

**UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION**

<b>Niagara Mohawk Power Corporation,</b>	)	<b>Docket No. EL06-1-000</b>
<b>A National Grid Company</b>	)	
	)	
<b>v.</b>	)	
	)	
<b>New York State Reliability Council and</b>	)	
<b>New York Independent System Operator, Inc.</b>	)	

**Informational Report**

**Actions Taken by the  
New York State Reliability Council and the  
New York Independent System Operator  
Concerning the Issues Raised in the  
Niagara Mohawk Power Corporation, d/b/a National Grid, Complaint**

**I. Joint NYSRC/NYISO Report**

In a complaint filed on September 30, 2005 with the Federal Energy Regulatory Commission (“FERC” or the “Commission”) under Section 206 of the Federal Power Act, Niagara Mohawk Power Corporation, d/b/a National Grid (“National Grid”) alleged that current practices of the New York State Reliability Council (“NYSRC”) and the New York Independent System Operator (“NYISO”) pertaining to the setting of the statewide installed capacity reserve margin (“IRM”) and locational capacity requirements (“LCRs”) cause electricity consumers in upstate New York to subsidize the costs of maintaining reliability in the downstate regions.<sup>1</sup> National Grid requested FERC to direct the NYSRC and the NYISO to implement a lower statewide installed capacity requirement to

---

<sup>1</sup> *Niagara Mohawk Power Corporation, a National Grid Company v. New York State Reliability Council and New York Independent System Operator, Inc.*, 114 FERC ¶ 61,098, at P 1 (2006) (hereinafter cited as “February 2 Order” with paragraph references).

eliminate the claimed subsidy. The National Grid complaint also alleged that the current NYSRC and NYISO procedures for setting the IRM and LCRs were inconsistent with Commission orders and policy underlying locational markets and depressed price signals for increasing capacity in the downstate zones.<sup>2</sup>

FERC dismissed the National Grid complaint, without prejudice, and required that National Grid first exhaust its methods of resolving this dispute within the NYSRC and the NYISO before filing a complaint with the Commission. Although it dismissed the complaint, FERC directed the NYSRC and the NYISO to file a report within ninety days of the date of the order describing the progress that they and National Grid have made in resolving National Grid's concerns.<sup>3</sup>

This report is submitted jointly by the NYSRC and the NYISO as directed in the Commission's February 2 Order.

## **II. Communications**

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

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

Bruce B. Ellsworth  
Chairman  
NYSRC Executive Committee  
46 Tamarack Road  
Hopkinton, NH 03229  
Telephone: (603) 746-3447  
Email: ellsworth@conknet.com

---

<sup>2</sup> February 2 Order at P 10.

<sup>3</sup> February 2 Order at P 25.

Robert Fernandez  
New York Independent System Operator,  
Inc.  
10 Krey Boulevard  
Rensselaer, NY 12144  
Telephone: (518) 356-6000  
Email: rfernandez@nyiso.com

William F. Young  
Hunton & Williams, LLP  
1900 K Street, NW  
Washington, DC 20006  
(202) 955-1500  
Email: wyoung@hunton.com

### **III. Background**

Under the NYISO/NYSRC Agreement, the NYSRC is assigned the responsibility for establishing the annual statewide installed capacity requirement (generally referred to as the IRM) for the New York control area (“NYCA”),<sup>4</sup> and the NYISO is assigned the responsibility of establishing installed capacity requirements for load serving entities (“LSEs”) to ensure that the statewide IRM is achieved.<sup>5</sup> The NYISO is also charged to establish Locational Capacity Requirements (“LCRs”). Currently, there are two areas in the state that are subject to LCRs, New York City and Long Island.

Since the inception of the NYISO and the NYSRC, the interdependency between the establishment of the IRM and the LCRs has become more apparent. Aside from the specific issues raised by National Grid in its complaint, there is a general interest among the NYSRC, the NYISO and the NYISO market participants in developing IRM and LCR study methodologies that are as accurate as possible, and in coordinating the procedures used by the NYSRC and the NYISO to develop the IRM and LCRs. Consequently, the NYISO and NYSRC have been working cooperatively to improve the IRM and LCR study methodologies.

