

# NYSRC Installed Capacity Subcommittee

Meeting #145

**February 26th, 2013**

**10:00 a.m. – 3:00 p.m.**

Meeting Minutes

## Attendees

|  | Present                             | Tel                                 |
|--|-------------------------------------|-------------------------------------|
| Members / Alternates:  |                                     |                                     |
| Mr. Curt Dahl (LIPA) .....                                     | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Ms. Polina Adelson (LIPA) .....                                | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Mr. Yuri Fishman (LIPA) .....                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Ms. Kathune Zannat (LIPA) .....                                | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Mr. Rich Wright (CHG&E) .....                                  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Mr. Luting Pan (Con Edison).....                               | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Mr. Gregory Chu (Con Edison), <b>Secretary</b> .....           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Mr. Kelvin Chu (Con Edison) .....                              | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Mr. Syed Ahmed (National Grid) .....                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Mr. Bart Franey (National Grid).....                           | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Mrs. Patricia Caletka (NYSEG-RGE) .....                        | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Mr. Edward Gilroy (NYSEG-RGE) .....                            | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Mr. John Tigue (NYSEG-RGE) .....                               | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Mr. Richard Brophy (NYSEG-RGE) .....                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Mr. Robert Boyle (NYPA), <b>Chairman</b> .....                 | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Mr. Andrea Fossa (NYPA) .....                                  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Mr. Bradley Kranz (NRG Energy, Inc.) .....                     | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Mr. Chris LaRoe (IPPNY).....                                   | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Mr. Mark Younger (Hudson Energy Economics, LLC) .....          | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Mr. Mark Cordeiro (Municipal Power Agency) .....               | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Mr. Michael Mager (Couch White, LLP), <b>EC Chairman</b> ..... | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Advisers/Non-member Participants:                              |                                     |                                     |
| Mr. John Adams (NYISO) .....                                   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

- Mr. Peter Carney (NYISO) .....  .....
- Mr. Frank Ciani (NYISO).....  .....
- Mr. Dave Lawrence (NYISO) .....  .....
- Mr. Greg Drake (NYISO).....  .....
- Mr. Bill Lamanna (NYISO) .....  .....
- Mrs. Kathy Whitaker (NYISO) .....  .....
- Ms. Mariann Wilczek (NYISO) .....  .....
- Mr. Steve Lemme (NYISO) .....  .....
- Ms. Erin Hogan (NYSERDA) .....  .....
- Mr. Ed Schrom (NYPSC) .....  .....
- Mr. Al Adamson (Consultant).....  .....
- Mr. Frank Vitale (Consultant) .....  .....
- Mr. Arthur Maniaci (NYISO) .....  .....
- Mr. Scott Leuthauser (Consultant for H.Q. Services) .....  .....
- Mr. Henry Chao (NYISO) .....  .....
- Mr. Howard Tarler (NYISO) .....  .....
- Mr. Wes Yeomans (NYISO).....  .....
- Mr. Paul Gioia (NYSRC) .....  .....
- Mr. Dana Walters (NYISO) .....  .....
- Ms. Donna Pratt (NYISO) .....  .....
- Mr. David Allen (NYISO).....  .....
- Mr. Kai Jiang (NYISO) .....  .....
- Mr. Mark Walling (GE) .....  .....
- Mr. Gary Jordan (GE) .....  .....
- Mr. Glenn Haake (NYPA).....  .....

Guests Present:

- Mr. Charlie Shafer (AES) .....  .....
- Mr. Dean Ellis (Dynergy) .....  .....
- Mr. Jim D'andrea (Transcanada) .....  .....
- Mr. Alan Ackerman (Customized Energy Solutions).....  .....
- Dr. Roy Shanker .....  .....
- Mr. Phil Fedora (NPCC).....  .....

