UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

ISO New England, Inc.)Docket No. ER07-365-000New England Power Pool)

MOTION TO INTERVENE AND COMMENTS OF THE NEW YORK STATE RELIABILITY COUNCIL

Pursuant to Rules 211, 212 and 214 of the Commission's Rules of Practice and Procedure,

18 C.F.R. §§ 385.211, 385.212 and 385.214 (2006), the New York State Reliability Council LLC

("NYSRC") moves to intervene and submit these comments in the above-captioned proceeding.¹

The NYSRC is concerned with two aspects of the subject filing: (1) the modeling criteria for

emergency assistance from neighboring control areas; and (2) the modeling of tie lines for

emergency assistance without regard to New York firm capacity contracts. In support hereof, the

NYSRC states as follows:

I. COMMUNICATIONS

All communications, pleadings, and orders with respect to this proceeding should be sent to the individuals listed below:

Bruce B. Ellsworth Chairman NYSRC Executive Committee 46 Tamarack Road Hopkinton, NH 03229 Telephone: (603) 746-3447 Email: ellsworth@conknet.com P. Donald Raymond Executive Secretary New York State Reliability Council, LLC 14 Thornwood Lane Fayetteville, NY 13066 Telephone: (315) 637-9002 Email: Raymond40@aol.com

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National Grid USA, a member of the NYSRC, does not join in these comments.

II. BACKGROUND

On December 22, 2006, ISO New England Inc. and the New England Power Pool ("NEPOOL") Participants Committee (collectively, the "ISO-NE") submitted revisions to Market Rule 1 that are purportedly designed to memorialize the processes and methodologies used to determine the Installed Capacity Requirements ("ICR") for the New England Control Area.

The NYSRC was established to promote and preserve the reliability of the New York State power system by developing, maintaining and, from time to time, updating the reliability rules ("Reliability Rules") that govern the NYISO's operation of the State's bulk power system.² The NYSRC develops Reliability Rules in accordance with standards, criteria and regulations of the North American Electric Reliability Council ("NERC"), the Northeast Power Coordinating Counsel ("NPCC"), the Commission, the New York Public Service Commission ("PSC") and the Nuclear Regulatory Commission.³ The NYSRC also develops statewide IRM requirements in accordance with NPCC and NYSRC reliability criteria.

III. PROTEST AND COMMENTS

A. Utilizing "As Is" Versus "At Criteria" Modeling for Emergency Assistance From Neighboring Control Areas to Determine Tie Benefits Will Produce an Artificially Low ICR and LCR At the Expense of Neighboring Control Areas.

Tie benefits represent the amount of emergency assistance that may be available from interconnected control areas to reduce New England's loss of load expectation ("LOLE") by providing access to resources from outside New England when its own resources are unavailable. In its filing, ISO-NE describes the importance of modeling capacity resources in Control Areas directly

² <u>Central Hudson Gas & Electric Corp.</u>, 83 FERC ¶ 61,352 (1998), order on reh'g, 87 FERC ¶ 61,135 (1999).

³ NYISO/NYSRC Agreement, Section 4.1, *available at* www.nyiso.com/public/documents/regulatory/agreements.jsp.

connected to New England as "at criterion":

For Control Areas directly connected to New England, the load and resource assumptions are modeled such that the area is "at-criterion," meaning the area under study will only have available those resources required to meet the NPCC Resource Adequacy Criterion – as measured by having an LOLE of 0.1 days/year. This means that New England is not counting on surplus capacity in New York or New Brunswick. In fact, such surplus could be sold into the New England capacity market. The directly-connected Control Areas are modeled in this manner because the actual amount of resources that may be available in the future study year is unknown. Nonetheless, these Control Areas can reasonably be expected to have enough resources available to meet the LOLE criterion and, therefore, can be planned consistent with this requirement.

Filing Letter at 12.

