#### 31.1 General Overview

## **31.1.1** New York Comprehensive System Planning Process ("CSPP")

#### 31.1.1 **Definitions**

Throughout Sections 31.1 through 31.6, the following capitalized terms shall have the meanings set forth in this subsection:

Affected TO: The Transmission Owner who receives written notification of a dispute related to a Local Transmission Planning Process pursuant to Section 31.2.1.3.1.

**Bounded Region:** A Load Zone or Zones within an area that is isolated from the rest of the NYCA as a result of constrained interface limits.

CARIS: The Congestion Assessment and Resource Integration Study for economic planning developed by the ISO in consultation with the Market Participants and other interested parties pursuant to Section 31.3 of this Attachment Y.

**CRP:** The Comprehensive Reliability Plan as approved by the ISO Board of Directors pursuant to this Attachment Y.

**CSPP:** The Comprehensive System Planning Process set forth in this Attachment Y, which covers reliability planning, economic planning, cost allocation and cost recovery, and interregional planning coordination.

**Developer:** A person or entity, including a Transmission Owner, sponsoring or proposing a project pursuant to this Attachment Y.

**ESPWG:** The Electric System Planning Work Group, or any successor work group or committee designated to fulfill the functions assigned to the ESPWG in this tariff.

**Five Year Base Case:** The model representing the New York State Power System over the first five years of the Study Period.

Gap Solution: A solution to a Reliability Need that is designed to be temporary and to strive to be compatible with permanent market-based proposals. A permanent regulated solution, if appropriate, may proceed in parallel with a Gap Solution.

LCR: An abbreviation for the term Locational Installed Capacity Requirement, as defined in the ISO Open Access Transmission Tariff.

**Load and Capacity Data Report**: The annual report prepared by the ISO pursuant to Section of the Tariff.

<u>Loss of Load Expectation ("LOLE"):</u> A measure used to determine the amount of resources needed to minimize the possibility of an involuntary loss of firm electric load on the New York State Bulk Power Transmission Facilities.

LTP: The Local Transmission Owner Plan, developed by each Transmission Owner, which describes its respective plans that may be under consideration or finalized for its own Transmission District.

LTP Dispute Resolution Process ("DRP"): The process for resolution of disputes relating to a Transmission Owner's LTP set out in Section 31.2.1.3.

LTPP: The Local Planning Process conducted by each Transmission Owner for its own Transmission District.

Management Committee: The standing committee of the ISO of that name created pursuant to the ISO Agreement.

Net CONE: The value representing the cost of new entry, net of energy and ancillary services revenues, utilized by the ISO in establishing the ICAP Demand Curves pursuant to Section 5 of the ISO Market Services Tariff.

New York State Bulk Power Transmission Facilities ("BPTFs"): The facilities identified as the New York State Bulk Power Transmission Facilities in the annual Area Transmission Review submitted to NPCC by the ISO pursuant to NPCC requirements.

**NPCC:** The Northeast Power Coordinating Council, or any successor organization.

NYCA Free Flow Test: A NYCA unconstrained internal transmission interface test, performed by the ISO to determine if a Reliability Need is the result of a statewide resource deficiency or a transmission limitation.

NYDPS: The New York State Department of Public Service, as defined in the New York Public Service Law.

NYPSC: The New York Public Service Commission, as defined in the New York Public Service Law.

<u>Operating Committee:</u> The standing committee of the NYISO of that name created pursuant to the ISO Agreement.

Other Developers: Parties or entities sponsoring or proposing to sponsor regulated economic projects or regulated solutions to Reliability Needs who are not Transmission Owners.

Reliability Criteria: The electric power system planning and operating policies, standards, criteria, guidelines, procedures, and rules promulgated by the North American Electric Reliability Council ("NERC"), Northeast Power Coordinating Council ("NPCC"), and the New York State Reliability Council ("NYSRC"), as they may be amended from time to time.

**Reliability Need:** A condition identified by the ISO as a violation or potential violation of one or more Reliability Criteria .

Responsible Transmission Owner: The Transmission Owner or Transmission Owners designated by the ISO, pursuant to Section 31.2.4.1, to prepare a proposal for a regulated backstop solution to a Reliability Need or to proceed with a regulated solution to a Reliability Need. The Responsible Transmission Owner will normally be the Transmission Owner in whose Transmission District the ISO identifies a Reliability Need.

**RNA:** The Reliability Needs Assessment as approved by the ISO Board under this Attachment.

**Study Period:** The ten-year time period evaluated in the RNA.

**Target Year**: The calendar year in which a Reliability Need arises, as determined by the ISO pursuant to Section 31.2.

**TPAS:** The Transmission Planning Advisory Subcommittee, or any successor work group or committee designated to fulfill the functions assigned to TPAS pursuant to this Attachment.

**Trigger Date**: The date by which the ISO must request implementation of a regulated backstop solution pursuant to Section 31.2.5.7 in order to meet a Reliability Need.

All other capitalized terms shall have the meanings provided for them in the ISO's tariffs.

## **31.1.2** Reliability Planning Process

Sections 31.2.1 through 31.2.6 of this Attachment describe the process that the NYISOISO, the Transmission Owners, and Market Participants and other interested parties shall follow for planning to meet the reliability needsReliability Needs of the New York State Bulk Power Transmission Facilities ("BPTFs"). The objectives of the process are to: (1) evaluate the reliability needsReliability Needs of the BPTFs pursuant to Reliability Criteria (2) identify, through the development of appropriate scenarios, factors and issues that might adversely impact the reliability of the BPTFs; (3) provide a process whereby solutions to identified needs are proposed, evaluated on a comparable basis, and implemented in a timely manner to ensure the reliability of the system; (4) provide an opportunity for the development of market-based solutions while ensuring the reliability of the BPTFs; and (5) coordinate the NYISO's ISO's reliability assessments with neighboring Control Areas.

The NYISOISO will provide, through the analysis of historical system congestion costs, information about historical congestion including the causes for that congestion so that Market Participants and other stakeholders can make appropriately informed decisions. See Appendix A.

## 31.1.1.23 Transmission Owner Planning Process

The Transmission Owners will continue to plan for their transmission systems, including the BPTFs and other NYS Transmission System facilities. The planning process of each Transmission Owner is referred to herein as the Local Transmission Owner Planning Process ("LTPP"), and the plans resulting from the LTPP are referred to herein as Local Transmission Plans ("LTPs"), whether under consideration or finalized. Each Transmission Owner will be responsible for administering its LTPP and for making provisions for stakeholder input into its LTPP. The NYISO's ISO's role in the LTPP is limited to the procedural activities described in this Attachment Y.

The finalized portions of the LTPs periodically prepared by the Transmission Owners will be used as inputs to the Reliability Planning Process described in this Attachment Y. Each Transmission Owner will prepare an LTP for its transmission system in accordance with the procedures described in Section 31.2.1.

## 31.1.1.34 Economic Planning Process

Sections 31.3.1 and 31.3.2 of this Attachment Y describe the process that the NYISOISO, the Transmission Owners, and Market Participants shall follow for economic planning to identify and reduce current and future projected congestion on the New York State BPTFs. The objectives of the economic planning process are to: (1) project congestion on the New York State-BPTFs over the ten-year planning period of this Comprehensive System Planning ProcessCSPP, (2) identify, through the development of appropriate scenarios, factors that might produce or increase congestion, (3) provide a process whereby projects to reduce congestion identified in the economic planning process are proposed and evaluated on a comparable basis in a timely manner, (4) provide an opportunity for the development of market-based solutions to

reduce the congestion identified, and (5) coordinate the <u>NYISO's ISO's</u> congestion assessments and economic planning process with neighboring Control Areas.

## 31.1.1.45 Participation In The ESPWG and TPAS

For purposes of any matter addressed by this Attachment Y, participation in the ESPWG and TPAS shall be open to any interested entity, irrespective of whether that entity has become a Party to the ISO Agreement. Only Parties to the ISO Agreement who have signed the appropriate Non-Disclosure Agreement will have access to CEH data. Access to Confidential Information shall be in accordance with the provisions of the NYISO's Code of Conduct, as found in Section 12.4 of Attachment F of the NYISO OATT and Article 6 of the Services Tariff.

#### 31.1.2 Definitions

Unless otherwise defined in this document, capitalized terms used herein shall have the meanings ascribed to them in the OATT.

**ATRA:** The Annual Transmission Reliability Assessment conducted under Attachment S to the NYISO OATT.

CARIS: The Congestion Assessment and Resource Integration Study for economic planning developed by the NYISO in consultation with the Market Participants and other interested parties under this Attachment Y.

**CRP:** The Comprehensive Reliability Plan as approved by the NYISO Board of Directors pursuant to this tariff.

CSPP: The Comprehensive System Planning Process set forth in this Attachment Y, which covers reliability planning, economic planning, cost allocation and cost recovery, and interregional planning coordination.

**ESPWG:** The Electric System Planning Work Group, or any successor work group or committee designated to fulfill the functions assigned to the ESPWG in this tariff.

Five Year Base Case: The model representing the New York State Power System over the first five years of the Study Period.

Gap Solution: A solution to a Reliability Need that is designed to be temporary and to strive to be compatible with permanent market-based proposals. A permanent regulated solution, if appropriate, may proceed in parallel with a Gap Solution.

LTP: The Local Transmission Owner Plan, developed by each Transmission Owner, which describes its respective plans that may be under consideration or finalized for its own Transmission District.

LTPP: The Local Planning Process conducted by each Transmission Owner for its own Transmission District.

Other Developers: Parties or entities sponsoring or proposing to sponsor regulated economic projects or regulated solutions to Reliability Needs who are not Transmission Owners.

Management Committee: The standing committee of the NYISO of that name created pursuant to the ISO Agreement.

New York State Bulk Power Transmission Facilities: The facilities identified as the New York State Bulk Power Transmission Facilities in the annual Area Transmission Review submitted to NPCC by the NYISO pursuant to NPCC requirements.

NYCA Free Flow Test: A NYCA unconstrained internal transmission interface test, performed by the NYISO to determine if a Reliability Need is the result of a statewide resource deficiency or a transmission limitation.

NYDPS: The New York State Department of Public Service, as defined in the New York Public Service Law.

NYPSC: The New York Public Service Commission, as defined in the New York Public Service Law.

Operating Committee: The standing committee of the NYISO of that name created pursuant to the ISO Agreement.

Reliability Criteria: The electric power system planning and operating policies, standards, eriteria, guidelines, procedures, and rules promulgated by the North American Electric Reliability Council ("NERC"), Northeast Power Coordinating Council ("NPCC"), and the New York State Reliability Council ("NYSRC"), as they may be amended from time to time.

**Reliability Need:** A condition identified by the NYISO in the RNA as a violation or potential violation of Reliability Criteria.

Responsible Transmission Owner: The Transmission Owner or Transmission Owners designated by the NYISO, pursuant to the NYISO Planning Process, to prepare a proposal for a regulated solution to a Reliability Need or to proceed with a regulated solution to a Reliability Need. The Responsible Transmission Owner will normally be the Transmission Owner in whose Transmission District the NYISO identifies a Reliability Need.

**RNA:** The Reliability Needs Assessment as approved by the NYISO Board under this tariff.

Study Period: The ten-year time period evaluated in the RNA.

**TPAS:** The Transmission Planning Advisory Subcommittee, or any successor work group or committee designated to fulfill the functions assigned to TPAS in this tariff.

#### 31.1.36 NYISO Implementation and Administration

31.1.6.1.3.1 The NYISOISO shall adopt procedures for the implementation and administration of the CSPP set forth in this Attachment Y, and shall revise those procedures as and when necessary. Such procedures will be incorporated in the NYISO'sISO's manuals, including NYISO'sISO's Comprehensive ReliabilitySystem Planning Process Manual. The NYISO'sISO's procedures shall provide for the open and transparent coordination of the CSPP to allow Market Participants and all other interested parties to have a meaningful opportunity to participate in each stage of the CSPP through the meetings conducted in accordance with the NYISOISO system of collaborative governance. Confidential informationInformation and Critical Energy Infrastructure

Information exchanged through the CSPP shall be subject to the protections for such information contained in the <a href="https://www.nylsov.n

- 31.1.36.2 The NYISO's ISO's procedures shall include a schedule for the collection and submission of data and the preparation of models to be used in the studies contemplated under this tariff. That schedule shall provide for a rolling two-year cycle of studies and reports. Each cycle commences with the LTPP providing input into the Reliability Planning Process. When the Reliability Planning Process is completed, it is then followed by the Economic Planning Process.
- 31.1.36.3 The NYISO's ISO's procedures shall be designed to allow the coordination of the NYISO's ISO's planning activities with those of NERC, NPCC, the NYSRC, neighboring Control Areas and other regional reliability organizations so as to develop consistency of the models, databases, and assumptions utilized in making reliability and economic determinations.
- 31.1.36.4 The NYISO's procedures shall facilitate the timely identification and resolution of all substantive and procedural disputes that arise out of the CSPP.

  Any party participating in the CSPP and having a dispute arising out of the CSPP may seek to have its dispute resolved in accordance with NYISOISO governance procedures during the course of the CSPP. If the party's dispute is not resolved in this manner as a part of the plan development process, the party may invoke formal dispute resolution procedures administered by the NYISOISO that are the same as those available to Transmission Customers under Section 2 Article 12.16 of the NYISOISO OATT and Section 11 of the ISO Market Administration and

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Control Area Services Tariff.. Disputes arising out of the LTPP shall be addressed by the dispute resolution processLTP DRP set forth in Section 31.2.1.3 of this Attachment Y.

31.1.36.5 Except for those cases where the NYISOISO OATT provides that an individual customer shall be responsible for the cost, or a specified share of the cost, of an individually requested study related to interconnection or to system expansion or to congestion and resource integration, the study costs incurred by the NYISOISO as a result of its administration of the CSPP will be recovered from all customers through and in accordance with Rate Schedule 1 of the NYISOISO OATT.

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## 31.2 Reliability Planning Process

## 31.2.1 Local Transmission Owner Planning Process

## 31.2.1.1 Criteria, Assumptions and Data

Each Transmission Owner will post on its website the planning criteria and assumptions currently used in its LTPP as well as a list of any applicable software and/or analytical tools currently used in the LTPP. Customers, Market Participants and other interested parties may review and comment on the planning criteria and assumptions used by each Transmission Owner, as well as other data and models used by each Transmission Owner in its LTPP. The Transmission Owners will take into consideration any comments received. Any planning criteria or assumptions for a Transmission Owner's BPTFs will meet or exceed any applicable NERC, NPCC or NYSRC criteria. The LTPP shall include a description of the needs addressed by the LTPP as well as the assumptions, applicable planning criteria and methodology utilized. A link to each Transmission Owner's website will be posted on the NYISOISO website.

