

NYSRC Installed Capacity Subcommittee

Meeting #99

April 29th, 2009

9:30 a.m. – 3:30 p.m.

Meeting Minutes

Attendees

	Present	Tel
Members / Alternates:		
Mr. Curt Dahl (LIPA), Chairman	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Carlos Villalba (Con Edison)	<input type="checkbox"/>	<input type="checkbox"/>
Mr. Timothy Bush (Generation Owners).....	<input type="checkbox"/>	<input type="checkbox"/>
Mr. Bart Franey (National Grid)	<input type="checkbox"/>	<input type="checkbox"/>
Mr. Steve Jeremko (NYSEG-RGE)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Mark Younger (Slater Consulting - Generation Owners)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Rajee Mustafa (NYPA).....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mr. Rich Wright (CHG&E) Ruby Chan (filling).....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mrs. Patricia Caletka (NYSEG-RGE)	<input type="checkbox"/>	<input type="checkbox"/>
Mr. Madison Milhous (National Grid).....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ms. Hilary Goldman (Con Edison).....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mr. Kelvin Chu (Con Edison).....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mr. Mark Cordeiro (Municipal Power Agency).....	<input type="checkbox"/>	<input type="checkbox"/>
Mr. Han Huang (NYPA).....	<input type="checkbox"/>	<input type="checkbox"/>
Mr. Glenn Haake (Dynergy, Inc. - Generation Owners)	<input type="checkbox"/>	<input type="checkbox"/>
Mr. Harry Joscher (PSEG Power, LLC).....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Advisers/Non-member Participants:		
Mr. Al Adamson (Consultant)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Frank Vitale (Consultant)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. John Adams (NYISO).....	<input type="checkbox"/>	<input type="checkbox"/>
Mr. Greg Drake (NYISO)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Frank Ciani (NYISO)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Peter Carney (NYISO)	<input type="checkbox"/>	<input type="checkbox"/>
Mr. Arthur Maniacci (NYISO).....	<input type="checkbox"/>	<input type="checkbox"/>

Mr. Ed Schrom (NYPSC).....

Guests Present:

Mr. Robert Boyle (NYPA)

Mr. John Charlton (NYISO)

Mr. Bill Lamanna (NYISO).....

Mr. Frank Francis (BEMI)

Mr. Clyde Custer (NYISO).....

Ms. Erin Hogan (NYSERDA).....

Mr. John Pade (NYISO-Consultant).....

Mrs. Mary Ann Wilccek (NYISO)

Mr. Sam Krueger (Dynergy, Inc.).....

Mr. Alan Ackerman (Customized Energy Solutions

Mr. Paul Gioia (NYSRC)

Mr. Chris De Graffenried (NYPA)

** Additionally present was Aydemir Nehrozoglu. – on phone – filling in for Carlos Villalba (secretary).

Next Meetings

June 2, 2009 -- Meeting #100 NOTE meeting is TUESDAY at 15 Columbia Circle

June 24, 2009 – Meeting#101

August 5, 009 – Meeting#102

September 2, 2009 – Meeting#103

September 30, 2009 – Meeting#104

November 4, 2009 – Meeting#105

November 30, 2009 – Meeting#106

1. Review Previous Meeting Minutes

1.1. No meeting minutes were reviewed – final minutes from last meeting need to be approved.

1.2. Secretary to submit minutes for review at next meeting.

2. Action Items – Updates and New Action Items Added

No	Action Item	Updates for existing items/ Date added for new items	Responsible Individuals	Sched./Actual Completion Date
66-2	Con Edison and NYISO to automate the IRM/LCR curve calculation and perform benchmarking. Update: NYISO is performing test	Needs input from Carlos – coding changes needed for NYISO to run automation	F.Ciani/ C.Villalba	5/5/09
78-1	Refine PJM East Area Model and interconnections with NYISO through IPSAC.	Bill was not present; no update	B. Lamanna	1/1/09
85-1	Perform MARS runs without external capacity de-rates to determine if there is any impact in the NYCA LOLE. The NYISO will send the OT09 file flow results and build and IRM/LCR curve. Update: We need a white paper for this issue and present it to the EC before making these changes. More investigation required	NYISO is awaiting 0t.09 files – UDRs and other confidential information need to be removed	NYISO	6/1/09
89-4	Issue whether actual hourly load used to analyze the load shape are adjusted for load management programs, voltage reduction, and zonal outages	On-going. Needs update to group by Arthur -	A. Maniacci	6/2/09 Previously: 5/1/09
95-3	Finalize H, I and J LFU	Final details need to be reconciled – request for it to be finalized by next meeting (6/2/09)	K. Chu/A. Maniaci	6/2/09 Previous: 5/29/09
95-4	Prepare a paper on the methodology of shifting capacity and impact of the calculation IRM with wind generators	No change in status	G. Drake/ M. Younger/ C. Villalba	5/15/09
95-6	NYISO to work with ICS to build EFORD trends	On Agenda – will be addressed in meeting	F. Vitale/ B. Boyle	6/1/09

