

NYSRC Installed Capacity Subcommittee

Meeting #146

April 3rd, 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 type="checkbox"/>	<input checked="" type="checkbox"/>
Mr. Yuri Fishman (LIPA)	<input 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), Secretary	<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 checked="" type="checkbox"/>
Mr. Edward Gilroy (NYSEG-RGE)	<input type="checkbox"/>	<input type="checkbox"/>
Mr. John Tigue (NYSEG-RGE)	<input type="checkbox"/>	<input type="checkbox"/>
Mr. Richard Brophy (NYSEG-RGE)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mr. Robert Boyle (NYPA), Chairman	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Andrea Fossa (NYPA)	<input type="checkbox"/>	<input 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), EC Chairman	<input type="checkbox"/>	<input type="checkbox"/>

Advisers/Non-member Participants:

Mr. John Adams (NYISO)

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. Nicholas Occhionero (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).....	<input type="checkbox"/>	<input type="checkbox"/>
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 checked="" 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. Timothy G. Lundin (Customized Energy Solutions).....	<input type="checkbox"/>	<input checked="" 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. Assumption Matrix

Gregory Drake (NYISO) added a column in the matrix for possible IRM impact. Dana Walters (NYISO) commented that a draft version of the GOLD book will probably be available around April 10th.

Mr. Drake also said that the multi-year load shape will be implemented in this year’s study. John Adams (NYISO) said that the new load shape will probably lower the IRM. Mr. Adams said that the 3 shapes being considered for the new multi-year load shape are 2002, 2007, and 2005.

Chairman Bob Boyle (NYPA) mentioned that we need a year before this new load shape can be used in the study. Al Adamson (NYSRC-consultant) said that we would need the white paper in May, test the new method in May/June, and recommend the method to the Executive Committee by July for approval. At least that is the projected schedule, Mr. Adamson said.

Mr. Drake said that as of this time, there are no new retirements. Mark Younger (Hudson Energy Economics) stated that Dunkirk units are new retirements for

this year's model. Frank Ciani (NYISO) said that these retirements that were not included in the base case last year will be run separately.

Mr. Drake also mentioned that unit forced outage rates are getting higher overall and will probably increase the IRM. The 5 year average outage rates will be available at the next ICS meeting. **(AI 146-1)**

Frank Vitale (NYSRC- consultant) will be working on the scheduled maintenance. Chairman Boyle wondered if the MWs are broken down to a zonal level. Mr. Vitale agreed with Chairman Boyle that if the MWs are significant, a zonal level breakdown will be helpful to the members.

Mr. Drake stated that randomized wind shape can be implemented in this new version of MARS. The NYISO would use actual 2012 wind data instead of the simulated wind data used in the past. Mr. Drake said that 2012 has better availability than 2002 (18% from 11%). Chairman Boyle wondered if this improvement was due to more data available. Mr. Adams said that there were higher towers (139 meters) being installed, as compared to the simulated data that has data from shorter towers (65 meters).

Erin Hogan (NYSERDA) stated that she will provide a list of potential renewable projects by May through email, since the NYISO needs the list of projects by June for inclusion in the IRM report. Ms. Hogan also mentioned that there is currently a \$250 million RPS project solicitation that may result in 270 MW. She stated that there was a modification on the RPS selection criteria, and until the PSC rule on the modification, no new contracts can be rewarded. She expects the ruling will arrive by summer but may not make the June deadline for IRM study.

Mr. Drake said that we were about 50% accurate on the new large scale solar project installation projections. Ms. Hogan said that, because of the NY Sun Initiative, there was a customer-sited 50 MW solar project solicitation. She'll confirm the new projects and provide some information about the solar projects. The disperse amount of customer-sited solar capacity in the state is most likely

negligible for this year's IRM, but it's prudent to develop an understanding of the resource.

Mr. Drake stated that this year's hydro derate will be higher than 45%.

