

NYSRC Installed Capacity Subcommittee

Meeting #162

July 29th, 2014

10:00 a.m. – 3:00 p.m.

Meeting Minutes

Attendees

	Present	Tel
Members / Alternates:		
Mr. Yuri Fishman (PSEG-LI)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Rich Wright (CHG&E)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mr. Gregory Chu (Con Edison), ICS Vice Chair/Secretary	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mr. Richard Brophy (NYSEG-RGE)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Robert Boyle (NYPA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Shaun Johnson (NRG)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Mark Younger (Hudson Energy Economics, LLC.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Advisers/Non-member Participants:		
Ms. Erin Hogan (NYSERDA), ICS Chair	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Frank Ciani (NYISO)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Steve Lemme (NYISO)	<input checked="" 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. John Adams (Consultant)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Scott Leuthauser (Consultant for H.Q. Services)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Howard Tarler (NYISO)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Peter Carney (NYISO)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Dana Walters (NYISO)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Dr. Kai Jiang (NYISO)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Wes Yeomans (NYISO)	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Guests Present:

1. Executive Committee Meeting Recap

Chair Erin Hogan (NYS-DOS) briefed the group on the EC's desire to model the daily logic option in this year's base case. However, the EC would like 2 additional sensitivity cases to be performed as well. They would like to evaluate one run with the option OFF in the base case and another run using only 2002 load shape and turn ON the daily logic option.

The EC also wanted the base case to include Danskammer. Mark Younger (Hudson Energy Economics) voiced concerns and the group can perform a sensitivity case with it taken out of the base case.

2. Follow-up to Special ICS meeting (conference call) on July 18th, 2014

For modeling summer maintenance, the group will need to return next year and look at the multi-year impact on the maintenance determination, since the current proposed method hinged on the LFU from a single year as the determining criteria. The group previously agreed upon using the same method from the past for this year's study.

Dana Walters (NYISO) said that temperature derates are not typically included in the transition rates calculation. These derates are captured in GADS separately and are modeled based on manufacturer's curves. We would revisit this concern next year.

3. Parametric Study Results

Mr. Ciani went over the parametric study step by step. The NYISO updated the starting year for the new model, and that would relate to the load shape starting on a different date. Vice Chair Gregory Chu (Con Edison) asked if the wind shapes are also automatically adjusted since they follow the same EEI format.

Mr. Ciani said that the wind shapes do not have a headline entry of the year for automatic adjustment.

They've input the new gold book peak load forecast. The higher new load increased IRM. Mr. Younger finds it odd that zone J has load increase but the LCR decreased as evident on the table. Vice Chair Chu said that it is because this isn't a true tangent 45 point. Mr. Ciani said that capacity is added back to ALL zones. Mr. Younger asked the NYISO about how they restore LOLE back to 0.1 in this step, Mr. Ciani and Dr. Jiang said the amount of capacity added back into the system followed sensitivity method, which is to every zone by their UCAP capacity ratio.

Load Forecast Uncertainty caused an increase in IRM as well because of zone K's bump in its new uncertainty distribution curve. Vice Chair Chu pondered why zone's K was not normal at all. Dana Walters (NYISO) stated that these were values provided by PSEG-LI. Former Chair Bob Boyle (NYPA) asked that the NYISO make a note about this in the report since it is odd looking. **(AI 162-1)**

Retirement of Dunkirk 2 increased IRM, and members were thoroughly confused. Al Adamson (NYSRC – Consultant) mentioned that this is the opposite of the finding last year, where retirement of Cayuga and Dunkirk helped to decrease IRM instead. Mr. Ciani said that Dunkirk was helping NYC, through a path from PJM, so Dunkirk's assistance was a more significant factor than previous year's retirement. In this case Mr. Ciani also said that they deviated from the past practice that return capacity back to all zones, and instead, the NYISO returned capacity back only in zones A-F due to undesired changes to LCR as capacity is added back to J and K. This may be a cause of this strange result. Mr. Younger wondered if we should use a different EFORD than the regular zonal EFORD to add capacity back into the system. Vice Chair Chu suggested perhaps we would use the EFORD of the retired unit and spread those MW among the zones, so the effect would be to identify the effect of losing the unit at the current zone, versus a combination effect of spreading out the capacity plus new EFORD for the added capacity. Mr. Younger doesn't think that using the unit's own EFORD would be helpful. Mr. Boyle suggested perhaps we would replace the capacity using the load instead. Mr. Adamson doesn't think we should dwell too much on