Despite the foregoing analysis, ISO-NE goes on to state that:

The ICR and Local Sourcing Requirements that will be used in the annual reconfiguration auction immediately preceding the relevant Capacity Commitment Period will incorporate tie benefits that are calculated using "as-is" assumptions, meaning the Control Areas will be modeled with all forecasted resources available to serve the forecasted load – without regard to whether the Control Area has surplus or deficient resources to meet the LOLE criterion. This is appropriate because the final annual reconfiguration auction will take place approximately two months before the Capacity Commitment Period; therefore, "as-is" assumptions are likely to more accurately reflect the resources that will be available during the upcoming Power Year.

Id.

ISO-NE's proposal to assume "As-Is" capacity levels for neighboring control areas for purposes of determining the annual IRM for the New England Control Area is of significant concern to the NYSRC. The NYSRC is concerned that the use of this inconsistent modeling approach to determine tie benefits will result in unreasonably low ICR and locational requirements for the New England Control Area and diminish the reliability of neighboring control areas, such as the New York Control Area ("NYCA"). Modeling of "As-Is" capacity levels assumes that the NYCA has an IRM of approximately 30% rather than 16.5% design level for 2007. This creates a large inconsistency in the LOLE modeling of ISO-NE and its neighboring control areas.

While ISO-NE will achieve a lower ICR and locational requirements as a result of such modeling, the lower IRM will likely assume unrealistically large transfers of outside emergency assistance from neighboring regions to support ISO-NE. The NYSRC has a policy of not over-relying on imports in determining the annual IRM for the NYCA. *See, e.g.*, NYSRC Policy 5-1. Furthermore, the NYCA's capacity requirements are not designed to support ISO-NE's over-reliance on imports from the NYCA beyond the current design levels. NYSRC Policy 5-1, Section 3.5.6, "Outside World Area Load and Capacity Models," provides:

The reliability of NYCA depends [to] a large extent on emergency assistance from the Outside World Areas in NPCC and PJM, based on reserve sharing agreements. Therefore, load and capacity models of the Outside World Areas are represented in the MARS analyses. The load and capacity models for New England, PJM, Ontario, and Quebec are based on data received from the Outside World Areas, as well as NPCC sources.

The primary consideration for developing the final load and capacity models for the Outside World Areas is to avoid overdependence on the Outside World Areas for emergency capacity support. For this purpose, a rule is applied whereby an Outside World Area's LOLE cannot be lower than its own LOLE criterion, its isolated LOLE cannot be lower than that of the NYCA, and its IRM can be no higher than that Area's minimum requirement. Another consideration for developing models for the Outside World Areas is to recognize internal transmission constraints within the Outside World Areas that may limit emergency assistance to the NYCA. This recognition is considered either explicitly, or through direct multi-area modeling providing there is adequate data available to accurately model transmission interfaces and load areas within these Outside World Areas.

Id.

It is inappropriate for ISO-NE to over-depend on emergency assistance imports from

NYCA. The ISO-NE proposal would result in New York ratepayers subsidizing New England

because New York would have to increase its IRM if NE proposal is approved. Otherwise NY reliability would be reduced. Not only is it inherently risky to rely on external resources over which ISO-NE has no direct control, but there are no deliverability requirements for emergency assistance. Furthermore, the General Electric Multi-Area Reliability Simulation ("MARS") program is not a sophisticated load flow model capable of identifying new restrictions as a result of this over-reliance.

In addition, if another control area were to make the same assumptions with respect to emergency assistance imports in the determination of its capacity requirements, that would result in a "double count" of the same resources thereby grossly overstating reliability and artificially setting the ICR for both control areas too low.

The NYSRC also is concerned that the ISO-NE filing makes no reference to the Joint Tie Benefit study that has been undertaken jointly by the NYSRC/NYISO and ISO-NE. The scope of that study includes an evaluation and determination of the level of emergency assistance that New York and New England can provide to one another.⁴ The purpose of the study is stated as follows:

The purpose of this study is to assess boundary conditions and the reliability benefits of transmission interfaces between NYISO and ISONE recognizing transmission constraints within both control areas. This assessment of boundary conditions will allow for more accurate modeling of Emergency Assistance resulting in improved Reliability calculations and more accurate determination of Control Area and Locational reserve requirements.

Scope at 1.

