

NYSRC Installed Capacity Subcommittee

Meeting #135

May 2nd, 2012

9:30 a.m. – 3:00 p.m.

Meeting Minutes

Attendees

	Present	Tel
Members / Alternates:		
Mr. Curt Dahl (LIPA)	<input type="checkbox"/>	<input type="checkbox"/>
Mr. Yuri Fishman (LIPA)	<input type="checkbox"/>	<input type="checkbox"/>
Ms. Kathune Zannat (LIPA)	<input type="checkbox"/>	<input type="checkbox"/>
Ms. Erin Plasse (CHG&E).....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mr. Rich Wright (CHG&E).....	<input type="checkbox"/>	<input type="checkbox"/>
Mr. Kelvin Chu (Con Edison)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mr. Gregory Chu (Con Edison), Secretary	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Syed Ahmed (National Grid).....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mr. Bart Franey (National Grid).....	<input type="checkbox"/>	<input type="checkbox"/>
Mrs. Patricia Caletka (NYSEG-RGE)	<input type="checkbox"/>	<input type="checkbox"/>
Mr. Edward Gilroy (NYSEG-RGE)	<input type="checkbox"/>	<input type="checkbox"/>
Mr. Steve Jeremko (NYSEG-RGE)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mr. Robert Boyle (NYPA) , Chairman	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Andrea Fossa (NYPA)	<input type="checkbox"/>	<input type="checkbox"/>
Mr. Bradley Kranz (NRG Energy, Inc.).....	<input type="checkbox"/>	<input type="checkbox"/>
Mr. Chris LaRoe (IPPNY).....	<input type="checkbox"/>	<input type="checkbox"/>
Mr. Mark Younger (Slater Consulting - Generation Owners)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Mark Cordeiro (Municipal Power Agency).....	<input type="checkbox"/>	<input type="checkbox"/>
Mr. Michael Mager (Couch White, LLP), EC Chairman	<input type="checkbox"/>	<input type="checkbox"/>
Advisers/Non-member Participants:		
Mr. John Adams (NYISO)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Peter Carney (NYISO)	<input type="checkbox"/>	<input type="checkbox"/>
Mr. Frank Ciani (NYISO).....	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Mr. Dave Lawrence (NYISO)	<input type="checkbox"/>	<input type="checkbox"/>
Mr. Greg Drake (NYISO).....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Bill Lamanna (NYISO)	<input type="checkbox"/>	<input type="checkbox"/>
Mrs. Kathy Whitaker (NYISO)	<input type="checkbox"/>	<input type="checkbox"/>
Ms. Mariann Wilczek (NYISO)	<input type="checkbox"/>	<input type="checkbox"/>
Ms. Erin Hogan (NYSERDA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Ed Schrom (NYPSC)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mr. Glenn Haringa (GE Energy).....	<input type="checkbox"/>	<input type="checkbox"/>
Mr. Al Adamson (Consultant).....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Frank Vitale (Consultant)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Arthur Maniaci (NYISO)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Yannick Vennes (HQ).....	<input type="checkbox"/>	<input type="checkbox"/>
Mr. Scott Leuthauser (Consultant for H.Q. Services)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Henry Chao (NYISO).....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Howard Tarler (NYISO)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Wes Yeomans (NYISO).....	<input type="checkbox"/>	<input type="checkbox"/>
Mr. Paul Gioia (NYSRC)	<input type="checkbox"/>	<input type="checkbox"/>
Mr. Dana Walters (NYISO)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Ms. Donna Pratt (NYISO)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. David Allen (NYISO).....	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Guests Present:

