

**Final Minutes**

**New York State Reliability Council**

**Installed Capacity Subcommittee**

**Meeting #179 – January 7, 2016**

**NYISO Corporate Center, Rensselaer NY**

**Attendees**

**Present    Phone**

**Members / Alternates:**

Rich Wright (CHG&E) .....	<input type="checkbox"/>	<input type="checkbox"/>
Dmitriy Kiselev (Con Edison) .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Howard Kosel (Con Edison) .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Sanderson Chery (Con Edison) .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Khatune Zannat (PSEG LI) .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mariann Wilczek(PSEG LI), <b>ICS Vice Chair/Secretary</b> .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Syed Ahmed (National Grid) .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Bart Franey (National Grid) .....	<input type="checkbox"/>	<input type="checkbox"/>
Richard Brophy (NYSEG-RGE) .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
John Tigue (NYSEG-RGE) .....	<input type="checkbox"/>	<input type="checkbox"/>
Bob Boyle (NYPA), <b>ICS Chair</b> .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Tim Lundin (NYPA) .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mark Younger (Hudson Energy Economics, LLC – Wholesale Sellers) .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mark Cordeiro (PLM, Inc – Municipals & Electric Coops) .....	<input type="checkbox"/>	<input type="checkbox"/>
Mike Mager (Couch White – Large Consumers) .....	<input type="checkbox"/>	<input type="checkbox"/>

**Advisers/Non-member Participants:**

Al Adamson (Consultant) .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
John Adams (Consultant) .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Erin Hogan (UIU) .....	<input type="checkbox"/>	<input type="checkbox"/>
Kelvin Chu (GE) .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Liam Baker (US PowerGen) .....	<input type="checkbox"/>	<input type="checkbox"/>
Scott Leuthauser (HQUS) .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Kelli Joseph (NRG) .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
James Scheiderich (ECS).....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Chris LaRoe (Brookfield Renewables) .....	<input type="checkbox"/>	<input type="checkbox"/>
Greg Drake (NYISO).....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Frank Ciani (NYISO) .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Dana Walters (NYISO) .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Josh Boles (NYISO) .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Steve Lemme (NYISO) .....	<input type="checkbox"/>	<input type="checkbox"/>
Kai Jiang (NYISO) .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Bill Lamanna (NYISO) .....	<input type="checkbox"/>	<input type="checkbox"/>
Carl Patka (NYISO).....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Brian Hodgdon (NYISO).....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Vijay Ganugula (NYISO).....	<input type="checkbox"/>	<input type="checkbox"/>
Alan Ackerman (CES).....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Norman Mah (Con Edison Solutions).....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Matt Cinadr (E-Cubed) .....	<input type="checkbox"/>	<input type="checkbox"/>

**1. Review of Action Items List**

Chair Bob Boyle reviewed the action item list. Several action items (161-5, 170-7, 178-1, 178-2 and 179-1) were noted as potential white papers with scheduled completion dates to be determined based on priorities that will be assigned at the February 3<sup>rd</sup> ICS meeting. Item 168-2 (The NYISO to report back to the ICS on the ICAP metric (LCR study) finding from LCR TF) was removed from the action item list and will become a permanent agenda item. Mr. Dana Walters noted that on January 14<sup>th</sup>, a meeting of the LCR Task Force has been scheduled where the NYISO’s consultant FTI will report on a study that was performed. Item 169-1(Track the development of Northeastern MOUs and its effect on our IRM study, specifically transmission interface modeling) was removed from the action item list and will become a permanent agenda item where the NYISO will report progress at each meeting. Additionally, Mr. Mark Younger was removed as a responsible individual from this item. On item 170-8, Chair Boyle removed both Mr. Younger and Mr. John Adams as responsible individuals and added Mr. Walters as the responsible individual. Mr. Younger noted that this action item has become more relevant with 8760