---

<sup>4</sup> NYISO/NYSRC Agreement at Section 4.5.

<sup>5</sup> NYISO/NYSRC Agreement at Section 3.4.

### **III. Actions Taken by the NYSRC and the NYISO to Improve the IRM and LCR Procedures**

#### **A. The Unified Study Method and IRM Anchoring Method**

In 2005, the NYSRC and the NYISO undertook a joint effort to enhance the technical study procedures for establishing NYCA IRM and LCRs. This effort produced two new methodologies which were subsequently adopted by the NYSRC Executive Committee (“EC”) and the NYISO Operating Committee (“OC”) for the 2006-2007 IRM and LCRs.<sup>6</sup> These methodologies are the “Unified Study Method” and the “TAN 45 Anchoring Method.”

#### ***The Unified Study Method***

Because the NYCA has had installed capacity in excess of the minimum reliability requirement, previous NYCA IRM requirement study methodologies, performed by NYISO staff for the NYSRC, included a procedure whereby load was added in all NYCA zones until the loss of load expectation (“LOLE”) met the minimum criteria of 0.1 day per year for the NYCA. The LCRs, however, had been separately determined by the NYISO under a method where the peak load forecast was fixed for the localities being studied. This difference between the NYSRC and NYISO study methodologies resulted in inconsistencies and led the NYSRC and the NYISO to jointly pursue a more coordinated, unified approach to developing the IRM and LCRs. This Unified Study Method establishes a graphical relationship between the NYCA IRM and LCRs.

---

<sup>6</sup> The technical study report entitled “NYSRC – NYCA Installed Capacity Requirement for the Period May 2006 through April 2007” was approved by the NYSRC Executive Committee on January 31, 2006.

Under the Unified Method, capacity is removed from zones west of the Central-East interface that have capacity which exceeds their forecast peaks until a study point IRM is reached. At this point, capacity is shifted from Zones J (New York City) and K (Long Island) into the zones west of the Central-East interface until the 0.1 LOLE criterion is violated. Doing this at various IRM points yields a curve with all points on the curve meeting the 0.1 day per year LOLE criterion. Furthermore, all LCR “point pairs” for the New York City and Long Island curves along the IRM axis consistently represent a 0.1 LOLE solution for the NYCA.

#### ***TAN 45 - IRM Anchoring Method***

The IRM Anchoring Method establishes the NYCA IRM and related LCRs by establishing on the IRM/LCR curves developed by the Unified Study Method an anchor point at a tangent of 45 degrees (“TAN 45”) at the bend (or “knee”) of the curve. The TAN 45 point was selected because points on the curve on either side of the TAN 45 point may create disproportionate changes in LCRs and IRM, since small changes in LCRs can introduce larger changes in IRM requirements and vice versa.

National Grid and New York State Electric & Gas Corporation/Rochester Gas and Electric Corporation (“NYSEG/RGE”) proposed the adoption of the “Free Flowing Equivalent” as an alternative basis for establishing the statewide IRM by the NYSRC and the LCRs by the NYISO. Motions to adopt the Free Flow Equivalent method were defeated in the NYSRC Executive Committee (“EC”) and the NYISO Operating Committee (“OC”).

**B. Implementation of the Unified Study Method and IRM Anchoring Method for the 2006 - 2007 IRM and LCR studies**

*IRM Study*

The Unified Study Method was used for the first time in the 2006 – 2007 IRM study. In conjunction with the IRM Anchoring Method, this resulted in a base case IRM of 18.0%.<sup>7</sup> This study and the resulting IRM were approved by the NYSRC EC on January 31, 2006.

The NYSRC EC rejected NYSEG-RGE’s motion to replace the TAN 45 Anchoring Method with the Free Flowing Equivalent Method. This Motion, supported by National Grid, would have established an IRM by assuming the absence of transmission constraints in the NYCA and then increasing the LCRs to the level necessary to meet the 0.1 LOLE criteria in 2006-2007.

