

# **NYSRC Installed Capacity Subcommittee**

Meeting #51

**April 6, 2005**

**9:30 a.m. – 3:30 p.m.**

**NYISO: Washington Ave Ext. Conference Room WD**

## Meeting Minutes

### **Attendees**

#### Members/Alternates Present:

Mr. Curt Dahl (KeySpan/LIPA), Chairman  
Mr. Bart Franey (National Grid) – Telephone  
Mr. Steve Jeremko (NYSEG)  
Mr. Harold Joscher (PSEG Power)  
Mr. Steve Whalen (NYSEG) – Telephone  
Mr. Rich Wright (Central Hudson)  
Mr. King Look (Con Edison), Secretary

#### Advisers/Non-member Participants Present:

Mr. John Adams (NYISO)  
Mr. Al Adamson (Consultant)  
Mr. Greg Drake  
Mr. Hebert Joseph (NYPSC)  
Mr. Steve Keller (NYPSC) – Telephone  
Mr. Ed Schrom (NYPSC)  
Mr. Frank Vitale (Consultant)

#### Guests Present:

Mr. John Charlton (NYISO) – Limited Participation  
Mr. Glenn Haringa (GE) – Telephone  
Mr. Bill Lamanna (NYISO) – Limited Participation  
Mr. Cenk Yildirim (NYISO)

### **Changes to Meeting Agenda:**

- Under Agenda Item 4 (Preparation for the 2006-2007 Base Case IRM), two additional sub-items will be included as:
  - 4.1 IRM Study Work Plan Matrix
  - 4.2 RCMS Compliance ReviewThe current sub-items 4.1, 4.2 and 4.3 will be renumbered as 4.3, 4.4 and 4.5, respectively.
- Under Agenda Item 5 (Impact of Cedars Unit), one additional sub-item will be included as:
  - 5.1 Load Carrying Capability of Cedars (“Greg Drake’s Study”)The current sub-item 5.1 will be renumbered as 5.2.

- Under Agenda Item 9 (Other Business), a sub-item will be included, which is:  
8.1 NERC Resource Adequacy SAR

### **Agenda Item 1: Discuss and Approve Meeting Minutes**

The Meeting Minutes from Meeting #50 (held on 3/2/05) were reviewed. Due to the extent of the comments received, a revised draft of the Meeting Minutes will be sent out to the ICS team for final review and approval at the next ICS meeting on 5/4/05.

### **Agenda Item 2: Review Previous Outstanding Assignments**

Action Items List #50 was reviewed and resulted in closing out items 48-1, 49-6 and 50-1. See Action Items List for specifics.

### **Agenda Item 3: Impact of No New Poletti Unit on 2005-2006 Base Case IRM**

- Greg Drake discussed the results of action item 50-1:
  - Removing the new Poletti unit has no effect on the IRM, which remained at 17.6%, but the corresponding ratio of locational capacity to adjusted load for NYC was reduced from 83% to 79.6% and the corresponding LI ratio was increased from 99% to 100.2%.
- King Look stated that removing the new Poletti unit should not lower NYC's locational capacity requirement. With this as the premise, the 83% ratio of locational capacity to adjusted load in NYC in the 2005-2006 Base Case IRM could not be NYC's locational capacity requirement, because that ratio was reduced by removing the new Poletti unit while the IRM remained the same.
- Curt Dahl will report to the EC the finding that removing the new Poletti unit has no effect on the IRM.

### **Agenda Item 4: Preparation for the 2006-2007 IRM Study**

#### **1. IRM Study Work Plan Matrix**

Curt Dahl reviewed with the ICS team the NYSRC 2006-07 NYCA IRM Study Work Plan matrix of major modeling and study assumption issues. The study work plan matrix was accepted by the NYSRC EC at their 3/11/05 meeting. In reviewing the matrix, the following were noted:

