CASE 07-E-1507
ERP DELIVERABLE 1:
COST ALLOCATION & RECOVERY
FOR
REGULATED ELECTRIC BULK-SYSTEM RELIABILITY PROJECTS
STRAW OPTIONS
Revision 1 – February 15, 2008

The purpose of this straw proposal is to suggest a framework for the allocation and recovery of costs related to PSC jurisdictional regulated projects that may be required if market-based merchant projects are not sufficient to ensure the reliability of the bulk electric system and the NYISO triggers a regulated backstop solution.

The straw proposal seeks to fulfill two major goals. The first goal is to provide a framework for cost recovery that provides assurances to project sponsors that there will be a defined avenue to recover reasonable expenditures consistent with the guidance provided in the December 24, 2007 order in this case. The second goal is to develop a process that respects state and federal jurisdictional boundaries, and is either integrated with or reasonably parallel to the federal process for cost allocation and cost recovery of regulated transmission project investments so that solution development will take place on a level playing field and not be influenced by forum issues.

COST ALLOCATION

- The NYISO ESPWG has drafted principles and an allocation methodology for application to reliability investments in the FERC tariff. Development of the methodology was pursued with the thought that it could be applied to all resources – transmission, generation and demand-based projects – on an equal basis.

- It is proposed that the PSC use the NYISO-drafted cost allocation principles and methodology for generation and demand-based projects, which are presented in Appendix A.

- The allocation methodology requires calculations based on the Comprehensive Reliability Plan (CRP) base cases. As such, the calculation of the allocation should be performed by the NYISO for projects where recovery is under PSC jurisdiction.

- The NYISO should provide the results of the allocation to the PSC.

COST RECOVERY

- Before the establishment of the NYISO planning process and the state-wide wholesale competitive market regime, utilities had the sole industry responsibility to propose projects to ensure a reliable bulk electric system. Utilities built projects or portions of projects that were within their respective service territories and recovery was usually from the utility's

ratepayers. With the advent of the competitive market, the concept of "beneficiaries pay" has been adopted at the NYISO and approved by the FERC. Therefore, in the new context we have the situation where the entity that incurs costs to implement a reliability solution might need to have payment flow from customers of a different LSE/utility.

- Under the NYISO Comprehensive Reliability Planning Process(CRPP), the implementation of a regulated backstop solution by the Responsible Transmission Owner(s) to address a reliability need identified in the NYISO's Reliability Needs Assessment (RNA) will not be triggered unless the NYISO determines that a timely solution to an identified reliability need will not be met by market-based projects or local TO plans, and that a regulated solution, subject to the issues under consideration in Initiative One of this proceeding, is necessary.

- Under the CRPP, the Responsible TO(s) will provide a regulated backstop solution to address a reliability need identified in the NYISO's RNA. The regulated backstop solution provided by the Responsible TO(s) may be a transmission, generation and/or demand-based solution, and may provide for implementation directly by the Responsible TO(s) or by other means.

- While the PSC has broad electric rate authority over the investor-owned utilities, there are several entities such as NYPA, LIPA and some municipal utilities that are not under PSC rate jurisdiction. Therefore, any cost recovery methodology that would require payment from these entities (as beneficiaries) must coordinate recovery among entities that are not solely under PSC jurisdiction.

- Reasonably-incurred costs for generation and demand-based projects authorized by the PSC will be recoverable.

MODEL 1: PSC DIRECTED RECOVERY

- The investor-owned utility or alternate developer will file generation and demand-based project costs (be it contractual or full requirements) with the PSC for recovery authorization.

- A master contract will be developed between the developer and the Responsible TOs and municipalities that have been designated as beneficiaries in the cost allocation process. This contract is specifically to transfer PSC specified retail ratepayer funds to the project developer.

- Incremental TCCs, installed capacity, energy and/or other products resulting from the reliability project will be auctioned into the appropriate NYISO markets and the resulting revenues will offset a project's revenue requirement for non-fixed priced, full- requirements proposals.

- There will be a mechanism established by the PSC to recover investor-owned utility payments from retail ratepayers in a manner that is non-discriminatory to customers regardless of their commodity supplier. The mechanism will provide a full pass through to retail rates of the investor-owned utility payments. Ratemaking will be determined on a case-by-case basis.

- NYPA and LIPA costs will be recovered through a mechanism they establish with the ISO (e.g., FERC tariff, their own NYISO tariff).

