

NYSRC Installed Capacity Subcommittee

Meeting #72

January 3rd, 2007

9:30 a.m. – 4:00 p.m.

NYSERDA: 17 Columbia Circle Board Room

Meeting Minutes

Attendees

Members/Alternates Present:

Mr. Curt Dahl (LIPA), Chairman
Mr. Franey (National Grid)
Mr. Madison Milhous (KeySpan Ravenswood)
Mr. Steve Jeremko (NYSEG-RGE) – Telephone
Mr. Rajee Mustafa (NYPA)
Mr. Aydemir Nehrozoglu (Con Edison), Acting Secretary

Advisers / Non-Voting Participants Present:

Mr. Greg Drake (NYISO)
Mr. Frank Vitale (Consultant)
Mr. Al Adamson (Consultant)
Mr. Tim Bush (Navigant Consulting)
Mr. John Adams (NYISO)*
Mr. Steve Keller (NYDPS)
Mr. Ed Schrom (NYDPS)
Mr. Mayer Sasson (Con Edison) – Telephone
Mr. Harry Joscher (PSEG) – Telephone
Mr. Glenn Haake (IPPNY) – Telephone
Mr. Mike Specter (Central Hudson G&E) – Telephone
Mr. Glenn Haringa (GE) – Telephone

Guests Present:

Ms. Erin Hogan (NYSERDA)
Mr. Wayne Coste (ISO NE)
Mr. Edward Whittaker (GE) – Telephone
Mr. Steven Wemple (Coned Energy) – Telephone

1 Review and Approval of Meeting Minutes

Review of meeting minutes was postponed until a draft of the minutes from meeting 71 is available.

2 2007 – 2008 IRM Sensitivity Cases

Base IRM is 16% and base LCRs are 80% (New York City) and 99% (Long Island). Greg Drake pointed out that at 16% SRM the LOLE is 0.091. This is due to rounding off of the LCRs to the nearest whole percentage in the Tan 45 procedure.

Mr. Drake went over each sensitivity case that was planned for the 2007 – 2008 IRM study.. The blank rows are the cases that had not been completed. Mayer Sasson

commented that there were no details given on the sensitivity cases in the draft IRM report and asked if a brief paragraph could be added to describe each case. Steve Jeremko offered to work with Mr. Drake to draft descriptions that basically explain the rationale for each case. Considering the need to issue the report to the Executive Committee on Friday January 5th it was agreed that these descriptions had to be completed by noon on January 4th, if they are to be included in the report.

Note that the sensitivity cases do not reproduce the unified procedure. The IRM, as well as the LCRs were solved independently for each case.

There was discussion on the following cases:

Case 1 (NYCA Isolated Case): Mr. Drake remarked that if the LCRs are kept at their base values of 80% and 99% for New York City and Long Island, respectively, this case cannot be solved to an LOLE of 0.1.

Case 6 (No NYCA Transmission Constraints): This is the free flowing case. The result obtained was 13.9% IRM, 78.4% NYC, and 97.2% LI. A question was raised as to why the locational values were less than the base values of 80% and 99%. Mr. Drake explained that the LCRs were not solved for this sensitivity case. The 13.9% IRM was obtained by starting with the base values of 16%, 80%, and 99% (not the as found system) and removing capacity from each zone until a NYCA LOLE of 0.1 is reached. The locational values of 78.4% and 97.2% are simply the capacity to load ratios, respectively, for NYC and LI at the 13.9% IRM point.

Cases 7a and 7b (Peak loads of outside world areas increased/decreased by 10%): Mr. Sasson asked if the point of these cases was to account for an unusually high temperature weather condition and, if so, was the NYCA load also increased. Mr. Drake and Mr. Jeremko explained that the objective of this case was to simulate a decrease/increase in available reserves (decreased/increased capacity) in neighboring areas. Load was used as a proxy to simulate availability of external capacity. Mr. Franey asked what the LOLEs for the external areas were for these cases and indicated that a 10% change in peak load was extreme.