96-1	Upstate/Downstate study	Results presented to EC – ICS members would like to see this study performed annually. NYISO cited resource constraints. ICS to discuss and come to a consensus by next meeting on whether study should be updated each year.	J. Pade	6/2/09 Previous: 4/8/09
97-1	SCRs Performance & Modeling Technique White Paper	No status change	Dave Lawrence/M. Younger	6/9/09
97-3	Comments on external ICAP paper	No status change – was discussed under IRM assumptions agenda item	ALL	6/2/09
97-4	Consult NYISO Legal Department whether or not and why MARS output file 0t09 is confidential	OT09 file sent out with redacted information	NYISO/ G. Drake	Complete - 4/8/09
97-6	Find out if NERC has a service to produce an analysis of the NYCA forced outage rate	Was discussed under forced outage rate agenda item	F. Vitale	6/1/09
98-1	Forecasted Wind Capacity	Will provide capacity to group prior to June meeting	Erin Hogan	6/2/09
98-2	SAS program code and process to calculate transition rates	No update – this action item to be discussed with Carlos	Greg Drake	6/2/09
98-3	Curt to talk with Clyde about EFORD calculations	Was discussed under forced outage rate agenda item	Curt Dahl	6/2/09
98-4	Send to group either summary of loop flow analysis or 0T.09 output files	No update	G. Drake	6/2/09
98-5	Group to review NYISO's loop switch conclusion before starting with MARS run	No update – will talk about this under IRM assumptions matrix	All	6/2/09
99-1	ISO in June will provide ICS an evaluation of last years load shape and the applicability of the 2002 load shape	Added 4/29/09	NYISO/ A. Maniaci	6/2/09

99-2	Request for NYISO legal department to provide information and justification on why Zonal EFORDs and SCR/EDRP forecasts are confidential	Added 4/29/09	NYISO/ G. Drake	6/2/09
99-3	Collect planned outage inputs for IRM 2010 study	Added 4/29/09	NYISO/ G. Drake	5/31/09
99-4	Circulated updated IRM 2010 timeline schedule to ICS group	Added 4/29/09	NYISO/ F. Ciani	6/2/09
99-5	Draft report on FCM to group prior to next ICS meeting	Added 4/29/09	Al Adamson	6/2/09
99-5	Review and finalize modeling of New Transmission Capability – modeling 300 MW Linden VFT. Need explanation for why the flows are higher over ABC lines in the Coned model.	Added 4/29/09	NYISO/ Bill Lamanna	6/2/09
99-6	Con Edison to get Transmission Cable Forced outages earlier than July. NYISO needs this information sooner than traditionally provided.	Added 4/29/09	Con Edison/ Kelvin Chu	Prior to 6/24/09
99-7	Decision needs to be made by ICS on how to weigh last two years of EFORD data into the 2010 IRM base case assumptions. Also should 5 or 10 years of data be incorporated into the average?	Added 4/29/09	ALL	6/2/09