- The 711 MW DMNC capacity reduction needs to be assessed and updated. Greg Drake was asked to report back to ICS at the next ICS meeting on 5/4/05 a preliminary assessment of the 711 MW DMNC capacity reduction. This is an existing action item (#49-7).
- Frank Vitale is seeking historical scheduled maintenance outage data in order to update the planned maintenance outage average rate for the 2006-2007 IRM Study. *As a new action item (#51-1), Greg Drake will provide Frank Vitale with the historical scheduled maintenance outage data.*
- On the Monte Carlo Error Range Analysis, Curt Dahl suggested that at some future date ICS should consult with George Smith and Mayer Sasson. Besides the number of iterations of a MARS run, the seed and the ordering of the units in the MARS MIF file would also have an effect on the MARS results. *As a new action item (#51-2), Greg Drake will work with GE to develop a work scope for the Monte Carlo Error Range Analysis.*

- Al Adamson clarified that the Fuel Availability action item on the Work Plan matrix is to develop a scope and methodology for the fuel availability study, not to do the study itself.
- Curt Dahl informed ICS that Paul Gioia (NYSRC legal counsel) has made the determination that the current IRM study schedule does accommodate future NYSRC IRM filings to FERC that may show an IRM other than the current 18%. This completes the Study Schedule action item on the Work Plan matrix.

## **2. RCMS Compliance Review**

Al Adamson reviewed with ICS the RCMS Compliance Review of NYSRC Reliability Rule A-R2, *Load Serving Entity Capacity Requirements*:

- RCMS is concerned with an apparent inconsistency between the locational capacity requirements in the NYSRC report, *NYCA Installed Capacity Requirement for the Period May 2005 Through April 2006*, dated 12/10/04 and the locational capacity requirements in the NYISO report, *Locational Installed Capacity Requirement Study Covering the New York Control Area For the 2005 – 2006 Capability Year*, dated 2/17/05.
- RCMS recognizes there may be methodology differences between the two studies.
- RCMS requests the ICS and the NYISO staff to work together to develop a consistent study methodology, and to submit a report to RCMS reporting the results of this effort. This report should include a review of compliance with NYSRC Rules A-R1 and A-R2 for the 2005-2006 capability year, utilizing the new joint methodology. RCMS requests this report to be completed by June 1, 2005.

On this matter, ICS is already committed to exploring the possibility of consistent IRM and LCR methodologies as part of the 2006-2007 IRM Study Work Plan.

## **3. 2006 – 2007 IRM Study Assumptions Matrix**

Using the 8/13/04 EC approved assumptions matrix for the 2005-06 IRM Study, ICS reviewed and identified the assumptions that need to be updated. In reviewing the assumptions, the following were noted:

- John Pade will be asked to brief ICS at the next ICS meeting on 5/4/05 on the appropriate year load shape for use in the 2006-2007 IRM Study.
- According to Curt Dahl, LIPA is seeking capacity accreditation of the 96 MW of Long Island emergency units, as SCRs. These units are expected to operate until at least 2008, when Neptune and Caithness come on-line.
- King Look asked how should last year's 711 MW DMNC capacity reduction be treated because it would have an impact on how it would be updated. For example, since the 711 MW was derived using a 2-year average of 2002 and 2003 data, should it be updated as a 2-year rolling average where the 2004 data would be weighted one-half of the new average? Or since the 711 MW represents capacity reduction not captured in the forced outage data where a 5-year rolling average is used, should the 711 MW be treated already as a 5-year rolling average, such that when updating with 2004 data, the 2004 data would be weighted one-fifth of the new average. Action item (# 49-7) has been formed to assess the 711 MW DMNC capacity reduction.

- Greg Drake will review the actual external rights contracts to determine the proper assumptions on the external capacity.

The following were new action items, resulting from the review of the assumptions matrix:

- *Action item # 51-3: Curt Dahl and King Look will review and update as required the Long Island and Con Edison Load Uncertainty Models, respectively.*
- *Action Item #51-4: Aaron Breindenbaugh (NYISO) will review and update as required the SCRs and EDRPs assumptions.*
- *Action Item #51-5: John Adams will assess how to model PSEG-Con Edison Wheel Protocol. (Protocol goes into effect on June 1<sup>st</sup>.)*
- *Action Item #51-6: Curt Dahl and King Look will review and update as required the Long Island and New York City transmission cable forced outage rates.*
- *Action Item #51-7: Bill Lamanna will review and update as required the transmission topology.*

The 2006 – 2007 IRM Study Assumptions Matrix will be updated on an ongoing basis with the goal to complete it by July or August this year for EC review and approval.