#### 31.2.1.2 Process Timeline

- 31.2.1.2.1 Each Transmission Owner, in accordance with a schedule set forth in the NYISO's Comprehensive Reliability Planning Process Manual ISO's Procedures, will post its current LTP on its website for review and comment by interested parties sufficiently in advance of the time for submission to the NYISO for input to its RNA so as to allow adequate time for stakeholder review and comment. Each LTP will include:
  - identification of the planning horizon covered by the LTP,
  - data and models used.
  - issues addressed,

- potential solutions under consideration, and,
- a description of the transmission facilities covered by the plan.
- 31.2.1.2.2 To the extent the current LTP utilizes data or inputs, related to the <a href="NYISO's ISO's">NYISO's ISO's</a> planning process, not already reported by the <a href="NYISOISO">NYISOISO</a> at the time each Transmission Owner posts criteria and planning assumptions in accordance with Section 31..2.1.1 and will be posted by the <a href="NYISOISO">NYISOISO</a> on its website subject to any confidentiality or Critical Energy Infrastructure Information restrictions or requirements.
- 31.2.1.2.3 Each planning cycle, the <a href="NYISOISO">NYISOISO</a> shall hold one or more stakeholder meetings of the ESPWG and TPAS at which each Transmission Owner's current LTP will be discussed. Such meetings will be held either at the Transmission Owner's Transmission District, or at <a href="a NYISOan ISO">a NYISOan ISO</a> location. The <a href="NYISOISO">NYISOISO</a> shall post notice of the meeting and shall disclose the agenda and any other material distributed prior to the meeting.
- 31.2.1.2.4 Interested parties may submit written comments to a Transmission Owner with respect to its current LTP within thirty days after the meeting. Each Transmission Owner shall list on its website, as part of its LTP, the person and/or location to which comments should be sent by interested parties. All comments will be posted on the <a href="https://www.nyisologisco.com/nyisologisco/nyi

31.2.1.2.5 Each planning cycle, each Transmission Owner will submit the finalized portions of its current LTP to the <a href="https://www.nylson.org/nylson.nylson">NYISOISO</a> as contemplated in Section 31.2.2.4.2 below for timely inclusion in the RNA.

## 31.2.1.3 LTP Dispute Resolution Process

## 31.2.1.3.1 Disputes Related to the LTPP; Objective; Notice

Disputes related to the LTPP are subject to the LTP Dispute Resolution Process

("DRP").DRP.. The objective of the DRP is to assist parties having disputes in communicating effectively and resolving disputes as expeditiously as possible. Within fifteen (15) calendar days of the presentation by a Transmission Owner of its LTP to the ESPWG and TPAS, a party with a dispute shall notify in writing the Transmission Owner ("Affected TO"), the NYISOISO, the ESPWG and TPAS of its intention to utilize the DRP. The notice shall identify the specific issue in dispute and describe in sufficient detail the nature of the dispute.

## 31.2.1.3.2 Review by the ESPWG/TPAS

The issue raised by a party with a dispute shall be reviewed and discussed at a joint meeting of the ESPWG and the TPAS in an effort to resolve the dispute. The party with a dispute and the Affected TO shall have an opportunity to present information concerning the issue in dispute to the ESPWG and the TPAS.

#### **31.2.1.3.3** Information Discussions

To the extent the ESPWG and the TPAS are unable to resolve the dispute, the dispute will be subject to good faith informal discussions between the party with a dispute and the Affected TO. Each of those parties will designate a senior representative authorized to enter into informal discussions and to resolve the dispute. The parties to the dispute shall make a good faith effort to resolve the dispute through informal discussions as promptly as practicable.

## 31.2.1.3.4 Alternative Dispute Resolution

In the event that the parties to the dispute are unable to resolve the dispute through informal discussions within sixty (60) days, or such other period as the parties may agree upon, the parties may, by mutual agreement, submit the dispute to mediation or any other form of alternative dispute resolution. The parties shall attempt in good faith to resolve the dispute in accordance with a mutually agreed upon schedule but in no event may the schedule extend beyond ninety (90) days from the date on which the parties agreed to submit the dispute to alternative dispute resolution.

## **31.2.1.3.5** Notice of Results of Dispute Resolution

The Affected <u>Transmission OwnerTO</u> shall notify the <u>NYISOISO</u> and ESPWG and TPAS of the results of the DRP and update its LTP to the extent necessary. The <u>NYISOISO</u> shall use in its planning process the LTP provided by the Affected TO.

## 31.2.1.3.6 Rights Under the Federal Power Act

Nothing in the DRP shall affect the rights of any party to file a complaint with the Commission under relevant provisions of the FPA.

## 31.2.1.3.7 Confidentiality

All information disclosed in the course of the DRP shall be subject to the same protections accorded to confidential information and CEII by the <a href="https://www.nylsou.org/nylsou.new.nylsou.org/nylsou.org

## 31.2.2 Reliability Needs Assessment

## **31.2.2.1** General

The NYISOISO shall prepare and publish the RNA as described below. The RNA will identify Reliability Needs and provide an analysis of historic congestion costs. The NYISOISO

shall also designate in the RNA the Responsible TOTransmission Owner with respect to each Reliability Need.

## 31.2.2.2 Interested Party Participation in the Development of the RNA

The NYISOISO shall develop the RNA in consultation with Market Participants and all other interested parties. TPAS will have responsibility consistent with ISO Procedures for review of the NYISO's reliability analyses. ESPWG will have responsibility consistent with ISO Procedures for providing commercial input and assumptions to be used in the development of reliability assessment scenarios provided under Section 31.2.2.5, and in the reporting and analysis of historic congestion costs. Coordination and communication will be established and maintained between these two groups and NYISOISO staff to allow Market Participants and other interested parties to participate in a meaningful way during each stage of the CSPP. The NYISO StaffISO staff shall report any majority and minority views of these collaborative governance work groups when it submits the RNA to the Operating Committee for a vote, as provided below.

#### 31.2.2.3 Preparation of the Reliability Needs Assessment

- The NYISOISO shall evaluate bulk power system needs in the RNA over the Study Period.
- 31.2.2.3.2 The starting point for the development of the Five Year Base Case will be the system as defined for the ATRA.FERC 715 Base Case. The details of the development of the Five Year Base Case are contained in the procedures contained in the NYISO's Comprehensive Reliability Planning Process

  ManualISO Procedures.
- 31.2.2.3.3 The <u>NYISOISO</u> shall assess the Five Year Base Case to determine whether the BPTFs meet all Reliability Criteria for both resource and

transmission adequacy in each year, and report the results of its evaluation in the RNA. Transmission analyses will include thermal, voltage, short circuit, and stability studies. Then, if any Reliability Criteria are not met in any year, the <a href="https://www.nyses.com/ny

- 31.2.2.3.4 The NYISOISO will also evaluate the BPTFs over the second five years of the Study Period to determine whether they meet all Reliability Criteria for both resource and transmission adequacy in each year and report the results of its evaluation in the RNA. A short circuit assessment will be performed for the tenth year of the Study Period. Reliability needs Needs will be defined in terms of total deficiencies relative to Reliability Criteria and not necessarily in terms of specific facilities.— The ISO will determine the Target Year for each Reliability Need so identified.
- 31.2.2.3.5 The NYISOISO shall develop the system representation to be used for its evaluations of the second five years of the Study Period using (1) the most recent Load and Capacity Data Report published by the NYISOISO on its web site; (2) the most recent versions of NYISOISO reliability analyses and assessments provided for or published by NERC, NPCC, NYSRC, and neighboring Control Areas; (3) information reported by neighboring Control Areas such as power flow

data, forecasted load, significant new or modified generation and transmission facilities, and anticipated system conditions that the NYISOISO determines may impact the BPTFs; and (4) data submitted pursuant to paragraph 31.2.2.4 below.

## 31.2.2.4 Planning Participant Data Input

- 31.2.2.4.1 At the NYISO's ISO's request, Market Participants, Developers, and other parties shall provide, in accordance with the schedule set forth in the NYISO's Comprehensive Reliability Planning Process Manual ISO's Procedures, the data necessary for the development of the RNA. This input will include but not be limited to (1) existing and planned additions to the New York State Transmission System (to be provided by Transmission Owners and municipal electric utilities);

  (2) proposals for merchant transmission facilities (to be provided by merchant developers); Developers); (3) generation additions and retirements (to be provided by generator owners and developers); Developers); (4) demand response programs (to be provided by demand response providers); and (5) any long-term firm transmission requests made to the NYISOISO.
- 31.2.2.4.2 The Transmission Owners shall submit their current LTPs referenced in Section 31.1.1.2 and Section 31.2.1 to the NYISOISO. The NYISOISO will review the Transmission Owners' LTPs, as they relatedrelate to BPTFs, to determine whether they will meet Reliability Needs, recommend an alternate means to resolve the needs from a regional perspective, where appropriate, or indicate that it is not in agreement with a Transmission Owner's proposed additions. The NYISOISO shall report its determinations under this section in the RNA and in the CRP.

31.2.2.4.3 All input received from Market Participants, Developers, and other parties shall be considered in the development of the system representation for the Study Period in accordance with the procedures contained in the NYISO's

Comprehensive Reliability Planning Process ManualISO's Procedures.

## 31.2.2.5 Reliability Scenario Development

The NYISOISO, in consultation-with the ESPWG and TPAS, shall develop reliability scenarios addressing the first five years and the second five years of the Study Period. Variables for consideration in the development of these reliability scenarios include but are not limited to: load forecast uncertainty, fuel prices and availability, new resources, retirements, transmission network topology, and limitations imposed by proposed environmental or other legislation.

## 31.2.2.6 Evaluation of Alternate Reliability Scenarios

The NYISOISO will conduct additional reliability analyses for the alternate reliability scenarios developed pursuant to paragraph 31.2.2.5. These evaluations will test the robustness of the needs assessment studies conducted under paragraphs 31.2.2.3. This evaluation will only identify conditions under which Reliability Criteria may not be met. It will not identify or propose additional needs. Reliability Needs. In addition, the NYISOISO will perform appropriate sensitivity studies to determine whether Reliability Needs previously identified can be mitigated through alternate system configurations or operational modes. The Reliability Needs may increase in some reliability scenarios and may decrease, or even be eliminated, in others. The NYISOISO shall report the results of these evaluations in the RNA.

## 31.2.2.7 Reliability Needs Assessment Report Preparation

Once all the analyses described above have been completed, NYISO StaffISO staff will prepare a draft of the RNA including discussion of its assumptions, Reliability Criteria, and results of the analyses and, if necessary, designate the Responsible Transmission Owner.

#### 31.2.3 RNA Review Process

#### 31.2.3.1 Collaborative Governance Process

The draft RNA shall be submitted to both TPAS and the ESPWG for review and comment. The NYISOISO shall make available to any interested party sufficient information to replicate the results of the draft RNA. The information made available will be electronically masked and made available subjectpursuant to such other terms and conditionsa process that the NYISO mayISO reasonably determine are 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 that the TPAS and ESPWG review, the draft RNA reflecting the revisions resulting from the TPAS and ESPWG review, shall be forwarded to the Operating Committee for discussion and action. The NYISOISO shall notify the Business Issues Committee of the date of the Operating Committee meeting at which the draft RNA is to be presented. Following the Operating Committee vote, the draft RNA will be transmitted to the Management Committee for discussion and action.

#### **31.2.3.2 Board Action**

Following the Management Committee vote, the draft RNA, with working group,

Operating Committee, and Management Committee input, will be forwarded to the NYISOISO

Board for review and action. Concurrently, the draft RNA will be provided to the Market

Monitoring Unit for its review and consideration of whether market rules changes are necessary

to address an identified failure, if any, in one of the NYISO's So's competitive markets. The Board may approve the RNA as submitted, or propose modifications on its own motion. If any changes are proposed by the Board, the revised RNA shall be returned to the Management Committee for comment. The Board shall not make a final determination on a revised RNA until it has reviewed the Management Committee comments. Upon approval by the Board, the NYISOISO shall issue the final RNA to the marketplace by posting it on its web site.

The responsibilities of the Market Monitoring Unit that are addressed in the above section of <a href="mailto:this\_Attachment">this\_Attachment</a> Y to the ISO OATT are also addressed in Section 30.4.6.8.2 of the Market Monitoring Plan, <a href="Attachment O to the ISO OATT">Attachment O to the ISO OATT</a>.

## 31.2.3.3 Needs Assessment Disputes

Notwithstanding any provision to the contrary in this Attachment, the NYISO Services Tariff, in the event that a Market Participant raises a dispute solely within the NYPSC's jurisdiction relating to the final conclusions or recommendations of the RNA, a Market Participant may refer such dispute to the NYPSC for resolution. The NYPSC's final determination shall be binding, subject only to judicial review in the courts of the State of New York pursuant to Article 78 of the NYCPLR.

#### 31.2.3.4 Public Information Sessions

In order to provide ample exposure for the marketplace to understand the identified reliability needsReliability Needs, the NYISOISO will provide various opportunities for Market Participants and other potentially interested parties to discuss the final RNA. Such opportunities may include presentations at various NYISOISO Market Participant committees, focused discussions with various industry sectors, and/or presentations in public venues.

## 31.2.4 Development of Solutions to Reliability Needs

## 31.2.4.1 Regulated Backstop Solutions

31.2.4.1.1 When a Reliability Need is identified in any RNA issued under this tariff, the **NYISOISO** shall request and the Responsible Transmission Owner shall provide to the **NYISOISO**, as soon as reasonably possible, a proposal for a regulated solution or combination of solutions that shall serve as a backstop to meet the Reliability Need if requested by the **NYISOISO** due to the lack of sufficient viable market-based solutions to meet such Reliability Needs identified for the Study Period. Regulated backstop solutions may include generation, transmission, or demand side resources. AExcept as provided in Section 31.2.4.2.1, a proposed regulated backstop solution to address a needReliability Need that arises in the second five years of the planning period that does not have a trigger date within one year or less of the CRP currently under considerationStudy Period will not require the same level of detail as a proposed solution for a needReliability Need arising in the first five years. Such proposals may include reasonable alternatives that would effectively address the Reliability Need; provided however, the Responsible Transmission Owner's obligation to propose and implement regulated backstop solutions under this tariff is limited to regulated transmission solutions. The Responsible Transmission Owner shall also estimate the lead time necessary for the implementation of its proposal. The NYISO will-ISO shall independently analyze the lead time required for implementation of the proposed potential regulated backstop solution. The ISO shall use the Responsible Transmission Owner estimate and its analysis to establish athe Trigger Date for the Responsible Transmission Owner's

regulated backstop solution. The ISO will also independently establish benchmark lead timetimes for responses submitted pursuant to Sections 31.2.4.3, and 31.2.4.5 and 31.2.5.7 on the basis of the NYISO's independent analysis of the time period required for implementation of the proposed potential backstop solution... Prior to providing its response to the RNA, each Responsible Transmission Owner will present for discussion at the ESPWG and TPAS any updates in its LTP that impact a Reliability Need identified in the RNA. Contemporaneous with the request to the Responsible Transmission Owner, the NYISO shall solicit responses using the two step process defined below, which shall not be a formal RFP process. Should more than one regulated backstop solution be proposed to address a Reliability Need, it will be the responsibility of the Responsible Transmission Owners Owner to determine the regulated backstop solution that will proceed following a finding by the **NYISOISO** under Section 31.2.6.4 of this Attachment Y. The determination by the Responsible Transmission Owners Owner will be made prior to the approval of the CRP in which <u>precedes the Trigger Date for</u> the regulated backstop solution with the longest lead\_time-could. Contemporaneous with the request to the Responsible Transmission Owner, the ISO shall solicit market-based and alternative regulated responses using the two-step process defined in Sections 31.2.4.3 and 31.2.4.5, which shall not be triggered formal RFP process.

## 31.2.4.2 Qualifications for Regulated Backstop Solutions

31.2.4.2.1 For Reliability Needs projected to occuridentified as occurring during the first five years of the Study Period, the submission of a regulated backstop solution shall include, at a minimum, the following details: (1) the lead time

necessary to complete the project, (2) a description of the project, including planning and engineering specifications as appropriate, (3) evidence of a commercially viable technology, (4) a major milestone schedule, (5) a schedule for obtaining required siting permits and other certifications, (6) a demonstration of site control or a schedule for obtaining such control, (7) status of **NYISOISO** interconnection studies and interconnection agreement, (8) status of equipment procurement, and (9) any other information requested by the NYISOISO. These details also<del>must</del> be provided for any regulated backstop solution proposed to address a Reliability Need identified during the second five years of the Study Period if the lead time for that regulated backstop solution has a trigger date Trigger Date within one yearplanning cycle of the date that the Responsible Transmission Owner presents its proposed regulated backstop solution. If the regulated backstop solution does not meet the needs identified in the RNA, the NYISOISO will provide sufficient information to the Responsible Transmission Owner to determine how the regulated backstop should be modified to meet the identified reliability needs. Reliability Needs. The Responsible Transmission Owner will make necessary changes to its proposed regulated backstop solution to address reliability deficiencies identified by the **NYISOISO**, and submit a revised proposal to the **NYISO**ISO for review and approval.

