

NYSRC Installed Capacity Subcommittee

Meeting #148

June 5th, 2013

10:00 a.m. – 3:00 p.m.

Meeting Minutes

Attendees

	Present	Tel
Members / Alternates:		
Mr. Curt Dahl (LIPA)	<input type="checkbox"/>	<input type="checkbox"/>
Ms. Polina Adelson (LIPA)	<input type="checkbox"/>	<input type="checkbox"/>
Mr. Yuri Fishman (LIPA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Ms. Kathune Zannat (LIPA)	<input type="checkbox"/>	<input type="checkbox"/>
Mr. Rich Wright (CHG&E)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mr. Luting Pan (Con Edison).....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mr. Gregory Chu (Con Edison), Secretary	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Kelvin Chu (Con Edison)	<input type="checkbox"/>	<input type="checkbox"/>
Mr. Syed Ahmed (National Grid)	<input checked="" type="checkbox"/>	<input 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. John Tigue (NYSEG-RGE)	<input type="checkbox"/>	<input type="checkbox"/>
Mr. Richard Brophy (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 checked="" 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 (Hudson Energy Economics, LLC.)	<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 checked="" 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"/>
Mr. Steve Lemme (NYISO)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Ms. Erin Hogan (NYSERDA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Ed Schrom (NYPSC)	<input type="checkbox"/>	<input type="checkbox"/>
Mr. Nicholas Occhionero (NYPSC)	<input checked="" 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. Scott Leuthauser (Consultant for H.Q. Services)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mr. Henry Chao (NYISO).....	<input type="checkbox"/>	<input type="checkbox"/>
Mr. Howard Tarler (NYISO)	<input 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"/>
Dr. Kai Jiang (NYISO).....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Mark Walling (GE)	<input type="checkbox"/>	<input type="checkbox"/>
Mr. Gary Jordan (GE)	<input type="checkbox"/>	<input type="checkbox"/>
Mr. Glenn Haake (NYPA).....	<input 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 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 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. Timothy G. Lundin (Customized Energy Solutions).....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mr. Norman Mah (Con Edison)	<input type="checkbox"/>	<input type="checkbox"/>
Mr. Matt Renninger (Energy Curtailment Specialist)	<input type="checkbox"/>	<input type="checkbox"/>
Ms. Kathy Slusher (SUNY)	<input type="checkbox"/>	<input type="checkbox"/>
Mr. Rick Roby (Dynergy).....	<input type="checkbox"/>	<input type="checkbox"/>
Mr. Shawn Johnson (NRG).....	<input checked="" type="checkbox"/>	<input type="checkbox"/>

1. Assumption Matrix

Frank Ciani (NYISO) reviewed the latest version of the assumption matrix at the ICS meeting. The NYISO, per ICS members’ request, will combine “EFORd” and “Transition Rates” categories into a single field within the matrix.

Al Adamson (NYSRC – Consultant) asked why the EFORd has decreased and yet there is an increase in the IRM. Mr. Ciani said that the average 5 year average EFORd is still higher even though last year’s EFORd has decreased.

Mr. Ciani said that ETCNL from capacity purchases should not be modeled because NYSEG has not elected to exercise their rights to those capacities. Mark Younger (Hudson Energy Economics) stated that unless NYSEG no longer have the ability to exercise the capacity rights, we should be modeling those capacity and reduce the transfer limits accordingly to avoid double counting the reliability value of these capacities. ICS members agreed that the NYISO needs to continue to model this MW amount as they have done so in the past.

Mr. Ciani mentioned that Hudson Transmission Partners (HTP) line will continue to be modeled as emergency assistance only.

Chairman Bob Boyle (NYPA) asked if we have a higher value of SCR for this year's model. Donna Pratt (NYISO) replied that SCR enrollment closes on June 6th, thus by June 10th the NYISO will be able to comment on the July SCR enrollment, which is the value to be used in the IRM model. She will present the enrollment number at the next ICS meeting **(AI 148-1)**

2. Associated Power Analysts(APA)/NYISO EFORd Deviation Findings

Dr. Chanan Singh (Associated Power Analysts) joined the group via telephone to discuss his review of the NYISO EFORd deviation findings when APA software was implemented in the MARS model. Dr. Singh agreed with the NYISO's results, through a thorough review of the NYISO findings. He said that the differences between market EFORd values and APA EFORd values for units can be contributed to two reasons: different recording data sets and overlapping events in these data sets.

Dr. Singh said that market EFORd used NERC's "performance data" set, while the APA EFORd was calculated from "event data" set. These two data sets differ in that performance data is updated monthly and thus missing service hour data is added back into the data set. Event data required some conditioning since the missing service hours were not corrected.

Dr. Singh said the second reason for deviation came from overlapping data in sets. Performance data does not have seamless flow between events and does not require them. APA needs sequential events to properly enumerate the different states that the units step into and out of during outages.

In the end, the total deviation identified was 224 MW, out of 33,000 MW.

Dr. Kelvin Chu (Con Edison) was also on the phone and said that we are comfortable with the APA methodology, as we've stated previously, and were only concerned about the implementation of the software itself. He said that both

Con Edison and ICS should review Dr. Kai Jiang's (NYISO) paper, when it becomes available, that details the NYISO findings in order to provide proper comments.

The NYISO has been asked to provide a final version of the paper and Con Edison/ ICS would have an additional week to provide relevant comments. **(AI 148-2)**

3. Environmental Impacts

Peter Carney (NYISO) was at the meeting to discuss impacts on the IRM model due to environmental regulations.

He stated that overall units in NYCA saw improved heat rates due to increase in natural gas usage.

He mentioned that most of the coal units will satisfy NOx RACT.