|  |                                     |       |                                     |
|--|-------------------------------------|-------|-------------------------------------|
| Mr. Arvind Jaggi (NYISO) .....                           | <input type="checkbox"/>            | ..... | <input type="checkbox"/>            |
| Mr. Frank Francis (Brookfield) .....                     | <input type="checkbox"/>            | ..... | <input type="checkbox"/>            |
| Mr. Tom Patrit (EPS) .....                               | <input type="checkbox"/>            | ..... | <input type="checkbox"/>            |
| Mr. Ruben Brown (The E Cubed Co.) .....                  | <input type="checkbox"/>            | ..... | <input type="checkbox"/>            |
| Mr. John Dalwin .....                                    | <input type="checkbox"/>            | ..... | <input type="checkbox"/>            |
| Mr. Richard Quimby .....                                 | <input type="checkbox"/>            | ..... | <input type="checkbox"/>            |
| Mr. Randy Wyett (NYISO).....                             | <input type="checkbox"/>            | ..... | <input type="checkbox"/>            |
| Mr. John Dowling (Luthin Associates) .....               | <input type="checkbox"/>            | ..... | <input type="checkbox"/>            |
| Mr. Nicholas Occhionero (NYPSC) .....                    | <input checked="" type="checkbox"/> | ..... | <input type="checkbox"/>            |
| Mr. Timothy G. Lundin (Customized Energy Solutions)..... | <input type="checkbox"/>            | ..... | <input type="checkbox"/>            |
| Mr. Norman Mah (Con Edison) .....                        | <input type="checkbox"/>            | ..... | <input type="checkbox"/>            |
| Mr. Matt Renninger (Energy Curtailment Specialist) ..... | <input type="checkbox"/>            | ..... | <input checked="" type="checkbox"/> |
| Ms. Kathy Slusher (SUNY) .....                           | <input type="checkbox"/>            | ..... | <input type="checkbox"/>            |
| Mr. Rick Roby (Dynergy).....                             | <input type="checkbox"/>            | ..... | <input type="checkbox"/>            |

## 1. IRM Study Milestone Schedule

Al Adamson (NYSRC – Consultant) sent out a revised version of the milestone schedule to the ICS members a week prior to the meeting.

Mr. Adamson said that the lockdown date for base case assumptions, which is in October, will be presented to the executive committee for approval. He added that the NYISO will determine the final IRM and the tangent 45 curves after the lockdown date in October.

Additional updates after the lockdown date will be considered at a separate ICS call to determine if a sensitivity case should be performed for the updates by November 15<sup>th</sup>.

Chairman Bob Boyle (NYPA) asked if the NYISO would have an issue with the current version of the schedule. Gregory Drake (NYISO) said that the amount of changes for the special sensitivity case should be reasonable to avoid doing the entire case all over again. Chairman Boyle reassured that only major changes would be considered for this sensitivity case.

Mr. Adamson wondered if the two weeks is enough to perform new tangent 45 curves if it is deemed necessary. Mr. Drake said it would take one week to do the curve and another for review, so that should be fine.

## **2. Assumption Matrix**

Mr. Drake suggested that only the red line changes be discussed at this meeting.

The row of Transition Rates would be kept in the assumption matrix.

Wind resources have typically been modeled with 2002 simulated data. The NYISO is transitioning into using 2012 actual data. Mr. Drake stated that capacity value would be 18%, instead of 11%. Also, the shape should be randomly selected based on John Adams' (NYISO) previous study.

Mr. Adams stated the higher percentage came from higher penetration of 100 meter towers. Mr. Adamson asked if the 18% came from summer peak period, which Mr. Adams said it is higher in the winter.

Mr. Younger recommended that if we truly would like to create a random shape, one should be generated statistically, instead of using some historical shape. His concern was that applying a specific shape to a different, unrelated year, may yield unusual/inaccurate results. Mr. Younger has agreed to provide, in writing, the details of this suggestion. **(AI 145-1)**

Mr. Drake said that the derates of non-NYPA hydro resources need to be confirmed.

Mr. Adamson asked if the June deadline for the assumption matrix is achievable. The concern Mr. Drake had about the deadline was on the white papers.

Mr. Drake will put together some words for Policy 5 regarding external areas, in particular to PJM's LOLE of 0.4 **(AI 145-2)**

### 3. Use of Normal vs. Emergency Limits

Mr. Adamson said that our criteria asked for emergency limits to be used in the model. The NPCC study does not explicitly state if the limits need to be normal or emergency ratings. Frank Ciani (NYISO) said that the planning process would assume operators would do everything possible to avoid load shedding, which would include emergency limits. Chairman Boyle asked if the model used normal ratings, would MARS increase the limits to emergency when the need arise. Mr. Drake said that an EOP step may be able to accomplish this.

Mr. Younger wondered if the planners were depending on meeting the 0.1 LOLE without the need to exercise the reserve, then we should follow suit. He stated that the result shouldn't change with an EOP step.

Syed Ahmed (National Grid) stated that from the ISO-NE point of view, they used long term emergency ratings in their planning process because of the forward capacity market that's looking 3 years ahead. Since NYISO is only looking at a one year period, using short term emergency ratings may be more appropriate. He also cautioned that there are other factors that determine the ratings so it is complicated.