The Procedure in the approved study scope requires the MARS model to include "All firm

⁴ A copy of the final study Scope, which was approved by the ISO-NE Power Supply Planning Committee (PSPC), on Nov. 10, 2005, and by the NYSRC Installed Capacity Subcommittee (ICS), on Nov. 20, 2005, is attached as Attachment 1.

transactions between Areas and Zones." It further provides that:

A final step is to check that none of the areas surrounding NYISO and ISO-NE are more reliable on an isolated basis. If they are, then their loads are increased until this is no longer the case. This is done so that there is not an over-dependence on the neighboring systems.

Scope at 1.

Thus, it is clear that the study is intended to ensure accurate modeling of emergency

assistance, to ensure accurate determinations of ICR and locational capacity requirements and to

avoid over-dependence on neighboring systems. The study provides an appropriate forum for the

issues raised by the ISO-NE proposal to be carefully considered.

For the reasons stated above, the Commission should direct ISO-NE to reconsider its

proposal to model assistance from neighboring control areas on an "As-Is" basis for the purpose

of determining the annual IRM for the New England Control Area, and to submit its proposal for

discussion in the context of the Joint Tie Benefit study.

B) The Modeling Of Tie Lines For Emergency Assistance Without Regard To New York Firm Purchases Is Inappropriate.

In considering whether transactions should be limited across ties, the ISO-NE filing states

that:

The ISO, however, concluded that, for purposes of ICR, it would be just and reasonable if the ultimate consumers that pay Network Load charges - which all New England customers pay for the transmissionsystem interconnections that ultimately provide the means to purchase assistance from neighboring Control Areas (*i.e.*, tie benefits) – continued to have the right to benefit from reduced capacity requirements in the region as a result of free-flowing ties between two directly connected Control Areas. For this to happen, however a portion of the Control-Area interface would need to remain free of imports.

Filing Letter at 13. In footnote 28, ISO-NE further states that:

In order for tie benefits to occur, a portion of the interface must be

free from long-term capacity commitments. Firm capacity contract require a portion of a tie to be reserved. Because the ISO cannot double count transfer capability, the transfer capacity for tie benefits is reduced and tie benefits themselves may be reduced also. Thus, firm capacity imports over ties effectively lowers the transfer limits available to support tie benefits.

Id. at n.28.

The NYSRC is equally concerned with this aspect of the ISO-NE's filing. Simply put, to maximize emergency assistance benefits, ISO-NE is proposing to ignore firm export capacity commitments to neighboring control areas when determining ICR and locational requirements.⁵ However, the modeling of firm export capacity directly impacts the NYCA IRM and associated locational capacity requirements calculations. The curtailment of firm capacity contracts is inconsistent with NYISO market rules and may jeopardize ISO-NE participation in the NYSIO market. It should be noted that the approved study scope for the Joint Tie Benefit study provides that the General Electric MARS model will include:

8. All firm transactions between Areas and Zones.

Scope at 1.

The NYSRC believes that this issue should be resolved jointly as part of ongoing NYSRC/NYISO/ISO-NE Joint Tie Benefit study.

IV. MOTION TO INTERVENE

The NYSRC is a limited liability company established to promote and preserve reliability in the New York Control Area⁶ for the benefit of the public and all market participants and is responsible for developing reliability standards, including the annual state-wide installed capacity

⁵ "The reliability benefits associated with these interconnections should not be diminished by commercial transactions over these interconnections" (Robert Ethier and Scott Hodgdon testimony, Attachment 2, ISO-NE Filing).

requirement for the NYCA, that are implemented by the New York Independent System Operator, Inc.

In view of its responsibilities, the NYSRC has a direct and substantial interest in the Commission decision in this proceeding. No other party can adequately represent the NYSRC's interest. Accordingly, it is in the public interest to permit this intervention.

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The New York Control Area generally encompasses the State of New York.

V. CONCLUSION

For the reasons stated above, the NYSRC requests that it be permitted to intervene with all the rights that attend to such status and that the Commission issue an order consistent with the comments set forth herein.

Respectfully submitted,

/s/ Bruce B. Ellsworth

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Dated: January 17, 2007

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person

designated on the official service list in this proceeding in accordance with the requirements of

Rule 2010 of the Commission's Rules of Practice and Procedure.