In March of 2006, the NYISO informed the NYSRC that the database used in the 2006-2007 IRM study contained inconsistent data which resulted in an inaccurate LCR curve. The IRM study was rerun using the corrected data. The corrected LCR curve confirmed the base case IRM of 18.0%. On March 20, 2006, the NYSRC EC reaffirmed the 18.0% IRM for the 2006-2007 capability year.<sup>8</sup>

---

<sup>7</sup> The base case included UDRs for the Cross Sound Cable. UDRs are capacity rights that allow the holder/owner to extract the Locational Capacity Benefit derived by the NYCA from the addition of a new incremental controllable transmission project that provides a transmission interface to a NYCA locality or zone. Non-locational capacity when coupled with a UDR can be used to satisfy locational capacity requirements. The Cross Sound Cable, with a transfer capability of 330 MW, is the only existing project that is currently eligible for these awards. LIPA has recently announced it has chosen the option of utilizing all of the CSC UDRs it is awarded by the NYISO.

<sup>8</sup> The adoption of the Unified Study Method and the TAN 45 IRM Anchoring Method for determining the IRM resulted in a reserve requirement of 18%. This is substantially below an IRM of over 20% that would have resulted had the methodology used for the 2005-2006 study been used for the 2006-2007 Study,

## ***LCR Study***

The LCR study, rerun in March 2006 to remedy the database error, produced LCRs of 80.0% and 99.0% for New York City and Long Island, respectively. The NYISO OC approved the revised LCRs on March 28, 2006. The OC rejected a motion by National Grid to adopt LCRs based on the Free Flowing Equivalent Method.

Pursuant to the provisions of the *ISO Agreement*, National Grid appealed the OC's rejection of its Motion to adopt LCRs based on the Free Flowing Equivalent Method to the Management Committee ("MC") which also rejected its Motion. National Grid appealed the MC's rejection to the NYISO Board of Directors which also denied its request. Although the Board denied the Appeal, it concluded that, given the complexity of the issues and the range of interests involved, a further stakeholder process was necessary to allow adequate consideration of the issues raised.<sup>9</sup>

## **IV. Actions Currently Underway to Address Issues Related to the National Grid Complaint**

### **A. 2006-2007 IRM Study Lessons Learned Review**

The NYSRC EC requested the NYSRC ICS to conduct a Lessons Learned review of the 2006-2007 IRM study. The subjects to be reviewed include items related to National Grid's concerns.

---

including the 2006 Base Case assumptions and the 2005 LCRs of 80% and 99% for New York City and Long Island, respectively. See technical study report entitled "*NYSRC – NYCA Installed Capacity Requirement for the Period May 2006 through April 2007*" was approved by the NYSRC Executive Committee on January 31, 2006.

<sup>9</sup> The Board's decision is available at [http://www.nyiso.com/public/webdocs/committees/appeals/feb\\_9\\_2006/board\\_decision.pdf](http://www.nyiso.com/public/webdocs/committees/appeals/feb_9_2006/board_decision.pdf)

1. **Reconsideration of the IRM Anchoring Method and the Free Flowing Equivalent Method**

As previously discussed, when the NYSRC-EC voted in August of 2005 to use the TAN 45 IRM Anchoring Method for the base case for the 2006-2007 IRM study, it further agreed to reconsider the TAN 45 anchoring point, as well as the Free Flow Equivalent Method, for the 2007-2008 IRM study. Many of the initiatives to be completed will serve as supporting information for the NYSRC EC's reconsideration of the IRM Anchoring Method and the Free Flowing Equivalent Method. Other anchoring options may be considered as well. The ICS and the EC will review the performance of the IRM Anchoring Method and will consider possible alterations and improvements, such as a more analytical based methodology.