Mr. Charlie Shafer (AES)	<input type="checkbox"/>	<input type="checkbox"/>
Mr. Dean Ellis (Dynergy).....	<input type="checkbox"/>	<input type="checkbox"/>
Mr. Jim D'andrea (Transcanada)	<input type="checkbox"/>	<input type="checkbox"/>
Mr. Alan Ackerman (Customized Energy Solutions).....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Dr. Roy Shanker	<input type="checkbox"/>	<input type="checkbox"/>
Mr. Phil Fedora (NPCC).....	<input type="checkbox"/>	<input type="checkbox"/>
Mr. Arvind Jaggi (NYISO)	<input type="checkbox"/>	<input type="checkbox"/>
Mr. Frank Francis (Brookfield)	<input type="checkbox"/>	<input type="checkbox"/>
Mr. Tom Patrit (EPS)	<input type="checkbox"/>	<input type="checkbox"/>
Mr. Ruben Brown (The E Cubed Co.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mr. John Dalwin.....	<input type="checkbox"/>	<input type="checkbox"/>
Mr. Richard Quimby.....	<input type="checkbox"/>	<input type="checkbox"/>

Mr. Randy Wyett (NYISO).....	<input type="checkbox"/>	<input type="checkbox"/>
Mr. John Dowling (Luthin Associates)	<input type="checkbox"/>	<input type="checkbox"/>
Mr. Glenn Haake (Haake Energy Consulting LLC).....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Matt Renninger (Energy Curtailment Specialist)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Ms. Kathy Slusher (SUNY)	<input checked="" type="checkbox"/>	<input type="checkbox"/>

1. Action Item Discussion

Mark Younger (Slater Consulting) stated that for action item 108-1a/b, the NYISO has not yet addressed how they treated, or agreed to treat, exports for planning purposes. Frank Vitale (NYSRC) mentioned that the ICS may have previously looked at the impact of these exports on the internal transfer limit. He recommended that the NYISO perform a study if the result from the previous study could not be determined. Mr. Younger stressed that the agreement between the ISOs is that the system should be planned so there will be less likelihood that the ICAP exports will be cut first. Gregory Drake (NYISO) responded that the study is not necessary since there's definitely an impact on the IRM and the ICS has previously agreed to the current methodology of modeling exports. Chairman Bob Boyle (NYPA) will consult with former Chairman Curt Dahl (LIPA) for more details about the past study. **(AI 135-1)**

2. Assumption Matrix Review

Mr. Drake went through the highlighted sections of the assumption matrix at the meeting and had the following comments:

A new comment was added to the matrix under Special Case Resources to signify that the monthly variation for SCRs was removed due to a multiplier effect. The effect stems from assigning the SCRs as a percentage of the peak load, and since Load Forecast Uncertainty will change the peak load level during the MARS run, the SCR MW amount will end up being higher than the intended value.

3. 2013 IRM Study Model Development

A document outlining the various model change initiatives was reviewed at the meeting. Al Adamson (NYSRC) stated that several of the items on this document have this meeting as the due date. Several of the white papers may not be ready for the June meeting and may not be available for the basecase if they are not ready by June.

Mr. Drake asked about the differences between the usual load shape analysis versus the new load shape determination analysis. Chairman Boyle stated that while each year the load shape is reviewed, this year the ICS/NYISO is trying to find a typical load shape instead of finding the most conservative shape. Mr. Younger stated that external loads will also have to be aligned if a new shape is chosen and this is not a simple task. Mr. Younger believed that there will be some adjustment to any shape the ICS selects in the end. Chairman Boyle expects the white paper to be ready next week for review and approval to meet the June deadline.

John Adams (NYISO) reported that for the EFORd/APA methodology, there are still differences between Dr. Channan Singh's hand calculated verification results and the Fluegge software output. Mr. Adams believed that the differences can be worked out with a conference call between Mr. Fluegge and Dr. Singh. Mr. Drake stated that this is really an implementation issue. Kelvin Chu (Con Edison) stated that Con Edison has performed an independent verification on the test units. The results can be reconciled with Dr. Singh's results provided some events accounting issues (frequency) can be agreed upon. Con Edison could not match Fluegge's output at this time since Fluegge's accounting method is currently not transparent.

Syed Ahmed (National Grid) asked if the code would be ready for this year's study, once all results are reconciled. Mr. Drake believed that the code will be ready within the next few weeks.

