

NYSRC Installed Capacity Subcommittee

Meeting #89

June 25th , 2008

9:30 a.m. – 5:00 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), Secretary	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Timothy Bush (Generation Owners).....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Bart Franey (National Grid)	<input type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Rich Wright (CHG&E)	<input type="checkbox"/>	<input type="checkbox"/>
Mrs. Patricia Caletka (NYSEG-RGE)	<input type="checkbox"/>	<input type="checkbox"/>
Mr. Madison Milhous (KeySpan)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mrs. Jane Shin (Con Edison)	<input type="checkbox"/>	<input type="checkbox"/>
Mr. Kelvin Chu (Con Edison).....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Mark Cordeiro (Municipal Power Agency).....	<input type="checkbox"/>	<input type="checkbox"/>
Mr. Han Huang (NYPA).....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mr. Glenn Haake (Dynergy, Inc. - Generation Owners)	<input type="checkbox"/>	<input checked="" 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 checked="" 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 checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Arthur Maniacci (NYISO).....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Ed Schrom (NYPSC).....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Guests Present:		
Mr. Robert Boyle ()	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. John Charlton (NYISO)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Bill Lamanna (NYISO).....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Frank Francis (BEMI)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mr. Clyde Custer (NYISO).....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Ms. Erin Hogan (NYSERDA).....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. John Pade (NYISO-Consultant)	<input type="checkbox"/>	<input checked="" type="checkbox"/>

1. Meeting Minutes

Meeting Minutes #86 - The committee members reviewed, commented on, and made editorial revisions to the meeting minutes.

2. Action Items

2.1. Closed

66-1. Collapse EOPs: The group agreed that with faster computers this item is not necessary and was removed from the action items list.

86-3. MISO wheel: The NYISO has completed all tests and Mr. Greg Drake reported a decrease in the LOLE of 0.0001 when modeling the MISO wheel. The NYISO informed that the MISO wheel system impact has not been studied yet and therefore should not be part of the basecase.

87-1. External Limits: Bill Lamanna reported that the external transmission limits are correct and that there are not internal overloads when generation and imports are dispatched simultaneously for 2009. Mr. Lamanna explained that the internal limits in combination with the external limits will prevent the system from overloading internally.

88-1. Add the number of zones in each neighboring pool into the Assumptions Matrix.

87-3. According to Mr. Al Adamson, all comments on the Policy 5 have sent to the EC.

2.2. New

89-1. Carlos Villalba will investigate and present a set of draft assumptions necessary to effectively model system changes due to the inclusion of 100 MW of UDRs from the VFT.

89-2. NYISO will re-visit the growth rate presented for SCRs.

89-4. Find whether or not Zone J actual hourly load is adjusted to Coned internal load management programs, outages, voltage reduction, and public appeals.

89-5. Submit comments on the SCRs and EDRPs NYISO's forecast proposal.

89-6. Find details of 45 MW Co-Op city unit in New York City.

89-7. NYISO and Con Edison to suggest a new topology to model the VFT UDRs.

89-8. Update New England Topology to 14 areas and new interface limits from NE last year study

2.3. Revised

All items were revised and the following items were discussed in detail.

84-7. Mrs. Erin Hogan presented an update of the RPS list to the group. Mr. Mark Younger made minor corrections and the group finalized Mrs. Hogan's RPS list.

85-2. Modeling of wind units: Mr. Greg Drake presented to the group the 2006 and 2007 results of NYCA wind units capacity factors during the first 20 peak load hours and days. The results shown by Mr. Drake confirm the volatility of the wind around the peak load hours and days. The group however concluded that there is not sufficient data yet to make any conclusion on the total wind unit NYCA fleet availability and this will require more data collection and further analysis of the simultaneous composite sites output. Mr. John Charlton added that by inspection of the 5 minutes interval output data of these units, it is clear the volatility nature of these resources as well. Mr. Charlton also noted that the wind units have not coordinated any maintenance outages to take credit for the capacity.

85-1. IRM/LCR curve comparison without external ICAP: Mr. Drake presented the results of some IRM/LCR points on the curve. The points were not graphed and the group asked the NYISO to build more points around the TAN 45 and to share the points with the group.

3. Load Shape Analysis

Mr. Arthur Maniacci presented to the group the NYISO analysis of the 2007 load shape and its comparison to the load shape used presently by the MARS model. The analysis concludes that the 2002 load shape continues to be the most conservative assumption for load shapes. Mr. Maniacci also reported neighboring pools coincident peak dates and their alignment with the NYCA peak.

During the presentation Mr. Al Adamson asked if the load profile was adjusted for SCRs and EDRPs. Mr. Maniacci responded that normally the load profile is adjusted for SCRs and EDRPs, but not for public appeal and voltage reduction; however, during 2007 there were no SCRs and EDRPs event calls. Mr. Adamson also asked if it was still valid to assume that once every ten

years during the NYCA peak the neighboring pools were peaking at the same time. Mr. Maniacci didn't have an answer but will investigate.