hours now used in the studies. Chair Boyle noted that 170-9 (Develop IRM Study Guide document) is very low priority for 2016. Mr. Adams suggested that an outline put together in February 2015 as well as the work he has completed on the guide be sent to Chair Boyle and Ms. Wilczek before a final determination on priority is to be made at the February ICS meeting. Mr. Kelvin Chu from General Electric commented on item 173-1. General Electric thinks by adding another class of units, EL3( combination of a thermal unit and EL2), they could model this type of unit. General Electric will give a presentation at the February ICS meeting. Item 174-1 was removed from the action item list as completed per Mr. Greg Drake. The load shape methodology did not change last year, but was automated. Mr. Drake will provide an update to the status of item 174-2 at February ICS. Item 174-4 was determined to be completed for the 2016 IRM and removed from the list. Item 176-1 was removed from the list as Mr. Al Adamson noted that no sensitivities have been discussed for the upcoming 2017 IRM. Chair Boyle revised the date for item 177-1 to June 2016 based on the draft milestone timeline. Mr. Bill Lamanna was added as the responsible individual. Mr. Howard Kosel from Con Edison noted that the issue is that the flow on ABC lines was limited to 1000 MW due to the wheeling contract. He noted that Con Edison has publicly stated, as of now, they will not renew the wheel; however, Con Edison will make the final decision in April 2016. As a result, the topology change made last year may become irrelevant and would need to be changed. Mr. Younger expressed a concern that an item be added on the amount of emergency support that we can receive from our neighbors. Item 179-1 was added to capture this as well as to note this was part of a potential white paper.

## **2. 2017-2018 IRM Study Schedule and Process Milestones**

Chair Boyle noted that he and Ms. Wilczek met with Mr. Drake and Mr. Walters at the NYISO to finalize the timeline. It was developed jointly with the NYISO to ensure the deliverables could be met. Chair Boyle noted there were identified areas where the NYISO needed additional time beyond the scheduled meeting. As a result, an additional meeting was scheduled in both August and November. He reviewed the timeline and noted several key areas of work for the upcoming year. The first area discussed was the identification and prioritization of the white papers. Mr. Drake noted that the white papers are not restricted to the NYISO and solicited ICS members with ideas for white papers and scopes. Chair Boyle asked for ICS members to respond by January 29<sup>th</sup>. He asked the NYISO to provide a priority list for the white papers at the February 3<sup>rd</sup> meeting. The scopes for the white papers will be developed during the month of February.

Mr. Adamson noted that the transmission topology is one of the most important inputs to the IRM study and expressed some concern on the June 1<sup>st</sup> date that the NYISO is to provide the topology to the ICS. Chair Boyle suggested a standing agenda item to look forward two months and review the status of the deliverables to the ICS.

Additional discussion took place on the white papers. Chair Boyle noted that at the June 29<sup>th</sup> meeting the ICS will determine if any modeling enhancements are needed as a result of the white papers. He noted his expectation that the outside world modeling white paper would be the most complex consisting of multiple pieces and all of these components may not be completed this year. Mr. Adamson and Mr. Walters expressed concerns over the wording of the white paper milestones. Mr. Adamson noted the intent was to present completed and approved white papers to the EC as they are done and not present the EC with all of the white papers on July 8<sup>th</sup>. Mr. Walters expressed a concern that there may be interactive decisions between them which would determine any proposed modeling enhancements to be used in the 2017 study. Chair Boyle addressed both concerns by bringing the white papers to the EC as soon as they are completed and approved noting there may be an update that has to happen in July.

Chair Boyle expressed some concern with the July 31<sup>st</sup> date to provide the master input file to GE. The NYISO is unable to send the file to GE earlier which was identified as a risk. A teleconference was added on August 15<sup>th</sup> as the Tan 45 takes additional time to meet the August 30<sup>th</sup> date. There is significant work being done in September to meet the October deliverables as October is a lockdown month.