Mr. Adamson stated that the white paper is needed for the APA methodology by the next meeting. Chairman Boyle stated that the contents of the white paper are already known, and while he's willing to present an interim paper that is acceptable to the ICS in front of the Executive Committee (EC), he would like the parties to reconcile the difference as soon as possible.

Secretary Gregory Chu (Con Edison) asked about the typical 1-year study period needed for new methodologies. Although a sensitivity study was done last year, the study was performed using a different version of the code. Mr. Adamson stated that when the code is ready, the ICS needs to review its impact on the IRM to determine implementation suitability. Mr. Ahmed supported that the preliminary white paper be presented to the EC. Mr. Adamson and Chairman Boyle both stated that the white paper needs to be sent out first to the ICS for review and comments in time. Chairman Boyle would like to see a version of the paper by next Tuesday (5/8) and discuss any comments on a Wednesday conference call, scheduled for May 9th at 3:30 PM. He said that the paper due on May 8th must include the process of validation, but does not need to include the results. **(AI 135-2)**

Howard Tarler (NYISO) mentioned that the MARS topology is being presented by Bill Lamanna (NYISO) at the next TPAS meeting. He mentioned that the topology will be a preliminary version, with the bubble limits still being determined. He said that the topology will be finalized at the joint TPAS/EPSWG meeting and subsequently submitted to the ICS for review. **(AI 135-3)**

4. Load Shape Study

Arthur Maniaci (NYISO) stated that for the load shape study, the NYISO has collected external data for several years. 2006 shape had more days lower than typical and is not an ideal candidate. There is no specific year that is perfect, but the NYISO is currently looking at a year, to be announced pending internal review, for consideration. Mr. Maniaci believed that the final report can be issued by mid June, but the ICS commented that it would be too late. To meet the June deadline for IRM basecase, Mr. Maniaci offered a "memo report" that would

include the recommended shape year with supporting data, by May 8th. **(AI 135-4)**

Mr. Younger requested the NYISO to provide historical load values and weather normalized peak values in the memo report. Mr. Maniaci agreed.

Mr. Younger asked if the chosen year will include external DR reconstituted load. Chairman Boyle stated that if the external load for that particular year cannot be obtained in a reasonable amount of time, the new shape cannot be used for this year's basecase. Since Mr. Maniaci is not sure if the external load data will be available in time, the new shape can still be used for sensitivity study, Mr. Adamson said.

5. Policy 5 update - PRR 109 (SCR Data Reporting)

David Allen (NYISO) stated that the NYISO is not comfortable with the wording of PRR 109, since new procedures are needed for compliance. The NYISO would develop the procedures and present them to the ICS at a later date. Mr. Allen mentioned that Donna Pratt (NYISO) presented the SCR data for review and Mr. Maniaci provided the top-down estimation methodology to better estimate SCR impact.

Glenn Haake (Haake Energy Consulting) asked if the NYISO will provide the procedures within the 90 day windows stipulated by the rule. Mr. Allen responded that the NYISO cannot support the rule until procedures are developed.

Mr. Allen mentioned that Responsible Interface Parties (RIP) suggested transmission owners (TO) should also be included in the rule since sometimes they hold the actual meter data that RIPs are required to provide according to the rule. Matt Renninger (ECS) stated that perhaps the rule needs to state that RIPs would not be found in violation if they do not receive metered data from the TOs, if they depended on the TOs in the first place for data.

Mr. Younger was not satisfied with the NYISO response since the NYISO did not provide a time table for the requested delay.

Mr. Adamson asked if the SCR data is needed for the study or else the rule is not needed. Chairman Boyle stated that the idea is that the NYISO would provide the ICS with the currently existing procedure(s) to determine if they are already sufficient. Mr. Allen said that the procedures will need to state the amount of needed data for compliance. The NYISO is looking to return by summer with a draft procedure to comply with the rule, not delaying this indefinitely.

