

# NYSRC Installed Capacity Subcommittee

Meeting #108

February 2nd, 2010

9:30 a.m. – 2:30 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. Kelvin Chu (Con Edison) .....                                     | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Ms. Hilary Goldman (Con Edison) .....                                 | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Mr. Madison Milhous (National Grid) .....                             | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Mr. Syed Ahmed – filling in for Mr. Bart Franey (National Grid) ..... | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Mr. Steve Jeremko (NYSEG-RGE) .....                                   | <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. Rajee Mustafa (NYPA) .....  | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Mr. Han Huang (NYPA) .....  | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Mr. Glenn Haake (Dynegy, Inc. - Generation Owners) .....              | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Mr. Harry Joscher (PSEG Power, LLC) .....                             | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Mr. Chris Wentlent (AES-NY) .....                                     | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Mr. Mark Younger (Slater Consulting - Generation Owners) .....        | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Mr. Mark Cordeiro (Municipal Power Agency) .....                      | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Mr. Richard J. Bolbrock (MEUA/NYMPA) .....                            | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Mr. Rich Wright (CHG&E) .....   | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Ms. Erin Plasse – filling in for Rich Wright (CHG&E) .....            | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Advisers/Non-member Participants:                                     |                                     |                                     |
| Mr. John Adams (NYISO) .....  | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Mr. Peter Carney (NYISO) .....  | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Mr. Frank Ciani (NYISO) .....   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Mr. Clyde Custer (NYISO) .....  | <input type="checkbox"/>            | <input type="checkbox"/>            |

- Mr. Greg Drake (NYISO) .....  .....
- Mr. Bill Lamanna (NYISO).....  .....
- Ms.Tracy Landers (NYISO) .....  .....
- Mariann Wilczek (NYISO) .....  .....
- Ms. Erin Hogan (NYSERDA).....  .....
- Mr. Ed Schrom (NYPSC).....  .....
- Mr. Glenn Haringa (GE Energy).....  .....
- Mr. Gary Jordan (GE Energy).....  .....
- Mr. Al Adamson (Consultant) .....  .....
- Mr. Frank Vitale (Consultant) .....  .....
- Mr. John Pade (Consultant) .....  .....
- Mr. Arthur Maniaci (NYISO).....  .....
- Mr. Yannick Vennes (HQ) .....  .....
- Mr. Scott Leuthauser (Consultant for H.Q. Services) .....  .....

Guests Present:

- Mr. Robert Boyle (NYPA) .....  .....
- Mr. Frank Francis (BEMI) .....  .....
- Mr. Sam Krueger (Dynergy, Inc.).....  .....
- Mr. Alan Ackerman (Customized Energy Solutions) .....  .....
- Mr. Paul Gioia (NYSRC) .....  .....
- Mr. Chris De Graffenried (NYPA) .....  .....
- Dr. Roy Shanker .....  .....
- Mr. Liam Baker (US Power Gen).....  .....
- Mr. Wes Yeomans (NYISO) .....  .....
- Ms. Kathune Zannat (LIPA).....  .....
- Mr. Will Dong (NYISO) .....  .....
- Mr. Yuri Fishman (LIPA).....  .....

**1. Action Items**

**Closed**

**Revised**

- 98-4. Greg Drake/Frank Ciani to schedule time with Hilary Goldman from Con Edison to discuss questions from the output (ot.09 files). Due date extended to 3.3.2010.
- 100-5. NYISO to provide SAS code to Con Edison (Mr. Kelvin Chu) and LIPA (Ms. Kathune Zannat) to validate EFORD and transition rates. Due date extended to 3.3.2010.
- 101-2. Average pondage/run of river hydro units derate for past five years and worst year. Frank Ciani to report by next meeting. Due date extended to 3.3.2010.
- 102-4. Still awaiting documentation from NYISO about the final methodology/procedure used to model the sales from C, D, and E (about 716 MW) and other generation sources from NYCA to New England's FCM. ICS requested Mr.Greg Drake to document sensitivity A6 assumptions.
- 105-1. Still awaiting Mr. Carlos Villalba and Mr. Bill Lamanna to verify RECO model – due date pushed to 3.3.2010.
- 105-4. Mr. Bill Lamanna to be notified that he is to review flows from new model additions in PJM.
- 107-5. This action item was updated to focus specifically on the consideration of removing generation from areas of excess/bottled generation when calculating the minimum requirement. Committee to meet to discuss comments from action item 102-5 (new methodology for shifting capacity in areas of bottled generation) to determine appropriate methodology in accordance with Policy 5.

