NYSRC Installed Capacity Subcommittee

Meeting #176

September 29th, 2015

10:00 a.m. – 2:00 p.m.

Meeting Minutes

Attendees

	Present	Tel
Members / Alternates:		
Ms. Khatune Zannat (PSEG-LI)	☐	☒
Mr. Rich Wright (CHG&E)	☐	☒
Mr. Gregory Chu (Con Edison), **ICS Vice Chair/Secretary**	☐	☒
Mr. Sanderson Chery (Con Edison)	☐	☒
Mr. Richard Brophy (NYSEG-RGE)	☒	☐
Mr. John Tigue (NYSEG-RGE)	☐	☒
Dr. Syed Ahmed (National Grid)	☒	☐
Mr. Mark Younger (Hudson Energy Economics, LLC.)	☒	☐
Mr. Bob Boyle (NYPA)	☒	☐
Advisers/Non-member Participants:		
Ms. Erin Hogan (DOS), **ICS Chair**	☒	☐
Mr. Greg Drake (NYISO)	☒	☐
Mr. Frank Ciani (NYISO)	☒	☐
Mr. Dana Walters (NYISO)	☒	☐
Mr. Josh Boles (NYISO)	☒	☐
Mr. Steve Lemme (NYISO)	☐	☒
Dr. Kai Jiang (NYISO)	☒	☐
Mr. Bill Lamanna (NYISO)	☒	☐
Ms. Vijay Ganugula (NYISO)	☐	☐
Mr. Richard Quimby (NY DPS)	☐	☒
Mr. Edward Schrom (NY DPS)	☐	☒
Dr. Kelvin Chu (GE)	☐	☒

Mr. Al Adamson (Consultant).....☒ ..... ☐
Mr. John Adams (Consultant) .....☐ ..... ☒
Mr. Scott Leuthauser (Consultant for H.Q. Services) .....☒ ..... ☐
Ms. Kelli Joseph (NRG) .....☒ ..... ☐
Mr. James Scheiderich (ECS).....☐ ..... ☒

Guests Present:

Mr. Alan Ackerman (CES).....☐ ..... ☒
Mr. Timothy Lundin (CES) .....☐ ..... ☒
Mr. Liam Baker (USPowerGen) .....☐ ..... ☒

1. Fall Load Forecast

Arthur Maniaci (NYISO) said that the forecast was presented at the last Load Forecast Task Force. ICS Chair Emeritus Bob Boyle (NYPA) suggested that the NYISO should provide the forecast presentation before the meeting because ICS members do not all attend LFTF. Mr. Maniaci said that they can post material jointly for both LFTF and ICS next time.

Al Adamson (NYSRC-Consultant) asked if this preliminary forecast would be followed up with a final forecast. Mr. Maniaci said that because there were questions and comments at the LFTF meeting, the forecast has not been finalized by this ICS meeting.

Mr. Maniaci said this was a cool summer. Downstate regions had much lower temperature than normal. Overall the entire state was either around or below normal temperature-wise. July 20th was the peak this past summer and the NYCA peak was 31,076 MW. He said that there was a 370 MW over forecast with 1.1% over forecast error.

Mr. Maniaci said that the 2016 IRM preliminary fall forecast is 11777 MW for J, 5457 for K, and 16375 for zones G-J. NYCA forecast is 33377 MW.

Chair Erin Hogan asked if LFTF agreed with these numbers. Mr. Maniaci said yes. She also asked that the presentation be posted with the title changed to final forecast. She wondered if the 2015 ICAP forecast MW on the presentation is the same as the Gold Book forecast values. Mr. Maniaci said no, instead the ICAP forecast is referring to the last December forecast. He would add a column 9, on page 14 for locality peaks to show the Gold Book forecast for comparison.

2. Preliminary Base Case Tan 45/ IRM

Chair Hogan just wanted to make official the tangent 45 results approved by the members on a separate conference call previous to this meeting.

The tangent 45 values for the 2016 IRM preliminary base case (2013 wind shape) were 16.8% IRM, 76.2% J LCR, and 101.6% K LCR. The IRM of 16.8% was approved by ICS.

Syed Ahmed (National Grid) said that we need to put in the report the explanation on our use of 2013 wind shape instead of 2014.

3. Parametric IRM Impact Comparison

Mr. Adamson presented table 6.1 that showed the parametric impact on the IRM from last year to this year. He normalized the changes and he mentioned that policy 5 changes were combined with PJM model changes in addition to outside world changes all together. He also mentioned that there is a footnote for the 2013 wind shape that's seen here, but that footnote ("use of 2014 load shape model will decrease IRM by 1.1%") will not be shown here in table 6.1 in the report. This will be explained in the report body instead.