The discussion turned to the handling of special sensitivity cases. Mr. Adamson noted that the white paper/policy statement should address how to avoid what happened last year in revising the report at the very end due to a special sensitivity. Mr. Walters agreed that we do not want to encourage rewriting the report and turning it into the base case. Chair Boyle was concerned at not capturing the level of effort in the schedule if the EC directs the ICS to make changes. Mr. Walters noted that if the EC chooses to vote on a special sensitivity, the revisions would be for November 28<sup>th</sup> and the report should not be rewritten after that. Mr. Adamson agreed that the EC is very careful to meet the NYISO timeline to deliver the final IRM which is the 1<sup>st</sup> week of December. Although the EC approves the final IRM, the report is very important as it goes to FERC. Chair Boyle agreed with the concerns raised and revised the schedule to move the approval of the special sensitivity case (if there is one) to November 15<sup>th</sup>. The EC

will need to make their decision on November 16<sup>th</sup> for inclusion for review in the report for the November 28<sup>th</sup> ICS meeting. Both Mr. Walters and Mr. Drake continued to express concerns about making a special sensitivity into a base case. They felt the results should be included in the report but did not want to leave the door open to revise the prior base case to a new base case. Chair Boyle noted that if directed by EC, ICS will deliver a revised IRM report incorporating the special sensitivity results. Mr. Adamson noted that Policy 5 dictates certain rules the ICS would like the EC to abide by. Mr. Walters reiterated that it should not be characterized as rewriting the report to make it a base case. Chair Boyle noted that everyone agrees that no one wants to rewrite the IRM report. We will capture these thoughts in the white paper. The discussion of the timeline was completed.

### **3. Review Inventory of Issues to Consider for 2017 IRM Study:**

#### **White Papers**

##### **3.1. Outside World Model**

Chair Boyle noted that ideas should not be limited Policy 5. He noted that it should not apply just to PJM but also to ISO-NE and eventually the IMO. Mr. Drake added that he would be looking for outside world models that provide consistent emergency assistance from year to year without wild swings. Chair Boyle made note of operations position of not being comfortable modeling the ties wide open. However, this is a planning model and if there is availability why should there be a limit to the amount. Mr. Younger noted there is one aspect of the current modeling of emergency supply where MARS turns on every unit in PJM since it may need to provide emergency assistance to New York. This is part of what makes operations uncomfortable with what has been modeled. Mr. Younger continued that it has not been an issue in the past since transmission limits have blocked it but we can't assume that every unit in PJM would be turned on to provide emergency supplies to New York and yet that is what the model is doing today. He offered that we might consider a way to limit how much more PJM would be dispatching its units in the model over and above the amount it needs for its own loads and this should apply to New England as well. Mr. Drake noted these are good ideas we want to explore further. Chair Boyle noted that additional thoughts be sent to the Mr. Drake and the ICS list by Friday, January 29<sup>th</sup> to allow the opportunity for review prior to the February 3<sup>rd</sup> meeting.

##### **3.2. Multiple Year Wind Shape**

Mr. Drake indicated that it appears a recommendation of four years of data will be appropriate to use. Another item to be discussed in the paper will be the treatment of new wind units. Currently, we use

wind data that was collected in 2005 or earlier and at that time the hub height they were collecting data was lower than the plants coming on line. We would need to find another source of data for the new units. The white paper will examine these items.

### **3.3. Special Sensitivities**

Mr. Younger asked for clarification on this item. He noted that a white paper is an identified issue that looks at the best way to model it. Chair Boyle indicated this item was the result rewriting the last IRM due to the special sensitivity. Mr. Adamson concurred that the ICS should rethink how to approach special sensitivities to avoid having the EC, at its December meeting, change a special sensitivity into the base case. The idea of the paper is to address that issue. Chair Boyle agreed it would be more appropriate to call it a policy statement instead of a white paper.

### **3.4. SCR Modeling**

Chair Boyle noted that at the November 30<sup>th</sup> ICS, Mr. Vijay Ganugula had presented ideas on the different ways to calculate the reliability of SCR units. The ICS would like him to present his thoughts in a white paper for the ICS to review.

Chair Boyle solicited additional items for consideration for white papers. Mr. Drake offered two. The first is to compile a list of methodology choices to conduct sensitivity cases with. He noted that once the list of sensitivities is developed, we will assign which methodology to use for each of them. He felt this would be a quick white paper. The second is on the load shape selection. He noted there is a point in time where the load shapes become too dated to be useful. This will be an examination of that.