Chairman Boyle stated that the ICS has already asked the NYISO to capture the CBL data for energy payment. If the comparison between CBL and ACL data proves to be sufficiently close, then the current procedures will satisfy the rule. Mr. Allen stated that the NYISO is asking for more time to evaluate the procedures before determining if the market rules need to be modified for compliance.

Mr. Adamson was concerned that the NYISO seems to be stating that it won't support the rules unless it's capable of achieving the compliance 100% of the time. He recommended that the rule should be adopted, since the ICS agreed that the rule is needed, and then the NYISO/ICS can work together to determine the necessary information for compliance.

Ms. Pratt mentioned that there are procedures now for data collection for market purposes. The NYISO is under the impression that the collected data is not enough for reliability study purposes. She also cautioned that CBL is not a single definitive method, as there are currently some thoughts about changing the calculation method in the near future. She clarified that the procedure the NYISO is currently focused on is a procedure that statistically determines if the sample data set is sufficient/significant. The NYISO currently can't agree on the wording of "statistically significant". Ms. Pratt also said that CBL method is an adopted version used by the EDRP program to determine SCR energy payments. CBL was never designed for SCR specifically.

Mr. Haake reiterated that RIPs will not support the rule when the TOs do not have to comply with the rule, especially the TOs are the ones with the required metered data. Kathy Slusher (SUNY) represents one of the SCR providers. She mentioned that they are still waiting for a TO invoice with metered data from January.

Mr. Allen stated that the NYISO wanted a CM-16 that ensures TOs are also covered under the rule.

In the afternoon session, Mr. Haake asked about the final agreement of the rule. Chairman Boyle mentioned that the reference to Policy 5 will disappear from the rule. The NYISO will only need to provide existing procedures they have now for the initial submission to the ICS without compliance finding, or develop new ones in 90 days.

6. Renewable Projects

Erin Hogan (NYSERDA) provided the spreadsheet that included all of the upcoming renewable projects that are a part of the NYSERDA Renewable Portfolio Standard.

Belmont/Ellenburg II project was cancelled. The change in capacity will be a reduction of 10.5 MW for this year's study since only 50% of the full capacity was modeled last year.

Steel Winds II is in operation and its 15 MW will be added in this year's study.

Allegheny Wind Farm was cancelled and 72.5 MW will be removed.

Stony Creek should be added for this year's study. Ms. Hogan will check with Steve Jeremko about the amount of capacity to include. **(AI 135-5)**

Marble River Wind Farm will be modeled as 100% of its capacity due to it being in operation by December.

Black River Facility was the old GT that converted to bio-mass. No new capacity will be required for the model since it was an existing generator. (Fort Drum project)

7. Locational Capacity Requirement

Mr. Drake mentioned that the document describing “Section 6: Alignment of base case model with established IRM” has been reworded. If the final IRM led to a LOLE of above 0.1, the NYISO recommended a guideline table of assumptions to modify the base case to bring the model back to 0.1 LOLE.

Just as an example, Mr. Drake has listed “SCRs modeled” as the assumption to modify in order to bring the case back to 0.1 LOLE, and the recommended procedure would be to increase SCR MW values in the model in all zones.

Mr. Younger asked why the NYISO wouldn't just use the same assumptions/updates used to determine the LCRs under the NYISO study first, like the peak load forecast that is typically updated for the LCR determination. Mr. Drake said that this may not bring the model back to 0.1.

Mr. Adamson felt that Policy 5 should not get into the details since the LCR is a NYISO study.

Mr. Drake will circulate the wording and guideline table for comments. **(AI 135-6)**

8. Policy 5 Updates

Mr. Adamson went through the various updates on sections within the Policy 5 document.

Maintenance write-up will be reviewed by Mr. Drake. The outside world model write-up has been approved and will be incorporated. Milestone dates will be updated in Policy 5. The wording for LCR determination will be incorporated into Policy 5. Mr. Younger's write-up on the SCR did not receive buy-in from the NYISO. The NYISO would like the SCR section of Policy 5 to stay the way it is.