3. Forward Capacity Market

3.1. Draft report on findings on FCM study by June 2nd meeting

- 3.2. Al and Frank to provide ~~scope and a draft of report of~~ FCM study results to ICS group prior to June 2nd meeting. The scope of this study has already been provided.
- 3.3. Base case analysis will be done by May 8th
- 3.4. Still need more time to do sensitivities and tan 45 curve
- 3.5. Sensitivities are as follows:
 - 3.5.1. Wind sensitivities – 8,000 MW for 2013 (everything in the NYISO queue)
 - 3.5.1.1. One sensitivity is that all of the 8000 MW wind is in for 2013
 - 3.5.1.2. 30% of 8000 MW wind in for 2013
 - 3.5.2. Environmental sensitivity – works case
- 3.6. Suggestion for procedure for future FCM studies depending on results of the study.
- 3.7. Mention that push for FCM modeling is dwindling but results of the first study will be examined to determine whether or not a FCM study is going to be pursued as an ongoing procedure.
- 3.8. Interest in interim year results
- 3.9. Review of the Horizon Year MARS runs results (results on Webex and circulated materials)
 - 3.9.1. Starting point, Case 0: Made sure load capacity was the same for 2009 and 2013 – there was a difference in results because there was a different start date of the week for 2009 versus 2013 to ensure peaks line up (difference between 0.097 (starting point) and 0.1)
 - 3.9.2. Step 1 is using RNA Load Forecast for 2013 but use only uses 30% of Spitzer's 15% load reduction plan by 2015 (15X15) to be conservative.
 - 3.9.3. Step 2 was to retire Poletti
 - 3.9.3.1. At first, without adjusting back to 16.2%/79/97, the LOLE shoots up to 0.447
 - 3.9.3.2. Then adjust to 16.2/79/97. To do this NYISO adds generic capacity via load adjustments using MODMDMW table (table in MARS that adjusts load/generation). Zonal average EFORD is

used to adjust this added capacity into real capacity. The LOLE then becomes 0.118.

3.9.3.3. Finally adjust to LOLE of 0.097. The required RM becomes 17.54%

3.9.4. Step 3 was to retire Astoria GTs 5,7,8,10,11,12,13

3.9.4.1. At first, without adjusting back to 16.2%/79/97, the LOLE shoots up again to 0.491

3.9.4.2. After adjusting to 16.2/79/97, using real capacity adjustments, the LOLE actually goes down to 0.109

3.9.4.3. Final adjustment back to LOLE of 0.097 brings RM to 16.89%.

3.9.5. Final steps or Step 4 was to add RNA Gold book new units and uprates.

3.9.5.1. Includes some wind, 2 Gilboa Uprates, Besicorp unit, as specified in the 2009 Gold Book. The LOLE goes to 0.114.

3.9.5.2. Capacity adjusted cases to bring LOLE back to 0.097 are pending.

3.9.6. Next cases to be done are to adjust external capacity purchases, transfer limit changes/Linden VFT, update forced outage rates

3.9.7. Need to decide how to incorporate environmental effects – would they be handled in a sensitivity or worked into the base case? Also, what are the environmental assumptions to be included in the study?

3.9.8. Also, in report, it should identify what are the major drivers of the LOLE changes.

4. Review of 2010 IRM Study Work Schedule

4.1. Minor changes to the timeline chart were suggested. The EC approval steps began before the draft IRM report was completed so they were moved further out. In addition, ordering of the main tasks was changed to better reflect the logical progression of the IRM Study.

4.2. Revised timeline will be shared with the group.

5. Preliminary discussion on Forecasted Wind for 2010 IRM Study

- 5.1. Erin Hogan from NYSERDA requested new information about wind contracts for 2010 from the group or any leads on new wind units being contracted or proposed.
- 5.2. Wind units can be approved and built much quicker than thermal units; so it is important to know potential wind units or wind project proposals to get a good approximation of the wind capacity for 2010 IRM study.
- 5.3. Revisit procedure for screening processes for “likely” projects to include in 2010 IRM study
- 5.4. Erin to provide a draft of potential wind projects prior to next meeting.

6. 2010 IRM Recommended Study Assumptions Matrix

- 6.1. Load Shape model decision will be made June 29th
- 6.2. Load uncertainty model still needs updates (action item)
- 6.3. NYISO working on DMNC updates and changes for existing generating unit capacities
- 6.4. Retirements – Poletti 1 is going to be retired (890 MW)
- 6.5. Forced and Partial outages – need to determine how many years of GADS data are incorporated into the forced and partial outages
- 6.6. Planned outages – NYISO needs to work on this portion – action item needed
- 6.7. Non NYPA Hydro Capacity Modeling – need to determine % derating for 2010 assumptions. NYISO will supply a 5 year performance average (peak average performance in summer or winter for 5 years). Discussion on run of river hydro plants and their performance dependency on participation levels.
- 6.8. SCRs and EDRPs – need to be updated based on growth trends and existing forecasting philosophy. Discussion over how many times SCRs should be called in the modeling. EDRP will be modeled and forecasted similar to 2009 assumptions.
- 6.9. External Capacity Purchases Assumption
 - 6.9.1. 2010 assumption to model only grandfathered contracts and firm contracts – this eliminates the possibility that full emergency

assistance won't be available if too much external capacity purchases are modeled.