31.2.4.2.2 For Except as provided above, the submission of a proposed regulated

backstop solution for a Reliability Needs Need projected to occur during the second five years of the Study Period (other than those for which the trigger date is within one year of the date that the Responsible Transmission Owner presents its proposed regulated backstop solution), the submission of a proposed regulated

backstop solution must include, at a minimum, the following: (1) an explanation of how the Responsible Transmission Owner considered, in the development of its proposal, one (or more) compensatory MW scenarios developed by the NYISOISO as a guide to the development of proposed solutions that appear most likely to meet the statewide LOLE criterion of one day in ten years, (2) a description of the type of preliminary solution(s) or a variety of preliminary solution(s) (generation, demand-side, transmission, or any combination thereof) that could meet the need, (3) an estimate of the potential MW impact if either a generation or demand side solution is proposed, (4) for proposed transmission solutions, an identification of the zones where the potential solution may be located, as well as an identification indicating some general characteristics such as voltage level and approximate capacity, (5) for proposed transmission capacitor bank solutions, an identification of the MW amount of the voltage constrained interface that the Responsible Transmission Owner intends to restore up to the thermal limits of the interface, along with a commitment to size the capacitor bank solution to achieve this amount of restoration, (6) an estimated implementation time, or range of implementation times, to allow the **NYISOISO** to establish a preliminary trigger date Trigger Date, and (7) any other information requested by the **NYISOISO**. In addition to the foregoing, a Responsible Transmission Owner may propose at any time a specific solution to a Reliability Need projected to occur during the second five years of the Study Period. Because the potential needs indicated by each RNA for years six through ten are a preliminary assessment of future conditions based on assumptions that will evolve over time using analysis that can only be conducted by the **NYISOISO** staff, the

solutions proposed by the Responsible Transmission Owner may change in response to subsequent RNAs. The Responsible Transmission Owner must continue to collaborate with <a href="https://www.nys.org/

31.2.4.2.3 Market Participants and other interested parties may submit at any time optional suggestions for changes to <a href="NYISOISO">NYISOISO</a> rules or procedures which could result in the identification of additional resources or market alternatives suitable for meeting Reliability Needs.

## 31.2.4.3 Market-Based Responses

At the same time that a proposal for a regulated backstop solution is requested from the Responsible Transmission Owner under Section 31.2.4.1, the NYISOISO shall also request market-based responses from the market place. Subject to the execution of appropriately drawn confidentiality agreements and FERC'sthe Commission's standards of conduct, the NYISOISO and the appropriate Transmission Owner or Transmission Owners shall provide any party who wishes to develop such a response access to the data that is necessary to develop its response. Such data shall only be used for the purposes of preparing a market-based response to a Reliability Need under this section. Such responses will be open on a comparable basis to all resources, including generation, demand response providers, and merchant transmission developersDevelopers.

#### 31.2.4.4 Qualifications for a Valid Market-Based Response

The submission of a proposed market-based solution must include: (1) evidence of a commercially viable technology, (2) a major milestone schedule, (3) evidence of site control, or a plan for obtaining site control, (4) the status of any contracts (other than an Interconnection

Agreement) that are under negotiation or in place, (5) the status of any interconnection studies and an Interconnection Agreement, (6) the status of any required permits, (7) the status of equipment procurement, (8) evidence of financing, and (9) any other information requested by the NYISOISO. Failure to provide any data requested by the NYISOISO within a reasonable period of time (not to exceed 60 days from the date of the NYISOISO request) will result in the rejection of the proposed market-based solution from further consideration. The NYISOISO will perform continuing analyses of the viability of a proposed market-based solution as follows: (1) between three and five years before the expiration of the benchmark lead time established Trigger Date for the regulated backstop solution, the NYISOISO will use a screening analysis to verify the feasibility of the proposed market-based solution (this analysis will not require final permit approvals or final contract documents), (2) between one and two years before the expiration of the benchmark lead time established Trigger Date for the regulated backstop solution, the NYISOISO will perform a more extensive review of the proposed marketbased solution, including such elements as status of interconnection studies, contract negotiations, permit applications, financing, and site control, and (3) less than one year before the expiration of the benchmark lead time established Trigger Date for the regulated backstop solution, the NYISOISO will perform a detailed review of the proposed market-based solution status and schedule. For the review conducted less than one year before the expiration of Trigger Date, the benchmark lead time, it is expected, but not required, that ISO will consider, among other things, whether the proposed market-based solution will have has obtained its final permits, that any required interconnection studies will have been completed, that the status of an interconnection agreement will have been filed, that financing will beis in place, and that

equipment will beis on order. If the NYISOISO, following its analysis, determines that a

proposed market-based solution is no longer viable to meet the Reliability Need, the proposed market-based solution will be removed from the list of potential market-based solutions.

#### 31.2.4.5 Alternative Regulated Responses

- 31.2.4.5.1 In the event that insufficient market based solutions qualified under

  Section 31.2.4.4 are proposed, or the NYISO determines that there is imminent

  need to do so, the NYISOThe ISO will initiate a second step of the solicitation

  process by requesting request alternative regulated responses to Reliability Needs

  at the same time that it requests market-based responses and regulated backstop

  solutions. Such proposals may include reasonable alternatives that would

  effectively address the identified Reliability Need.
- 31.2.4.5.2 In response to the NYISO's request, Other Developers may develop alternative regulated proposals for generation, demand side alternatives, and/or other solutions to address a Reliability Need and submit such proposals to the NYISOISO. Transmission Owners, at their option, may submit additional proposals for regulated solutions to the NYISOISO. Transmission Owners and Other Developers may submit such proposals to the NYDPS for review at any time. Subject to the execution of appropriately drawn confidentiality agreements and FERC'sthe Commission's standards of conduct, the NYISOISO and the appropriate Transmission Owner(s) shall provide Other Developers access to the data that is needed to develop their proposals. Such data shall be used only for purposes of preparing an alternative regulated proposal in response to a Reliability Need.

## 31.2.4.6 Qualifications for Alternative Regulated Solutions

The submission of a proposed alternative regulated solution must include: (1) evidence of a commercially viable technology, (2) a major milestone schedule, (3) evidence of site control, or a plan for obtaining site control, (4) the status of any contracts (other than an Interconnection Agreement) that are under negotiation or in place, (5) the status of any interconnection studies and an Interconnection Agreement, (6) the status of any required permits, (7) the status of equipment procurement, (8) evidence of financing, and (9) any other information requested by the **NYISOISO**. Failure to provide any data requested by the NYISOISO within a reasonable period of time (not to exceed 60 days from the date of the **NYISOISO** request) will result in the rejection of the proposed alternative regulated solution from further consideration. A proponent of a proposed alternative regulated solution must notify the NYISOISO immediately of any material change in status of a proposed alternative regulated solution. For purposes of this provision, a material change includes, but is not limited to, a change in the financial viability of the developer, a change in the siting status of the project, andor a change in a major element of the project's development. If the NYISOISO, at any time, learns of a material change in the status of a proposed alternative regulated solution, it may, at that time, make a determination as to the continued viability of the proposed alternative regulated solution. The NYISOISO will perform continuing analyses of the viability of a proposed alternative regulated solution as follows: (1) between three and five years before the expiration of the benchmark lead time established Trigger Date for the regulated backstop solution, identified in the CRP as meeting the NYISOsame

Reliability Need, the ISO will use a screening analysis to verify the feasibility of the proposed alternative regulated solution (this analysis will not require final permit approvals or final contract documents), (2) between one and two years before the expiration of the benchmark lead time established Trigger Date for the regulated backstop solution, the **NYISOISO** will perform a more extensive review of the proposed alternative regulated solution, including such elements as status of interconnection studies, contract negotiations, permit applications, financing, and site control, and (3) less than one year before the expiration of the benchmark lead time established Trigger Date for the regulated backstop solution, the NYISOISO will perform a detailed review of the proposed alternative regulated solution status and schedule. For the review conducted less than one year before the expiration of Trigger Date, the benchmark lead time, it is expected, but not required, that ISO will consider, among other things, whether the proposed alternative regulated solution will have has obtained its final permits, that any required interconnection studies will have been completed, that an interconnection agreement will have has been filed, that financing will beis in place, and that equipment will beis on order. Prior to making a determination about the viability of a proposed alternative regulated solution, the NYISO will communicate its intended determination to the project sponsor along with the basis for its intended determination, and will provide the sponsor a reasonable period (not more than two weeks) to respond to the NYISO's intended determination, including an opportunity to provide additional information to the NYISO to support the continued viability of the proposed alternative regulated solution. If the NYISOISO, following its analysis, determines that a proposed alternative

regulated solution is no longer viable to meet the Reliability Need, the proposed alternative regulated solution will be removed from the list of potential alternative regulated solutions.

#### 31.2.4.7 Additional Solutions

Should the NYISOISO determine that it has not received adequate regulated backstop or market-based solutions to satisfy the Reliability Need, the NYISOISO may, in its discretion, solicit additional regulated backstop or market-based solutions. Other Developers may submit additional alternative regulated solutions for the NYISO's Consideration at that time.

## 31.2.5 NYISOISO Evaluation of Proposed Solutions to Reliability Needs

## 31.2.5.1 Comparable Evaluation of All Proposed Solutions

When evaluating proposed solutions to Reliability Needs, all resource types shall be considered on a comparable basis as potential solutions to the Reliability Needs identified: generation, transmission, and demand response.

#### 31.2.5.2 Evaluation of Regulated Backstop Solutions

The NYISOISO shall evaluate a proposed regulated backstop solution submitted by a Responsible Transmission Owner pursuant to Section 31.2.4.1 to determine whether it will meet the identified Reliability Need in a timely manner, and will report the results of its evaluation in the CRP.

#### 31.2.5.3 Evaluation of Market Based Proposals

The NYISOISO shall review proposals for market-based solutions and determine whether they resolve a Reliability Need. If market-based solutions are found by the NYISOISO to be sufficient to meet a Reliability Need in a timely manner, the NYISOISO will so state in the CRP.

The NYISOISO will not select from among the market-based solutions if there is more than one proposal which will meet the same Reliability Need.

## 31.2.5.4 Evaluation of Alternative Regulated Responses

If market based solutions do not resolve a Reliability Need, the NYISO shall proceed to The ISO shall review the proposed alternative regulated solutions submitted in accordance with Section 31.2.4.5 above, and will report the results of its review in the CRP.

#### 31.2.5.5 Resolution of Deficiencies

Following initial review of the proposals, as described above, NYISO Staff[SO staff] will identify any reliability deficiencies in each of the proposed solutions. The Responsible Transmission Owner, Transmission Owner or Other Developer will discuss any identified deficiencies with the NYISO Staff[SO staff]. Other Developers and Transmission Owners that propose alternative regulated solutions shall have the option to revise and resubmit their proposals to address any identified deficiency. With respect to regulated backstop solutions proposed by a Responsible Transmission Owner pursuant to Section 31.2.4.1, the Responsible Transmission Owner shall make necessary changes to its proposed backstop solution to address any reliability deficiencies identified by the NYISOISO, and submit a revised proposal to the NYISOISO for review. The NYISOISO shall review all such revised proposals to determine that all of the identified deficiencies have been resolved.

# 31.2.5.6 Designation of Regulated Backstop Solution and Responsible Transmission Owner

If the NYISOISO determines that a market-based solution will not be available in time to meet a Reliability Need, and finds that it is necessary to take action to ensure reliability, it will state in the CRP that implementation of a regulated solution is necessary. The NYISOISO will

also identify in the CRP (1) the regulated backstop solution that the <u>NYISOISO</u> has determined will meet the Reliability Need in a timely manner, and (2) the Responsible Transmission Owner.

## 31.2.5.7 **Determination of Necessity**

If the ISO determines in the CRP, or at any time, that implementation of a regulated backstop solution reviewed in a previous RNA/CRP cycle is necessary, the ISO will request the Responsible Transmission Owner to submit its proposal for a regulated backstop solution to the appropriate governmental agency(ies) and/or authority(ies) to begin the necessary approval process. The Responsible Transmission Owner in response to the ISO request shall make such a submission. Other Developers and Transmission Owners proposing alternative regulated solutions pursuant to Section 31.2.4.5.2 that have completed any changes required by the ISO under Section 31.2.5.4, which the ISO has determined will resolve the identified Reliability Need, may submit these proposals to the appropriate governmental agency(ies) and/or authority(ies) for review. The appropriate governmental agency(ies) and/or authority(ies) with jurisdiction over the implementation or siting will determine whether the regulated backstop solution or an alternative regulated solution will be implemented to address the identified Reliability Need. If the appropriate governmental agency(ies) and/or authority(ies) makes a final determination that an alternative regulated solution is the preferred solution to a Reliability Need and that the regulated backstop solution should not be implemented, implementation of the alternative regulated solution will be the responsibility of the Transmission Owner or Other Developer that proposed the alternative regulated solution, and the Responsible Transmission Owner will not be responsible for addressing the Reliability Need through the

implementation of its regulated backstop solution. Should the alternative regulated solution not be implemented, the ISO may request a Gap Solution pursuant to Section 31.2.5.10 of this Attachment Y.

- Owner to proceed with a regulated backstop solution evaluated in the CRP in parallel with a market-based solution in order to ensure that a Reliability Need is met in a timely manner, the Responsible Transmission Owner shall proceed with due diligence to develop it in accordance with Good Utility Practice unless or until notified by the ISO that it has determined that the regulated backstop solution is no longer needed.
- determines that the Responsible Transmission Owner has not submitted its

  proposed regulated backstop solution for necessary regulatory action within a

  reasonable period of time, or that the Responsible Transmission Owner has been

  unable to obtain the approvals or property rights necessary under applicable law

  to construct the project, the ISO shall submit a report to the Commission for its

  consideration and determination of whether any action is appropriate under

  federal law.

# 31.2.5.8 Process for Consideration of Regulated Backstop Solution and Alternative Regulated Solutions

Upon a finding determination by the NYISOISO under Section 31.2.6.4 of this

Attachment 5.7 that a regulated solution should proceed, the Responsible Transmission Owner will make a presentation to the ESPWG that will provide a description of the regulated backstop solution. The presentation will include a non-binding preliminary cost estimate of that backstop

solution; provided, however, that a Responsible Transmission Owner shall be entitled to full recovery of all reasonably incurred costs related to the regulated backstop solution. Any Alternative Regulated SolutionAny alternative regulated solution proponent seeking regulated cost recovery for its project will also make a presentation to the ESPWG at the time of the above finding by the NYISOISO providing a description of the Alternative Regulated Solutionalternative regulated solution, including a non-binding preliminary cost estimate of the project. The NYISOISO and stakeholders through this process will have the opportunity to review and discuss the scope of the projects and their associated non-binding preliminary cost estimates prior to implementation.

## 31.2.5.89 Regulated <u>Backstop</u> Solution to Proceed in Parallel with a Market-based Solution

If the NYISOISO determines that it is necessary for the Responsible Transmission Owner to proceed with a regulated <a href="backstop">backstop</a> solution to be conducted in parallel with a market-based solution in order to ensure that a Reliability Need is met in a timely manner, the CRP will so state.