2. **Use of the Same GE-MARS Data for the IRM and LCR Studies**

Because the NYISO OC determines the LCRs after the NYSRC EC determines the IRM, the OC has used an updated NYCA load forecast which has resulted in the NYISO determining LCRs based on a different curve than the one considered by the NYSRC in setting the IRM. The ICS will work with the NYISO to develop a process to ensure that the same General Electric Multi-Area Simulation Model (GE-MARS) database is used for both the IRM and the LCR studies.

3. **Policy 5.0 and NYSRC Resource Adequacy Rules Update**

The ICS will review, and modify if appropriate, NYSRC resource adequacy rules and develop written procedures for the Unified Study Method and the IRM Anchoring Method for incorporation into NYSRC Policy 5, *Procedure for Establishing New York Control Area Installed Capacity Requirements*.



## **B. Upstate – Downstate Study**

The ICS will evaluate the reliability parameters and inter-zonal assistance between two NYCA “Superzones” identified as Upstate (Zones A through I) and Downstate (Zones J and K). The scope of the study was approved by the NYSRC-EC in December 2005 (attached as Appendix A). The objective of this study is to quantify all the reliability benefits that the Upstate and Downstate Superzones provide to each other. The study is expected to provide additional information to enhance our understanding of NYCA system reliability, including:

1. Whether the capacity requirements of the Upstate Superzone could be met by the unconstrained case results, without capacity assistance from the Downstate Superzone.
2. Where and when future capacity resources will be needed and whether they would come from generation, transmission or demand resources — or some combination thereof.
3. The degree and magnitude of installed capacity assistance (for reliability purposes) that the Upstate Superzone provides for the Downstate Superzone during peak demand — and conversely, such assistance that Downstate provides to the Upstate Superzone.
4. An assessment of the reliability balance between the Upstate and Downstate Superzones which includes an assessment of the LOLE for each Superzone when the NYCA is at the 0.1 day per year LOLE. For example, the Upstate Superzone

may have an LOLE of 0.04 day per year while the Downstate Superzone has an LOLE of 0.08 day per year. This assessment should be performed with and without internal transmission constraints, and with and without the NYCA isolated from the neighboring control areas. This analysis will also examine the application of existing and additional firm contracts and purchases to achieve system balance between the two Superzones.

5. An evaluation of the Downstate Superzone may improve our understanding of the distribution of capacity requirements in the Downstate Superzone as well as an overall evaluation and determination of locational capacity requirements for Zones J and K.
6. An evaluation of the Upstate Superzone may help to improve our understanding of the contribution of capacity in the Upstate Superzone to both Downstate and overall NYCA reliability.
7. The Superzonal approach will examine transfer limits between Upstate-Downstate including interface ties between (and within) the Superzones and ties from external contributors (PJM, ISO-NE, Ontario Hydro, Hydro Quebec, *et al.*).

This study has begun and it is anticipated that draft results should be available by the summer of 2006.

### **C. Other Actions Currently Underway**

The NYSRC ICS also has undertaken a further examination of the relationship of LCR capacity to IRM capacity on the curves developed under the Unified Method.

**V. Formation of Resource Adequacy Issues Task Force (RAITF)**

The Chairs of the NYSRC ICS and the NYISO Installed Capacity Working Group (“ICAPWG”), with support from market participants, have established a joint task force to address the issues raised in the National Grid complaint: the Resource Adequacy Issues Task Force (“RAITF”). The RAITF scope of work and work plan is attached as Appendix B. The RAITF scope of work includes the tasks described below.

In order to address the issues raised in National Grid’s complaint, the RAITF will conduct a review of applicable studies and procedures of the NYSRC and NYISO that relate to resource adequacy for the purpose of making recommendations to the NYISO and/or NYSRC for their consideration concerning whether stakeholders support:

1. Revising the procedures used to develop the IRM and LCR; and/or
2. Revising how costs associated with procuring these requirements are allocated among LSEs

The RAITF will also advise the NYISO and NYSRC of stakeholder views regarding what priority, if any, the objective of minimizing total statewide costs should be accorded in setting the IRM and LCR requirements. Any recommendations or stakeholder support for revising how costs associated with procuring these requirements are allocated shall also be referred to the appropriate NYISO stakeholder committees for further work.

