

## **NYSRC Installed Capacity Subcommittee**

Summit Meeting

**May 20, 2005**

**10:00 a.m. – 3:30 p.m.**

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

Meeting Minutes

### **Attendees**

#### Members/Alternates Present:

Mr. Curt Dahl (KeySpan/LIPA), Chairman  
Mr. Bart Franey (National Grid)  
Mr. Harold Joscher (PSEG Power) – Telephone  
Mr. Carlos Villalba (Con Edison) – Telephone  
Mr. Steve Whalen (NYSEG) – Telephone  
Mr. Rich Wright (Central Hudson) – Telephone  
Mr. Mayer Sasson (Con Edison), Acting Secretary

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

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

#### Guests Present:

Mr. Gary Jordan (GE)  
Mr. Madison Milhous (KeySpan Ravenswood)  
Mr. Glenn Haringa (GE) – Limited Participation  
Mr. Bill Lamanna (NYISO) – Limited Participation  
Mr. Aydemir Nehrozoglu (Con Edison) – Telephone  
Mr. Tom Baldi (Con Edison) – Telephone  
Mr. Wayne Coste (ISO-NE)

### **Review of Agenda Items and Background**

Curt Dahl gave some background on the agenda issues: the requirement to formulate a method to derive the IRM/LCR relationship curve and criteria for anchoring to a point on the curve (i.e. selecting an IRM).

Curt mentioned that the IRM/LCR methodology question has been evolving for some time but had taken a back seat to the 2004/2005 IRM study due to time and resource limitations. However, the subject was now being brought back because the NYISO is preparing to submit a resolution of the issue to the NYSRC within the June 2005 time frame.

Some members of the Executive Committee (EC) expressed misgivings about the current methodology for mapping an IRM/LCR relationship and urged the ICS to resolve the issue.

Curt also noted that the IRM/LCR methodology is being mentioned as a proxy for a whole host of other issues as well. Therefore a table listing all relevant issues, options for resolving each issue, and the pros and cons of each option had been prepared and submitted to summit participants. This table, called the “issue matrix” is attached below and outlines the structure that was followed in today’s meeting.



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### **Changes to Meeting Agenda**

Curt Dahl suggested adding one task to the agenda: Developing a process to ensure proper coordination of NYISO’s activities with other entities such as NYSRC, in the resolution of the matrix of IRM/LCR issues.

#### **Agenda Item 1: Conform LCR/IRM Methodologies**

There was a discussion on whether the ICS should consider the free-flow (unconstrained) method of determining IRM. It was concluded that this was not a separate method but an extreme point on the curve.

Mayer Sasson pointed out that the NYSRC has a current methodology and ICS needed to come up with compelling reasons for changing to a new methodology.

Each of the methods was discussed at length.

- It was noted that the green curve (elevated load case) is the current methodology used to calculate statewide IRM. However it does not handle the LCR calculation correctly. GE made the point that elevating loads overstates the impact of transmission limits. The general consensus was against the green curve method.
- Carlos Villalba noted that the blue curve method (current NYISO methodology used to calculate the LCRs) tells the whole story because it covers the whole spectrum of state reserve margins (SRM) ranging from the current actual SRM to the minimum value defined by the asymptote. Neither the green nor the red curves produce the same range, as some of the SRM values do not converge to a 0.1 LOLE point.

- The Cedars issue was mentioned as one of the weaknesses of the current methodology. It seemed counterintuitive to some that adding a new generation unit upstate could increase the statewide IRM requirement. Some saw this as an anomaly.
- Mayer Sasson argued that the Cedars study finding was not counterintuitive since it shows that adding a unit lowers the LOLE and hence improves reliability. Mayer asserted that the IRM increases because the Cedars unit was not sited appropriately to serve load behind transmission constraints.
- It was agreed that the Cedars issue would not be referred to as an “anomaly” but as a “phenomenon”.
- The red curve or “Reduced Capacity Method” allows capacity to be removed independently from zones J and K. Target locational capacities (LC) are first established in zones J and K keeping the relationship between NYC and LI capacities at the ratio of 80% to 99% (i.e.,  $0.80/0.99 = 0.808$  MW in NYC for every MW in LI), before capacity is removed from zones A-I to calculate the IRM.
- The idea of using a hybrid of the red and blue curves (i.e., red-blue curve) received a generally positive response. Gary Jordan pointed out that this method could be structured to maintain the same LOLE in all zones during capacity reduction. In this manner other zones (besides J and K) that are becoming resource deficient could be identified.
- The red-blue curve has not been generated yet. Therefore it is not clear where the knee of the curve will fall relative to the blue curve. One of the action items from this meeting is to generate the red-blue curve.
- The subzonal LOLE method did not converge to a statewide LOLE of 0.1. Likely cause is deficient initial capacity. This method starts with an initial capacity corresponding to the unconstrained IRM of 15.9%. Transmission constraints are then put in, which raises the LOLE to about 0.14. To bring LOLE back down to 0.1, capacity is shifted from resource rich zones to deficient zones. Without sufficient initial capacity the system cannot be brought back to 0.1 LOLE.

**Agenda Item 2: Develop Requirements for Anchoring LCR/IRM**

The discussion centered on the following issues:

- Should existing resources in constrained localities be limiting values in setting the LCR? If not, a locality that can't meet the anchored LCR has to compensate by purchasing more RoS capacity at the appropriate equivalent amount to stay on the IRM/LCR curve. This is probable if the unconstrained IRM is chosen as the anchoring point. Bart Franey agreed to provide ICS with more information on how a replacement capacity process would work.

- Should the anchored IRM/LCR pair be such that a small change in one does not lead to a large change in the other? It was noted that such changes would be expected since study inputs are not known with perfect accuracy.

There was also a discussion on whether the IRM/LCR curve should be limited to a small region around the 45 degree tangent point, instead of covering a wide range of points on either side.

**Agenda Item 3: Review LCR Definitions, NYSRC rules A-R1 and A-R2, and NYSRC Policy 5-0**

LCR definitions and NYSRC rule A-R1 were briefly touched on during the discussion of agenda item 1.

**Agenda Item 4: Review Schedule and Timing of NYISO's LCR Study and NYSRC's IRM Study**

Mayer Sasson noted that it would not be proper for the NYSRC to be guided mainly by economic considerations and proposed a process that would allow the LCR and IRM updates to be more closely synchronized:

- The NYSRC develops a base case LCR/IRM curve by August based on whichever IRM methodology is adopted.
- The NYISO conducts technical feasibility, stability and economics studies and makes a recommendation, by September, to the Operating Committee on where to set the following year's LCR values.
- The NYSRC completes its normal IRM studies, including the base case and sensitivity analyses and makes a determination on the IRM value.

**Agenda Item 5: Next Meeting**

Meeting #53: June 1, 2005 9:30am – 3:30pm.

**Action Items**

ACTION ITEM S-1: Finish Blue-red curve

ACTION ITEM S-2: Change the curve axes to MW vs MW (leaving % values on secondary axes)

ACTION ITEM S-3: Update the issue matrix for the June 1, 2005 ICS meeting

*Secretary: King Look*