## 31.2.5.910 Gap Solutions

- 31.2.5.910.1 If the NYISOISO determines that neither market-based proposals nor regulated proposals can satisfy the Reliability Needs in a timely manner, the NYISOISO will set forth its determination that a Gap Solution is necessary in the CRP. The NYISOISO will also request the Responsible Transmission Owner to seek a Gap Solution. GAPGap Solutions may include generation, transmission, or demand side resources.
- 31.2.5.910.2 If there is an imminent threat to the reliability of the New York power system, the NYISOISO Board, after consultation with the

- NYDPS, may request the appropriate Transmission Owner or Transmission Owners to propose a Gap Solution outside of the normal planning cycle.
- 31.2.5.910.3 Upon the NYISO's determination of the need for a Gap Solution, pursuant to either Section Sections 31.2.5.910.1 or 31.2.5.910.2 above, the Responsible Transmission Owner will propose such a solution, as soon as reasonably possible, for consideration by the NYISOISO and NYDPS.
- 31.2.5.910.4 Any party may submit an alternative Gap Solution proposal to the NYISOISO and the NYDPS for their consideration. The NYISOISO shall evaluate all Gap Solution proposals to determine whether they will meet the Reliability Need or imminent threat. The NYISOISO will report the results of its evaluation to the party making the proposal as well as to the NYDPS and/or other appropriate governmental agency(ies) and/or authority(ies) for consideration in their review of the proposals. The appropriate governmental agency(ies) and/or authority(ies) with jurisdiction over the implementation or siting of Gap Solutions will determine whether the Gap Solution or an alternative Gap Solution will be implemented to address the identified Reliability Need.
- 31.2.5.910.5 Gap Solution proposals submitted under Sections 31.2.5.910.3 and 31.2.5.910.4 shall be designed to be temporary solutions and to strive to be compatible with permanent market-based proposals.
- 31.2.5.910.6 A permanent regulated solution, if appropriate, may proceed in parallel with a Gap Solution.

## 31.2.5.1011 Confidentiality of Solutions

31.2.5.1011.1 The term "Confidential Information" shall include all types of solutions to Reliability Needs that are submitted to the <a href="https://www.nylsol.com/nylsol.com

Needs identified in any RNA issued by the <a href="https://www.nys.org/nys.org

- 31.2.5.1011.2 For regulated backstop solutions and plans submitted by the Responsible

  Transmission Owner in response to the findings of the RNA, the NYISOISO shall
  maintain the confidentiality of same until the NYISOISO and the Responsible

  Transmission Owner have agreed that the Responsible Transmission Owner has
  submitted sufficient regulated backstop solutions and plans to meet the Reliability

  Needs identified in an RNA. Thereafter, the NYISOISO shall disclose the
  regulated backstop solutions and plans to the Market Participants; however, any
  preliminary cost estimates that may have been provided to the NYISOISO shall
  not be disclosed.
- 31.2.5.1011.3 For an alternative regulated response, the NYISOISO shall determine, after consulting with the owner or supplierDeveloper thereof, whether the response would meet part or all of the Reliability Needs identified in an RNA, and thereafter disclose the alternative regulated response to the Market Participants and other interested parties; however, any preliminary cost estimates that may have been provided to the NYISOISO shall not be disclosed.
- 31.2.5.1011.4 For a market-based response, the NYISOISO shall maintain the confidentiality of same during the CRPPReliability Planning Process and in the Comprehensive Reliability PlanCRP, except for the following information which may be disclosed by the NYISOISO: (i) the type of resource proposed (e.g., generation, transmission, demand side); (ii) the size of the resource expressed in Megawattsmegawatts of equivalent load that would be served by that resource;

- (iii) the subzone in which the resource would interconnect or otherwise be located; and (iv) the proposed in-service date of the resource.
- 31.2.5.1011.5 In the event that the developer Developer of a market-based response has made a public announcement of its project or has submitted a proposal for interconnection with the NYISOISO, the NYISOISO shall disclose the identity of the market-based developer Developer and the specific project during the CRPPReliability Planning Process and in the Comprehensive Reliability PlanCRP.

# 31.2.6 Comprehensive Reliability Plan

Following the NYISO's evaluation of the proposed market-based and regulated solutions to Reliability Needs, the NYISOISO will prepare a draft Comprehensive Reliability

Plan ("CRP")... The draft CRP shall set forth the NYISO's ISO's findings and recommendations, including any determination that implementation of a regulated solution (which may be a Gap Solution) is necessary to ensure system reliability.

#### 31.2.6.1 Collaborative Governance Process

The NYISO Staff[SO staff] shall submit the draft CRP to TPAS and ESPWG for review and comment. The NYISO[SO] shall make available to any interested party sufficient information to replicate the results of the draft CRP. The information made available will be electronically masked and made available subjectpursuant to such other terms and conditionsa process that the NYISO may[SO] reasonably determine are 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 that the TPAS and ESPWG review, the draft CRP reflecting the revisions resulting from the TPAS and ESPWG review, shall be forwarded to the Operating Committee for a discussion and action. The

NYISOISO shall notify the Business Issues Committee of the date of the Operating Committee meeting at which the draft CRP is to be presented. Following the Operating Committee vote, the draft CRP will be transmitted to the Management Committee for a discussion and action.

#### **31.2.6.2 Board Action**

Following the Management Committee vote, the draft CRP, with working group,

Operating Committee, and Management Committee input, will be forwarded to the NYISOISO

Board for review and action. Concurrently, the draft CRP will also be provided to the Market

Monitoring Unit his-for its review and consideration of whether market rule changes are

necessary to address an identified failure, if any, in one of the NYISO's ISO's competitive

markets. The Board may approve the draft CRP as submitted or propose modifications on its

own motion. If any changes are proposed by the Board, the revised CRP shall be returned to the

Management Committee for comment. The Board shall not make a final determination on the

draft CRP until it has reviewed the Management Committee comments. Upon final approval by
the Board, the NYISOISO shall issue the CRP to the marketplace by posting on its website. The

NYISOISO will provide the CRP to the appropriate regulatory agency(ies) for consideration in
their review of the proposals.

The responsibilities of the Market Monitoring Unit that are addressed in the above section of Attachment Y to the ISO OATT are also addressed in Section 30.4.6.8.3 of the Market Monitoring Plan, Attachment O to the ISO OATT.

## 31.2.6.3 Reliability Disputes

Notwithstanding any provision to the contrary in this Attachment, the NYISO SO OATT, or the NYISO Services Tariff, in the event that a Market Participant or other interested party raises a dispute solely within the NYPSC's jurisdiction concerning NYISO's ISO's final determination in the CRP that a proposed solution will or will not meet a Reliability Need, a

Market Participant or other interested party seeking further review shall refer such dispute to the NYPSC for resolution, as provided for in the NYISO's Comprehensive Reliability Planning

Process Manual-ISO Procedures. The NYPSC's final determination of such disputes shall be binding, subject only to judicial review in the courts of the State of New York pursuant to Article 78 of the New York Civil Practice Law and Rules.

#### **31.2.6.4 Determination of Necessity**

31.2.6.4.1 If the NYISO determines in the CRP that implementation of a regulated solution is necessary, the NYISO will request the Responsible Transmission Owner to submit its proposal for a regulated backstop solution to the appropriate governmental agency(ies) and/or authority(ies) to begin the necessary approval process. The Responsible Transmission Owner in response to the NYISO request shall make such a submission. Other Developers and Transmission Owners proposing alternative regulated solutions pursuant to Section 31.2.4.5.2 that have completed any changes required by the NYISO under Section 31.2.5.4, which the NYISO has determined will resolve the identified Reliability Need, may submit these proposals to the appropriate governmental agency(ies) and/or authority(ies) for review. The appropriate governmental agency(ies) and/or authority(ies) with jurisdiction over the implementation or siting will determine whether the regulated backstop solution or an alternative regulated solution will be implemented to address the identified Reliability Need. If the appropriate governmental agency(ies) and/or authority(ies) makes a final determination that an alternative regulated solution is the preferred solution to a Reliability Need and that the regulated backstop solution should not be implemented, implementation of the alternative regulated solution will be the responsibility of the Transmission

Owner or Other Developer that proposed the alternative regulated solution, and the Responsible Transmission Owner will not be responsible for addressing the Reliability Need through the implementation of its regulated backstop solution. Should the alternative regulated solution not be implemented, the NYISO may request a Gap solution pursuant to Section 31.2.5.9 of this Attachment.

- 31.2.6.4.2 If the NYISO determines in the CRP that it is necessary for the

  Responsible Transmission Owner to proceed with the regulated solution identified in 31.2.6.4.1 in parallel with a market-based solution in order to ensure that a Reliability Need is met in a timely manner, the Responsible Transmission Owner shall proceed with due diligence to develop it in accordance with Good Utility

  Practice unless or until notified by the NYISO that it has determined that the regulated solution is no longer needed.
- 31.2.6.4.3 If, after consultation with the Responsible Transmission Owner, the

  NYISO determines that the Responsible Transmission Owner has not submitted

  its proposed solution for necessary regulatory action within a reasonable period of
  time, or that the Responsible Transmission Owner has been unable to obtain the
  approvals or property rights necessary under applicable law to construct the
  project, the NYISO shall submit a report to the FERC for its consideration and
  determination of whether any action is appropriate under federal law.

## 31.2.7 Monitoring of Reliability Project Status

31.2.7.1 The NYISOISO will monitor and report on the status of market-based solutions to ensure their continued viability to meet Reliability Needs on a timely basis in the CRP. The NYISO's ISO's criteria to assess the continued viability of

such projects are included in the NYISO's Comprehensive Reliability Planning

Process Manual ISO Procedures.

- 31.2.7.2 The <a href="NYISOISO">NYISOISO</a> will monitor and report on the status of regulated solutions to ensure their continued viability to meet Reliability Needs on a timely basis in the CRP. The <a href="NYISO's ISO's">NYISO's Comprehensive Reliability Planning</a> such projects are included in the <a href="NYISO's Comprehensive Reliability Planning">NYISO's Comprehensive Reliability Planning</a> <a href="Process ManualISO Procedures">Process ManualISO Procedures</a>.
- 31.2.7.3 The NYISOISO will apply the criteria in this Section 31.2.7.3 for halting a regulated <a href="backstop">backstop</a> solution that is already underway because of the entry of ISO <a href="https://basdetermined.number
- 31.2.7.3.1 The NYISOISO shall review proposals for market-based solutions, pursuant to Section 31.2.5.3 of this Attachment Y. If, based on the availability of market-based solution(s) to meet the identified Reliability Need, the NYISOISO determines that the regulated backstop solution is no longer needed and should be halted, it will immediately notify the Responsible Transmission Owner and will so state in the CRP. If a regulated backstop solution is halted by the NYISOISO, all of the costs incurred and commitments made by the Responsible Transmission Owner up to that point, including reasonable and necessary expenses incurred to implement an orderly termination of the project, will be recoverable by the

Responsible Transmission Owner under the cost recovery mechanism in the <a href="https://www.nylson.com/nylson

- 31.2.7.3.2 Once the Responsible Transmission Owner submits its application for state regulatory approval of the regulated backstop solution, pursuant to Section-31.2.6.4.15.7 of this Attachment Y, or, if state regulatory approval is not required, once the Responsible Transmission Owner submits its application for any necessary regulatory approval, the entry of a market-based solution will not result in the halting by the <a href="https://www.necessary.org/nc/halter/">NYISOISO</a> of the regulated backstop solution. The <a href="https://www.necessary.org/nc/halter/">NYISOISO</a>, however, will continue to <a href="https://www.necessary.org/nc/halter/">evaluatemonitor</a> proposed market-based solutions to determine their ability to meet the identified Reliability Need in a <a href="https://www.necessary.org/nc/halter/">https://www.necessary.org/nc/halter/</a> and will provide the results of its review to the Responsible Transmission Owner, Market Participants and the appropriate state regulatory agency(ies).
- 31.2.7.3.3 If a material modification to the regulated backstop solution is proposed by any federal, state or local agency, the Responsible Transmission Owner will request the <a href="https://www.nyisolsout.org/nyisolsout.nyisolso
- 31.2.7.3.4 If the appropriate federal, state or local agency(ies) does not approve a necessary authorization for the regulated backstop solution, 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 Responsible Transmission Owner under the <u>NYISOISO</u> cost recovery mechanism in Rate Schedule 10 of this tariff regardless of the nature of the solution.

- 31.2.7.3.5 The NYISOISO is not required to review market-based solutions to determine whether they will meet the identified Reliability Need in a timely manner after the regulated backstop solution has received federal and state regulatory approval, unless a federal or state regulatory agency requests the NYISOISO to conduct such a review. The NYISOISO will report the results of its review to the federal or state regulatory agency, with copies to the Responsible Transmission Owner.
- 31.2.7.3.6 If a necessary federal, state or local authorization for a regulated backstop solution is withdrawn, all expenditures and commitments made up to that point including reasonable and necessary expenses incurred to implement an orderly termination of the project, will be recoverable under the NYISOISO cost recovery mechanism in Rate Schedule 10 of this tariff by the Responsible Transmission Owner regardless of the nature of the solution. When an alternative regulated solution proposed by a Transmission Owner or Other Developer has been determined by the PSCNYPSC or other State authorities to be the preferred solution to a Reliability Need and the Transmission Owner or Other Developer makes all best efforts to obtain necessary federal, state or local authorization, but these authorizations are not granted or are withdrawn, then all reasonably incurred expenditures and necessary expenses incurred to implement an orderly termination of the project; will be recoverable under the NYISOISO cost recovery mechanism in Rate Schedule 10 of this tariff by the Transmission Owner or Other

Developer, provided that such expenditures and commitments were before the PSCNYPSC or other State authorities when it made its determination that the alternative regulated solution is the preferred solution.

- 31.2.7.4 The NYISOISO will apply the criteria in this Section 31.2.7.4 for determining the cutoff date for a determination that a market-based solution will not be available to meet a Reliability Need on a timely basis.
- 31.2.7.4.1 In the first instance, the NYISOISO shall employ its procedures for monitoring the viability of a market-based solution to determine when it may no longer be viable. Under the conditions where a market-based solution is proceeding after the date on which the NYISO would otherwise have invoked a Trigger Date for the relevant regulated backstop solution, it becomes even more critical for the NYISOISO to conduct a continued analysis of the viability of such market-based solutions.
- 31.2.7.4.2 The <a href="developer-Developer">developer</a> of such a market-based solution shall submit updated information to the <a href="NYISOISO">NYISOISO</a> twice during each <a href="CRPPReliability">CRPPReliability</a>
  <a href="Planning Process">Planning Process</a> cycle, first during the input phase of the RNA, and again during the solutions phase during the period allowed for the solicitation for market-based and regulated backstop solutions. If no solutions are requested in a particular year, then the second update will be provided during the <a href="NYISO's ISO's">NYISO's</a> analysis of whether existing solutions continue to meet identified <a href="reliability">reliability</a>
  <a href="mailto:needs-Reliability Needs">needs-Reliability Needs</a>. The updated information of the project status shall include: status of final permits, status of major equipment, current status of construction\_schedule, estimated in-service date, any potential impediments to

completion by the <u>reliability need date</u> <u>Target Year</u>, and any other information requested by the <u>NYISOISO</u>.

