

NYSRC Installed Capacity Subcommittee

Meeting #101

July 1, 2009

9:30 a.m. – 3:30 p.m.

Meeting Minutes

Attendees

	Present	Tel
Members / Alternates:		
Mr. Curt Dahl (LIPA), Chairman	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mr. Carlos Villalba (Con Edison)	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>
Mr. Mark Younger (Slater Consulting - Generation Owners)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Rajee Mustafa (NYPA).....	<input type="checkbox"/>	<input type="checkbox"/>
Mr. Rich Wright (CHG&E)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mrs. Patricia Caletka (NYSEG-RGE)	<input type="checkbox"/>	<input type="checkbox"/>
Mr. Madison Milhous (National Grid).....	<input type="checkbox"/>	<input 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 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 type="checkbox"/>	<input type="checkbox"/>
Mr. Peter Carney (NYISO)	<input type="checkbox"/>	<input type="checkbox"/>
Mr. Arthur Maniacci (NYISO).....	<input type="checkbox"/>	<input checked="" 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).....
- Mariann Wilczek (NYISO)
- Mr. Sam Krueger (Dynergy, Inc.).....
- Mr. Alan Ackerman (Customized Energy Solutions)
- Mr. Paul Gioia (NYSRC)
- Mr. Chris De Graffenried (NYPA)

New Guests Present:

- Dr. Roy Shanker
- Yannick Vennes (HQ).....
- Liam Baker (US Power Gen).....

1. Action Items

1.1. Closed

- 97-6.** Find out if NERC has a service to produce an analysis of the NYCA forced outage rate. This item was closed and the NYISO will continue to use outage data reported from NYCA generators.
- 98-1.** Forecasted Wind Capacity results presented to ICS by Erin Hogan
- 99-3.** NYISO collected data for outage inputs for IRM 2010 study.
- 99-4.** NYISO updated IRM 2010 timeline schedule to ICS group.
- 99-7.** Decision was made by ICS to use last 5 years year of EFORD data.
- 100-2:** NYISO expanded on the SCR/EDRP performance factor measurement through CBL to add a white paper and expand on the CBL methodology at meeting number 100.

1.2. New

101-1. For IRM assumption matrix, Steve Jeremko follow up with Erin Hogan about Bear Creek wind farm, located in PA, to question whether it should be included in our Renewable Resources assumption. Also confirm other renewable forecast data with Erin.

101-2. NYISO to provide data to ICS on average derate of pondage/run of river hydro units for past 5 years and worst year data.

101-3. Bill Lamanna and Greg Drake to follow up on external capacity assumptions for IRM 2010 Study, especially issue with HQ to Ontario line limit increase from 350 MW to about 1250 MW in two steps: up to 600 MW on July 1st 2009 and to 1250 MW on May 1st 2010.

101-4. In 2010 IRM study assumption matrix, Carlos Villalba to follow up with Con Edison's Operations on increase in EOP step 6 (Voluntary Industrial Curtailment) from 129 MW to 295 MW from 2009 to 2010.

101-5. Upstate/Downstate study – clarification needed from Paul Gioia on 3 year commitment for upstate/downstate study. Curt to follow up.

1.3. Revised

66-2. Con Edison and NYISO are working together to automate the IRM/LCR curve calculation and perform the benchmarking. Due to unit name changes or use of underscore, code wasn't able to run successfully. Con Edison is working to fix this and will continue to work with NYISO to automate the curve.

99-2. Request for NYISO legal department to provide Zonal generation EFORDs for zones A, B, C, D E, F, GHI, J and K and SCR/EDRP forecasts for zones A through D, zones E through I, and zone J and K separately. NYISO indicated that Curt send a formal request for this data.

95-3. Con Edison to finalize zones H, I, and J LFU calculation methodology.

99-6. Con Edison has Transmission Cable Forced outages rates prepared – just need to double check the database and calculations to ensure there are no errors. The results can be delivered by week of July 6th.

100-5. Action Item proposed by Con Edison to work with NYISO to prove EFORd and Transition rates are similar calculations. This action item was combined with Con Edison's request for SAS program code and process to calculate transition rates from the NYISO.

2. Final Review Forecasted Wind/Renewable projects for 2010 IRM study

2.1. To be done in 2010 IRM study Assumption Matrix

3. Assumptions Matrix for 2010 IRM Study

3.1. Load Shape Analysis

- 3.1.1. Examine the CDD and CTHI duration curve as well as hourly and daily load duration curve for NYCA and zone J and K. June 1st through August 31st by ranking data from high to low.
- 3.1.2. 1996, 2000, 2004 load shapes excluded because anomaly cool year
- 3.1.3. PJM hit peak on June 9th hour ending 1700 – same date and hour NYISO hit peak. New England ISO also peaked around the same time.
- 3.1.4. Zone J and K peaked June 10th at hour ending 1700.
- 3.1.5. Daily cooling degree day duration curve – average from 1993 forward shown.
- 3.1.6. CDD duration curve is about average in 2008, whereas 2002, duration curve is higher than average (more conservative). Same trend for CTHI duration curve – duration curve is higher than normal (more conservative)
- 3.1.7. SCR and EDRP were not added back into 2008 load because they were not called.
- 3.1.8. Question about how much IRM changes using average/normal duration over number of years versus 2002 load shape.
- 3.1.9. Follow up question about which load shape is closest to the normal throughout the year – will be looked into. This one can be used to test the impact on the IRM versus using 2002 load shape.
- 3.1.10. Focusing on top 40 days in NYCA gives a better look at relationship between average in 2002 and 2008:
 - 3.1.10.1. On average 11 days above 90% and 5 days above 95%;
 - 3.1.10.2. 2002 has higher occurrences: 19 days above 90% and 10 are above 95%
 - 3.1.10.3. 2008 has lower: 6 days above 90% and 3 above 95%
 - 3.1.10.4. Zone J has similar behavior as NYCA. 2002 is clearly above average and 2008 is below. Zone K follows same trends.
- 3.1.11. Summarize results of study:
 - 3.1.11.1. Number of days above normal curve for CPHI in 2002 61 days, and 2008 only has 19 days
 - 3.1.11.2. CDD has 66 days above normal in 2002; 2008 only 44 days above normal curve
 - 3.1.11.3. Load curve: In 2002: 38 days above normal curve; 2008 had no days above normal