Dated at Washington, D.C. this 17th day of January 2007.

/s/ Claire Brennan_____

Claire Brennan Paralegal Manager LeBoeuf, Lamb, Greene & MacRae LLP 1875 Connecticut Avenue, N.W. Washington, D.C. 20009-5728 202-986-8000

ATTACHMENT 1

DRAFT SCOPE

Joint NYSRC/NYISO/ISO-NE Tie Benefit Analysis

(Draft 5 - 11/30/2005)

Background

NPCC reliability criterion states that "Each Area's resources will be planned in such a manner that after due allowance for scheduled maintenance, forced and partial outages, interconnections with neighboring areas, and available operating procedures, the probability of disconnecting non-interruptible customers due to resource deficiency, on the average, will be no more than once every ten years. Part of this evaluation is consideration of emergency assistance from external Control Areas (adjusted for grandfathered contracts and estimated external capacity purchases).

Purpose

The purpose of this study is to assess boundary conditions and the reliability benefits of transmission interfaces between NYISO and ISONE recognizing transmission constraints within both control areas. This assessment of boundary conditions will allow for more accurate modeling of Emergency Assistance resulting in improved Reliability calculations and more accurate determination of Control Area and Locational reserve requirements.

Procedure

The General Electric Multi-Area Reliability Simulation (MARS) will be used as the primary analytical tool for this probabilistic analysis. The MARS model will include:

- 1. The most recent database used by ISO-NE, combined with the most recent database used by NYISO, updated for the latest assumptions.
- 2. All known generators for all modeled Areas and their associated MW ratings and transition rates.
- 3. The transfer limits of the transmission system between Zones and/or Areas (across the interfaces between the Zones and/or Areas) in both directions. The necessity to define additional interfaces such as simultaneous flows into Connecticut and Long Island (NOR + SWCT + N-CT + NY-K) will be considered and if necessary define appropriate simultaneous limits.
- 4. Groupings of interface flows that would limit the total flows to less than the sum of the individual flows into or out of an Area.
- 5. The transition rates for the cable interfaces.
- 6. Daily peak loads for each of the Zones and Areas.
- 7. Emergency operating procedures.
- 8. All firm transactions between Areas and Zones.
- 9. Generator maintenance schedules.
- 10. Load forecast uncertainty.
- 11. Latest Locational Capacity Requirements for locationally constrained zones in NY and NE.

Using the base case data an initial reliability simulation will be run to achieve design reliability levels. The LOLE result will be compared to the LOLE criterion target of disconnecting firm load once in 10 years, or 0.1 days per year. If the LOLE result is higher or lower than 0.1 days per year, MARS is re-run in an iterative process by increasing/decreasing capacity in the individual Zones or groups of Zones defined by the critical import interfaces in order to attain the 0.1 days per year LOLE target.

The goal will be to maximize the amount of capacity that can be removed within the control area

to satisfy the LOLE reliability criterion. The MARS function table "MOD-MDMW" will be used to facilitate capacity shifts between regions to avoid potential distortions associated with shifting of individual units.

The LOLE indices to be considered will be the NYISO control area LOLE and the ISO-NE control area LOLE considering internal transmission limits. When these both simultaneously attain 0.1 days per year with the minimum amounts of capacity this defines a base case.

A final step is to check that none of the areas surrounding NYISO and ISONE are more reliable on an isolated basis. If they are, then their loads are increased until this is no longer the case. This is done so that there is not an over-dependence on the neighboring systems. Critical interfaces between NYISO and ISO-NE control areas will be cut to determine the reliability benefit of each group of ties. For example, the 1385 and Cross-Sound Cable can be evaluated individually, but, they must also be treated as a group in order to determine the simultaneous tie benefits. With the interface ties cut, the system will then be resolved for 0.1 LOLE. The difference between the basecase and the interface cut case represents tie benefits. Sensitivity testing will include the reliability impacts of increased transfer capability across ISONY/NE transmission interfaces, as appropriate.

<u>Schedule</u> Spring, 2006

Approved by ISO-NE PSPC on 11/10/2005 Approved by NYSRC ICS on 11/30/2005