- 31.2.7.4.3 The developer Developer shall immediately report to the NYISOISO when it has any indication of a material change in the project status or that the project in-service date may slip beyond the Reliability Need date. Target Year. A material change shall include, but not be limited to, a change in the financial viability of the developer Developer, a change in siting status, or a change in a major element of the project development.
- 31.2.7.4.4 Based upon the above information, the NYISOISO will perform an independent review of the development status of the market-based solution to determine that whether it remains viable to meet the identified reliability needReliability Need in a timely manner. If the NYISOISO, at any time, learns of a material change in the project status of a market-based solution, it may, at that time, make a determination as to the continued viability of such project.
- 31.2.7.4.5 The NYISOISO, prior to making a determination about the viability of a specific proposed solution, will communicate its intended determination to the project sponsorDeveloper along with the basis for its intended determination. The NYISOISO shall provide sponsorthe Developer a reasonable period (not more than 2 weeks) to respond to the NYISO's intended determination, including an opportunity to provide additional information to the NYISOISO to support the continued viability of the proposed solution.
- 31.2.7.4.6 If the <a href="https://www.needis.no.longer.no.">NYISOISO</a> determines that a market-based solution that is needed to meet an identified Reliability Need is no longer viable, it will request the Responsible Transmission Owner to <a href="https://www.needis.no.longer.no.">invokeproceed with</a> the regulated backstop

solution, or to seek other measures including, but not limited to, a Gap Solution, to ensure the reliability of the system within the benchmark timeframe.

31.2.7.4.7 If the <a href="NYISOISO">NYISOISO</a> determines that the market-based solution is still viable, but that its in-service date is likely to slip beyond the <a href="reliability need dateTarget">reliability need dateTarget</a>
<a href="Year">Year</a>, the <a href="NYISOISO">NYISOISO</a> will request the Responsible Transmission Owner to prepare a Gap Solution in accordance with the provisions of this Attachment Y.

# 31.3 Economic Planning Process

# 31.3.1 Congestion Assessment and Resource Integration Study for Economic Planning

#### **31.3.1.1** General

The NYISOISO shall prepare and publish the Congestion Assessment and Resource Integration Study ("CARIS") as described below. The CARIS for economic planning will align with the reliability planning process. Each CARIS will useshall (1) develop a ten-year planning horizon consistent with the reliability planning horizon. Each CARIS will be based on projection of congestion and shall identify, rank, and group the most recently concluded and approved CRP. The base case for each CARIS will assume a reliable congested elements on the New York bulk power system for based on historic and projected congestion; and (2) include three studies, selected pursuant to Section 31.3.1.2.2, of the potential impacts of generic solutions to mitigate the ten-year planning horizon based upon the CRP-identified congestion. The CARIS will align with the Reliability Planning Process.

# 31.3.1.2 Interested Party Participation in the Development of the CARIS

31.3.1.2.1 The NYISOISO shall develop the CARIS in consultation with Market

Participants and all other interested parties. The TPAS will have responsibilities

consistent with ISO Procedures for review of the NYISO's technical analyses.

ESPWG will have responsibilities consistent with ISO Procedures for providing

commercial input and assumptions to be used in the development of the

congestion assessment and the congestion assessment scenarios provided for

under Section 31.3.1.5, and in the reporting and analysis of congestion costs.

Coordination and communication will be established and maintained between

these two groups and NYISOISO staff to allow Market Participants and other interested parties to participate in a meaningful way during each stage of the economic planning process. The NYISOISO staff shall report any majority and minority views of these collaborative governance work groups when it submits the CARIS to the Business Issues Committee for a vote, as provided below.

- 31.3.1.2.2 The NYISOISO, in conjunction with ESPWG, will develop criteria for the selection and grouping of the three congestion and resource integration studies that comprise each CARIS, as well as for setting the associated timelines for completion of the selected studies. Study selection criteria may include congestion estimates, and shall include a process to prioritize the three studies that comprise each CARIS. Criteria shall also include a process to set the cut off date for inputs into and completion of each CARIS study cycle.
- 31.3.1.2.3 The NYISOISO, in conjunction with ESPWG, will develop a process by which interested parties can request and fund other congestion and resource integration studies, in addition to those included in each CARIS. These individual congestion and resource integration studies are in addition to those studies that a customer can request related to firm point-to-point transmission service pursuant to Section 3.7 of the NYISOISO OATT, or studies that a customer can request related to Network Integration Transmission Service pursuant to Section 4.5 of the NYISOISO OATT, or studies related to interconnection requests under Attachment X or Attachment Z of the NYISOISO OATT.
- 31.3.1.2.4 The NYISOISO shall post all requests for congestion and resource integration studies on its website.

# 31.3.1.3 Preparation of the CARIS

- 31.3.1.3.1 The Study Period for the CARIS shall be the same ten-year Study Period covered by the most recently approved CRP.
- 31.3.1.3.2 The CARIS will assume a reliable system throughout the Study Period, based first upon the solutions identified in the most recently completed and approved CRP. The baseline system for the CARIS shall first incorporate sufficient viable market-based solutions to meet the identified Reliability Needs as well as any regulated backstop solutions triggered in prior or current CRPs.

  The NYISO by an ISO request pursuant to Section 31.2.5.7. The ISO, in conjunction with the ESPWG, will develop methodologies to scale back market-based solutions to the minimum needed to meet the identified Reliability Needs, if more have been proposed than are necessary to meet the identified Reliability

  Needs. Regulated backstop solutions that have been proposed but not triggered in the most recent CRP pursuant to Section 31.2.5.7 shall also be used if there are insufficient market-based solutions for the ten-year study period. Study Period.

  Multiple market-based solutions, as well as regulated solutions to Reliability

  Needs, may be included in the scenario assessments described in Section 31.3.1.5.
- 31.3.1.3.3 In conducting the CARIS, the NYISOISO shall combine the component studies selected and assess system congestion and resource integration over the study periodStudy Period, measuring congestion by the metrics discussed in Appendix A to this Attachment Y. The NYISOISO, in conjunction with the ESPWG, will develop the specific production costing model to be used in the CARIS. All resource types shall be considered on a comparable basis as potential

solutions to the congestion identified: generation, transmission, and demand response, and energy efficiency. The CARIS may include consideration of the economic impacts of advancing a regulated back stop solution contained in the CRP.

31.3.1.3.4 In conducting the CARIS, the NYISOISO shall conduct benefit/cost analysis of each potential solution to the congestion identified, applying benefit/cost metrics that are described in this Section 31.3.1.3. The principal benefit metric for the CARIS analysis will be expressed as the present value of the NYCA-wide production cost reduction that would result from each potential solution. The present value of the NYCA-wide production cost reduction will be determined in accordance with the following formula:

Present Value in year 1 = Sum of the Present Values from each of the 10 years of the Study Period.

The discount rate to be used for the present value analysis shall be the current after-tax weighted average cost of capital for the New York Transmission Owners.

31.3.1.3.5 Additional benefit metrics shall include estimates of reductions in losses,

LBMP load costs, generator payments, ICAP costs, Ancillary Services costs,

emission costs, and TCC payments. The NYISOISO will work with the ESPWG to

determine the most useful metrics for each CARIS cycle, given overall NYISOISO

resource requirements. The additional metrics will estimate the benefits of the

potential generic solutions in mitigating the congestion identified for information

purposes only. All the quantities, except ICAP, will be the result of the forward

looking production cost simulation. The additional benefit metrics will be

determined by measuring the difference between the CARIS base case system

value and a system value when the potential generic solution is added. All three resource types will be considered as potential generic solutions to the congestion identified, such as generation, transmission, and/or demand response. The value of the additional metrics will be expressed in present value by using the following formula:

Present Value in year 1 = Sum of the Present Values from each of the 10 years of the Study Period.

The discount rate to be used for the present value analysis shall be the current after-tax weighted average cost of capital for the New York-Transmission Owners. The definitions of the LBMP load cost metric, generator payments metric, reduction in losses metric, Ancillary Services costs metric, and TCC payment metric are set forth below.

- 31.3.1.3.5.1 LBMP load costs measure the change in total load payments and unhedged load payments. Total load payments will include the LBMP payments (energy, congestion and losses) paid by electricity demand (forecasted load, exports, and wheeling). Exports will be consistent with the input assumptions for each neighboring control area. Unhedged load payments will represent total load payments minus the TCC payments.
- 31.3.1.3.5.2 Reductions in losses measure the change in marginal losses payments.

  Losses payments will be based upon the loss component of the zonal LBMP load payments.
- 31.3.1.3.5.3 Generator payments measure the change in generation payments.

  Generation payments will include the LBMP payments (energy, congestion, losses), and Ancillary Services payments made to electricity suppliers. Ancillary

Services costs will include payments for Regulation Services and Operating Reserves, including 10 Minute Synchronous, 10 Minute Non-synchronous and 30 Minute Non-synchronous. Generator payments will be the sum of the LBMP payments and Ancillary Services payments to generators and imports. Imports will be consistent with the input assumptions for each neighboring control area Control Area.

- 31.3.1.3.5.4 The TCC payment metric set forth below will be used for purposes of the study phase of the CARIS process, and will not be used for regulated economic transmission project cost allocation under Section 31.4.3.4. The TCC payment metric will measure the change in total congestion rents collected in the dayahead market. These congestion rents shall be calculated as the product of the Congestion Component of the Day-Ahead LBMP in each Load Zone or Proxy Generator Bus and the withdrawals scheduled in each hour at that Load Zone or Proxy Generator Bus, minus the product of the Congestion Component of the Day-Ahead LBMP at each Generator Bus or Proxy Generator Bus and the injections scheduled in each hour at that Generator bus or Proxy Generator Bus, summed over all locations and hours.
- 31.3.1.3.5.5 The emission metric will measure the change in CO<sub>2</sub>, NO<sub>x</sub>, and SO<sub>2</sub>, emissions in tons on a zonal basis as well as the change in emission cost by emission type. Emission costs will be reflected in the development of the production cost curve.
- 31.3.1.3.5.6 The calculation of the ICAP cost metric will be determined as set forth below. The ICAP cost metric will be highly dependent on the rules and

procedures guiding the calculation of the IRM, LCR, and the ICAP Demand <a href="mailto:c:\documents\espwg\040512\compare 31.3">c:\documents\espwg\040512\compare 31.3</a> for posting 3 13.docxeompare result 1w:\17400\17468\dor\ny

Curves, both for the next capability period and future capability periods. In each CARIS cycle, the ISO will review, with the ESPWG and, as appropriate, other ISO committees, the results of the ICAP cost metric.

- 31.3.1.3.5.6.1 The ICAP metric, in the form of a megawatt impact, will be computed for both generic and actual economic project proposals based on a methodology that: (1) determines the base system loss of load expectation ("LOLE") for the applicable horizon year; (2) adds the proposed economic project; and (3) calculates the LOLE for the system with the addition of the proposed economic-project. If the system LOLE is lower than that of the base system, the NYISOISO will reduce generation in all New York Control Area ("NYCA") zones proportionally (i.e., based on proportion of zonal capacity to total NYCA capacity) until the base system LOLE is achieved. That amount of reduced generation is the NYCA megawatt impact.
- 31.3.1.3.5.6.2 The ISO will calculate both of the following ICAP cost metrics described in subsections (1) and (2) below by first determining the megawatt impact described above in (A)Section 31.3.1.3.5.6.1 and then:
- (1) For Rest of State, the ISO will measure the cost impact of a proposed

  economicgeneric project for each planning year by: (i) forecasting the cost per

  megawatt-year of Installed Capacity in Rest of State under the assumption that the

  proposed economicgeneric project is not in place, with that forecast based on the

  latest available ICAP Demand Curve for the NYCA and the amount of Installed

  Capacity available in the NYCA, as shown in the Load and Capacity table Data

  Report developed for that year; and (ii) multiplying that forecasted cost per

megawatt-year for Rest of State in that year by the sum of the megawatt impact for all Load Zones contained within Rest of State, as calculated in accordance with subsection (A) of this Section 31.3.1.3.5.4.

For each Locality, the ISO will measure the cost impact of a proposed economic generic project for each planning year by: (i) forecasting the cost per megawatt-year of Installed Capacity in that Locality under the assumption that the proposed economic generic project is not in place, with that forecast based on the latest available ICAP Demand Curve for that Locality and the amount of Installed Capacity available in that Locality as shown in the relevant Load and Capacity table Data Report developed for that year, and (ii) multiplying that forecasted cost per megawatt-year for that Locality in each year by the sum of the megawatt impact for all Load Zones contained within that Locality, as calculated in accordance with subsection (A) of this Section 31.3.1.3.5.4.

This ICAP cost metric will then be presented for each applicable planning year as a stream of present value benefits for each Locality and for Rest of State. The applicable planning years start with the proposed commercial operation date of the proposed economicgeneric project and end ten years after the proposed commercial operation date of the proposed economicgeneric project.

(2) For Rest of State, the ISO will measure the cost impact of a proposed economic project for each planning year by: (i) forecasting the cost per megawatt-year of Installed Capacity in Rest of State under the assumption that the proposed economic project is in place, with that forecast based on the latest available ICAP Demand Curve for the NYCA and the amount of Installed

Capacity available in the NYCA; (ii) subtracting that forecasted cost per

megawatt-year from the forecasted cost per megawatt-year of Installed Capacity in Rest of State calculated in subsection (1) under the assumption that the proposed economicgeneric project is not in place; and (iii) multiplying that difference by fifty percent (50%) of the assumed amount of Installed Capacity available in Rest of State as calculated from the relevant Load and Capacity tables Data Report developed for the CARIS process.

For each Locality, the ISO will measure the cost impact of a proposed economicgeneric project for each planning year by: (i) forecasting the cost per megawatt-year of Installed Capacity in that Locality under the assumption that the proposed economic project is in place, with that forecast based on the latest available ICAP Demand Curve for that Locality and the amount of Installed Capacity available in that Locality as shown in the relevant Load and Capacity table Data Report developed for that year; (ii) subtracting the greater of that forecasted cost per megawatt-year with the proposed economic project in place or the forecasted Rest of State Installed Capacity cost per megawatt-year with the proposed economic project in place from the forecasted cost of Installed Capacity in that Locality calculated in subsection (1) under the assumption that the proposed economic project is not in place; and (iii) multiplying that difference by fifty percent (50%) of assumed amount of Installed Capacity available in that Locality, as taken from the relevant Load and Capacity tables developed for the CARIS process.

This ICAP cost metric will then be represented for each applicable planning year as a stream of present value benefits for each Locality and for Rest of State. The

applicable planning years start with the proposed commercial operation date of the proposed economicgeneric project and end with the earlier of: (i) the year when the system, with the proposed economicgeneric project in place, reaches an LOLE of 0.1, or (ii) ten years after the proposed commercial operation date of the proposed economicgeneric project.

(3) The forecast of Installed Capacity costs per megawatt-year are developed by: first, escalating the Net Cost of New Entry ("CONE") for the NYCA or a Locality from the most recently completed ICAP Demand Curves for each year of the planning period; second, determining the future proxy Locational Minimum Installed Capacity Requirement or Minimum Installed Capacity Requirement for the NYCA as the actual amount of Installed Capacity in the Locality or the NYCA for the year that NYCA reaches 0.1 LOLE; third, reducing the cost per megawatt-year in each year from the escalated Net-CONE to reflect the excess Installed Capacity from the Load and Capacity tableData Report above the future proxy Minimum Installed Capacity Requirement with the adjustment calculated from the excess and the slope of the ICAP Demand Curve.