- NYPA, LIPA and PSC need to develop an agreement establishing the conditions under which the Authorities will contract with the project sponsor for recovery of the sponsor's costs.

Model 1 Benefits:

Staff/MI:
* State and federal jurisdictions are respected.
* Guarantees full recovery of reasonably incurred project costs.
* Retail ratemaking would treat ESCO and utility customers equally.
* All disputes arising from state decisions are settled locally.

Model 1 Drawbacks:

DTOs:
* Not likely to achieve clarity and certainty
* Provides a higher cost recovery risk
* May require the auditing of developer revenues by the PSC or TO in order to ensure that appropriate consumer credits are provided

National Grid:
* Recovery of transmission and non-transmission costs are not comparable

MODEL 2: NYISO – FERC TARIFF

- Prior to the implementation of the preferred transmission or non-transmission regulated solution and any collection of project costs under the NYISO's tariff, the Responsible TO, other TO or the NYISO as requested by a jurisdictional entity or on behalf of a non-jurisdictional TO or a non-TO developer will make a Section 205 filing with FERC describing the project and its related costs and seeking approval for cost collection under the NYISO tariff. If the preferred solution is subject to state jurisdiction, the project cost will be submitted for review by the appropriate state regulatory authority. In the case of a state jurisdictional project, the project cost recovery sought to be collected under the NYISO tariff will not include any costs that have been found by the appropriate state regulatory

authority to have been imprudently incurred, provided that the developer has a legal right to judicial review of the decision of the state regulatory authority.

- The NYISO will assess its transmission customers, including TOs, municipal systems, state authorities and competitive LSEs, in the zones, and sub-zones, to which costs have been allocated under the NYISO's cost allocation methodology, regardless of the nature of the project.

- The project costs will be collected through a separate NYISO rate schedule (e.g., a Reliability Facilities Charge or RFC). The FERC approved revenue requirement will be the basis for a monthly RFC. The NYISO will adjust the RFC to account for variances in the billing collections to properly equate the revenues received with the FERC approved revenue requirement. In the event that LIPA undertakes a regulated backstop project on Long Island, project costs incurred by LIPA and allocated to customers in LIPA's transmission district will be charged and recovered by LIPA through a separate rate mechanism approved by the LIPA Board. For LIPA project costs allocated to other transmission districts, the NYISO will enter into a cost-sharing agreement with LIPA for the reimbursement of costs incurred by LIPA.

- NYISO market products produced by the reliability project (e.g., TCCs, energy and ancillary services, and installed capacity) will be credits to offset the project's monthly revenue requirement.

- The NYISO will collect the RFC revenues on a monthly basis and remit those revenues to the appropriate TO or other developer.

- There will be a mechanism established by the PSC to provide a full pass through to retail rates of the investor-owned utility payments. Ratemaking will be determined on a case by case basis.

Model 2 Benefits:

DTOs:

* Provides comparable rate recovery treatment for all types of reliability solutions
* Provides a cost recovery mechanism compatible with LIPA and NYPA requirements
* Ensures recovery of costs from all LSEs
* Provides greater assurance to a developer of full cost recovery
* Provides assurance to LSEs that they will not bear more of the project cost than has been assigned by the cost allocation methodology
* Use of one entity, NYISO, provides consistency
* Retains PSC ability to review the prudence of costs
* Recovery is tariff based and reaches all wholesale entities

Model 2 Drawbacks:

Staff:
* Significant jurisdictional issues between FERC and the PSC are raised by this Model that are not likely resolvable in the short-term.
* FERC has not stated that it will allow state jurisdictional costs to flow through a federal tariff. Otherwise, the PSC would have to relinquish/cede jurisdiction under this model.
* Retail ratemaking is significantly complicated and absent the creation of zonal retail rates could create competitive inequities.
* Could result in double and/or inequitable charges to ESCO customers.

MODEL 3: CONSOLIDATED MODEL (CPV/NAG)

CPV/NAG predicates this model on 1) only non-utility developers allowed; and, 2) sponsoring utilities will enter into a contract with the developer.

- The costs incurred by the sponsoring PSC-regulated utility will be allocated among PSC-regulated utilities in accordance with the NYISO-adopted allocation formula in a rate schedule to be filed by the NYISO for recovery by each such utility.

- The regulated generation or demand-based project developer will file project costs with the PSC for review and a determination whether the costs are "reasonably incurred".

- The project developer/seller will file the contract with FERC.