this single parameter, since there's some normalization being done later. Mr. Ciani stated that the NYISO would look at the process. Dr. Jiang also stressed that consistency in the method is also important for year over year comparison, but we can improve the process in the future. Tangent 45 may wash out the effect we are witnessing here, he added.

The group asked the NYISO to break out Ravenswood and DMNC changes. Also, the group asked the NYISO to complete all 17 parametric studies by the end of the week and provide the results to the group **(AI 162-4)**

The result of the Preliminary base case, with tangent 45 points, is needed by 8/22. **(AI 162-5)** Mr. Adamson will provide normalized table 1 shortly after **(AI 162-6)**

Frank Ciani (NYISO) stated that there will be an additional case on the updated external area model that will be completed by the September meeting. Some of the missing cases are currently being reviewed so the results are not yet available. PJM modeling is also under review after some discussion with PJM.

Mr. Younger recommended that the NYISO should list the pending cases as well, even without the results. He also felt that the NYISO should put a footnote to show the last step to avoid confusion. Dr. Kai Jiang (NYISO) suggested adding an asterisk for the last step.

4. Action Item 108-1 Capacity Export Modeling

Wes Yeomans (NYISO) presented the existing principle of modeling leaving capacity. The original action item asked the NYISO to comment on the proper modeling of the export.

Mr. Yeomans first pointed out the principle is to ensure that ICAP energy cannot be subject to frequent and routine curtailment due to transmission constraints. Mr. Yeomans said that this principle points to 1. The Tariff and 2. The MOU that stated curtailments.

He further stated that curtailment can only happen due to a correction of violation of transmission limits/criteria, or if the resource that is tied to the ICAP contract was unavailable. Curtailment cannot occur due to capacity shortage of the source jurisdiction, or generation losses other than the specific generator under the export ICAP contract.

Mr. Younger reiterated the concern he had about the planning process. To put it succinctly, he said that if the NYISO plans accordingly assuming curtailment is an option, then the system would have a lower reserve margin than what it actually needs. If the NYISO plans assuming curtailment is not an option, then naturally the system will need a higher reserve margin, and thus would decrease the likelihood of curtailing that export to begin with. He also had concerns that the tariff stated the non-comparable basis for curtailment (Non-firm services). Mr. Yeomans said that the key is “routine and frequent”. He said if people paid for capacity, they will get it without curtailment. He said it hasn’t been frequent and thus the NYISO is satisfying the principle.

Mr. Younger is not questioning the NYISO’s right to curtail, but rather does the ISO-NE know how the NYISO is planning the system, and thus is modeling consistent with the signed agreement. Mr. Yeomans said the ISO-NE is aware about the lack of modeling wheel through by the NYISO during NYCA planning process. Mr. Younger said that is different than if the ISO-NE believes the NYISO modeling is following the MOU. We haven’t asked them if they agreed with our planning satisfying the MOU. Mr. Yeomans stressed that the NYISO did speak with ISO-NE specifically with the 16.3.4.4.7 of the tariff that states the NYISO has the rights to invoke other emergency procedures if necessary, and the ISO-NE is aware and has not voiced objection.

Mr. Yeomans goes into the NYISO recommendation for modeling. The ISO will not curtail export unless transmission constraint exists. The NYISO will continue the practice of reducing internal capacity due to export. On the same token, the NYISO will continue to reduce transfer limits due to the export sale. Finally, the NYISO will not model power flows associated with known capacity sale across internal transmission system.