The forecasts of Installed Capacity costs for Localities or Rest of State performed in subsections (1) and (2) above shall, in addition to the assumptions listed above, be based upon: (i) the forecasted Net CONE for the Locality (the NYCA in the case of the Rest of State forecast); (ii) the amount of Installed Capacity required to meet the future proxy Locational Minimum Installed Capacity Requirement (the Minimum Installed Capacity Requirement for the NYCA in the case of the Rest of State forecast); (iii) the slope of the relevant ICAP Demand Curve, and

(iv) the smallest quantity where the cost of Installed Capacity on that ICAP Demand Curve reaches zero.

# 31.3.1.4 Planning Participant Data Input

At the NYISO's ISO's request, Market Participants, Developers, and other parties shall provide, in accordance with the schedule set forth in the NYISO Comprehensive Reliability Planning Process Manual ISO's Procedures, the data necessary for the development of the CARIS. This input will include but not be limited to existing and planned additions and modifications to the New York State Transmission System (to be provided by Transmission Owners and municipal electric utilities); proposals for merchant transmission facilities (to be provided by merchant developers Developers); generation additions and retirements (to be provided by generator owners and developers Developers); demand response programs (to be provided by demand response providers); and any long-term firm transmission requests made to the NYISO The relevant Transmissions Transmission Owners will assist the NYISO in developing the potential solution cost estimates to be used by the NYISO to conduct benefit/cost analysis of each of the potential solutions.

# 31.3.1.5 Congestion and Resource Integration Scenario Development

The NYISOISO, in consultation with the ESPWG-and TPAS, shall develop congestion and resource integration scenarios addressing the Study Period. Variables for consideration in the development of these congestion and resource integration scenarios include but are not limited to: load forecast uncertainty, fuel price uncertainty, new resources, retirements, emission data, the cost of allowances and potential requirements imposed by proposed environmental and

energy efficiency mandates, as well as overall <a href="https://www.ncsen.com/NYISOISO">NYISOISO</a> resource requirements. The <a href="https://www.ncsen.com/NYISOISO">NYISOISO</a> shall report the results of these scenario analyses in the CARIS.

# 31.3.1.6 CARIS Report Preparation

Once all the analyses described above have been completed, NYISO Staff will prepare a draft of the CARIS including a discussion of its assumptions, inputs, methodology, and the results of its analyses.

# 31.3.2 CARIS Review Process and Actual Project Proposals

#### 31.3.2.1 Collaborative Governance Process

The draft CARIS shall be submitted to both TPAS and the ESPWG for review and comment. The NYISOISO shall make available to any interested party sufficient information to replicate the results of the draft CARIS. The information made available will be electronically masked and made available subjectpursuant to such other terms and conditions process that the NYISO mayISO reasonably determine are 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 that review, the draft CARIS reflecting the revisions resulting from the TPAS and ESPWG review shall be forwarded to the Business Issues Committee and the Management Committee for discussion and action.

#### **31.3.2.2 Board Action**

Following the Management Committee vote, the draft CARIS, with Business Issues

Committee and Management Committee input, will be forwarded to the NYISOISO Board for review and action. Concurrently, the draft CARIS will be provided to the Market Monitoring

Unit for its review and consideration. The Board may approve the CARIS as submitted, or

propose modifications on its own motion. If any changes are proposed by the Board, the revised CARIS shall be returned to the Management Committee for comment. The Board shall not make a final determination on a revised CARIS until it has reviewed the Management Committee comments. Upon approval by the Board, the <a href="https://www.nyses.com/

The responsibilities of the Market Monitoring Unit that are addressed in the above section of Attachment Y to the ISO OATT are also addressed in Section 30.4.6.8.4 of the Market Monitoring Plan, Attachment O to the ISO OATT.

## 31.3.2.3 Public Information Sessions

In order to provide ample exposure for the market place to understand the content of the CARIS, the NYISOISO will provide various opportunities for Market Participants and other potentially interested parties to discuss final CARIS. Such opportunities may include presentations at various NYISOISO Market Participant committees, focused discussions with various industry sectors, and /or presentations in public venues.

#### 31.3.2.4 Actual Project Proposals

As discussed in Section 31.3.1 of this Attachment Y, the CARIS analyzes system congestion over its ten year study period the Study Period and, for informational purposes, provides benefit/cost analysis and other analysis of potential generic solutions to the congestion identified. If, in response to the CARIS, a developer proposes an actual project to address specific congestion identified in the CARIS, then the NYISOISO will process that project proposal in accordance with the relevant provisions of Sections 31.4.1, 31.4.3 and 31.4.4 of this Attachment Y.



# 31.4 Cost Allocation and Cost Recovery

# 31.4.1 The Scope of Attachment Y Cost Allocation

## 31.4.1.1 Regulated Responses

The cost allocation principles and methodologies in this Attachment Y cover only regulated transmission solutions to Reliability Needs and regulated transmission responses to congestion identified in the CARIS, 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 31.4.2.1 and 31.4.2.2 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 31.4.3.1 and 31.4.3.2 of this Attachment Y.

## 31.4.1.2 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.

#### 31.4.1.3 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-and, Attachment X and Attachment Z of the NYISOISO OATT.

# 31.4.1.4 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 NYISOISO OATT.

#### 31.4.1.5 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.

# 31.4.1.6 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.

## 31.4.2 Regulated Responses to Reliability Needs

# 31.4.2.1 Cost Allocation Principles

Cost allocation for regulated transmission solutions to Reliability Needs shall be determined by the <a href="https://www.nylson.org/nylson.org

- 31.4.2.1.1 The focus of the cost allocation methodology shall be on solutions to violations of specific Reliability Criteria Needs.
- Potential impacts unrelated to addressing the Reliability Needs shall not be considered for the purpose of cost allocation for regulated solutions.
- 31.4.2.1.3 Primary beneficiaries shall initially be those <u>Transmission DistrictsLoad</u>

  <u>Zones</u> identified as contributing to the reliability violation.
- 31.4.2.1.4 The cost allocation among primary beneficiaries shall be based upon their relative contribution to the need for the regulated solution.
- 31.4.2.1.5 The NYISOISO 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).
- 31.4.2.1.6 Cost allocation among Transmission Districts shall recognize the terms of prior agreements among the Transmission Owners, if applicable.
- 31.4.2.1.7 Consideration should be given to the use of a materiality threshold for cost allocation purposes.
- 31.4.2.1.8 The methodology shall provide for ease of implementation and administration to minimize debate and delays to the extent possible.
- 31.4.2.1.9 Consideration should be given to the "free rider" issue as appropriate.

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

minimum Locational <u>Installed</u> Capacity Requirement ("LCR") cost responsibilities,"), and is based on a separate process that results in NYCA meeting its LOLE requirement.

- 31.4.2.1.13 The target year is the year in which a need will be met by a backstop solution(s).
- 31.4.2.1.14 The trigger year is the year in which the backstop solution must begin to be implemented, driven by the project lead time.
- 31.4.2.1.15 Cost allocation for a solution that meets the needs of a target year Target

  Year assumes that backstop solutions of prior years have been implemented.
- 31.4.2.1.<del>16</del> Cost allocation will consider the most recent values for LCRs.

  LCRLCRs must be met for the target year. Target Year.

# 31.4.2.2 Cost Allocation Methodology

#### 31.4.2.2.1 General Reliability Solution Cost Allocation Formula:

The cost allocation mechanism <u>under Rate Schedule 10 of this tariff</u> for regulated transmission <u>reliability projects</u> solutions to <u>Reliability Needs</u>, 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 that are triggered to meet Reliability Needs identified in the RNA-determined to be necessary pursuant to Section 31.2.5.7. The formula is not applicable to that portion of a project oversized beyond the smallest technically feasible solution that meets 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 <u>NYISOISO</u> 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. 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. This cost allocation process can be applied to any solution or set of solutions that involve single or multiple cost allocation steps. One formula can be applied to any solution set:

$$Cost Allocation_{i} = \begin{bmatrix} \frac{LCRdef_{i}}{Soln} \\ \frac{Soln}{Size} \end{bmatrix} + \begin{bmatrix} \frac{Coincident Peak_{i} \times (1 + IRM - LCR_{i})}{NN} \times \frac{Soln STWdef}{Soln-Size} \end{bmatrix}$$

$$= + \begin{bmatrix} \frac{Coincident Peak_{i} \times (1 + IRM - LCR_{i})}{NN} \times \frac{Soln CIdef}{Soln-Size} \end{bmatrix}$$

$$= \sum Coincident Peak_{i} \times (1 + IRM - LCR_{i}) \times \frac{Soln CIdef}{Soln-Size}$$

$$= \sum Coincident Peak_{i} \times (1 + IRM - LCR_{i}) \times \frac{Soln CIdef}{Soln-Size}$$

$$= \sum Coincident Peak_{i} \times (1 + IRM - LCR_{i}) \times \frac{Soln CIdef}{Soln-Size}$$

$$= \sum Coincident Peak_{i} \times (1 + IRM - LCR_{i}) \times \frac{Soln CIdef}{Soln-Size}$$

$$= \sum Coincident Peak_{i} \times (1 + IRM - LCR_{i}) \times \frac{Soln CIdef}{Soln-Size}$$

$$= \sum Coincident Peak_{i} \times (1 + IRM - LCR_{i}) \times \frac{Soln CIdef}{Soln-Size}$$

$$= \sum Coincident Peak_{i} \times (1 + IRM - LCR_{i}) \times \frac{Soln CIdef}{Soln-Size}$$

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<sub>i</sub> 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.

Three step cost allocation methodology for regulated reliability solutions:

31.4.2.2.1.1 Step 1 - LCR Deficiency

31.4.2.2.1.1.1 Any deficiencies in meeting the LCRs for the target year 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 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:

$$Allocation_i = \frac{LCRdef_i}{Soln\_Size} \times 100\%$$

Where *i* is for each applicable LCR zone, LCRdef<sub>i</sub> represents the applicable zonal LCR deficiency, and SolnSizeSoln\_Size represents the total compensatory MW addressed by the applicable project.

- 31.4.2.2.1.1.2 Prior to the LOLE calculation, voltage constrained interfaces will be recalculated to determine the resulting transfer limits when the LCRdef MW are added.
- 31.4.2.2.1.2 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.

- 31.4.2.2.1.2.1 If NYCA is found to be resource limited, the NYISOISO, 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.
- 31.4.2.2.1.2.2 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<sub>i</sub> = 
$$\begin{bmatrix} \text{Coincident Peak}_{i} \times (1 + \text{IRM-}LCR_{i}) & \times & \text{SolnSTWdef} \\ \hline \\ & \sum_{k=1}^{n} \text{Coincident Peak}_{k} \times (1 + \text{IRM-}LCR_{k}) & \sum_{k=1}^{n} \text{Soln-\_Size} \end{bmatrix} \times 100\%$$

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 <a href="SolnSizeSoln Size">Soln Size</a> represents the total compensatory MW addressed by the applicable project.

31.4.2.2.1.3 Step 3 - Constrained Interface Deficiency. If the NYCA is not resource limited as determined by the NYCA Free Flow Test, then the <a href="https://www.nyca.ni.gov.nyca.ni.go

- 31.4.2.2.1.3.1 The NYISOISO 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.

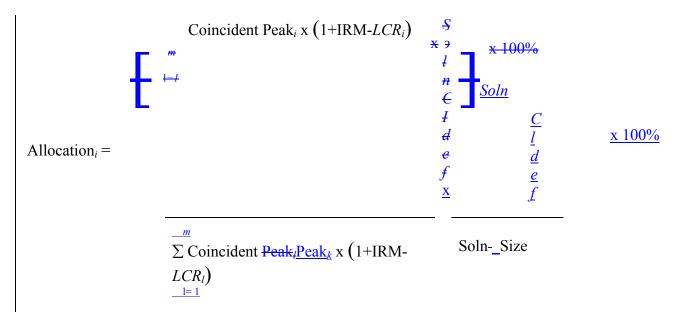
  These values will be used as an initial indicator to determine the binding interfaces that are impacting LOLE within the NYCA.
- 31.4.2.2.1.3.2 NYISOThe ISO will review the output of the reliability simulation program utilized for the RNA along with other applicable information that may be available to make the determination of the binding interfaces.
- 31.4.2.2.1.3.3 Zone(s) within areas isolated from the rest of NYCA as a result of constrained interface limits (the "Bounded Regions") Bounded Regions are assigned cost responsibility for the compensatory MW, defined as CIdef, needed to reach an LOLE of 0.1.
- 31.4.2.2.1.3.4 If one or more Bounded Regions are isolated as a result of binding interfaces identified through the Binding Interface Test, the <a href="https://www.nyisolateness.nyiso
- 31.4.2.2.1.3.5 The Bounded Regions will be identified by the NYISO's ISO's Binding
  Interface 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 NYISOISO 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.

31.4.2.2.1.3.6 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:



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 <u>SolnSizeSoln\_Size</u> represents the total compensatory MW addressed by the applicable project.
- 31.4.2.2.1.4 If, after the completion of Steps 1 through 3, there is a thermal or voltage security issue that does not cause an LOLE violation, it will be deemed a local issue and related costs will not be allocated under this process.
- 31.4.2.2.1.5 Costs related to the deliverability of a resource will be addressed under the <a href="https://www.nylso.com/nyls

# 31.4.3 Regulated Economic Projects

# **31.4.3.1** The Scope of Section **31.4.3**

As discussed in Section 31.4.1 of this Attachment Y, the cost allocation principles and methodologies of this Section 31.4.3 apply only to regulated economic transmission projects ("RETPs) proposed in response to congestion identified in the CARIS. This Section 31.4.3 does not apply to generation or demand side management projects, nor does it apply to any market-based projects. This Section 31.4.3 does not apply to regulated backstop solutions triggered by the NYISOISO pursuant to the Comprehensive Reliability Planning ProcessCSPP, provided, c:\documents and settings\eckels\my documents\espwg\040512\compare 31.4 for posting 3 28.docxw:\17400\17468\dor\nyto drafts 9.19-11\text{moster 31.4 red line 9.19 doc

however, the cost allocation principles and methodologies in this Section 31.4.3 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 <a href="https://www.nyisol.org/nyisol.o

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

# 31.4.3.2 Cost Allocation Principles

Cost allocation for regulated transmission responses to NYISO studies of future congestion RETPs shall be determined by the NYISOISO based upon the principle that beneficiaries should bear the cost responsibility. The specific cost allocation methodology in Section 31.4.3.4 incorporates the following elements:

- 31.4.3.2.1 The focus of the cost allocation methodology shall be on responses to specific conditions identified in studies of future congestionthe CARIS.
- 31.4.3.2.2 Potential impacts unrelated to addressing the identified congestion shall not be considered for the purpose of cost allocation for regulated economic projects RETPs.
- 31.4.3.2.3 <u>Economic projects that were previouslyProjects</u> analyzed <u>eanhereunder as</u> <u>proposed RETPs may</u> proceed on a market basis with willing buyers and sellers at any time.

- be applicable only when a super majority of the beneficiaries of the project, as defined in Section 31.4.3.6 of this Attachment Y, vote to support the project.
- 31.4.3.2.5 Beneficiaries of a regulated economic project RETP shall be those entities economically benefiting from the proposed project. The cost allocation among beneficiaries shall be based upon their relative economic benefit.
- 31.4.3.2.6 Consideration shall be given to the proposed project's payback period.
- 31.4.3.2.7 The cost allocation methodology shall address the possibility of cost overruns.
- 31.4.3.2.8 Consideration shall be given to the use of a materiality threshold for cost allocation purposes.
- 31.4.3.2.9 The methodology shall provide for ease of implementation and administration to minimize debate and delays to the extent possible.
- 31.4.3.2.10 Consideration should be given to the "free rider" issue as appropriate. The methodology shall be fair and equitable.
- 31.4.3.2.11 The methodology shall provide cost recovery certainty to investors to the extent possible.
- 31.4.3.2.12 Benefits determination shall consider various perspectives, based upon the agreed-upon metrics for analyzing congestion.
- 31.4.3.2.13 Benefits determination shall account for future uncertainties as appropriate (e.g., load forecasts, fuel prices, environmental regulations).
- 31.4.3.2.14 Benefits determination shall consider non-quantifiable benefits as appropriate (*e.g.*, –system operation, environmental effects, renewable integration).