Case 10 (Neptune Cable Added – 660MW of UDRs): This case yielded 15.3% IRM, 78% NYC LCR, and 108.8% LI LCR. The discussion on this case centered around why the LI LCR had increased from the base value of 99%, while both the IRM and NYC LCR had decreased. Mr. Drake explained that the 660 MW of UDRs from the Neptune Cable was considered LI capacity. Therefore, the capacity requirement in megawatts, for capacity physically located on Long Island, had actually decreased by about 12%. Mr. Drake indicated that the increase was an artifact of the methodology used to arrive at these values, which are one out of an infinite set of possible values that would satisfy the reliability criteria.

Madison Millhouse asked that this case be footnoted in the IRM report with an explanation that clarifies how the methodology has affected the Long Island LCR result.

Case 11a (Cross-sound cable as a free flowing tie): This case was shown in the report with a parenthetical that states “New England Capacity Increases”. Mr. Franey asked that this phrase in the parenthesis be removed because the noted capacity increase is due to a dummy area being added back to New England and hence had always been a part of New England’s capacity.

Case 11b (Cross-sound cable as a free flowing tie but without adding dummy area capacity back to New England): It was agreed that this case should be deleted.

Case 12 (Free flow equivalent with new methodology): The objective of this case was to explore the effect of calculating the IRM for the free flowing equivalent (FFE) by using a slightly different method that removes capacity from all upstate zones, A through H, (including AG) instead of just A, C, and D as done in the unified methodology. The results are very close to the FFE case generated using the regular unified methodology, which yielded an IRM of 14.1%.

Al Adamson and Mr. Sasson questioned whether this case added any value to the report, since the results were very close to those obtained with the unified methodology. The group decided to keep the case as an illustration of what the impact of using a different method might be.

Unfinished cases: The expectation during the meeting was that cases 13 (No transition rates), 14 (350 MW wheel from HQ through Ontario), and 15 (Use last years transition rates (EFOR) for IP2 would be completed by Friday, January 4th and may make it into the report. However cases 17, 18, and 19 that use methodologies 1 and 2 would be taken up (if required) with the NYSRC Executive Committee on a separate discussion.

3 Review Draft#3 IRM 2007-08 Report

The members reviewed the draft. Mr. Sasson's comments were the main focus, as they had been provided a day earlier. The following changes were made (note that the page numbers refer to draft#3):

Page 1:

Add footnote, suggested by Mr. Sasson, to the first sentence under Executive Summary, which reads: "*The base case for 2007 IRM Study calculated that NYCA IRM requirement for the period May 1, 2007 through April 30, 2008 to be 16%.*" The footnote will read: "*There is a 99.7% probability that the base case result is within the range of 15.2% to 16.9%. See Appendix A.*"

Page 2:

Based on Mr. Franey's suggestion, add a footnote indicating the LOLE calculated for the base result, at the end of the first paragraph (following the word respectively) under Executive Summary. The footnote would read: "*These requirements would result in a NYCA LOLE of 0.091, due to rounding of the LCRs.*"

Mr. Sasson had suggested revising the sentence "*The principal reasons for this fairly large IRM reduction are the use of an improved version of the GE MARS program;*" to "*The principal reasons for this fairly large IRM reduction is the resolution of a programming error in the GE MARS program;*" Mayer's suggestion was accepted with the following revision: Instead of the phrase "*resolution of a programming error in the GE MARS program*" the report will state "*a correction of the treatment of Emergence Operating Procedures in the version of the GE MARS program used this year.*"

Page 6:

Mr. Sasson's suggested addition under Resource Capacity Availability was accepted with some revision. The affected sentence, which originally began with "*During this period*" now reads: "*Average capacity availability improved during 2000-2004, the period considered for the 2006 IRM study. This increase was mainly due to removing of year*"

2000 data from the average, which included prolonged outages of an Indian Point and a Lovett unit in the lower Hudson Valley.”