#### **4. Coal Retirements**

Greg Drake reviewed with ICS the IRM impact of removing all the coal units that are scheduled to be retired over the next few years (1340 MW total coal capacity). Using the 2005-2006 IRM Base Case, removing the coal units reduced the IRM from 17.6% to 16.1%.

#### **5. Outside World Model**

Greg Drake briefed ICS on the work in progress to update the outside world model:

- Greg updated the PJM model with the new one (3 areas) from NPCC CP-8 Working Group. Using the 2005-2006 IRM Base Case, the new PJM model lowered the IRM from 17.6% to 17.0%.
- A review of the NPCC CP-8 model of PJM showed PJM isolated is better than NYCA isolated. On an interconnected basis, the NPCC CP-8 model of PJM is not more reliable than NYCA. NYSRC criterion requires that the outside control area cannot be more reliable than NYCA, either isolated or interconnected.
- According to Glenn Haringa, the PJM model represents only MAAC (“PJM classic”). Glenn suggested taking out the ECAR support to PJM to avoid over-counting on the external.
- Per John Adam’s suggestion, Greg Drake will raise PJM load proportionately until their minimum IRM of 15% is reached.

- Greg Drake will work with GE to collapse the 13 zones in New England to 5 zones.
- Greg requested assistance from Glenn Haringa of GE to check if Ontario can be covered as a single area. GE currently has a 11-zone model of Ontario. Greg also requested assistance from Glenn on modeling Hydro Quebec.

New Version of MARS: Glenn Haringa indicated there is a new version of the EOP model, which he will send Greg Drake a copy. Curt Dahl asked Greg to benchmark the results of the new version against those of the existing version.

## **Agenda Item 5: Impact of Cedars Unit**

### **1. Load Carrying Capability of Cedars (“Greg Drake’s Study”)**

Greg Drake presented the load carrying capability of the 200 MW Cedars unit under two different scenarios – one at the “as found” LOLE and the other at the criterion 0.1 LOLE:

- When Cedars was removed from the “as found” LOLE case, the LOLE went from 0.006 to 0.007, which in turn required 170 MW of load be removed proportionately throughout all the NYCA zones to restore the LOLE back to the “as found” 0.006. This 170 MW is the load carrying capability of Cedars at the “as found” LOLE case. Greg pointed out that the 170 MW load carrying capability is the most that can be expected of 200 MW capacity, because 170 MW load plus 17.6% IRM equals 200 MW.
- A similar exercise starting with the “at criterion” 0.1 LOLE case resulted in the LOLE increasing to 0.112 when the Cedars unit was removed, which in turn required 94 MW of load be removed proportionately throughout all the NYCA zones to restore the “at criteria” 0.1 LOLE. This 94 MW is the load carrying capability of Cedars at the “at criterion” 0.1 LOLE case.

As a result of the difference in load carrying capability of the Cedars unit between these two cases, Greg asked the question of which of the two is the correct load carrying capability of the Cedars unit, while noting that elevating the load throughout NYCA in the derivation of the “at criterion” 0.1 LOLE case greatly affected the load carrying capability of Cedars.

### **2. White Paper**

The discussion focused primarily on Steve Jeremko’s comments to the Cedars white paper, which he forwarded to ICS prior to the 4/6/05 ICS meeting. Most of the Steve’s comments were editorial in nature and the rest focused on a potential shortcoming in the current IRM methodology:

- Steve Jeremko and Bart Franey sought to include in the white paper as one of the focal points a need to improve the IRM methodology to preclude a situation like Cedars that adding capacity increases the IRM. Steve Keller was in agreement with Steve Jeremko and Bart Franey on the need to improve the IRM methodology.

- Curt Dahl and Al Adamson indicated that the purpose of the white paper was to explain that Cedars does not increase LOLE and that Cedars increases the IRM because of the current IRM methodology. Both of these points have been demonstrated to be factual.