Use of the 2002 load shape in the basecase was approved by the ICS.

4. State Environmental Programs Impact

Peter Carney informed the group that the RGGI program will not hold the auction in September for New York and that he was in the process of writing a white paper that will present to the ICS on July 24th.

5. SCRs and EDRPs analysis

Mr. Clyde Custer presented the NYISO's analysis of SCRs and EDRPs programs registration and performance. The analysis found a 0.85 overall summer performance factor for the SCRs and EDRPs program.

Mr. Custer also proposed a methodology to account for SCRs and EDRPs registration in the MARS tables that describe the Emergency Operating Procedures. The proposal used a combination of the last 12 month registration and a growth rate applied to obtain future values. Mr. Villalba expressed a concern based on the short amount of data (years of the programs) and the migration of EDRP programs to the SCR programs to create a growth rate. It would be more conservative to use the previous year number.

6. Transmission Topology Update

Mr. Bill Lamanna informed the group of the following changes on the model's topology that reflect recent load flows and transfer limit studies perform for 2009:

- Moses South's limit decreases to 2600 MW from 2900 MW due to changes in the load flows.
- Dysinger East's limit decreases to 2200 MW from 2600 MW. The interface was tested using simultaneous flows from Ontario, PJM, Zone A, and to Zones G,H&I. The analysis found a voltage limit for the loss of Ginna. The transfer limit was also calculated with Ginna out of service resulting in sub-transmission feeders' outages in the 115 kV-system controlling a voltage limit on the interface of also 2200 MW. On this subject Mr. Franey asked for clarification on whether or not the limit was due to overloads in the 115 kV sub-transmission. Mr. Lamanna responded saying that it was not the case.
- The Dunwoodie (I to J) interface limit increases to 4000 MW its thermal limit from the previous voltage limit after the installation of the Millwood capacitors banks and load shifting to the Mott Haven substation.
- Recommends continuing monitoring of the interface of I to J&K.

Mr. Dahl asked Mr. Lamanna if the modeling of the VFT was going to be part of the 2009 IRM study topology. Mr. Lamanna said that if they choose to claim 100 MW of UDRs then the model should reflect 100 MW of UDRs fully deliverable. Mr. Lamanna added that the capacity that will be used by the VFT will be de-listed in PJM and that the VFT project paid for system upgrades in PJM to have the rights to withdraw 300 MW at their point of interconnection. Mr. Dahl suggested NYISO and Con Edison to work together to create a new topology to model the VFT.

Mr. Lamanna brought the group up to date on the IPSAC latest developments and discussions. He noted that the IPSAC was behind schedule for the resource adequacy limit study.

Mr. Franey asked Mr. Lamanna if the neighboring pool individual limits were calculated using the entire emergency limit with the neighboring pools and then prorated through its components or each of the limits was calculated individually as the internal limits are calculated. Mr. Lamanna responded that even during the calculation of the internal limits, the loading of individual feeders is done such that maximum flows are achieved. He gave as an example the calculation of the Central East interface limit with its individual components.

7. Assumptions Matrix

Resources:

During the revision of the assumptions Mr. Villalba asked if the Co-Op city 45 MW unit located in New York City was taken into consideration as a new resource for 2009. Mr. Dahl asked the NYISO why this unit was unnoticed. Mr. John Adams responded that this unit is a non-FERC jurisdictional facility; therefore, they didn't need to file an SRIS and go through the interconnection process. Mr. Adams noted that if the unit decides to participate in the market it will become a FERC jurisdictional facility and will need some type of impact study.

Force Outage Rates:

Mr. Dahl started a group discussion on the large NYCA EFORD changes in 2007. Mr. Dahl observed that the EFORD changed to 6% from 4.5% last year. Mr. Adams then informed the group that the NYISO re-calculated the State's EFORD from GADS data after finding that some unit miss-reported their outages. Mr. Charlton clarified saying that there were three factors to consider on this change; one that there were few generators that were asked to re-state their GADS data; two some generators that have higher outage rates than before; and three that there are generators that are now aware that they can be subject to an audit from the market monitor and are more careful submitting the data. In general, there were several hundred MWs that were

miss-reported in 2006 and 2007, the analysis has been completed by the NYISO, and that the issue is being handled legally for compliance.

Mr. Younger asked that if the underestimation occurred in 2006 and 2007 then how many years back would be necessary to add 1% to the EFORD calculated by the NYISO from GADS data.

There was a group concern about last year's EFORD and the veracity of one of the IRM study conclusions related to the decrease of the NYCA generating fleet forced outage rates.

Mr. Charlton added saying that this change was first noted last fall when the NYISO posted the winter translation for the capability period.