Page 10:

Mr. Sasson’s suggested sensitivity case – using last year’s EFORds to calculate the IRM was added to the list of sensitivity cases. However, it may not be shown in the executive summary if the case is not concluded in time for the final version of the report.

Page 11:

Based on Mr. Sasson’s comment, in the first paragraph under the heading Comparison with 2006 IRM Study Results, the phrase “improved version” was replaced with “the use of a new version” (third sentence in the paragraph). Also, in the same sentence, after “... GE-MARS program (Version 2.83) ...” added “which corrected the treatment of EOPs.”

APPENDIXES:

Mr. Franey offered the following suggestions:

- Thinking ahead, next year’s report should include trend plots that track the effect of transition rates and other parameters on IRM and LCRs.

Finally, the group noted that the “Confidence Intervals” chart on Page 17 needs to show corrected upper and lower confidence limits. The lower should be 0.076 instead of 0.081 and the upper should be 0.106 instead of 0.115.

Al Adamson will incorporate these changes and finalize the report for submission before the EC meeting on Friday January 4th.

4 ISO NE Presentation on Tie Benefits

Curt Dahl expressed to Wayne Coste of ISO NE that ICS feels some of the results from the ISO NE tie benefits study are counter intuitive. The main anomaly is that addition of tie capability appears, in some cases, to reduce reliability. These concerns have been summarized in a January 2nd letter from the ICS to Peter Wong and Wayne Coste.

Curt Dahl also asked Wayne Coste if the master input file (MIF) used in the tie benefits study could be shared with ICS.

Wayne Coste pointed out the following reasons for the perceived anomalies:

- Main cause of the anomalous results is the ordering and treatment of emergency operating procedures (EOP). In the ISO NE study tie benefits are used up before EOPs are activated. This approach neglects the benefits of reserve sharing. ISO NE verified that the ordering of the EOPs was the cause of the anomalies by repeating the analysis with EOPs treated as capacity. The results changed drastically.
- This method is consistent with the Northeast Power Coordinating Council (NPCC) method.
- ISO NE has presented the results to NPCC during their latest CP-8 meeting in December 2006. NPCC became aware of the anomalies in the study results and

will take the current method under review this year. However, this review may not be a high priority task for NPCC.

- ISO NE is currently looking for input from the NYISO and NYSRC to move the tie benefits study forward. Wayne Coste stressed this is a joint study between ISO NE, NYISO, and NYSRC. Therefore ISO NE expects NYISO and NYSRC to meet offline and come back with some comments on the methodology, as well as suggestions on how to move the study forward.

5 ISO NE FERC Filing

Background: ISO NE is currently seeking FERC approval for a change in input assumptions in its Installed Capacity Requirement (ICR) calculation. If approved, ISO NE would model rest of the world (i.e. neighboring zones) with their “as found” capacity rather than at their respective required reserve margins. This change would result in a lower LCR for ISO NE as early as next year and cause the subsequent NYCA IRM to increase.

Curt Dahl expressed ICS’s concern with respect to the New approach that ISO NE is proposing to calculate its ICR. Wayne Coste stated that this new approach would not affect the New England reserve margin because capacity needs in New England are determined 3 years ahead of time. Hence, the current reserve margin requirement would carry forward through year 2010.

During the discussion Wayne Coste expressed his belief that New England considers firm capacity contracts as “interruptible.” That is to say, ISO NE would interrupt firm exports to NY before they interrupt native load.

The group decided that this idea of “curtailable ICAP” should be discussed further at upcoming meetings and should also be communicated to the ICAP working group for their ideas.

6 Upstate/Downstate Study

Glenn Haringa (participating by phone) was asked if GE had made any progress on the Upstate/Downstate study. Glenn said that they had not done any work on the study and were waiting for a purchase order (PO) from the NYISO to start work. John Adams stated that the paperwork for the PO would probably be submitted tomorrow (Thursday, January 4th).

7 Next Meeting

January 31st, 2007 Meeting # 73

Secretary: Carlos Villalba