The studies and reports that the RAITF will review and evaluate include, but are not limited to, the following:

1. **Upstate-Downstate Study:** this study has been authorized by the NYSRC’s EC and is scheduled to commence in the Spring of 2006. It is intended to calculate

- LOLE and quantify the capacity assistance that Upstate and Downstate provide to one another;
2. **2006 IRM Study:** this study was completed March 20, 2006;
  3. **TAN 45 Methodology:** the EC has instructed the ICS to evaluate the Tangent 45 methodology used to calculate the IRM for the 2006 Capability Year and provide a report to the EC of its findings and conclusions. This will include a review of the Free-Flowing Equivalent IRM Methodology. ICS has agreed to report its findings and conclusions to RAITF for its evaluation;
  4. **Comprehensive Planning Process:** Reliability Needs Assessment issued December 21, 2005;
  5. **The 2006 Locational Capacity Requirements Study:** this study was approved by the NYISO Operations Committee (OC) on March 27, 2006.

The RAITF will prepare a report that sets forth its findings and conclusions regarding the foregoing issues and scope of work.

## **VI. Conclusion**

The NYSRC and the NYISO will continue to address the concerns raised by the National Grid complaint through the actions described in this report. These actions will be undertaken by the appropriate committees established under the NYSRC and NYISO governance procedures, including the RAITF which was established for the specific purpose of addressing the concerns raised by National Grid in its complaint. These

procedures will provide National Grid, and other parties that share its concerns, the opportunity to fully pursue the issues raised previously with the Commission.

Parties may use the information described above, and as gathered in the RAITF and other working groups to make recommendations to the NYSRC ICS and/or the NYISO Operating Committee for further action on the issues raised. Both the NYSRC and the NYISO will cooperate with the parties making recommendations to the extent further actions are required.

WHEREFORE, the New York State Reliability Council and the New York Independent System Operator, Inc. request that the Commission accept this report in compliance with the February 2 Order in this proceeding.

Respectfully submitted,

For the NYSRC

/s/ Bruce B. Ellsworth

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

Bruce B. Ellsworth  
Chairman  
NYSRC Executive Committee  
46 Tamarack Road  
Hopkinton, NH 03229  
Telephone: (603) 746-3447  
Email: ellsworth@conknet.com

For the NYISO

/s/ William F. Young

Robert Fernandez  
New York Independent System Operator,  
Inc.  
10 Krey Boulevard  
Rensselaer, NY 12144  
Telephone: (518) 356-6220  
Email: rfernandez@nyiso.com

William F. Young  
Hunton & Williams, LLP  
1900 K Street, NW  
Washington, DC 20006  
(202) 955-15  
Email: wyoung@hunton.com

## Appendix A

### NYSRC-ICS Proposal **Upstate-Downstate “Superzone” Study** Upstate (Zones A-I) and Downstate (Zones J-K)

~ SCOPE OF WORK ~  
Approved 12/9/09

#### I. BACKGROUND

Achieving system reliability in the New York Control Area State (NYCA) is a balancing act between installed capacity (including demand resources) against load requirements with consideration of transmission capability. Transmission constraints exist between the Upstate Zones A through I (Rest of State) and the Downstate Zones J (New York City) and K (Long Island). Zones J and K are considered “load pockets” that have limited physical capability of importing capacity.

The Locational Capacity Requirements (LCRs) for Zones J and K establish the minimum amount of capacity that must be electrically located “in-city” and “on-island”, respectively, to meet peak demand. As determined by the NYISO (and approved by the NYISO Operating Committee) the LCR inputs used in the 2005 IRM Study were 80% for New York City and 99% for Long Island.