Mr. Younger is concerned that our model is implying that the system can remain reliable operating at short term emergency for days on end. Mr. Adams and Dana Walters (NYISO) said that one needs to be careful since the limits are determined with a different model (power flow) than MARS with different assumptions and is primarily focused on equipments that are not modeled in detail with MARS.

Gregory Chu (Con Edison) stated that while Mr. Younger is concerned with the time duration of short term versus long term emergency limits, MARS counts any amount of time as a single daily loss of load, even if it exceed it by only 1 second. In other words, choosing which limit to use based on the amount of time it is capable at that rating may not be that significant to the model as the model does not make a distinction between 15 minutes (STE) versus 4/12 hours (LTE).

Chairman Boyle suggested postponing this conversation until the expert Bill Lamanna (NYISO) is present. One important point to consider is the limitation of MARS software and its inability to mimic another model's objective, which could be based on rules of operation. Mr. Younger would like to see the difference between STE, LTE, and normal ratings from the NYISO. **(AI 145-3)**

#### **4. NYISO Demand Response Report**

Donna Pratt (NYISO) presented the summer 2012 event response at the meeting. She discussed the reporting process, and went over the definition for mandatory and voluntary response for SCRs.

Chairman Boyle wondered if voluntary response hours would be counted in the performance calculation. Ms. Pratt said no.

June 21, 2012 had a partial voluntary event, which is HB 12 for zone J due to a lack of advance warning given to participants. The 3 event dates with mandatory response hours were June 20, 21, and 22.

Mr. Younger commented that since there were so many voluntary events due to a lack of advance warning, he felt that SCRs were not being modeled correctly. The assumed response rate should include the possibility that the response is pursuant to a call that lacked the advance warning. Chairman Boyle mentioned that we as a group need to consider if SCR should be modeled differently due to voluntary participation.

Mr. Chu asked if the ICAP MW listed for the mandatory response data obtained through actual measurement or were they calculated values. Ms. Pratt said it was calculated. Mr. Chu asked if it was computed the same way previously mentioned at the prior presentation and Ms. Pratt responded affirmatively.

Mr. Younger asked if CBL response is available and Ms. Pratt said that the NYISO is working on it and will present them at a later meeting, along with performance rating. Mr. Younger reiterated that the voluntary aspect of the

program needs to be reviewed when the NYISO returns with CBL response and performance rating.

## **5. Lessons Learned**

Chairman Boyle said that Mr. Adamson and Mr. Drake put the list of the lessons learned together and the proposed initiatives to address these concerns.

Mr. Drake said that GE data review was late was due to an expiring contract. That should not be a problem in the future.

Mr. Drake did not see an issue with the new lock-down date and the associated special sensitivity issue.

Mr. Drake commented that there were too many papers to complete last year. Wind modeling and multi-year load shape are two white papers for this year's study. Merging of IRM/LCR process may require one. Changing of transfer limit ratings may require another, but Mr. Adamson and others did not believe that a white paper is actually needed.

The production process of the IRM report was discussed and the discussion was recommended to be continued off line.

Mr. Ciani mentioned that GE masked everything when they returned the base case to the quality assurance participants. The NYISO is working with GE to making sure that non-confidential data is not masked. Chairman Boyle recommended legal should support this process. Mr. Chu commented that the key isn't about masking the confidential data correctly, but rather, keeping non-confidential data from being masked. The QA process was significantly delayed due to an inability to review data that should have been made transparent, but were not and thus the parties were unable to confirm if the database was fine.

## **6. New Capacity Zone**

Chairman Boyle said that the NYISO proposed methodology for determining LCR for the new capacity zone was discussed at length at previous meetings. He asked if the members felt there are problems with the methodology.

Rich Wright (Central Hudson) recapped the methodology as the NYISO would perform tangent 45 to obtain zones J and K LCR first, then determine the remaining capacity from G through K. Mr. Younger said that since J and K LCR was determined first, all of the capacity in G-I is needed.

Yuri Fishman (LIPA) asked about the need for NCZ. Mr. Younger said that due to constraint identified at UPNY/SENY, the market needs a price signal to encourage new generation and to keep existing generation south of the interface to maintain reliability. Mr. Fishman countered that if, for example, Roseton retires, LCRs for J and K would increase and we would still be at LOLE of 0.1. We are still reliable. Chairman Boyle stated that the zone is created for price separation due to a deliverability issue, and the zone is not needed for a reliability issue. Mr. Younger stated that it is a reliability issue since without the proper price signal, generation can and will retire, and was evident in the impact of Danskammer retiring. Chairman Boyle further stated that no stop gap solution was needed, and the LCR of both J and K increased with no reliability issue. He was uncertain about the future role of the ICS on this matter. Mr. Drake mentioned that retirements in zones G-I will have an impact in the future when there's not enough capacity to even maintain NYCA LOLE 0.1. Chairman Boyle replied that this may be the case in the far future, and the ICS is looking at the near future.

