

NYSRC Installed Capacity Subcommittee

Meeting #76

May 4, 2007

9:30 a.m. - 3:00 p.m.

NYSERDA: 17 Columbia Circle, New York City Conference Room

Meeting Minutes

Attendees

Members/ Alternates Present:

Mr. Curt Dahl (LIPA), Chairman
Mr. Bart Franey (National Grid) - Telephone
Mr. Steve Jeremko (NYSEG-RGE) - Telephone
Mr. Madison Mihous (KeySpan, Ravenswood)
Mr. Rajee Mustafa (NYPA)
Mr. Harry Joscher (PSEG Power) - Telephone
Mr. Carlos Villalba (Con Edison), Secretary - Telephone / Limited Participation
Mr. Daniel Head (Con Edison), Acting Secretary

Advisers/Non-member Participants Present:

Mr. John Adams (NYISO)
Mr. Greg Drake (NYISO)
Mr. Al Adamson (Consultant)
Mr. Steve Keller (NYDPS) - Telephone
Mr. Ed Schrom (NYDPS)
Mr. Frank Vitale (Consultant)
Mr. Timothy Bush (Public Power, Munis and Co-ops)
Mike Falconoff (Central Hudson) - Telephone

Guests Present:

Mr. John Charlton (NYISO)
Mr. Bill Lamanna (NYISO)
Mr. Cenk Yildirim (NYISO)
Mr. Phil Fedora (NPCC) - Telephone
Mr. Glenn Haringa (GE) Telephone / Limited Participation
Mr. Gary Jordan (GE) Telephone / Limited Participation

1. Action Items

1.1 Closed

No items were closed.

1.2 New

76-1 Mr. Cenk Yildirim will present 2006 load data to the committee at the June ICS Meeting so that the Group can determine whether or not

there is a basis for changing the MARS load shape for the 2008 IRM Study given the past few years of data. The current load shape is from the year 2002.

76-2 Mr. John Charlton will present a detailed analysis of the summer 2006 performance of SCR's at the next ICS Meeting. This analysis will be broken down by zones so that trends for each zone can be identified, thereby allowing the Group to decide if a change to the modeling of SCR's is warranted in the 2008 IRM Study.

76-3 Mr. John Adams will also call Peter Carney from the NYISO. The Group would like for Mr. Carney to come and speak to the RRS's potential request for a MARS reliability study on the potential assumptions and effects of currently proposed environmental legislation such as RGGI.

1.3 Revised

75-1 Mr. Bill Lamanna is to provide a written document to describe the current method for modeling HQ imports in MARS and PSSE as well as propose alternate methods, with supporting arguments. These changes are ready in draft but are still being discussed internally at the NYISO.

75-2 Mr. Lamanna is also to provide a written document to detail what differences are recommended. This document should explain the benefits of using different models for the IRM and RNA studies. This document is also ready in draft and is being circulated internally at the NYISO.

75-3 Mr. Steve Jeremko is to provide a summary version of the IRM Study Schedule and Project Timeline at the next meeting, currently scheduled for May 30.

75-4 Mr. Glenn Haringa will continue to review switch settings for ICS. During the meeting, Glenn noted that he can brief the group on what the switches in MARS do, but that it is up to the ICS Committee to decide what the correct switch settings are. Mr. Curt Dahl asked for further clarification of the switch settings and then tabled the issue until the next meeting.

75-5 Mr. Greg Drake will check with GE to ensure that MARS version 2.83 is the latest available version of the model and that no new versions are scheduled prior to the 2008 IRM Study. The drop dead date for the proposal of a new version of the model is June 1.

2. Review of Meeting Minutes for Meeting #75

During the amendment and approval of the final minutes for meeting #75, discussion again occurred over the differences between import rights that are granted, energy that actually flows over lines, and firm contracts between market participants. Mr. Carlos Villalba expressed concern that in an emergency, zones that pay for ICAP should be entitled to delivery of that ICAP, even if the zone or pool from which that ICAP is purchased is also in an emergency. Mr. John Charlton noted that this could be true if the capacity in question was scheduled through the Day-Ahead Market via the issuance of an SRE after the DAM closes and if the energy were in fact deliverable, i.e. there were no contingencies in the source area which would physically prevent delivery of the capacity in question. However, Mr. Charlton noted that such emergency situations only occur during contingencies, and that these situations would likely prevent delivery of the energy in question in this specific event. Moreover, Mr. Charlton noted that neither normal, economically-scheduled energy nor energy that is issued in bilateral contracts is backed by ICAP. Therefore, these deliveries from HQ would be prorata curtailable if the source area were in an emergency situation. Other Neighboring pools would curtail to fulfill the contracts.