The NYCA 2005 Installed Reserve Margin (IRM) was established by the NYSRC Executive Committee at 18%. Therefore, each Load-Serving Entity (LSE) within NYCA is required to procure capacity of at least 118% of its load coincident with the NYCA peak. Because of the unbalance of resource capacity and load in Upstate and Downstate NY, the Downstate LSEs are dependent on resources located in Upstate and out-of state for meeting their 18% reserve obligations.<sup>10</sup>

The 2005 IRM Study found that the IRM Requirement would be about 2% less than the statewide 18% IRM Requirement if there were no transmission constraints within NYCA.

In addition, the NYISO Reliability Needs Assessment (RNA) shows that load growth in SENY (Southeast NY) in Zones G through K may be placing additional stress on the transmission system all the way up to the UPNY (Upstate NY) / SENY interface.

---

<sup>10</sup> While Zones B and E in Upstate also depend on imports from neighboring zones, Zones B and E have the transmission capacity to allow each LSE in those zones to import the capacity needed to meet their capacity requirement of 118% of its load.

## II. OBJECTIVE

The NYSRC Installed Capacity Subcommittee (ICS) proposes to evaluate the reliability parameters and inter-zonal assistance between two NYCA “superzones” identified as **Upstate** (Zones A through I) and **Downstate** (Zones J and K).

All market participants are entitled to know the magnitude and rationale of higher IRM impacts caused by transmission constraints. Such knowledge is useful to the stakeholders and is vitally important to the Planning process. The objective of this study will be to quantify the reliability benefits that Upstate and Downstate provide each other currently and in the horizon year 2010. This study is expected to provide several benefits to enhance our understanding of NYCA system reliability, including:

1. Verification that the capacity requirements of the Upstate Superzone could be met by the unconstrained case results.
2. Inform market participants of where and when **future capacity resources** are needed and whether it would come from generation, transmission or demand resources — or some combination thereof.
3. Inform as to the degree and magnitude of installed **capacity “assistance”** (for reliability purposes) that the Upstate Superzone provides for the Downstate Superzone during peak demand — and conversely, such assistance that Downstate provides to the Upstate Superzone.
4. An assessment the **reliability balance** between the Upstate and Downstate Superzones which includes an assessment of the LOLE for each Superzone when the NYCA is at the 0.1 day per year LOLE. For example, the Upstate Superzone may have an LOLE of 0.04 day per year while the Downstate Superzone has an LOLE of 0.08 day per year. This assessment should be performed with and without internal transmission constraints, and with / without NYCA isolated from the neighboring control areas.
5. Evaluation of the Downstate Superzone may help to strengthen the understanding of distribution of capacity requirements in the Downstate Superzone as well as an overall evaluation and determination of **Locational Capacity Requirements (LCRs)** for Zones J and K.
6. Evaluation of the Upstate Superzone may help to strengthen the understanding of contribution of capacity in the Upstate Superzone to both Downstate and overall NYCA reliability.
7. The Superzonal approach will examine **transfer limits** between Upstate-Downstate including interface ties between (and within) the superzones and ties from Outside World contributors (PJM, ISO-NE, Ontario Hydro, Hydro Quebec, *et al.*).



### III. METHODOLOGY & ANALYSIS

1. This study will evaluate the Upstate-Downstate Superzones for years 2006 and 2010. By also evaluating 2010, this study will assess the impact of load growth on the assistance between the Upstate and Downstate Superzones and the transmission interfaces, such as UPNY / SENY and Dunwoodie South. The Horizon Year 2010 Study will be consolidated with this study.
2. This analysis will examine application of existing and additional “**firm contracts**” to achieve system balance between the two superzones. In this case, firm capacity contracts guarantee transfer of capacity from one area to another up to the transfer limitation. At the point of system balance, the LOLEs of the two superzones should be equal. The LOLE index is a measure of whether a system has adequate generation to serve its load. Systems with greater load will need more capacity, but their likelihood of a shortage should still be the same.