Curt Dahl recommended that the potential shortcoming in the current IRM methodology be addressed in the LCR vs. IRM study. Bart Franey said his company (National Grid) would take exception to the white paper and advocate a commitment by ICS to improve the IRM methodology.

Curt Dahl will send out by Friday, 4/8/05 a revised draft of the white paper to ICS for final review. The goal is to send the white paper to the EC for discussion at the 4/15/05 EC meeting.

### **Agenda Item 6: LCR/IRM Methodology**

#### **1. LCR vs. IRM Curves Using Various Methodologies**

Greg Drake presented an LCR vs. IRM curve that addressed item “a” of ICS action item # 50-2. The combinations of LCRs and IRMs on this curve were developed by maintaining the loads in zones J and K at the elevated load levels from the 2005-2006 IRM Base Case of 17.6% and adjusting loads in zones A through I and shifting capacities out of J and K. This methodology failed to provide LCRs for IRMs of less than 17.6%, because the loads in zones J and K were maintained at the elevated levels from the 17.6% IRM Base Case and any additional load in zones A through I to lower the IRM would cause the LOLE to exceed 0.1. Greg will send ICS the procedure for this methodology.

Greg Drake will continue to work on developing the LCR vs. IRM curves for items “b” and “c” of ICS action item #50-2.

#### **2. LCR vs. IRM Tradeoffs in Anchoring the LCRs**

This agenda item was not discussed and will be deferred to the next ICS meeting.

### **Agenda Item 7: Fuel Availability**

#### **1. White Paper**

Curt Dahl indicated that the Fuel Availability White Paper would be rewritten to incorporate the comments he have received and inputs from John Charlton.

According to John Charlton:

- Generators in New York State have an incentive to improve fuel availability to sell more UCAP and this philosophy is shared by PJM. If generators run out of natural gas, they would be counted as forced out.
- 20 hours of oil burn during the coldest period would probably be sufficient to ensure adequate fuel supply for electric generation; and therefore, 30 days of oil back-up capability would be plentiful.

- The NYISO made a presentation at the 3/23/05 Northeast Gas Association (NGA) workshop on the effects of fuel derates on the New York electrical grid. A copy of the presentation can be found on NGA website, with the link provided below:

<http://www.northeastgas.org/pdf/bachert.pdf>

***As a new action item (#51-8), Greg Drake will remove winter capacity in MARS until the LOLE changes.*** This will determine the amount of capacity loss in the winter (i.e., loss of natural gas for electric generation) that would result in lower reliability to the electric system.

## **2. PJM Reliability Pricing Model**

- PJM will be making a presentation on their Reliability Pricing Model (RPM) at the 4/11/05 NYISO ICAP Working Group meeting. Fuel diversity is one of the reliability metrics of the RPM.

### **Agenda Item 8: Committee Reports**

- John Charlton briefed ICS on the status of the NYISO ICAP demand curve filed with FERC. As indicated under item 2 of Agenda Item 7 above, John Charlton informed ICS that PJM will be presenting their RPM at the 4/11/05 NYISO ICAP Working Group meeting.
- Bill Lamanna informed ICS that the Deliverability Study is starting up again. Bill Lamanna also indicated that in the NYISO Comprehensive Electric Reliability Planning Process, the base case assumes a change of slightly over 300 MW in net additions (i.e., net of plant retirements).

### **Agenda Item 9: Other Business**

Al Adamson reported on the NERC Resource Adequacy SAR:

- NPCC supported NYSRC comments. Like NYSRC, NPCC supported comments not to include fuel curtailment in base case criteria requirements. However, we (NYSRC) recommended that fuel curtailment be included as a sensitivity.
- CA, ECAR and MAAC took the position that the region should develop the resource adequacy criteria.
- Both NPCC and NYSRC recommended 0.1 LOLE as the resource adequacy criterion.

### **Agenda Item 10: Review Action Items**

See attached action item list.

### **Agenda Item 11: Next Meeting**

Meeting #52: May 4, 2005, 9:30am – 3:30pm.

*Secretary: King Look*