- There will be a mechanism established by the PSC to enable recovery from retail ratepayers of investor-owned utility contract payments made in accordance with the cost allocation filed by NYISO with FERC

- NYPA and LIPA costs will be recovered through a mechanism they establish with the ISO (e.g., FERC tariff, their own ISO tariff).

- NYPA, LIPA, PSC and NYISO would develop an agreement establishing the conditions under which the Authorities will be allocated contract costs, which agreement would be embodied in the NYISO tariff.

- Transmission and non transmission solutions costs would be capped, or subject to adjustment, on a comparable basis.

Model 3 Benefits:

CPV/NAG:
* Allows the PSC to use the project selection process to keep the costs at reasonable levels
* Preserves the provider's right to file for recovery of wholesale charges

* Resolves jurisdictional issues

Model 3 Drawbacks:

Staff:

Model is of limited application as it only applies to a situation where there is a fixed-price, wholesale contract for services

APPENDIX A
NYISO Developed Cost Allocation Principles & Methodology

1.0 Cost Allocation for Regulated Project that Resolve a Reliability Need

1.1 Cost Allocation Principles

Cost allocation for regulated transmission solutions to Reliability Needs shall be determined by the NYISO based upon the principle that beneficiaries should bear the cost responsibility. The specific cost allocation methodology in Section 14.2, developed by the NYISO in consultation with ESPWG, incorporates the following elements:

a. The focus of the cost allocation methodology shall be on solutions to violations of specific Reliability Criteria.

b. Potential impacts unrelated to addressing the Reliability Needs shall not be considered for the purpose of cost allocation for regulated solutions.

c. Primary beneficiaries shall initially be those Transmission Districts identified as contributing to the reliability violation.

d. The cost allocation among primary beneficiaries shall be based upon their relative contribution to the need for the regulated solution.

e. The NYISO 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).

f. Cost allocation among Transmission Districts shall recognize the terms of prior agreements among the Transmission Owners, if applicable.

g. Consideration should be given to the use of a materiality threshold for cost allocation purposes.

h. The methodology shall provide for ease of implementation and administration to minimize debate and delays to the extent possible.

i. Consideration should be given to the "free rider" issue as appropriate. The methodology shall be fair and equitable.

j. The methodology shall provide cost recovery certainty to investors to the extent possible.

k. The methodology shall apply, to the extent possible, to Gap Solutions.

l. Cost allocation is independent of the actual triggered project(s), except when allocating Minimum Locational Capacity Requirement ("LCR") cost responsibilities, and is based on a separate process that results in NYCA meeting its LOLE requirement.

m. There is no implied relationship between the project(s) triggered by the NYISO and the Compensatory MW additions contemplated in the cost allocation process outlined below.

n. The target year is the year in which a need will be met by a backstop solution(s).

o. The trigger year is the year in which the backstop solution must begin to be implemented, driven by the project lead time.

p. Cost allocation for a solution that meets the needs of a target year assumes that backstop solutions of prior years have been implemented.

q. Cost allocation will consider the most recent values for LCRs. LCR must be met for the target year.

1.2 Cost Allocation Methodology

General Reliability Solution Cost Allocation Formula:

The cost allocation mechanism for regulated transmission reliability projects, 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. 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. 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 a single or multiple cost allocation steps. One formula can be applied to any solution set:

$$\text{Cost Allocation}_i = \left[\frac{\text{LCRdef}_i}{\text{Soln Size}} + \left[\frac{\text{Coincident Peak}_i \times (1 - \text{LCR}_i)}{\sum_{k=1}^{N} \text{Coincident Peak}_k \times (1 - \text{LCR}_k)} \times \frac{\text{Soln STWdef}}{\text{Soln Size}} \right] \right.$$

$$= + \left[\frac{\text{Coincident Peak}_i \times (1 - \text{LCR}_i)}{\sum_{l=1}^{M} \text{Coincident Peak}_l \times (1 - \text{LCR}_l)} \times \frac{\text{SolnVCIdef}}{\text{Soln Size}} \right]$$

$$= + \left[\frac{\text{Coincident Peak}_i}{\sum_{k}^{n} \text{Coincident Peak}_k} \times \frac{\text{SolnGNLdef}}{\text{Soln Size}} \right] \times 100\%$$

$k = 1$

Where *i* is for each applicable zone, n represent the total zones in NYCA, m represents the zones isolated by the binding interfaces, 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, (1-LCR) is set equal to zero if the actual value is negative, $LCRdef_i$ is the applicable zonal LCR deficiency, SolnSTWdef is the STWdef for each applicable project, SolnVCIdef is the VCIdef for each applicable project, SolnGNLdef is the GNL def for each applicable project and Soln Size represents the total compensatory MW addressed by each applicable project.