Starting from the base case with NYCA at 0.1 days per year, firm contracts will be developed between the two superzones such that the reliability of the two superzones are equitable. For example, one superzone may have a reliability of 0.04 days per year and the other superzone may have a reliability of 0.08 days per year but the combined reliability for NYCA will still be 0.1 days per year. As stated above, this may also help to better determine (or confirm) an equitable split in the LCRs for zones J and K. By using firm contracts, system balance may be achievable — but because of transmission constraints, firm contracts may not be enough to achieve system equality.

3. Other analytical treatments that could be used to differentiate the installed capacity requirements for each superzone would be to create “**virtual equivalent generators**” or the “**virtual transfer of existing generation**” from one superzone to another. These analyses could help determine equitable risk where the LOLEs of each superzone would be proportional to their peak loads.
4. For this particular study, a superzonal “**Zonal Reserve Margin**” (**ZRM**) will be created as a parameter analogous to the NYCA statewide reserve margin (**SRM**). This analysis will examine the effect of varying the transfer limits of interfaces on the IRM, LCRs and ZRMs.

### IV. PROCEDURES

Because of timing and staff resource limitations at the NYISO, General Electric Power Systems Energy Consulting (GE) has agreed to provide lead analytical work on this project. Since this type of study has not yet been done, the GE engineers will work in cooperation with the ICS to develop procedures for performing this analysis.

1. Study assumptions and modeling methods will be adapted from the 2006 IRM Study. As in that study, this special sensitivity analysis will use **General Electric Multi-Area Reliability Simulation (GE-MARS)** software to perform a probabilistic assessment of both the Upstate and Downstate Superzones with

- respect to surrounding Control Areas for the 2006-07 capability period. Output parameters will be similar to that provided by the IRM Study.
2. Assumptions will be based on the current IRM study assumptions and consistent with the NYISO Comprehensive Reliability Planning Process (CRPP) Reliability Needs Assessment (RNA).
  3. **Reserve Sharing** between the two superzones should stay within NYISO on a pool-wide basis. For example, if Area G and K are deficient, the excess capacity from Zone A is shared according to existing procedures.
  4. **Transfer limitations** of the transmission system are to be determined between individual areas — defined as between each Superzones and Areas (across the interfaces between the superzones and/or Areas) in both directions. The necessity to define additional interfaces such as simultaneous flows into PJM and NEPOOL will be considered.
  5. **Interface ties** between and within the Upstate and Downstate Superzones will be considered. Interface flow groups will be analyzed to ensure that the sum of total flows is consistent with individual flows into or out of an Area. It may be necessary to define appropriate simultaneous limits. Currently identified interfaces include:
    - **UPNY / SENY** – This tie connects Zone F (Capital) and Zone G (Hudson Valley).
    - **UPNY / CE (Upstate NY / ConEd)** —This tie connects Zone G (Hudson Valley) to Zone H (Millwood) and where transmission lines cross Putnam, Orange, Westchester and Rockland Counties. Stations involved include: Pleasant Valley, Fishkill, Fishkill Plains, Sylvan Lake, Shenandoah,
    - **ConEd Wheel** — This tie connects Zone G to PJM — and wheels from PJM back through Zone J. PJM is accessed through Ramapo-Branchburg and South Mawa-Waldick in Zone G. From PJM, the tie re-enters New York through Hudson-Farragut and Linden-Geothals in Zone J.

## V. SCHEDULE

This study will be conducted in a timely manner upon completion of the 2006 IRM Basecase Study.

## **RESOURCE ADEQUACY ISSUES TASK FORCE (RAITF) SCOPE OF WORK**

### **1. Background**

On October 6, 2005, National Grid (NG) filed a complaint at FERC asserting in essence that either (a) the NYCA IRM and corresponding locational capacity requirements (LCRs) should be set to the Free Flowing Equivalent IRM or (b) the increase in the NYCA IRM requirement that is caused by Zone J (NYC) and K (Long Island) transmission constraints should effectively be assigned to LSEs serving NYC and Long Island. Following this filing, several parties, including the NYSRC and NYISO, submitted filings either disagreeing with or supporting the NG complaint. On February 2, 2006, FERC dismissed the NG complaint without prejudice. FERC further ordered that the NYSRC and NYISO must file, within 90 days of the order, a report(s) describing the progress they have made in resolving NG's concerns (90 Day Report).