**New**

- 108-1. **GOES WITH ACTION ITEM 102-4:** Request for the NYISO to coordinate with the outside ISOs to verify that the priority for exports represented in the modeling is consistent with outside ISOs understanding of inter-ISO agreements. Additionally, ICS would like documentation explaining how internal and external transmission limitations are affected by different contract modeling options.
- 108-2. Committee to meet and discuss new methodology to shift generation from downstate to upstate using UCAP ratios (Kelvin Chu's presentation). ICS to vote on using new methodology for 2011-2012 IRM study.
- 108-3. Policy 5 revision suggestions (Mr. Greg Drake and Mr. Al Adamson). Discuss revisions that ICS will bring up during Policy 5 revisions by March meeting.
- 108-4 Review Table 1 calculations and assumptions for 2010 IRM study. Follow up information from Splinter Group.

**108-5:** An action item was created to develop a method for reporting a current year UCAP equivalent in IRM report. This will help to clarify UCAP meaning and how results of the IRM study impact NYCA in terms of dollars.

**108-6:** Methodology to model and set LOLE of neighboring pools.

**108-7:** Scott Leuthauser to review action items on page 100 of Energy Plan – ICS members to look for summaries of plan internally – specifically recommendations impacting reliability or capacity.

**108-8:** Perform a MARS run in which generation is removed proportionally to the generation of all zones.

## **2. Upstate/Downstate Study update**

2.1. To be discussed at March 3<sup>rd</sup> meeting.

## **3. 2010 Workplan – Continued**

3.1. Capacity shift methodology (**Item 3a on agenda**) – review comments from ICS members (Con Ed, Mark Younger, NYISO)

3.1.1. Carlos Villalba went over his proposal to continue removing generation from areas of excess capacity to calculate the minimum requirements. He stated that this methodology should also apply to the LCR calculation.

3.1.1.1. Mr. Carlos Villalba presented and explained a series of examples to demonstrate that removing generation from excess areas results in a system that contains the minimum requirement.

3.1.1.2. Mark Younger wanted to clarify that in Carlos Villalba's study, he makes the assumption that bottled generation occurs when all generation is on within a zone and causes some units to become undeliverable due to transmission constraints within that zone. Mark Younger also brought up the issue dealing with modeling assumptions due to Policy 5 presents a problem because it assumes that we lose MW in only A, C, and D and not in generation constrained zones E through I. This creates a bias result because we don't always lose generation in zones A, C, and D.

3.1.1.3. The issue gets summarized that if the ICS determines an IRM and LCR based on the assumption that if generation retires or is forced out in areas where there exists excess generation already (A, C, and D). This creates an issue with market signaling of excess generation.

Using the assumption stated above, the IRM is kept low with plenty of excess, which could cause incorrect market signaling, thus compromising the future resource adequacy.

- 3.1.1.4. Mark Younger provided an example that describes the bias situation created with removing generation from assumed areas of excess or bottled generation only: Take for example that to calculate the LCR for zone J, one assumes that the generation inside the Astoria generation pocket (bottled generation exists) can be removed first. The issue arises when you do this and then have a loss of generation at Gowanus, for example. Now, for reliability purposes, zone J must import more than the amount lost at Gowanus to meet the LCR. By assuming that you will only retire generation in areas of excess generation (in this example Astoria) allows the overall excess generation in comparison to the calculated LCR to be artificially high. Mark Younger suggested that instead, the LCR should be calculated by removing generation using an average or proportionate amount across all region of zone J instead of just removing from a region with bottled/excess generation. This takes out bias of assuming that generation will retire only in areas of excess or bottled generation only.
- 3.1.1.5. Carlos Villalba stated that when calculating reliability and calculating the minimum requirement for reliability purposes, implementing Policy 5 assumptions is correct. However, assumptions may need to be handled differently for market study purposes.
- 3.1.1.6. Greg Drake made two comments on this issue.
  - 3.1.1.6.1. Already have mechanism to model generation that isn't deliverable through dynamic ratings
  - 3.1.1.6.2. CRIS rights – new modeling mechanism. For new units, it is assigned a CRIS value to determine how much a unit can contribute to the capacity market and how much is deliverable using an average EFORd rate.
- 3.1.1.7. Mark Younger stated that although CRIS value won't help random outage occurrences.
- 3.1.1.8. Case G5 of 2010 IRM removed generation from A, C, D, F, G and H to study point and it raised IRM to 18.3% from 17.9%. Amount

removed from each zone is proportionate to excess capacity in each zone.