Mr. Yeomans said that the NYISO can speak to ISO-NE to ensure that the external ISO agrees with the planning principle. But the ISO-NE is aware of the export planning method of the NYISO, and is planning their system accordingly. Chair Hogan asked Mr. Younger to write-up the question (limited to yes/no answer) in an email that the NYISO will send to ISO-NE to determine if ISO-NE is in agreement with the NYISO planning principle, in accordance of the MOU. **(AI 162-3)** Chair Hogan asked if the NYISO can double check the frequency of export curtailment. **(AI 162-2)** Mr. Yeomans said they will try to look back 5 years (June through September). Mr. Younger still felt that the ISO-NE would not agree with the NYISO treatment of the export.

5. Sensitivity Cases

Chair Hogan mentioned that sensitivity 9 (retirement scenario) is not necessary this year. The origin of this case stemmed from the late retirement of Danskammer. Mr. Boyle asked if we are dropping this because we are unable to define the scenario. Chair Hogan said that we would have a “remove Danskammer” case that would be in place of this case.

Sensitivity 10 was also dropped due to the lack of value of limiting SCR calls in the model.

Sensitivity 12, which relates to environmental regulation impact, was also dropped due to no perceived added value.

Sensitivity 8, which relates to retirement of Indian Point and is typically suggested by the EC, will be left at the end of the list, in case there’s no support for this case at the EC level. Mr. Adamson said that the study only showed the level of LOLE without Indian Point, and the result is not directly relevant to the IRM.

On the topic of removing cases 1-5, Mr. Adamson mentioned that in the report, cases 1-5 are used to indicate the impact of each of these parameters on the IRM.

Cases 6 and 7 about higher or lower outside reserve margin are to be eliminated since there are other new cases, like PJM LOLE adjustment to 0.15, make these 2 cases redundant. Mr. Boyle asked if the report will at least list the external area modeling (i.e. amount of reserves, LOLE, etc.). Vice Chair Chu found the table in p.42 in the appendix of last year's report that has external area information.

Case 11 is a duplicate of the PJM LOLE case, since that is the NYISO proposed outside area methodology.

The new cases relating to new daily peak logic were reworded in the sensitivity list. Mr. Younger suggested that we should just say "use 2002 load shape in all bins." Vice Chair Chu asked if the EC knew that the case using 2002 shape is just the old case, and has nothing to do with daily peak logic. Chair Hogan said this is to see if the multi-year load shape had any effect on the model at all, since there's a possibility that last year's IRM reduction was due to daily peak logic issue and NOT due to multi-year shape at all. "Without multi-year load shape feature" is the agreed upon language.

The previous issue about not modeling external area's demand response (DR) MWs, in compliance with Policy 5 that prohibited the modeling of external EOP (includes DR), was revisited after Mr. Ciani and Dr. Jiang recounted their visit to PJM to determine how PJM is modeling their demand response. They do a 2 step process. They determine their reserve margin first, using their traditional resources only. Then they look at the auction results, and DR bids directly into the market, and those MWs are selected (economically) to satisfy the reserve margin determined in the first step. We here in NYCA use DR MW (which includes SCR and EDRP MWs) to determine reserve margin in our EOP steps within the model.

Dr. Jiang further explained that DR is not used in the determination of their reserve margin. They use a different software called PRISM. Once their reserve margin is determined, they use DR to cover the MW shortfall (due to coal retirement, as an example). There's a 5% (of the load) cap of the DR capacity available for purchase. They don't use performance (EFORd) but rather assess a

penalty to the owner of DR for non-performance. They need to demonstrate that they are functional for 10 calls, or else a penalty will be leveled upon the owner. The MWs are treated as actually 100% available. The performance of DR MWs is actually checked at the zonal level to ensure the criterion is met. Since DR MWs are 100%, one can rest assured that the criteria is almost always met since they are better than traditional generation.