Several other changes were made to minutes for meeting #75. None caused significant discussion or disagreement.

3. Neptune Ahead of Schedule

Mr. Curt Dahl stated that LIPA's installation of the Neptune project is ahead of schedule and that the cable should be in service by June of this year.

4. Upstate/Downstate (U/D) Study

Mr. Glenn Haringa and Mr. Gary Jordan were on the phone from GE to answer questions relative to the Upstate/Downstate Study, which was completed and released while meeting #76 was in progress. They noted that the study itself was twenty pages long with a twenty-seven page supporting PowerPoint presentation. The study was conducted as per the methodology agreed upon last year.

The study divided the state into two superzones (Upstate and Downstate) and then shifted capacity in 500 MW steps between these superzones in order to find the point at which LOLE was balanced between the superzones. The study then found the LOLE for each superzone but did not find a composite statewide LOLE. Using this methodology, the study developed LOLE curves for each sensitivity case.

The study examined the following cases:

- Effects of changes to transmission ties EFORds.

- Changes in interface limits
- Downstate benefits for Upstate customers
- The “As Found” system
- The NYCA isolated case (with the 1000MW Wheel in place)
- The No Neptune Case

For the EFORd cases, the study modeled changes to EFORd via changes to contract EFORds. It did not attempt to tie EFORd changes to specific units.

Mr. Dahl informed the group that the results of the Upstate/Downstate Study will be discussed at the RAITF Monday, May 7.

5. Resource Adequacy Workshop

Mr. Al Adamson reminded the group that the Resource Adequacy Workshop is scheduled for June 7. The deadline for presenters to get their slides into Mr. Greg Drake is May 15. The workshop itself will be worth seven Continuing Education Credits for PEs. The dress code for presenters will be shirt-and-tie.

Mr. Dahl suggested that the group’s presenters meet for a dry run prior to the next ICS meeting, and the group agreed to set the dry run for May 24 at 9:30am in the New York Room at 17 Columbia Circle. Mr. Dahl noted that everyone from the ICS was invited to attend and that lunch will be provided.

6. IRM Assumptions Matrix

Mr. Drake led the group through a revision of the IRM Assumptions Matrix list for the 2008 IRM Study.

6.1 Peak Load and Load Uncertainty

Mr. Drake noted that the NYISO intends to present the Load Forecast by October 1, and that Mr. Drake therefore needs all constituent load forecasts by that date. Mr. Drake is currently waiting on load forecasts from Con Edison and National Grid. Mr. Drake further noted that the Base Case is due in October and that Mr. Drake also needs the new Load Uncertainty Model from Con Edison before the next ICS meeting.

6.2 Load Shape Model

Mr. Cenk Yildirim will present 2006 Load Shape data at the next ICS meeting so that the group can determine whether or not there is any basis for changing the load shape that the model currently uses.

6.3 Unit Capacities

Data on new unit capacities is due to Mr. Drake by August 1. The IRM Study will use whatever data is submitted by ICS participants as well as

data from the 2007 Gold Book to form the basis for the 2008 study database.

Mr. Adams noted that incoming wind resource performance data has tended to validate the use of the current GE study on the matter, and the group agreed to continue to use the current method to model wind resources unless an issue arises due to a potential change to the load shape.

When discussing retirements, Mr. Dahl made sure to mention that with the installation of the Neptune cable, LIPA is now surplus capacity. LIPA is evaluating the retirement of 80 MWs of temporary capacity in September 2007. These were previously modeled as SCRs.

It was also noted that the NYISO is currently expecting the 882 MW Poletti unit to remain in service through at least 2009.

6.4 Outages

Several group members suggested that the 150 MW summer maintenance allowance from previous IRM studies may be conservatively high. Mr. Dahl suggested that the group should re-evaluate this number. The 150 MW likely had some basis from old data, but the group may want to adopt a new level of summer maintenance after it examines last year's data.

6.5 Gas Turbine Ambient Derates

Mr. Drake noted that this year's study will use all real-world data to evaluate gas turbine ambient derates. Mr. Drake noted that in last year's study, there was one derate for upstate units and another for downstate units. These were based on operational data for GTs, but complete operational data was not available for Combined Cycle units. This year he hopes to have complete real-world data for both types of units.