- 3.1.1.9. Action item 107-5 updated and reworded to form a small committee to analyze the issue of removing generation from areas of excess/bottled generation.
- 3.1.2. Kelvin Chu went over highlights from presentation about shifting capacity from J and K and adding/subtracting capacity from A, C, D depending on calculated rations using *perfect* capacity (UCAP) rather than the *real* (ICAP) capacities.
  - 3.1.2.1. Purpose of this presentation is to have a methodology to shift/remove/add PERFECT (UCAP) capacity to be used in the MODMDMW table. Also ensures the same amount of real capacity (ICAP) remains consistent in IRM and LCR calculation. For example, if we know how much ICAP needs to be shifted/removed/added, we can ensure that using a UCAP conversion, the correct amount of capacity is actually shifted/added/removed.
  - 3.1.2.2. Page 4 of Kelvin's presentation - Case 2 example correction: External Contracts to be taking out (because methodology is derating the ties).
  - 3.1.2.3. The point of the new methodology is to shift equal UCAP between zones and determine the correct average EFORd for each zone including SCRs, wind, hydro units, thermal units). Contracts not included if the model uses a method of derating the ties. Additionally, the EFORd used in the model must match the EFORd used in the shifting calculations (5 year GADS data).
  - 3.1.2.4. In previous years, the NYISO stated that it used either J or K's EFORd to shift capacity from downstate to upstate (or translate UCAP into ICAP). However, the same downstate EFORd that was used to translate UCAP in J and K to ICAP was then used to allocate the UCAP value of the shifted capacity into A, C, or D (upstate) instead of the according upstate zonal EFORd.
  - 3.1.2.5. Carlos Villalba brought up the fact that large hydro units are given a forced outage rate of zero. He suggested that the NYISO include these units in the zonal EFORd averages along with the wind.

- 3.1.2.6. Working group to schedule a meeting before next ICS meeting (March 3<sup>rd</sup>) – working group includes Kelvin Chu, Carlos Villalba, Mark Younger, Greg Drake, and Hilary Goldman. Greg Drake to run curve to see impact of results.
  - 3.1.2.7. Working group will finalize methodology discuss at next ICS meeting on March 3<sup>rd</sup>. ICS will then vote on implementing new methodology for 2010-2011 and future IRM cases. Separate Action Item (108-2) made for this action item.
- 3.2. Divergence of tan45 points between LI and In- City zones. Action Items developed between NYISO and GE discussed (**Item 3b on agenda** - Greg Drake)
- 3.2.1.1. Greg Drake is still working with GE on this issue.
  - 3.2.1.2. Greg Drake to share with the ICS the work plans for working with GE to figure out why the LI and in-city zones are misaligned.
  - 3.2.1.3. Curt Dahl brought up possibility that the way the NYISO was previously shifting capacity from downstate to upstate may be causing some of the divergence issues. Mr. Dahl also suggested that we re-run the 2010-1011 curves with the newly proposed methodology for shifting to see the impact (action item 108-2).
- 3.3. Forward Capacity Market/Horizon Study – Review scope and scenario changes (**Item 3c on agenda** - Greg Drake).
- 3.3.1. Scope needs to be updated.
  - 3.3.2. DMNC and transition rates need to be updated.
  - 3.3.3. CRIS will be in values in 2010 release of GOLD book.
  - 3.3.4. CRIS value is used to represent how much capacity of a particular unit is deliverable. NYISO proposed to use the smaller value of either the units DMNC or CRIS value in the IRM studies.
  - 3.3.5. For existing resources CRIS value is determined by the highest DMNC rating for the unit from the last five years. In some cases, a CRIS value could be higher than the DMNC.
  - 3.3.6. Carlos Villalba suggested that when there is a large discrepancy between the DMNC and CRIS value, a nomogram should be used in the model to change the DMNC value.

- 3.3.7. Mark Younger didn't agree with this suggestion because if a unit is forgoing capacity for planned uprates, thus its CRIS rights are lower than its DMNC rating. Mr. Younger pointed out that it's not correct to model the units DMNC when we know the units CRIS rights (amount that is classified as deliverable) are lower. Additionally, reliability isn't determined by energy only resources; only capacity resources are modeled.
- 3.3.8. Additionally, Curt Dahl pointed out that energy only resources are not required to bid into the market because there are no rules governing their involvement in the market. Therefore, we shouldn't count on them because energy only units have no obligation to sell excess energy into the market.
- 3.3.9. The ICS decided to model CRIS values in future IRM studies as long as the CRIS value is lower than the DMNC. If the DMNC is lower, use the DMNC value.
- 3.3.10. The other issue is should we use the lower CRIS value or the higher DMNC value in the final IRM calculation. It was decided to use the smaller of the two.
- 3.4. Policy 5 Revision (**Item 3d on agenda** - Al Adamson)
  - 3.4.1. Load Forecast Uncertainty Methodology
    - 3.4.1.1. Without LFU, sensitivity showed that there is a huge difference in the IRM with the LFU.
    - 3.4.1.2. LFTF has an action item that will finalize and formalize the Load Forecast Uncertainty methodology.
  - 3.4.2. Setting of exact reliability levels for neighboring pools
    - 3.4.2.1. Greg Drake discussed some observations and concerns of modeling external control areas for reserve margin studies.
    - 3.4.2.2. 2010 IRM study resulted in an 18% reserve margin (highest in two years) occurring at the same time that external control areas are lowering reserve margin (PJM and New England). NYISO is questioning if the higher reserve margin in New York a result of lower reserve margin in neighboring pools? Is New England's reserve margin decreasing because they are relying on capacity from New York's excess capacity resources?
    - 3.4.2.3. Carlos Villalba suggested that we use our model to analyze what the correct IRM should be for New England.