Mr. Carney said that BTA (Best Technology Available), which would require closed cycle cooling system, will affect new plants and Indian Point nuclear power plant. Mr. Younger asked specifically which zones would be affected and Mr. Carney said that zones J and K, and basically zones south of Troy, will be affected.

Mr. Carney stated that CSAPR is not in effect and it is vacated by the Court, pending USEPA appeal to the US Supreme court. CAIR will still be in place.

MATS (Mercury and Air Toxics Standards) will not have a major impact due to increase natural gas burning behavior of the generators.

Mr. Carney mentioned that the existing system for RGGI allowances is over supplied. Mr. Younger asked have they considered the loss of Indian Point units. Mr. Carney said they did and also considered the loss of Vermont Yankee nuclear power plant as well.

Shawn Johnson (NRG) asked why carbon dioxide emission cost appeared to remain flat in 2018 -2019. Mr. Carney said that there is an allowance price cap for those years.

Chairman Boyle asked for NYISO's recommendation on model changes due to these regulations and Mr. Carney said he will provide some unit derations due to environmental regulations at the next ICS meeting. **(AI 146-2)**

4. Renewable Projects

Erin Hogan (NYSERDA) has asked once again for the transmission owners to provide the status of any renewable projects in their service territory. **(AI 147-1)**

5. Load Forecast Uncertainty

Arthur Maniaci (NYISO) presented the preliminary Load Forecast Uncertainty tables at the ICS meeting. In summary, zones A-E and K saw a percent decrease in the 7th bin, while zones F-J all saw an increase in the 7th bin. Mr. Maniaci did note that the NYISO is still working with Con Edison to finalize the bin values for zone H-J. He stated that the final results will be presented at the next ICS meeting. **(AI 147-2)**

6. Multi-Year Load Shape White Paper

Mr. Adams reviewed the white paper at the meeting and pointed out a correction on the paper right away. He said that table 4 of the report showed a wrong year for bin 5. 2007 shape was used in bin 5, instead of the 2002 shape as shown in the table. The results were based on the bin 5 2007 shape. Mr. Adams said that the NYISO will perform other runs with 2002 shape in the 5th bin and present that as well.

Mr. Adamson recommended some additions/changes for the white paper. He said that the background section should point out that 2002 shape was too conservative. He also said that the paper should reiterate that the base case used 2002 shape and that the 0.6 IRM decrease came from the change from 2002 to multi-year shape. Finally, he mentioned that the paper should describe in a little more detail in the recommendation section about why we should use the multi-year load shape.

Mr. Younger would like to see the number of times SCRs were being called in the multi-year shape model. **(AI 148-3)**

Multi-year load shape model was approved by the ICS.

7. Wind Shape Model White Paper

Mr. Adams also presented the white paper on wind shape model. He stated that the simulated 2002 wind shape that's currently being used in the IRM model was updated with actual wind turbine output data from 2012. He said that wind capacity factor is higher in the 2012 shape because of the higher towers and larger new wind turbine units, along with more favorable wind conditions. The NYISO also found that incorporating random wind shapes into the model has no impact to the model since there's no correlation between wind generation and load. The NYISO in their recommendation stated that 2012 actual shape should be used in this year's model but the random shape function is not needed at this time pending further evaluation.

Syed Ahmed (National Grid) asked the NYISO if they've looked into how they modeled their wind units. The NYISO stated that they studied ISO-NE's model.

Mr. Younger recommended the NYISO to incorporate multi-year load shape with the random wind shape function in MARS to identify the synergistic effect. The NYISO has agreed to perform this study and present the results to the ICS. **(AI 148-4)**

Mr. Adamson recommended that the paper should clearly document which shape the 2012 has replaced in the base case. He also said that the NYISO should clarify, in recommendation #3, when they intend to revisit the random wind shape modeling feature.

The ICS appreciates Mr. Adams' tremendous effort in these two modeling studies for the past year.

8. Special Case Resources – Summer Only Performance Factors

Ms. Pratt mentioned that the final SCR numbers for the model will be the July enrollment, not the number seen in the gold book. In addition to the July number Ms. Pratt will present to the group at the next meeting, she will study SCR performance factors based only on summer experience. SCRs do not perform as well during winter periods and the performance factor presented before included winter performances. **(AI 148-1)**

9. Policy 5 Amendment – External Area LOLE

At the previous meeting, the NYISO has recommended a way to readjust external area LOLE closer to 0.1 to prevent them from relying on NYCA capacity. The original proposal was to decrease load to lower external LOLE. The NYISO introduced language suggesting implementing external area Emergency Operating Procedures (Demand Response in particular) instead.

Mr. Adamson stated that ICS should not be concerned with outside areas as long as they are not more reliable than we are (<0.1 LOLE). The NYISO stated that given the size of the DR in PJM, without it being in place, PJM sees a 0.4 LOLE and may indirectly force NYCA to provide additional support when NYCA has excess generation.

Yuri Fishman (LIPA) said that this should not be a concern since the study is looking at times when NYCA has NO EXCESS generation (LOLE=0.1).

Chairman Boyle has asked the NYISO to perform study on this change, which

members considered to be a major modeling change with a possible large IRM impact, PRIOR to including the new language in Policy 5.

Secretary: Gregory Chu

(Con Edison)

Next meetings:

Meeting 149, Wednesday, June 26th at NYISO HQ
Meeting 150, Tuesday, July 30th at NYISO HQ
Meeting 151, Wednesday, September 4th at NYISO HQ
Meeting 152, Wednesday, October 2nd at NYISO HQ
Meeting 153, Tuesday, October 29th at NYISO HQ
Meeting 154, Monday, December 2nd Teleconference