9. SCR Study Report

Ms. Pratt provided a verbal executive summary of the final report on SCR study. The report goes into some detail about how SCR enrollment is determine every year by June. The report also covered the SCR capacity value evaluation that was performed with MARS using different duration of calls.

Mr. Younger recommended that the NYISO indicate the level of MW shown in Appendix B is UCAP equivalent, and not of nameplate rating (ICAP). Availability is included.

The report goes into detail about how baseline is calculated. Data reporting requirement is also described within the report. The report also included many charts that compared APMD with CBL data for July 6-7, 2010, and July 21-22, 2011 for ACL and CBL comparison.

Ms. Pratt stated that the NYISO also looked at the SCRs that did not report CBL data and found a decrease in both quantity and size from 2010 to 2011. The amount is so small that the NYISO does not believe the effort to calculate the CBL for them will be warranted.

Ms. Pratt mentioned that performance factor calculations use 2 capability periods prior to the current period. Mr. Younger asked if the NYISO has compared SCR test performance versus SCR call performance. Ms. Pratt responded no.

The NYISO looked at ERCOT's program called EILS (Emergency Interruptible Load Service) to study persistence. A key point for their program is that participants are contracted to respond for a certain number of hours, even if the

need no longer exists. The participants cannot be called again soon after the contracted hours. Mr. Younger pointed out that the ERCOT program is quite different than NYISO's program, since the participants here only need to perform 4 hours, even if the need is more than 4. If they responded only 4 hours at maximum performance they have 100% performance factor.

Mr. Younger asked about the type of persistence called "call fatigue". He was wondering if SCR performance drops off after a lot of calls. Chairman Boyle asked the NYISO about a recommendation on the number of calls to model. Ms. Pratt stated that a 6 hour call would be a possible duration to model. She further stated that there is no data available to draw an estimate for fatigue. Mr. Adams said there's currently no limitation on the number of calls in the model. Ms. Slusher stated that as a SCR provider, they would provide the maximum performance duration possible. However, if the number of calls becomes too large, there will be complaints. Mr. Younger believed that since the amount of SCR is a large (8%) part of the system, there will be more calls when the need arise, even though we have plenty of margin in the system. He pointed out that more calls (>20 days) were made in hot years than the model has exhibited. Scott Leuthauser believed that 20 days of response is not realistic. He wondered if a survey done by the NYISO can provide some insight. Ms. Pratt believed that the survey won't be helpful due to differences between SCR participants.

Chairman Boyle asked the ICS members to provide comments of the study to Mr. Drake **(AI 135-7)**

10. Top-Down Demand Response Estimation

Mr. Maniaci presented the Top-down DR estimation methodology report in detail. In the report, there are several plots that compared predicted loads against actual load. The plots showed good fit and indicated the estimation methodology is sound and results are reasonably accurate.

He goes further to describe the estimation curve fit for NYCA for August 19, 2011. The predicted MW curve seemed to be lower than actual for that particular day. A ratio of actual load at hour 12 / predicted load at hour 12 was applied to all loads from 12 to 6pm. The new hourly estimated values and the resulting curve are termed “adjusted”. This adjusted estimation method was applied to Zones J and K using a sample of several days. In summary, the methodology will provide MW estimation within 10% of expected load reduction due to SCR participation. The NYISO recommended that the ICS to adopt either the obligated SCR MW values or use the top-down estimation for the IRM study.

Secretary: Gregory Chu

(Con Edison)

Next meetings:

Meeting 136, Tuesday, May 29th at NYISO HQ
Meeting 137, Wednesday, June 27th at NYISO HQ
Meeting 138, Wednesday, August 1st at NYISO HQ
Meeting 139, Wednesday, September 5th at NYISO HQ
Meeting 140, Wednesday, October 3rd at NYISO HQ
Meeting 141, Tuesday, October 30th at NYISO HQ
Meeting 142, Tuesday, November 27th at NYISO HQ