Discussion returned to the outside world model. Chair Boyle did not want to limit the outside world to PJM. Some items were suggested for consideration. The first is the IMO will be coming on and how do we model. The second was the granularity of ISO-NE with modeling eleven or thirteen zones. He noted the topic of the treatment of forward capacity as well as accounting for transmission upgrades between PJM and NY. He anticipated multiple items within the scope of the paper that will need to be prioritized. He reminded the group that what is done for PJM will transfer to ISO-NE and the IMO once they have a capacity market.

Mr. Drake brought up the treatment of generator outages. These consist of the retirement of units, mothballing of units, in addition to ICAP ineligible forced out units. There are instances where units are in an ICAP ineligible forced outage and not receiving ICAP payments but have a plan to repair. Mr. Younger opined if there is a credible plan for unit to come back before summer then it seems reasonable

to be in the model. For any other unit that went out, either if it filed notice or went out through an IIFO, and doesn't have a credible plan to come back, then it should not be represented as available. Chair Boyle noted this is where we will need a policy statement and added this topic to the February ICS agenda. Mr. Walters volunteered the NYISO to bring forth a presentation to discuss outage states. It was added to the action item list.

#### **4. Lessons Learned**

Chair Boyle reviewed solutions to averting potential issues.

##### **4.1. PJM Model Review**

Chair Boyle noted that the NYISO was allotted extra time in the upcoming schedule for to address items such as new lines coming in, the amount of emergency assistance, and the five bubble model versus four bubble model.

##### **4.2. NE Forward Capacity Sales**

Chair Boyle noted this is not an issue for the 2017 IRM but in 2018 there are 1000 MW of New York resources that were selected in the ISO-NE forward capacity market that is scheduled to leave New York. He noted the expectation that the reconfiguration auction will bring a portion back but there are different ways to look at modeling this. There are capacity resources that would need to be removed from the MARS model as unavailable. He noted we don't have enough data at this point but we need to have some kind of methodology to forecast what is likely to happen in the next year. Chair Boyle created a task force that will meet quarterly to discuss. There was a desire to limit the group to no more than six individuals. Volunteers for the task force are Bob Boyle, Mark Younger, Kai Jiang, Mariann Wilczek, Kelli Joseph and Josh Boles.

##### **4.3. SCR Modeling**

Chair Boyle noted the solution is to have a white paper for the ICS to make a determination.

##### **4.4. Beta Modeling**

Chair Boyle noted that all agree to not use beta models in any shape or form in the base case.

##### **4.5. Wind Year**

Chair Boyle noted the solution will be the adoption of the final version from GE.

Chair Boyle noted that he will bring these lessons learned to the EC tomorrow. There were no additions from the group.

## 5. Additional Agenda Items

None were noted.

*Secretary: Mariann Wilczek (PSEG LI)*

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### Upcoming meetings:

Meeting 180, Wednesday, February 3<sup>rd</sup> at NYISO Corporate Center

Meeting 181, Wednesday, March 2<sup>nd</sup> at NYISO Corporate Center

Meeting 182, Tuesday, March 29<sup>th</sup> at NYISO Corporate Center

Meeting 183, Wednesday, May 4<sup>th</sup> at NYISO Corporate Center

Meeting 184, Wednesday, June 1<sup>st</sup> at NYISO Corporate Center

Meeting 185, Wednesday, June 29<sup>th</sup> at NYISO Corporate Center

Meeting 186, Wednesday, August 3<sup>rd</sup> at NYISO Corporate Center

Meeting 187, Tuesday, August 30<sup>th</sup> at NYISO Corporate Center

Meeting 188, Wednesday, October 5<sup>th</sup> at NYISO Corporate Center

Meeting 189, Wednesday, November 2<sup>nd</sup> at NYISO Corporate Center

Meeting 190, Monday, November 28<sup>th</sup> at NYISO Corporate Center