## 31.4.3.3 Project Eligibility for Cost Allocation

The methodologies in this Section 31.4.3.3 will be used to determine the eligibility of a regulated economic transmission projectproposed RETP to have its cost allocated and recovered pursuant to the provisions of this Attachment Y.

- 31.4.3.3.1 The NYISOISO will evaluate the benefits and against the costs (as provided by the Developer) of each regulated economic transmission

  projectproposed RETP over a ten-year period commencing with the proposed commercial operation date for the project. The developer Developer of each project will pay the cost incurred by the NYISOISO to conduct the ten-year eost/benefit/cost analysis of its project. The NYISOISO, in conjunction with the ESPWG, will develop methodologies for extending the CSPP study periodmost recently completed CARIS database as necessary to evaluate the benefits and costs of each regulated economic transmission projectproposed RETP.
- 31.4.3.3.2 The benefit metric for eligibility under the NYISO's cost/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.
- 31.4.3.3.3 The cost for the NYISO's ISO's benefit/cost analysis will be supplied by the developer 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.

- 31.4.3.3.4 For informational purposes only, the <a href="https://www.nylson.org/nylson.o
- 31.4.3.3.5 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 31.4.3.2 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 31.4.3.6 of this Attachment Y.
- 31.4.3.3.6 In addition to <u>calculating</u> the <u>eligibility</u>-benefit metric <u>usedas defined</u> in its <u>benefit/cost analysisSection 31.4.3.3.2</u>, the <u>NYISOISO</u> will calculate the 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 31.4.3.4.2.3. The <u>NYISOISO</u> will provide information on these additional metrics to the maximum extent practicable considering its overall resource commitments.
- 31.4.3.3.7 In addition to the benefit/cost analysis performed by the NYISOISO under this Section 31.4.3.3, the NYISOISO will work with the ESPWG to consider the development and implementation of scenario analyses, for information only, that shed additional light on the cost and benefit/cost analysis of a proposed project.

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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 annual resource commitments of the NYISOISO.

## 31.4.3.4 Cost Allocation for Eligible Projects

As noted in Section 31.4.3.2 of this Attachment Y, the cost of a regulated economic transmission project RETP will be allocated to those entities that would economically benefit from implementation of the proposed project.

- 31.4.3.4.1 The NYISOISO will identify the beneficiaries of the proposed project over a ten-year time period commencing with the proposed commercial operation date for the project. The NYISOISO, in conjunction with the ESPWG, will develop methodologies for extending the CSPP study periodmost recently completed

  CARIS database as necessary for this purpose.
- 31.4.3.4.2 The NYISOISO will identify beneficiaries of a proposed project as follows:
- 31.4.3.4.2.1 The NYISOISO will measure the present value of the annual zonal LBMP load savings for all load zonesLoad 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 NYISOISO as set forth in subsection (v)31.4.3.4.2.5 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 <u>load zone</u>'s <u>Load Zone</u>'s load savings for each year over the ten-year period commencing with the project's commercial operation date. The load savings for a <u>load zone Load Zone</u> 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.

- 31.4.3.4.2.2 The beneficiaries will be those load zones who 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 zones 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 NYISOISO will proceed with the development of the zonal cost allocation information to inform the beneficiary voting process.
- impact of the project on TCC auction revenues and day-ahead residual congestion rents allocated to load in each zone, excludingnot 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.

- 31.4.3.4.2.4 Estimated TCC revenues from any Incremental TCCs created by a proposed regulated economic transmission projectRETP over the ten-year period commencing with the project's commercial operation date will be added to the net load savingsNet Load Savings used for the cost allocation and beneficiary determination.
- 31.4.3.4.2.5 The NYISOISO will solicit bilateral contract information from all Load

  Serving Entities, which will provide the NYISOISO 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 NYISOISO will

  not be included in the calculation of the present value of the annual zonal LBMP savings in section (i)31.4.3.4.2.1 above.
- 31.4.3.4.2.5.1 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
- 31.4.3.4.2.5.2 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 Article 6 of the ISO Services Tariff.
- 31.4.3.4.2.5.3 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.
- 31.4.3.4.2.5.4 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:

$$\begin{split} AdjLBMPS_{y,z} &= \max \Bigg[ 0, TL_{y,z} - \sum_{b \in B_{y,z}} \Big( BCL_{b,y,z} \cdot \Big( 1 - Ind_{b,y,z} \Big) \Big) - SG_{y,z} \Bigg] \\ &\cdot \Big( LBMPI_{y,z} - LBMP2_{y,z} \Big), \end{split}$$

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 31.4.3.4.2.5
- $BCL_{b,y,z}$  is the total annual amount of Energy sold into Load Zone z in year y under bilateral contract block b;
- Ind<sub>b,y,z</sub> 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;
- LBMP1y,z is the forecasted annual  $\underline{Loadload}$ -weighted average LBMP for Load Zone z in year y, calculated under the assumption that the project is not in place; and
- LBMP2<sub>y,z</sub> is the forecasted annual Loadload-weighted average LBMP for Load Zone z in year y, calculated under the assumption that the project is in place.
- $NZS_z$ , the [AI] Net Zonal Savings for each Load Zone z resulting from a given project, shall be calculated using the following equation:

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

Where:

*PS* is the year in which the project is expected to enter commercial operation; *AdjLBMPS*<sub>y,z</sub> is as calculated in Section 31.4.3.4.2.5;

- TCCRevImpact<sub>y,z</sub> is the forecasted impact of TCC revenues allocated to Load Zone z in year y, calculated using the procedure described in Appendices 30.6 to Appendix B in Section 31.6 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.
- 31.4.3.4.3 Load <u>zonesZones</u> not benefiting from a proposed <u>projectRETP</u> 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.
- 31.4.3.4.4 Costs of a project will be allocated to beneficiaries as follows:
- 31.4.3.4.4.1 For each load zone that would benefit from a proposed project, as

  determined pursuant to Section 31.4.3.4.2, the NYISO, The ISO will allocate the

  cost of the projectRETP based on the zonal share of total savings: to the Load

  Zones determined pursuant to Section 31.4.3.4.2 to be beneficiaries of the

  proposed project. Total savings will be equal to the sum of load savings for each

  load zone Load Zone that experiences net benefits pursuant to Section 31.4.3.4.2.

  A load zone's Load Zone's cost allocation will be equal to the present value of the

  following calculation:

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

- 31.4.3.4.4.2 Zonal cost allocation calculations for a <a href="mailto:projectRETP">projectRETP</a> 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.
- 31.4.3.4.4.3 Within zones, costs will be allocated to <u>Load Serving EntitiesLSEs</u> based on MWhs calculated for each LSE for each zone using <u>data from</u> the most recent <u>calendar year data.available 12 month period.</u> Allocations to an LSE will be calculated in accordance with the following formula:

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

- 31.4.3.4.5 Project costs allocated under this Section 31.4.3.4 will be determined as follows:
- 31.4.3.4.5.1 The project cost allocated under this Section 31.4.3.4 will be based on the total project revenue requirement, as supplied by the <a href="developer-Developer">developer Developer</a> 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 <a href="FERC.the Commission">FERC.the Commission</a>. If there is no formula rate on file at <a href="FERC.the">FERC.the</a> <a href="Commission">Commission</a>, then the <a href="developer-Developer">developer</a> shall provide to the <a href="NYISOISO">NYISOISO</a> the project-specific parameters to be used to calculate the total project revenue requirement.
- 31.4.3.4.5.2 Once the cost benefit/cost analysis is completed the amortization period and the other parameters used for cost allocation determine the costs that will be recovered for the project should not be changed, unless so ordered by FERCthe Commission or a court of applicable jurisdiction, for cost recovery purposes to maintain the continued validity of the cost benefit/cost analysis.

- 31.4.3.4.5.3 The NYISOISO, in conjunction with the ESPWG, will develop procedures to allocate the risk of project cost increases that occur after the NYISOISO 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 over-runsoverruns.
- 31.4.3.4.6 FERCThe Commission must approve the cost of a proposed economic transmission projectRETP for that cost to be recovered through the NYISO tariff. ISO OATT. The developer's filing with FERCthe Commission must be consistent with the project proposal evaluated by the NYISOISO under this Attachment Y in order to be cost allocated to beneficiaries.

#### 31.4.3.5 Collaborative Governance Process and Board Action

analysis and beneficiary determination to the ESPWG and TPAS, and to the identified beneficiaries of the proposed RETP for comment. The NYISOISO shall make available to any interested party sufficient information to replicate the results of the eost/benefit/cost analysis and beneficiary determination. The information made available will be electronically masked and made available subjectpursuant to such other terms and conditionsa process that the NYISO mayISO reasonably determine aredetermines is necessary to prevent the disclosure of any Confidential Information or Critical Energy Infrastructure Information contained in the information made available. Following completion of that the review, the NYISO's by the ESPWG and TPAS of the project

benefit/cost analysis, the ISO's analysis reflecting the 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 4 3 5 2 Following the Management Committee vote, the NYISO's project eost/benefit/cost analysis and beneficiary determination will be forwarded, with the input of the Business Issues Committee and Management Committee, to the NYISOISO 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 designations 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 designations 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 cost/benefit/cost analysis and beneficiary designation determination until it has reviewed the Management Committee comments. Upon final approval of the Board, project cost/benefit/cost analysis and beneficiary designations determinations shall be posted by the NYISOISO on its website and shall form the basis of the beneficiary voting described in Section 31.4.3.6 of this Attachment Y.

# 31.4.3.6 Voting by Project Beneficiaries

- 31.4.3.6.1 Only <u>LSEs serving Load Serving Entities located in a beneficiary zone</u>

  determined to be beneficiaries of a proposed project in accordance with the procedures in Section 31.4.3.4 of this Attachment Y shall be eligible to vote on a proposed project. The <u>NYISOISO</u> will, in conjunction with the ESPWG, develop procedures to determine the specific list of voting entities for each proposed project.
- 31.4.3.6.2 The voting share of each <u>Load Serving EntityLSE</u> shall be weighted in accordance with its share of the total project benefits, as allocated by Section 31.4.3.4 of this Attachment Y.
- 31.4.3.6.3 For The costs of a regulated economic transmission project to have its cost RETP shall be allocated under this Attachment Y, if eighty (80) percent (80%) or more of the actual votes cast on a weighted basis must be are cast in favor of implementing the project.
- 31.4.3.6.4 If the <a href="mailto:projectproposed RETP">projectproposed RETP</a> 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.
- 31.4.3.6.5 The NYISOISO will tally the results of the vote in accordance with procedures set forth in the NYISO manuals ISO Procedures, and report the results to stakeholders. Beneficiaries voting against approval of a project must submit to the NYISOISO 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 <a href="https://www.nylsol.gov.nylsol.go

## 31.4.4 Cost Recovery for Regulated Projects

Responsible Transmission Owners, Transmission Owners and Other Developers will be entitled 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 projects solutions, including Gap Solutions, proposed or undertaken pursuant to Section 31.2.6.4the provisions of this Attachment Y to meet a Reliability Need.

The costs of a regulated reliability project to be recovered pursuant to this Section 16 will be reduced by any amounts that, pursuant to Section 25.7.12 of Attachment S to the NYISO OATT, have been previously committed by or collected from Developers for the installation of System Deliverability Upgrades required for the interconnection of generation or merchant transmission projects. 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 31.4.34.4 of this Attachment Y.

- 31.4.4.1 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 31.2.6.4 of this Attachment Y that is
  subsequently cancelled in accordance with the criteria established pursuant
  to Section 31.32.7 of this Attachment Y. Such costs will include reasonably
  incurred costs through the time of cancellation, including any forward
  commitments made.
- 31.4.4.2 The Responsible Transmission Owner, Transmission Owner or Other

  Developer will recover its costs described in this Section 31.4.4 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 tariff. ISO

  OATT. Provided further that cost recovery for regulated transmission projects
  undertaken by a TOTransmission Owner pursuant to this Attachment Y shall be in
  accordance with the provisions of the NYISO/TO Reliability Agreement Between
  the New York Independent System Operator, Inc. and the New York

  Transmission Owners on the Comprehensive Planning Process.
- 31.4.4.3 Costs related to regulated non-transmission reliability projects 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 <u>samesale</u> and transmission of electric energy subject to the jurisdiction of the Commission.

- 31.4.4.4 For a regulated economic transmission project that meets the requirements of sapproved pursuant to Section 31.4.6.3 of this Attachment Y, the Transmission Owner or Other Developer shall have the right to make a filing with FERCthe 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 NYISOISO under Section 31.4.3 of this Attachment Y. The period for cost recovery, if any is approved, will be determined by FERCthe Commission and will begin if and when the project begins commercial operation. Upon request by NYPA, the NYISOISO will make a filing on behalf of NYPA.
- 31.4.4.5 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 <a href="https://www.nyiso.iso.com/nyiso.nc/">NYISO.iso.com/nyiso.nc/</a>. The <a href="https://www.nyiso.nc/">NYISO.iso.com/nyiso.nc/</a> shall determine the amount of Incremental TCCs that may be awarded to an <a href="https://www.nyiso.nc/">Expansion</a> in accordance with the provisions of Section 19.2.2 of Attachment M of the

NYISOISO OATT. The NYISOISO will use these revenues to offset the revenue c:\documents and settings\eckels\my documents\espwg\040512\compare 31.4 for posting 3 28.docxw:\17400\17468\dor\myto drafts 9-19-

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 regulated economic project RETP is implemented.

#### 31.5 Other Provisions

## 31.5.1 **FERC**The Commission's Role in Dispute Resolution

Disputes directly relating to the NYISO's compliance with its tariffs that are not resolved in the internal NYISOISO collaborative governance appeals process or NYISOISO dispute resolution process, and all disputes relating to matters that fall within the exclusive jurisdiction of FERCthe Commission, shall be reviewed at FERCthe Commission pursuant to the Federal Power Act if such review is sought by any party to the dispute. The NYPSC or any party to a dispute regarding matters over which both the NYPSC and FERCthe Commission have jurisdiction and responsibility for action may submit a request to FERCthe Commission for a joint or concurrent hearing to resolve the dispute.

#### 31.5.2 Non-Jurisdictional Entities

LIPA's and NYPA's participation in the NYISO Comprehensive Planning ProcessCSPP shall in no way be considered to be a waiver of their non-jurisdictional status pursuant to Section 201(f) of the Federal Power Act, including with respect to the FERC's the Commission's exercise of the Federal Power Act's general ratemaking authority.

## 31.5.3 Tax Exempt Financing Provisions

Con Edison, NYPA and LIPA shall not be required to construct, or cause to construct, a transmission facility identified through the <a href="https://www.nylson.org/nylson.org/">NYISO ComprehensiveISO</a> Reliability Planning Process if such construction would result in the loss of tax-exempt status of any tax-exempt bond issued by Con Edison, NYPA or LIPA, or impair their ability to secure future tax-exempt financing.