Jim Scheiderich (ECS) asked about the definition of a "LOLE event". He wondered if it was a violation of LOLE criteria. Dr. Kai Jiang (NYISO) suggested that we replace "LOLE" with just loss of load to avoid confusion.

Khatune Zannat (PSEG-LI) asked how did the PJM update parameter went from a -3.8% IRM change to a -0.7% on table 1. Mr. Adamson said that Policy 5 changes (which include PJM and Other outside world areas) are embedded in the -0.7%. The list of parametric table showed 2 separate lines and the combination resulted in -0.7% because there are adjustments made to all areas to 0.1 LOLE (0.14 for PJM). Mark Younger (Hudson Energy Economics) asked if the other areas also required adjustments aside from PJM. Dr. Jiang said that all areas needed to be adjusted and the adjustment is done in totality. Mr. Younger was interested in the split of the adjustment % for PJM versus the other zones.

Mr. Boyle said that "All hours in simulation" is unclear. He suggested 8760 hours would be clearer.

Ms. Zannat was concerned about the LCR changes that were not completely explained in the parametric results, as that would have been impacted directly by the IRM changes. Gregory Drake (NYISO) said that he would try to look into it but he may not have an explanation. Ms. Zannat goes on and asked about the procedure in which the NYISO use to determine LCR. Chair Hogan asked that the NYISO to circulate the LCR procedure that the NYISO employs to determine the LCRs, as this group is only responsible for setting the IRM. Mr. Younger and Carl Patka (NYISO) both mentioned that the NYISO can adjust the LCRs as they see fit after the Executive Committee has determined the proper IRM. Vice Chair Gregory Chu (Con Edison) pointed out that in the case of Danskammer going out after Superstorm Sandy and after IRM has been determined, zone J's LCR (and K's) was determined by the NYISO to be much higher in order to maintain system reliability with the same IRM. Mr. Patka reminded attendees that the tangent 45 LCRs are indicative and not final, and should not be perceived as such.

The Parametric Table was also approved by ICS previously, but the final version has the order of the parametric slightly different than before since the sum of non-material changes are added to the front of the table. **ICS approved the parametric table.**

4. Analysis of PJM Model

John Adams (NYSRC-Consultant) showed a table of PJM model from 2012 to 2016 and it showed that each year PJM was getting a little more reliable. He also pointed out that PJM to SENY transfer limit was increased by about 50% (about 1000 MW) last year and that helped reliability.

In addition, Mr. Adams said TOTS project that enabled more capacity to flow into the LHV locality had a direct impact, along with PJM being more reliable, on dramatically reducing zone J's LCR.

Chair Hogan wondered if J's LCR followed the behavior of PJM model show in the presentation. Josh Boles (NYISO) said the LCR for 2014 was 86% and 2015 was 83.5%.

Kelli Joseph (NRG) wondered if intermittent new PJM generation (like wind or solar unit) had any impact. Mr. Adams and Frank Ciani (NYISO) said that intermittent units are modeled as a thermal unit that is already derated. Vice Chair Chu said that we are more conservative this way because the units would never see 100% capacity, where as if they were modeled as a modifier, they could operate at maximum capability at times. Scott Leuthauser (HQUS) asked if PJM's reserve margin calculation uses the max capacity or the derated capacity. Mr. Adams said he does not know. Dr. Jiang believes that in their calculation they used derated capacity.

Mr. Younger finds it hard to believe that the improvement of PJM from 0.23 to 0.14 caused such a big difference in J LCR. Mr. Adams said that UPNYSENY uprate from TOTS was a major contributor. Henry Chao (NYISO) said that Staten Island Unbottling TOTS project is also a major contributor.

Mr. Boles said that the NYISO is very concerned with the large swing of J's LCR from year to year. He said that operations and planning groups are looking at the level of emergency assistance that both group could comfortably rely upon. Mr. Adamson wondered if this something we would hear by the end of the day because the group needs to lock down the model by today. Mr. Boyle reminded

the group that we do have the option to run a special case (with tan 45) in November, so we don't have to hold up the study if the NYISO will come back with some modeling changes.

Mr. Scheiderich mentioned that there will be a very large concentration of solar units/penetration in Maryland. He thought perhaps those are not deliverable. He also said PJM changed their load forecasting, significantly lowering the forecast and caused some objections from their member.

Mr. Chao wondered if the group would defer the model determination later at a conference call until the NYISO can provide additional information before the EC meeting. Chair Hogan said that Policy 5 adjustment to 0.145 already limited PJM's assistance and we knew all along that PJM had more resources and lower load. But Mr. Chao said that there may be additional factors like transmission constraint in east Jersey that may also have affected J's LCR that isn't clear at this time.

5. Sensitivity Cases

Chair Hogan said that we needed to add an additional case to 7 – ISO-NE forward capacity market for two different levels of capacity sales, previously agreed upon by the members.