3.1.11.4. 2008 load shape is less conservative than 2002 load shape.

3.2. Transition rates – forced and partial outage rates

- 3.2.1. Retain current methodology
- 3.2.2. Use current most recent 5 year average
- 3.2.3. EFORDs downstate has gone up dramatically over last two years.

3.3. Peak load – use GOLD book peak load as interim forecast until Oct 1st forecast is done

- 3.3.1. Need to clarify if we are using full amount of energy efficiency portfolio standard into load forecast or if we are using a % energy efficiency.
- 3.3.2. Arthur stated we are using about 40% of the EEPS program.
- 3.3.3. Final peak forecasts is 33,431 MW, which is lower than last year's peak forecast due to economic conditions.
- 3.3.4. Sensitivity test can be done to test this lower peak forecast value.

3.4. Load Forecast Uncertainty

- 3.4.1. LIPA results were received this week and NYISO recommends to use this LFU model
- 3.4.2. Zones A-E and Zones F-G LFU models were developed – grouped due to weather differences in these zone groupings.
- 3.4.3. NYISO has different results for Con Edison zone J, H and I
 - 3.4.3.1. Con Edison uses 1 and 3 criteria
 - 3.4.3.2. Methodology that NYISO used to calculate Con Edison's LFU is different from Con Edison's LFU methodology.
 - 3.4.3.3. Con Edison and NYISO need to come to a consensus on what methodology to use to deliver to NYISO by the end of July. Arthur and Carlos will set up a time to meet to discuss data and come to a conclusion on what methodology and forecast numbers to use.

3.5. Existing Generating Unit Capacities and Proposed Units

- 3.5.1. Caithness and Gilboa Uprate are pretty much in service already
- 3.5.2. Riverbay unit in Brooklyn should be included – question as to what the MW would be for this proposed unit. Carlos Villalba believes he can find.

3.6. Wind Resource Modeling

- 3.6.1. Use latest wind units sent by Steve J and Erin Hogan
- 3.6.2. Work in progress – need to follow up with Erin Hogan to
- 3.6.3. Currently total MW we will model in IRM study will be is Wethersfield (6.6 MW) hasn't participated in ICAP market in 5 years and BearCreek, since it's located in PA – so both of them shouldn't be on the wind resource list.

3.7. Solar Resource Inclusion this year

- 3.7.1. Need to confirm 30% capacity factor.

3.7.2. Brookhaven Nation Lab – LIPA project and SRAS underway

3.8. Non – NYPA Hydro Capacity Modeling

3.8.1. Outstanding question if the 45% derate is accurate.

3.8.2. Pondage/Run of River hydro units – need to determine how much to derate the units in study.

3.8.3. Suggestion to use NYISO existing 5 year average data and worst year data to help develop a derate value.

3.9. SCRs

3.9.1. Performance of SCR has been found to be worse than previously modeled – will push IRM up.

3.9.2. Also discussed that SCR growth factor will not be used for 2010 because data shows growth factors last year were too aggressive.

3.10. Environmental Impact

3.10.1. Still undecided how to model NOx and CO2 emission restrictions due to concern over near future emission reduction legislation.

3.11. External Capacity

3.11.1. FERC ruling that only to use grandfathered contracts: 50 MW from NE, 1080 MW from PJM and 1090 MW from Quebec

3.11.2. Action item 101-3 added for Bill Lamanna to follow up on the external capacity assumption and grandfathered contract modeling.

3.12. Sales

3.12.1. Increased from 2009 assumptions due to firm sales from generators inside NYCA to neighboring pools, especially one's with forward capacity market.

3.13. EOP (without SCRS and EDRPs)

3.13.1. EOP step voluntary industrial curtailment increases from 129 MW to 295 MW attributed to Con Edison operations. Carlos to follow up on this increase in load relief.

3.14. Loop flow analysis discussion

3.14.1. Request for further results from NYISO impact of just Loop Flow Switch set to no – output files requested.

Conference call scheduled for July 21st 1:30 to 3:30

Next Meetings

August 5, 2009 – Meeting#102

September 2, 2009 – Meeting#103

September 30, 2009 – Meeting#104

November 4, 2009 – Meeting#105

November 30, 2009 – Meeting#106

Meeting #101: July 1st, 2009, 9:30am – 4:00pm.

Secretary: Carlos Villalba

Prepared by: Hilary J. Goldman

(Con Edison)