### **2. Objective**

The Resource Adequacy Issues Task Force (RAITF) was established to address the issues raised in the NG complaint and the FERC order. The RAITF's objective is to provide stakeholder input to the NYISO and NYSRC for their consideration in their preparation of the 90 Day Report, which is due to FERC by May 3, 2006. The RAITF will also review applicable studies/reports and may make recommendations to the NYISO and/or NYSRC regarding potential modifications to the methods, procedures and market rules that affect resource adequacy in New York.

### **3. RAITF Structure**

Co-Chairmen: Curt Dahl, Chairman of the NYSRC's Installed Capacity Subcommittee (ICS), and Glenn Haake, Chairman of the NYISO's Installed Capacity Working Group (ICAPWG)

Membership: the RAITF will be open to all NYISO stakeholders and NYSRC participants and is expected to include members of ICS and ICAPWG.

### **4. Tasks**

#### A. Comments on 90 Day Report

The RAITF shall provide input to the NYSRC and NYISO to inform these entities of stakeholder views concerning the issues to be addressed in the 90 Day Report. The RAITF shall also review and comment upon the draft 90 Day Report(s) prepared by the NYISO and NYSRC.

## B. Recommendation on IRM/LCR Approach

In order to address the issues raised in NG's complaint, the RAITF will conduct a review of applicable studies and procedures of the NYSRC and NYISO that relate to resource adequacy for the purpose of making recommendations to the NYISO and/or NYSRC for their consideration concerning whether stakeholders support:

1. revising the procedures used to develop the IRM and LCR; or
2. revising how costs associated with procuring these requirements are allocated among LSEs.

The RAITF will also advise the NYISO and NYSRC of stakeholder views regarding what priority, if any, the objective of minimizing total statewide costs should be accorded in setting the IRM and LCR requirements (February 2 Order at P 24). Any recommendations or stakeholder support for revising how costs associated with procuring these requirements are allocated shall also be referred to the appropriate NYISO stakeholder committees for further work.

## C. Studies That RAITF Will Review and Evaluate

The studies and reports that the RAITF will review and evaluate include, but are not limited to, the following:

1. Upstate-Downstate Study: this study has been authorized by the NYSRC's Executive Committee (EC) and is scheduled to commence in the Spring of 2006. It is intended to calculate LOLE and quantify the capacity assistance that Upstate and Downstate provide to one another;
2. 2006 IRM Study: this study was completed March 20, 2006;
3. Tangent 45 Methodology: the EC has instructed the ICS to evaluate the Tangent 45 methodology used to calculate the IRM for the 2006 Capability Year and provide a report to the EC of its findings and conclusions. This will include a review of the Free-Flowing Equivalent IRM Methodology. ICS has agreed to report its findings and conclusions to RAITF for its evaluation;
4. Comprehensive Planning Process; Reliability Needs Assessment issued December 21, 2005;
5. The 2006 Locational Capacity Requirements Study approved by the NYISO Operations Committee (OC) on March 27, 2006.

The RAITF shall prepare a report that sets forth its findings and conclusions regarding the foregoing issues and scope of work.

## 5. Schedule

### A. Deliverables:

- RAITF report on status of its efforts to develop and adopt a Scope of Work to NYISO Business Issues Committee – April 5, 2006; OC – April 6, 2006; and to EC – April 7, 2006;
- RAITF reviews and provides comments to the NYISO and NYSRC for their consideration on their draft Report(s) – Dependent on issuance of draft Report (expected in mid-April);
- RAITF shall endeavor to report preliminary findings and recommendations for NYISO and NYSRC consideration on issues set forth in Section 4(B), above, by August 1, 2006.

### B. RAITF Meetings:

- Kick-off meeting – March 1, 2006
- March 15, 2006 – second meeting
- March 28, 2006 – third meeting
- other meetings to be scheduled

**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 28th day of April 2006.

/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