Mr. Ahmed would like the NYISO to run a sensitivity case with average wind shape since we have a couple years of shapes to utilize. Chair Hogan thought since we have tangent 45 results for both 2014 and 2015 wind shape in the model, which are extreme cases on upper and lower boundaries, the average shape results may not be that informative.

Mr. Younger suggests that the NYISO need to come back with the recommendation on modeling PJM emergency assistance that NYISO Operations may be comfortable with. He also recommended that a tangent 45 on the modeling fix would be very important.

Mr. Boyle thought case 8 (New wind shape model) has a low priority, since the new modeling function needs more study than just a sensitivity case. He also supports Dr. Ahmed at looking at the wind shapes, possibly at an average shape and determine if 2014 shape is truly an outlier. A white paper may even be necessary. Mr. Boyle said it would be helpful to know how much wind data GE actually has. Chair Hogan said that case 8 is needed, Mr. Adamson concurred with that because of his conversation with EC member Mike Mager who has accepted using 2013 wind shape for this year under the condition that a sensitivity case would be performed with the new model.

Dr. Ahmed does not understand why we would study a sensitivity case (#12) that used the same PJM model as last year, when PJM has a model for this year. He was also wondering why we would choose LOLE of 0.234 for case 11. The idea behind case 11 and 12, Mr. Drake said, was that since we were uncomfortable with PJM's model this year, these two cases would give us an idea on the IRM impact if we were to use last year's model and/or LOLE level. Mr. Ahmed support running case 11, but with a different and justified LOLE level. He does not agree with running case 12 at all since we've spent a lot of time already setting up PJM model and it is unlikely for us to go back use last year's model. Mr. Patka suggested that using a level of emergency assistance/transfer capability that the NYISO is comfortable relying upon to set up case 11. Mr. Boyle suggested that using last year's transfer capability for case 11. Mr. Patka commented that may not be the level the NYISO is comfortable with, and Mr. Boyle said as long as the topology can support that transfer capability, we should use it. Vice Chair Chu agreed with using emergency assistance as a possible basis for case 11. He also agreed with Dr. Ahmed that we should not be performing case 12 because we don't normally replace a year's model with the previous year's model and we didn't do this for other regions. Case 12 will give us very little information that we can use. Mr. Boyle was concerned if emergency assistance would expose UDRs in the model. Vice Chair Chu said that it would not be revealed if the NYISO provide the flows in totality since the model does not segregate the contract flow versus emergency assistance flow. Chair Hogan asked if the NYISO knows the difference on emergency assistance level from year to year. Mr. Walters said there's an increase of 20 to 25% on the level of emergency assistance year over year. Mr. Scheiderich said that the NYISO should probably check with PJM to

understand the amount of assistance we can rely on. Mr. Walters said they have spoken with PJM and they would not commit to an amount of emergency assistance, but would try to assist NY if needed.

As a part of this emergency assistance conversation, the NYISO confirmed that TOTS project has significant impact on the LCR lowering effect, since PSEG-LI was concerned about the large drop in LCR year to year.

Vice Chair Chu said that we should prioritize case 13 which deals with identifying emergency assistance set as last year's level, and then the NYISO should tackle case 12 that sets PJM at an LOLE of 0.234. Mr. Adamson suggested that a tangent 45 should be performed on case 13. In the end, Ms. Zannat was comfortable with performing these two cases only, and the list of cases has shortened to 12 cases only, with the case that roll back PJM to last year's model being eliminated.

ICS will have a conference call for Wednesday morning 8:30 AM 10/7 to discuss sensitivity case results.

The group agreed to add a run with TOTS project removed so the group would understand the projects' impact on IRM/LCR, but the NYISO does not need to perform this sensitivity case run before report is completed. **(AI 176-1)**

6. SCR Test Performance

ICS is asking Vijaya Ganugula (NYISO) to come back at the next meeting to discuss this topic. **(AI 176-2)**

7. Database QA

Mr. Drake confirmed that TO and GE findings have been incorporated into the base case. He didn't have anything to present but it will be ready for the IRM report.

8. Final Base Case Assumption Matrix

Chair Hogan asked if reliability study on Huntley units have been completed. The NYISO said that the study won't be completed by final base case lock down.

ICS approved the final base case assumption matrix, with the NYISO updating the peak load forecast with Mr. Maniaci's numbers from earlier this meeting.

9. Transmission Outage Working Group

Vice Chair Chu said that Mr. Adamson wrote a final report for the group and circulated it among the working group. The deadline for the working group comments is due on October 2nd and the report will be circulated to the general ICS group for discussion at the next meeting.

Secretary: Gregory Chu

(Con Edison)

Next meetings:

Meeting 178, Monday, November 30th at NYISO HQ