Mr. Younger said that based on this discovery we can just ignore DR since PJM does not see DR as part of their need to meet reserve margin. Dr. Jiang said actually it is the opposite. We need to consider DR as actual capacity since PJM is relying on those MW just like a traditional generator to meet requirement. This is also the reason why we would see such a high LOLE in PJM when we ignore their DR, and yet they view those as crucial capacity in their region. We should, in fact, model those MWs in their zone. Dana Walters (NYISO) further stated that PJM DR is not an EOP step. PJM stated that these are supply resources and we would be way out of base if we are to ignore it in our model. In the end, we would revisit this issue, but the group has no issues with going forward of the sensitivity of adjusting PJM LOLE to 0.15, using load adjustment in accordance of Policy 5. The method to limit PJM LOLE to 0.15 has been suggested by the NYISO in the past and the NYISO has previously committed to providing a white paper to discuss the appropriateness of the LOLE cap.

Mr. Boyle asked how the NYISO would respond to questions about 0.15 LOLE, since there's no direct value to the result of this particular sensitivity case. Mr. Adamson recommended that the NYISO should provide a small write-up for the report that describes the importance of this sensitivity case. The NYISO agreed.

(AI 162-7)

For the case of modeling a nomogram to limit Danskammer output due to gas limitation, Mr. Younger said that Danskammer only has firm rights to gas to run only a part of their output. Mr. Walters said that is not the NYISO's understanding. The NYISO expects Danskammer to be fully capable of running on all gas, and if Roseton units need to run, it can run on oil since it has no firm rights to gas. Danskammer 3 & 4 can run solely on natural gas.

Rich Wright (CHG&E) stated that Danskammer has firm gas rights and there's enough supply to run full out on gas. Scott Leuthauser (HQUS) asked if Roseton would be taken gas away from Danskammer, but Mr. Wright said that Roseton can and will be running on oil. He does not see a limitation on running both plants simultaneously.

Chair Hogan, based on her research, found that Roseton can run 50% gas for 600 MW firm, and it can run oil for the remainder output. Mr. Leuthauser corrected and said 600 MW non-firm gas rights for Roseton. Shaun Johnson (NRG) brought to attention the possibility of Roseton unable to run fully on oil, to which Mr. Leuthauser said Roseton can run fully on oil since he was with Niagara Mohawk who used to own the plant. Mr. Younger wondered if environmental regulation would prevent full oil operation for Roseton.

Chair Hogan wondered if the NYISO can tell how many times the model call upon Danskammer. Mr. Ciani said that information is not available. Chair Hogan compared it to MAPS. She was trying to determine how often the unit gets called upon will determine how crucial this nomogram case would be. Vice Chair Chu said that MAPS and MARS are very different because unlike MAPS, MARS doesn't rely on pricing information to determine which unit is dispatched through the production cost level logic. Rather, MARS uses all the available MW to determine if there's a MW shortfall, regardless of the price. MARS has no commitment and dispatch logic.

Mr. Walters stated that based on the research of pipeline capacity, approximately 1200 MW of gas supply can be delivered to the area.

Peter Carney (NYISO) stopped by the meeting and confirmed that Roseton emission will be clear of the limits even when the plant is on 100% oil. He has studied EPA results and historically Roseton will easily meet the emission criteria. He also confirmed that based on Article 7 procedure, 1200 MW worth of gas delivery is available to the area. Chair Hogan said that since Danskammer only needs 500+ MW, coupled with oil burn on Roseton 50% (600 MW on gas, 600 MW on oil), this shouldn't be a problem. Mr. Younger would like to be

convinced by the 1200 MW supply statement. Chair Hogan recommended that Mr. Younger should reach out to the PSC to get the information from article 7.

The NYISO has been asked to provide two write-ups for the IRM report: Environmental and transmission, by October 1st. **(AI 162-8)**

6. Data Encryption

Mr. Ciani said that the NYISO would send the database to GE and they would encrypt it. Vice Chair Chu said that timing wise last year was fine. He said that it is really based on GE to complete the encryption before QA can be performed. He also asked if GE would do the encryption ahead of the September meeting since that's when the QA is due. Mr. Ciani has confidence that it'll be done on time. **(AI 162-9)**

Secretary: Gregory Chu

(Con Edison)

Next meetings:

Meeting 163, Wednesday, September 3rd at NYISO HQ
Meeting 164, Wednesday, October 1st at NYISO HQ
Meeting 165, Tuesday, October 28th at NYISO HQ
Meeting 166, Monday, December 1st at NYISO HQ