Potential Hydro DMNC changes in ICAPWG:

Mr. Glenn Haake clarified that this is an issue that is still being debated at the ICAPWG for limited-control run-of-river units which performance is similar to the wind units. These units are PURPA units and they get paid whatever they generate without any penalties generating whatever the available water gives them. If the proposal were to pass then the DMNC of the units will be reduced significantly. Because the IRM calculation already discounts the hydro units by 45%, then the group said that any DMNC adjustments from this proposal will fall within this derate.

External Capacity Calculation (40 minutes more of listening to the tape):

Mr. Greg Drake presented to the group preliminary results of a sensitivity analysis that consisted of building the IRM/LCR curves for last year IRM after removing the external capacity assumptions. Mr. Drake's results were inconclusive since he needed more points to build a complete curve on which a TAN 45 line could be drawn.

Mr. Franey asked whether this investigation will conclude in the removal of the external capacity assumption from the base case. Mr. Franey said that there is a Policy; referring to the Market Monitor suggestions; that guide us to take an action and that he has a reservation on the ICS approach of just performing a sensitivity that removes the external ICAP. Mr. Franey added that if either the results of this sensitivity show that there is an insignificant impact or there is a large impact the members should consider removing this assumption from the base case.

Mr. Villalba proposed to wait for the results from the NYISO to determine the impact on the TAN 45 point. Mr. Dahl added that not only we should take into consideration the impact but also this proposal may change the way the IRM is calculated.

Mr. Younger supported Mr. Franey's idea on modeling only the grandfathered external ICAP and believes that the current methodology overestimate the IRM and the LCRs.

Mr. Franey and Mr. Younger continued saying that based on the analysis presented by Mr. Drake today they can conclude that the TAN 45 will be different when modeling only the grandfathered external capacity that clearly impinge the LOLE, the emergency assistance, and NYCA reliability. Mr. Younger tied the methodology to the deliverability test that would have to assume a level of external capacity to calculate the deliverability of the internal resources. Mr. Dahl disagreed with Mr. Younger last statement because Mr. Lamanna reported to the members that the limits established on the external interfaces take into account the deliverability of the internal units close to the interface.

Mr. Younger thought gave Zone A as an example of deliverability. He said that simultaneously Zone A cannot have imports from PJM, from Ontario, and all generation at the same time.

Mr. Villalba added to the argument saying that if the external capacity is modeled as a contract and not as a derate of the line, then more generation are removed from A, C, and D zones, but the amount of external ICAP is counted as NYCA generation therefore yielding almost the same IRM.

Mr. Franey said that his point is that the assumptions assumed 45% for the Hydro de-rates and other de-rates to calculate the TAN 45; however it seems that ICS is applying different policies to different sections of the curve.

Mr. Franey clarified his proposal by saying that first the IRM should be calculated with grandfathered external ICAP only, then they NYISO can use the results to calculate the amount of external ICAP that is needed based on the NYISO methodology presented 2 months ago.

Mr. Dahl pointed to the Policy 5 where it states that the NYISO will determine the amount of external ICAP that will be model in the base case based upon projections and those are the rules. Mr. Franey responded that the methodology is also impinging on the NYCA LOLE.

Mr. Dahl proposed to write a white paper approved by the ICAPWG on this issue since it is a major change that impact thousands of MWs. He added that acknowledging the EC sentiment, they would like to know ahead of time of an impact of this magnitude. He believes that this issue needs to be study since we all have different theories, that in the past the ICS has made studies to make significant changes in the IRM calculation methodology and this case is not any different. He suggested that

Mr. Adamson recalled the A-R3 rule about external ICAP.

“ICAP from resources external to the NYCA for satisfying a portion of the LSE ICAP requirement must be demonstrated to be available and deliverable to the NYCA borders. ICAP from the resources external to the NYCA shall be permitted to the extent A-R1 reliability requirements are satisfied.”

Mr. Franey suggested also to run the basecase isolated from the neighboring pools and then add the external capacity until reach an LOLE of 0.1. This method does not violate A-R3.

Mr. Drake said that he can not commit to write a paper and build the curve for this year. He suggested building the curve first and finding out the impact, then adjust the external ICAP until the curves are the same.

Mr. Villalba suggested running first the system as found and recording the emergency assistance that flows into NYCA and the interfaces involved. This emergency assistance will be the maximum level of assistance that NYCA will need and that the market will sell to NYCA because is needed for reliability. Then the methodology would use this level of emergency assistance as external capacity for the IRM calculation. The external capacity then is treated as a contract through the recorded interfaces and the amount of capacity added to the neighboring pools since is above and beyond their requirement.

ICAP Sales:

Mr. John Charlton warned the group about the ICAP market sales and purchases with neighboring pools. Capacity market developments in the neighboring pools are changing rapidly, therefore past and present performance can not be use to forecast the future performance of this markets.

8. Next Meeting

Meeting #90: July 30, 2008, 9:30am – 4:00pm.
Secretary: Carlos Villalba