3.4.2.4. Curt Dahl brought up the fact that because wind resources are a cause for the ICAP reserve margin. Additionally, it was pointed out that although the ICAP reserve margin is increasing, the amount of UCAP needed for reliability has remained stable.

3.4.2.5. Al Adamson suggested this be discussed in NPCC.

3.4.3. Al Adamson will meet with Greg Drake to discuss some issues that should be brought up in the Policy 5 revision. The issues include: SCR performance calculation, review milestone dates and schedules, modeling of external control areas, etc. An outline of issues to discuss at Policy 5 revision will be discussed at next meeting (Action Item 108-3).

3.5. High level presentation on environmental impact and timing of different regulations and overview of January DEC meeting (**Item 3e on agenda** - Pete Carney).

3.5.1. **Skipped because Pete Carney was not at the meeting.**

3.5.2. Curt Dahl gave a presentation on the January 19<sup>th</sup> DEC meeting. ICS will be working with DEC moving forward because there are a lot rules coming down the pipeline that affect reliability – BART, NOx regulations, and HEDD.

3.5.3. Curt Dahl to send two presentations to ICS group – materials from January DEC meeting.

3.6. Reporting from splinter groups to ICS (**Item 3f on agenda**)

3.6.1. Carlos Villalba asked that for the 2011-2012 IRM study, the ICS splinter groups should report and circulate all documents created during their meetings. Mr. Bob Boyle and Mr. Younger made a similar request. Both complained that the Splinter groups did not report back to the ICS members properly even after they were asked for documentation..

3.6.2. Add this into the timeline for reporting process.

3.6.3. Review Table 1 in 2010 IRM study (action item 108-4).

3.7. ICAP/UCAP IRM Study Section (**Item 3g on agenda**)

3.7.1. Emphasize UCAP section of IRM study.

- 3.7.2. Help address and inform stakeholders about the meaning of UCAP and its translation.
  - 3.7.3. Action item 108-5: An action item was made to develop a method to report current year UCAP equivalent for IRM studies going forward – clarify UCAP meaning in future IRM study. Can be brought up in Policy 5 revisions.
  - 3.7.4. Mark Younger suggested that for 2011-2012 IRM study, ICS should combine sensitivity of no wind and no SCR to show what is driving the ICAP. Should we be limiting the amount of SCR resources so we are not “over-relying” on EOPs? It was suggested that NYISO policy is driving over-reliance on EOPs.
- 3.8. 2011-2012 IRM Study: Five Days sustain hot weather sensitivity (**Item 3h on agenda**)
- 3.8.1. Carlos Villalba brought up a recommendation to model of sustained hot weather to see if in combination with the EFORd of units, it causes the LOLE to be significantly higher.

#### **4. NYS Energy Plan – ICS to review for EC (Curt Dahl/All ICS)**

- 4.1. Outline made for NYS Energy Plan. Curt Dahl suggested that we need to divide up the reading because the document is so large.
- 4.2. Al Adamson suggested that ICS members read sections that may have an impact on reliability.
- 4.3. Ms. Erin Hogan suggested looking at the action items on the implementation plan (around page 100, section 1) – table that highlights the action items and assigns the lead agency. Additionally, the milestones for completion are also listed.
- 4.4. Curt Dahl also suggested that we look for a summary of NYS Energy Plan within our own Companies. Since the study is finalized, we aren’t making comments, just looking out for items that will impact the capacity market and system reliability.
- 4.5. Suggestion that we look at how the EC responds to the Energy Plan.

#### **5. MARS Database “Information Use Agreement”**

5.1. Contracts must be masked by GE and then the database will be released to those parties who signed the information use/confidentiality agreement.

**6. Concerns about reliability study inconsistencies due to Gold Book release date changes.** How/will this affect the RNA assumptions? (Glenn Haake)

6.1. The ICS members agreed that the ICS and RNA Study assumptions should be maintained as close as possible to available GOLD book data and that the main technical reliability issues be investigated by the ICS first.

**7. Next Meetings**

7.1. Meeting 109 – Wednesday March 3rd

7.2. Meeting 110 – Wednesday March 31<sup>st</sup>

7.3. Meeting 111- Tuesday May 4th

Meeting #108 – Minutes from February 2nd, 2010, 9:30am – 2:30pm.

Secretary: Carlos Villalba

Reported by: Hilary J. Goldman

*(Con Edison)*

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