- 6.9.2. This issue relates to loop flow analysis, too.
- 6.9.3. In parallel, there is currently a separate discussion going on dealing with deliverability and external ICAP allocation.
- 6.9.4. For last 5 years, we've had approximately an average of 2500 MW of external ICAP.
- 6.9.5. IRM study needs to be consistent with deliverability studies and other studies defining amount of external ICAP included in models.
- 6.9.6. Question about if loop flow switch is off, how will model handle firm contract? Will you need to explicitly model firm contracts?
- 6.9.7. Needs to be another discussion on external ICAP modeling and deliverability issues at next meeting when more ICS members are present and outcome of deliverability issue is decided upon.
- 6.9.8. EOPs – voltage reduction test information needs to be collected from operations – usually available in May.
- 6.9.9. New Transmission capability – new parameter for 2010 IRM study, which needs to be evaluated further. Further explanation needed by NYISO why higher flows on ABC lines – made into a new action item.
- 6.9.10. Automation issue – NYISO to connect with Carlos Villalba about automation of the curve.

7. Continue EFORD discussion

- 7.1. Discussion on how to calculate EFORDs in most accurate fashion
- 7.2. Last two years of EFORDs have been higher than the last 3 years. For a five year EFORD average, should there be given more weight to last 2 years (bad EFORD performance) or should the last two years be given equal weight?
- 7.3. NYISO to provide data to Frank Vitale by end of May – Frank will do analysis with turn around of around 6 weeks, maybe more – likelihood that the results of this study will not be available to make decision for 2010 IRM study. Therefore, ICS needs to determine how to handle EFORD for 2010 study using data from the last 5 years.

- 7.4. Suggestion to use 10 years to give these last two years of EFORD less weight (20% instead of 40%)?
- 7.5. June 2nd meeting – decision needs to be made at next ICS meeting on how to calculate EFORD averages (5 year average, 10 year average, etc) for 2010 IRM study.
- 7.6. Clarification made for what units have EFORDS. EFORDs are just for thermal units. It should be noted that wind units, run of river hydro units, SCRs, landfill gas units and solar units (if approved for capacity) have (or will have) different performance measurements – not classified as EFORDs.

8. Proposed Reliability Rule (PRR) 101 – Revision for rules on generation availability

- 8.1. Revision requirements for reporting outage data
- 8.2. Provide new procedures for processing/review procedures
- 8.3. Procedures for Screening by NYISO – new requirement (CM 4)
 - 8.3.1. Four possibilities of screening outcomes:
 - 8.3.1.1. Good data
 - 8.3.1.2. Error found – replaced by good data
 - 8.3.1.3. Suspect data – replaced by proxy – use of proxy is independent of compliance issue
 - 8.3.1.4. Screening misses suspect data
- 8.4. CM5 – market participant requirement
 - 8.4.1. All market participants must provide accurate data
 - 8.4.2. If data is found inaccurate after reliability study, generator will be found noncompliant.
 - 8.4.3. If inaccurate data is submitted by generator on availability that has economic impact, then generator can be fined. Generators won't be fined for reliability study non-compliance.
- 8.5. CM6 – NYISO should annually prepare a document depicting outage and load response data applicable to reliability analysis to Reliability Council and ICS. The report shall include statistics and trends and NERC data if requested.

8.5.1. NYISO is looking into whether or not they can send data to NERC?

This will not be part of CM6 though.

Meeting #99: April 29th, 2009, 9:30am – 4:00pm.

(Substitute) Secretaries: Hilary J. Goldman and Aydemir Nehrozoglu

(Con Edison)

Arthur completed and update on this (not shared with group) – says SCR resources are put into load forecast; however voltage reduction and other load management programs haven't been called in a few years, Suggestion to include these voltage and management programs to act conservatively