Four step cost allocation methodology for regulated reliability solutions:

a. Step 1 - LCR Deficiency

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

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

$$\text{Allocation}_i = \frac{\text{LCRdef}_i}{\text{Soln\_ Size}} \times 100\%$$

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

(ii) Prior to the LOLE calculation, voltage constrained interfaces will be recalculated to determine the resulting transfer limits when the LCRdef MW are added.

b. 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.

(i) If NYCA is found to be resource limited, the NYISO, 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.

(ii) 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:

$$\text{Allocation}_i = \left[\frac{\text{Coincident Peak}_i \times (1\text{-}LCR_i)}{\sum_{k=1}^{n} \text{Coincident Peak}_k \times (1\text{-}LCR_k)} \times \frac{\text{So1nSTWdef}}{\text{So1n Size}} \right] \times 100\%$$

Where *i* is for each applicable zone, n is for the total zones in NYCA, 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, (1-LCR) is set equal to zero if the actual value is negative, Soln STWdef is the STWdef for the applicable project, and SolnSize represents the total compensatory MW addressed by the applicable project.

c. Step 3 - Voltage Constrained Interface Deficiency. If the NYCA is not resource limited as determined by the NYCA Free Flow Test, then the NYISO will examine voltage constrained transmission interfaces, using the Binding Interface Test.

(i) The existing output results of MARS ot.09 files indicate the average expected number of hours that each interface is at limit in each flow direction, as well as the average expected number of hours with a loss of load event. These average expected values will be used as an initial indicator to determine the binding interfaces that are impacting LOLE within the NYCA.

(ii) NYISO will review the ot.09 output along with other applicable information that may be available in MARS to make the determination of the binding interfaces and to determine if there is a need to develop a new MARS output table that would provide a clearer and more transparent determination.

(iii) Zone(s) within areas isolated from the rest of NYCA as a result of voltage constrained interface limits are assigned cost responsibility for the Compensatory MW, defined as VCIdef, needed to reach an LOLE of 0.1.

(iv) If one or more areas are isolated as a result of binding interfaces identified through the Binding Interface Test, the NYISO will determine the optimal distribution of Compensatory MW to achieve a NYCA LOLE of 0.1. Compensatory MW will be added until the required NYCA LOLE is achieved or until the voltage constrained interfaces reach their thermal limits. If the interfaces are at their thermal limits and the required NYCA LOLE has not been achieved, Step 4 of the process will be conducted.

(v) The VCIdef MW are allocated to zones isolated as a result of the voltage 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:

$$\text{Allocation}_i = \left[\frac{\text{Coincident Peak}_i \times (1\text{-}LCR_i)}{\sum_{l=1}^{m} \text{Coincident Peak}_l \times (1\text{-}LCR_l)} \times \frac{So \text{ In } VCLdef}{\text{Soln Size}} \right] \times 100\%$$

Where *i* is for each applicable zone, n is for the total zones in NYCA, m is for the zones isolated by the binding interfaces, 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, (1-LCR) is set equal to zero if the actual value is negative, SolnVCIdef is the VCIdef for the applicable project and So1nSize represents the total compensatory MW addressed by the applicable project.

d. Step 4 - General Resource Deficiency. If the reliability criterion is still not met after Step 3, the NYISO will determine the optimal distribution of additional compensatory MW, defined as GNLdef MW, to achieve a NYCA LOLE of 0.1.

(i) The cost for these GNLdef MW will be allocated among all zones in the state, prorated on a NYCA coincident peak load basis.

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

$$\text{Allocation}_i = \left[\frac{\text{Coincident Peak}_i}{\sum_{k=1}^{n} \text{Coincident Peak}_k} \times \frac{So \text{ In } GNLdef}{\text{Soln Size}} \right] \times 100\%$$

Where *i* is for each applicable zone, n represents the total zones in NYCA, and where SolnGNLdef is the GNLdef for the applicable project and Soln Size represents the total compensatory MW addressed by the applicable project.

e. If, after the completion of Steps 1 through 4, 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.

f. Costs related to the deliverability of a resource will be addressed under the NYISO's deliverability procedures