# 31.5.4 Interregional Planning Coordination

## 31.5.4.1 The Northeastern ISO/RTO Planning Coordination Protocol

The NYISOISO will coordinate the transmission system planning activities for the NYCA described in this Attachment Y through the Northeastern ISO/RTO Planning Coordination Protocol. This protocol describes the committee structure, processes and procedures through which system planning activities are openly and transparently coordinated by the ISOs and RTOs of the northeastern United States and eastern Canada. The activities covered by the protocol are to be conducted in coordination with the Regional Reliability Councils of the northeastern United States and eastern Canada. The primary purpose of the protocol is to contribute, through transparent, coordinated planning based on consistent assumptions and data, to the on-going reliability and the enhanced operational and economic performance of the parties to the protocol. To accomplish this, the parties will coordinate the evaluation of tariff-provided services, such as generation interconnection, to recognize the impacts that result across the different systems. The parties will also produce, on a periodic basis, a Northeastern Coordinated System Plan that integrates the system plans of the parties and includes upgrade projects jointly identified by the parties to enhance the coordinated performance of their systems.

## 31.6 Appendices

#### APPENDIX A - REPORTING OF HISTORIC AND PROJECTED CONGESTION

#### 1.0 General

As part of its Comprehensive System Planning ProcessCSPP, the NYISOISO will prepare summaries and detailed analysis of historic and projected congestion across the New YorkNYS Transmission System. This will include analysis to identify the significant causes of historic congestion in an effort to help Market Participants and other interested parties distinguish persistent and addressable congestion from congestion that results from one time events or transient adjustments in operating procedures that may or may not recur. This information will assist Market Participants and other stakeholders to make appropriately informed decisions.

# **2.0** Definition of Cost of Congestion

The NYISOISO will report the cost of congestion as the change in bid production costs that results from transmission congestion. The following elements of congestion-related costs also will be reported: (i) impact on load payments; (ii) impact on generator payments; and (iii) hedged and unhedged congestion payments.

The determination of the change in bid production costs and the other elements of congestion will be based upon the difference in costs between the actual constrained system prices computed in the <a href="https://www.nylsovs.nyls

# 3.0 Analysis

Each Reliability Needs AssessmentRNA will include the NYISO's ISO's summaries and detailed analysis of the prior year's congestion across the New YorkNYS Transmission System.

The NYISO's ISO's analysis will identify the significant causes of the historic congestion.

Each study of projected congestion for economic planning will include the results of the <a href="https://www.nylso.com/nylso.

# 4.0 Detailed Cause Analysis for Unusual Events

The NYISOISO will perform an analysis to identify the cause of unusual events causing significant congestion levels. Such analysis will include the following elements:

(i) identification or the cause of major transmission or generation outages; and (ii) quantification of the market impact of relieving historic constraints.

Some of the information necessary to this analysis may constitute sensitive electric critical energy infrastructure material information and will need to be handled with appropriate confidentiality limitations to protect national security interests.

## 5.0 Summary Reports

The NYISOISO will prepare various reports of historic and projected congestion costs. Historic congestion reports will be based upon the actual congestion data from the NYISOISO Day-Ahead Market, and will include summaries, aggregated by month and calendar year, such as: (i) NYCA; (ii) by zone; (iii) by contingency in rank order; (iv) by constraint in rank order; (v) total dollars; and (vi) number of hours. Results of projected congestion studies conducted pursuant to Section 31.3.1 of this Attachment Y will include summaries of selected additional metrics and scenarios.

These reports will be based upon the foregoing definitions of congestion. c:\documents and settings\eckels\my documents\committees\oc\2012\special june\master\_31.6\_redline\_9\_15\_for\_espwg[1].doc

# APPENDIX B - PROCEDURE FOR FORECASTING THE NET REDUCTIONS IN TCC REVENUES THAT WOULD RESULT FROM A PROPOSED PROJECT

For the purpose of determining the allocation of costs associated with a proposed project as described in Section 31.4.3.4.2 of this Attachment Y, the ISO shall use the procedure described herein to forecast the net reductions in TCC revenues allocated to Load in each Load Zone as a result of a proposed project.

#### **Definitions**

The following definitions will apply to this appendix:

Pre-CARIS Centralized TCC Auction: The last Centralized TCC Auction that had been completed as of the date the input assumptions were determined for the CARIS in which the Project was identified as a candidate for development under the provisions of this Attachment Y.

Project: The proposed transmission project for which the evaluation of the net benefits forecasted for Load in each Load Zone, as described in Section 31.4.3.4.2 of this Attachment Y, is being performed.

TCC Revenue Factor: A factor that is intended to reflect the expected ratio of (1) revenue realized in the TCC auction from the sale of a TCC to (2) the Congestion Rents that a purchaser of that TCC would expect to realize. The value to be used for the TCC Revenue Factor shall be stated in the ISO Procedures

#### Steps 1 Through 6 of the Procedure

For each Project, the ISO will perform Steps 1 through 6 of this procedure twice for each of the ten (10) years following the proposed commercial operation date of the Project: once under the assumption that the Project is in place in each of those years, and once under the assumption that the Project is not in place in each of those years.

## Forecasting the Value of Grandfathered TCCs and TCC Auction Revenue

**Step 1.** The ISO shall forecast Congestion Rents collected on the New York electricity system in each year, which shall be equal to:

- (a) the product of:
  - (i) the forecasted Congestion Component of the Day-Ahead LBMP for each hour at each Load Zone or Proxy Generator Bus and
  - (ii) forecasted withdrawals scheduled in that hour in that Load Zone or Proxy Generator busBus,

summed over all locations and over all hours in that year, minus:

- (b) the product of:
  - (i) the forecasted Congestion Component of the Day-Ahead LBMP for each hour at each Generator bus or Proxy Generator Bus and
  - (ii) forecasted injections scheduled in that hour at that Generator bus or Proxy Generator Bus,

summed over all locations and over all hours in that year.

#### **Step 2.** The ISO shall forecast:

- (a) payments in each year associated with any Incremental TCCs that the ISO projects would be awarded in conjunction with that Project (which will be zero for the calculation that is performed under the assumption that the Project is not in place);
- (b) payments in each year associated with any Incremental TCCs that the ISO has awarded, or that the ISO projects it would award, in conjunction with other projects that have entered commercial operation or are expected to enter commercial operation before the Project enters commercial operation; and
- (c) payments that would be made to holders of Grandfathered Rights and imputed payments that would be made to the Primary Holders of Grandfathered TCCs that would be in effect in each year, under the following assumptions:
  - (i) all Grandfathered Rights and Grandfathered TCCs expire at their stated expiration dates;
  - (ii) imputed payments to holders of Grandfathered Rights are equal to the payments that would be made to the Primary Holder of a TCC with the same Point of Injection and Point of Withdrawal as that Grandfathered Right; and
  - (iii) in cases where a Grandfathered TCC is listed in Table 1 of Attachment M of the ISO OATT, the number of those TCCs held by their Primary Holders shall be set to the number of such TCCs remaining at the conclusion of the ETCNL reduction procedure conducted before the Pre-CARIS Centralized TCC Auction.

## **Step 3.** The ISO shall forecast TCC auction revenues for each year by subtracting:

(a) the forecasted payments calculated for that year in Steps 2(a), 2(b) and 2(c) of this procedure

from:

(b) the forecasted Congestion Rents calculated for that year in Step 1 of this procedure, and multiplying the difference by the TCC Revenue Factor.

## Forecasting the Allocation of TCC Auction Revenues Among the Transmission Owners

- **Step 4.** The ISO shall forecast the following:
  - (a) payments in each year to the Primary Holders of Original Residual TCCs and
  - (b) payments in each year to the Primary Holders of TCCs that correspond to the amount of ETCNL remaining at the conclusion of the ETCNL reduction procedure conducted before the Pre-CARIS Centralized TCC Auction,

and multiply each by the TCC Revenue Factor to determine the forecasted payments to the Primary Holders of Original Residual TCCs and the Transmission Owners that have been allocated ETCNL.

- **Step 5.** The ISO shall forecast residual auction revenues for each year by subtracting:
  - (a) the sum of the forecasted payments for each year to the Primary Holders of Original Residual TCCs and the Transmission Owners that have been allocated ETCNL, calculated in Step 4 of this procedure

from:

- (b) forecasted TCC auction revenues for that year calculated in Step 3 of this procedure.
- **Step 6.** The ISO shall forecast each Transmission Owner's share of residual auction revenue for each year by multiplying:
  - (a) the forecast of residual auction revenue calculated in Step 5 of this procedure and
  - (b) the ratio of:
    - (i) the amount of residual auction revenue allocated to that Transmission Owner in the Pre-CARIS Centralized TCC Auction to
    - (ii) the total amount of residual auction revenue allocated in the Pre-CARIS Centralized TCC Auction.

## **Steps 7 Through 10 of the Procedure**

The ISO will perform Steps 7 through 10 of this procedure once for each of the ten (10) years following the proposed commercial operation date of the Project, using the results of the preceding calculations performed both under the assumption that the Project is in place in each of those years, and under the assumption that the Project is not in place in each of those years.

## Forecasting the Impact of the Project on TSC Offsets and the NTAC Offset

- **Step 7.** The ISO shall calculate the forecasted net impact of the Project on the TSC offset for each megawatt-hour of electricity consumed by Load in each Transmission District (other than the NYPA Transmission District) in each year by:
  - (a) summing the following, each forecasted for that Transmission District for that year under the assumption that the Project is in place:

- (i) forecasted Congestion Rents associated with any Incremental TCCs that the ISO has awarded, or that the ISO projects it would award, as calculated in Step 2(b) of this procedure, in conjunction with other projects that have entered commercial operation or are expected to enter commercial operation before the Project enters commercial operation, if those Congestion Rents would affect the TSC for that Transmission District;
- (ii) forecasted Congestion Rents associated with any Grandfathered TCCs and forecasted imputed Congestion Rents associated with any Grandfathered Rights held by the Transmission Owner serving that Transmission District that would be paid to that Transmission Owner for that year, as calculated in Step 2(c) of this procedure, if those Congestion Rents would affect the TSC for that Transmission District;
- (iii) the payments that are forecasted to be made for that year to the Primary Holders of Original Residual TCCs and ETCNL that have been allocated to the Transmission Owner serving that Transmission District, as calculated in Step 4 of this procedure; and
- (iv) that Transmission District's forecasted share of residual auction revenues for that year, as calculated in Step 6 of this procedure for the Transmission Owner serving that Transmission District;
- (b) subtracting the sum of items (i) through (iv) above, each forecasted for that Transmission District for that year under the assumption that the Project is not in place; and
- (c) dividing this difference by the amount of Load forecasted to be served in that Transmission District in that year, stated in terms of megawatt-hours, net of any Load served by municipally owned utilities that is not subject to the TSC.
- **Step 8.** The ISO shall calculate the forecasted net impact of the Project on the NTAC offset for each megawatt-hour of electricity consumed by Load in each year by:
  - (a) summing the following, each forecasted for that year under the assumption that the Project is in place:
    - (i) forecasted Congestion Rents associated with any Incremental TCCs that the ISO has awarded, or that the ISO projects it would award, as calculated in Step 2(b) of this procedure, in conjunction with other projects that have entered commercial operation or are expected to enter commercial operation before the Project enters commercial operation, if those Congestion Rents would affect the NTAC;
    - (ii) forecasted Congestion Rents associated with any Grandfathered TCCs and forecasted imputed Congestion Rents associated with any Grandfathered Rights held by NYPA that would be paid to NYPA for that year, as calculated in Step 2(c) of this procedure, if those Congestion Rents would affect the NTAC;
    - (iii) the payments that are forecasted to be made for that year to NYPA in association with Original Residual TCCs allocated to NYPA, as calculated in Step 4 of this procedure; and

- (iv) NYPA's forecasted share of residual auction revenues for that year, as calculated in Step 6 of this procedure;
- (b) subtracting the sum of items (i) through (iv) above, each forecasted for that year under the assumption that the Project is not in place; and
- (c) dividing this difference by the amount of Load expected to be served in the NYCA in that year, stated in terms of megawatt-hours, net of any Load served by municipally owned utilities that is not subject to the NTAC.

#### Forecasting the Net Impact of the Project on TCC Revenues Allocated to Load in Each Zone

- **Step 9.** The ISO shall calculate the forecasted net impact of the Project in each year in each Load Zone on payments made in conjunction with TCCs and Grandfathered Rights that benefit Load but which do not affect TSCs or the NTAC, which shall be the sum of:
  - (a) Forecasted Congestion Rents paid or imputed to municipally owned utilities serving Load in that Load Zone that own Grandfathered Rights or Grandfathered TCCs that were not included in the calculation of the TSC offset in Step 7(a)(ii) of this procedure or the NTAC offset in Step 8(a)(ii) of this procedure, which the ISO shall calculate by:
    - (i) summing forecasted Congestion Rents that any such municipally owned utilities serving Load in that Load Zone would be paid for that year in association with any such Grandfathered TCCs and any forecasted imputed Congestion Rents that such a municipally owned utility would be paid for that year in association with any such Grandfathered Rights, as calculated in Step 2(c) of this procedure under the assumption that the Project is in place; and
    - (ii) subtracting forecasted Congestion Rents that any such municipally owned utilities would be paid for that year in association with any such Grandfathered TCCs, and any forecasted imputed Congestion Rents that such a municipally owned utility would be paid for that year in association with any such Grandfathered Rights, as calculated in Step 2(c) of this procedure under the assumption that the Project is not in place.
  - (b) Forecasted Congestion Rents collected from Incremental TCCs awarded in conjunction with projects that were previously funded through this procedure, if those Congestion Rents are used to reduce the amount that Load in that Load Zone must pay to fund such projects, which the ISO shall calculate by:
    - (i) summing forecasted Congestion Rents that would be collected for that year in association with any such Incremental TCCs, as calculated in Step 2(b) of this procedure under the assumption that the Project is in place; and
    - (ii) subtracting forecasted Congestion Rents that would be collected for that year in association with any such Incremental TCCs, as calculated in Step 2(b) of this procedure under the assumption that the Project is not in place.
- **Step 10.** The ISO shall calculate the forecasted net reductions in TCC revenues allocated to Load in each Load Zone as a result of a proposed Project by summing the following:

#### (a) the product of:

- (i) the forecasted net impact of the Project on the TSC offset for each megawatt-hour of electricity consumed by Load, as calculated for each Transmission District (other than the NYPA Transmission District) in Step 7 of this procedure; and
- (ii) the number of megawatt-hours of energy that are forecasted to be consumed by Load in that year, in the portion of that Transmission District that is in that Load Zone, for Load that is subject to the TSC;

summed over all Transmission Districts;

# (b) the product of:

- (i) the forecasted net impact of the Project on the NTAC offset for each megawatthour of electricity consumed by Load, as calculated in Step 8 of this procedure; and
- (ii) the number of megawatt-hours of energy that are forecasted to be consumed by Load in that year in that Load Zone, for Load that is subject to the NTAC; and
- (c) the forecasted net impact of the Project on payments and imputed payments made in conjunction with TCCs and Grandfathered Rights that benefit Load but which do not affect TSCs or the NTAC, as calculated in Step 9 of this procedure.

# **Additional Notes Concerning the Procedure**

For the purposes of Steps 2(c) and 4(b) of this procedure, the ISO will utilize the currently effective version of Attachment L of the <u>ISO</u>OATT to identify Existing Transmission Agreements and Existing Transmission Capacity for Native Load.

Each Transmission Owner, other than NYPA, will inform the ISO of any Grandfathered Rights and Grandfathered TCCs it holds whose Congestion Rents should be taken into account in Step 7 of this procedure because those Congestion Rents affect its TSC.

NYPA will inform the <u>NYISOISO</u> of any Grandfathered Rights and Grandfathered TCCs it holds whose Congestion Rents should be taken into account in Step 8 of this procedure because those Congestion Rents affect the NTAC.