Chairman Boyle asked the consensus of the members regarding the information he needs to present in front of the Executive Committee. Mr. Ahmed said that since there has not been enough time to study the effects of the proposed methodology, we cannot say if the method is going to work or not.

Chairman Boyle rephrased and asked if this methodology in the long run would support reliability of the system and if it is the best method. Mr. Younger said that the method should support the reliability of the system. Mr. Fishman agreed with Mr. Ahmed that there's not enough time to fully review the impact of the



methodology, but on the surface the method would appear to meet the reliability standard. Mr. Chu agreed with Mr. Fishman that without sufficient time to analyze the impact, we can't tell if the method is the best, but in the absence of an alternative methodology, the proposed method would maintain the reliability standard. Mr. Adamson said that we'll need more time to review the methodology and perform tests to ensure it maintains reliability criteria. Mr. Wright agreed with everyone and said he would like to see other methods to be investigated. He also mentioned that Policy 5 will need to be modified. Frank Vitale (NYSRC – Consultant) was comfortable with the proposal, but do not know if there can be a “best” methodology. Scott Leuthauser (HQUS) thinks Chairman Boyle should just state the facts.

## **7. Counterflow**

Chairman Boyle stated that some of the transfer limits in the reverse direction (east to west, south to north) should not be relied upon, as he learned at a meeting that discussed deliverability. Mr. Younger recalled that some of these counterflow limits were not calculated. Mr. Ahmed recalled a conversation with Bill Lamanna on the Dysinger interface; they spoke about voltage issue that related to counterflow. Mr. Younger wondered why they can't calculate the limits for the reverse flow in the same way they calculate the regular flow direction limits. Chairman Boyle also thought this is very important especially we are now dealing with deliverability issue that led to the creation of a new zone. Mr. Chu stated that load flow studies were performed to establish the transfer limits with all of the interface responsible parties. Mr. Adams said some of the reverse flows were engineering judgment since we never see the flow going backwards. He further clarified that any 1999 MW interface limit is from engineering judgment. He also said it is very hard to force to flow backwards in the power flow model to obtain the needed limits. He thinks they need someone who is more familiar with the subject to come to the ICS meeting to discuss this topic. Mr. Ahmed said that the limits are calculated from the MUST analysis in PSS/E and he was concerned that Total East interface of 1999 MW going east to west was an engineering judgment. He emphasized that there may be a situation where downstate capacity can flow backwards to support the system. He would like the NYISO to confirm which limits are calculated using MUST. He also would like to

know if these limits are good for long term planning studies (transmission security). **(AI 145-4)**

## **8. APA/EFORd**

Mr. Drake stated that they are talking to the programmer to test some situations but they do not have a conclusion on the deviations yet. Mr. Chu asked for an expected time of completion, which Mr. Drake responded that they will make a presentation at the next ICS meeting. **(AI 145-5)**

## **9. Policy 5 Modification**

Mr. Younger suggested a revision in Policy 5 to include/clarify a statement that allows shifts between zones ACD and JK. If shifting is only allowed one way, i.e. JK to ACD, and there are not enough resources in that zone, a curve cannot be generated since the current language does not make clear the possibility of shifting capacity downstate. He would create the language for this clarification.

**(AI 145-6)**

Secretary: Gregory Chu

*(Con Edison)*

---

Next meetings:

Meeting 146, Wednesday, April 3<sup>rd</sup> at NYISO HQ  
Meeting 147, Wednesday, May 1<sup>st</sup> at NYISO HQ  
Meeting 148, Wednesday, June 5<sup>th</sup> at NYISO HQ  
Meeting 149, Wednesday, June 26<sup>th</sup> at NYISO HQ  
Meeting 150, Tuesday, July 30<sup>th</sup> at NYISO HQ  
Meeting 151, Wednesday, September 4<sup>th</sup> at NYISO HQ  
Meeting 152, Wednesday, October 2<sup>nd</sup> at NYISO HQ  
Meeting 153, Tuesday, October 29<sup>th</sup> at NYISO HQ  
Meeting 154, Monday, December 2<sup>nd</sup> at NYISO HQ

---