6.6 Special Case Resources

Mr. Drake noted the need to develop a basis for the 2008 study's SCR's, both in their amount and performance. Mr. Dahl stated that he had received an email from Mr. Mark Younger wanting to break down SCR performance by zone. Mr. Charlton noted that, in general, SCR performance was at approximately 90% last year, but some SCRs were better performers than others, and particularly with small SCR aggregators, some zones were better performers than others. In general, upstate SCRs performed at about 95% while downstate SCRs performed at

a rate of about 85%. Also, large SCR providers tended to perform better. However, he noted that it is too soon to make judgments about what this means, or how it should be modeled pending analysis of more data. Mr. Charlton also noted that SCRs are typically only required to perform for four hours or less but that the reality last year was that when they were called, they were called for between five and six hours. At these times, all SCRs performed well during the middle hours. The smaller providers tended to perform less-well during the first and last hours of a given call.

Mr. Charlton suggested several potential contributing factors for this phenomenon, including persistence of calls and inability of small aggregators to communicate with their constituents and effectively enforce standards. Mr. Charlton further suggested that the 2008 IRM study use the SCR number that was seen at the end of the 2006 summer, suggesting 1200 MW as a temporary placeholder value.

Mr. Charlton will present a more-detailed review of his findings at the next ICS meeting.

Mr. Drake asked how EDRP performance differed from SCR performance, but Mr. Charlton said that he was not yet ready to go into EDRP performance. He will try to have that ready for the next meeting as well.

6.7 Interface Limits

Mr. Lamanna discussed some issues surrounding the development and refinement of interface limits for the 2008 study. Mr. Lamanna noted that the ICS needs a procedure document and that he hoped to have one ready by June 1. Mr. Lamanna further stated that the correct way to figure transfer limits is with all generators at maximum power, since these are the conditions at which limits are hit. He also stated that he wants to develop the limits while focusing on the 345kV system and ignoring the 138kV system, and he wants to see what issues are raised if Ravenswood 3 or Poletti trip at peak load times.

Mr. Lamanna also noted that there were a few other bases for changing the transmission topology. First, the UPNY/ConEd limit has been lowered to reflect restrictions imposed by the operation of Athens and Bethlehem. Additionally, the installation of the Mott Haven Substation has changed the way energy flows through the Sprainbrook / Dunwoodie interface. The new Millwood capacitor banks and the EGC to Newbridge to Ruland Road line, which was installed as part of the Neptune project, must also be incorporated into the model.

Several group members asked to see more documentation on this issue and to be allowed to consider it offline before making a decision about the proper way to model interface limits. Mr. Dahl also asked Mr. Lamanna to raise potentially contentious issues with Con Edison and other parties prior to the June ICS Meeting. According to the 2008 schedule the transmission map should be completed by June 1, a feat that will only be possible if potential issues are worked out prior to the deadline.

6.9 Transmission Cable Outage Rates and UDRs

The 2008 cable outage rates will be based on a five year rolling average of cable performance data. This data is due by June 1.

UDRs should be modeled for the CSC and Neptune lines under evaluation.

6.10 Model Version and Outside World Area Models

Mr. Dahl asked if their MARS version 2.83 was the latest version of the model. No one in the group knew for sure, but Mr. Adams was tasked to find out.

Mr. Drake then noted that the 2008 study will continue to model the Outside World as a set of multiple outside zones, and that the group needs to update its load and capacity tables for these outside zones prior to the new study. Mr. Drake also said that he has been unable to get a nondisclosure agreement with Quebec for non-public information for the purposes of this study.

7. Potential Resource Adequacy Impact of Environmental Regulations

Mr. Adams raised the issue of a request by the RRS (?) for a potential study on the impact of specific proposed environmental legislation on Resource Adequacy. This legislation includes State Implementation Plan (SIP), High Electric Demand Days (HEDD), RGGI, and local reliability rules. Mr. Adams wondered how the new initiatives could or would work with current natural gas curtailment rules.

The NYISO will ask Peter Carney for a speaker from RRS, Peter Carney from the NYISO, to explain exactly what is proposed and what assumptions should be made based on these proposals.

8. ISONE / NYISO Joint Reliability and Tie-Benefit Study

Mr. Dahl asked the group for a date that it could meet with representatives from ISONE to discuss the Joint Reliability and Tie-Benefit Study. Mr. Dahl

further stated that since the ISONE representatives had come to Albany twice, it was now NYISO's turn to go to New England. The meeting date was tentatively set for May 17 in Holyoke, MA.

9. Next Meeting

Meeting #77: May 30, 2007, 9:30am - 4:00pm.

Acting Secretary: Dan Head