Mr. Drake said that ETCNL (Existing transmission capacity for native load) has not been used for a long time as NYSEG election has been low. Mr. Younger said that unless we take away NYSEG election rights, we need to model ETCNL. Otherwise we may be assuming more emergency assistance than possible. Mr. Drake said that it may not matter because the assistance is coming into A and upstate. He said that he would provide some writing about the justification to the ICS if we decide not to model ETCNL. Mr. Younger would like to see last year's base case run with the details of the PJM interface flows.

Mr. Drake said that there are no new UDRs anticipated.

Mr. Adamson wondered if the NYISO is looking at the reason of an increase in cable interface forced outage rate. Mr. Drake said no.

Mr. Drake said that there are environmental regulations, specifically NOx RACT and RICE, which will be affecting the model this year. Peter Carney will attend the next ICS meeting to discuss the potential impacts. **(AI 146-2)**

2. Reliability Must Run (RMR) Contracts

The Executive Committee has requested the ICS to discuss the treatment of RMR contracts.

Mr. Adams said they should be modeled as capacity. Chairman Boyle further pointed out that they should remain in the model for the duration of the contract. David Allen (NYISO) said that the issue was that if a unit announced its intent to mothball, but is needed for reliability, yet it does not have a RMR contract in place (or has expired), should that still be modeled? Mr. Allen believed that the unit should still be modeled. Chairman Boyle was not so certain. Mr. Allen

emphasized that the unit can continue to run under the same condition of the expired contract.

Gregory Chu (Con Edison) asked if there's been precedence that a mothball unit ceased its operation even though it is needed for reliability. The NYISO stated that some arrangements will be made to keep the unit online, with or without a new contract.

The ICS decided that the language in Policy 5 about treatment of mothball unit is sufficient. Ms. Hogan stated that it may be helpful to have a sensitivity run for situations that may not be covered by the intent of the current language in the policy.

3. Use of Normal vs. Emergency Limits

Bill Lamanna (NYISO) was present at the meeting to discuss the use of the Short Term Emergency limits and the use of 1999 MW transfer limit value for counterflows in the model.

Mr. Younger felt that we are modeling the interfaces incorrectly by using STE limits since that rating may be achieved in the model for long periods of time.

Mr. Lamanna stated that the resource planning criteria say that we have to model emergency ratings. Mr. Walters also said that operators can perform other actions to rectify the problem other than load shedding that was pointed out by Mr. Younger. Mr. Lamanna said that there are fast closing switches that could fix the problem in shorter outage durations. However, for the purpose of IRM study, he said that the cable interface outages are considered to be long durations and it is pointed out in the report.

Mr. Lamanna also said that 1999 MW limits are just a place holder for counter flow because those limits were not calculated. The 1999 MW ratings differentiate from the 9999 mw ratings that are assigned to interfaces without true limitations. All of the interfaces, both directions, are looked at every year. The interfaces and

their limits are reviewed with the new system changes to ensure binding interfaces have the right limits at the time of the study.

Mr. Younger asked about the effects of changing (addition) capacity in zone K and its impact on the export transfer limits. Mr. Lamanna mentioned that in a previous IRM report, the details of the calculation were described fully. He will find the report and report back to the group. **(AI 146-3)**

Mr. Chu asked if the 1999 MW for Total East was actually calculated. Mr. Adams said that ALL of the 1999 MW interfaces are judgment calls.

4. External Area Modeling

Frank Ciani (NYISO) mentioned that the external area was modeled with data from CP-8 working group. He said that the NYISO would increase the load of external area to get to 0.1, if the area is already much better than 0.1 (HQ as an example). New England and PJM are typically worse than 0.1, thus these areas were not modified.

Chairman Boyle asked about the HQ load modification since the interface can already limit the amount of capacity going in or out of the region. Mr. Adamson said that it would not be reasonable to assume that interface transfer limit will prevent additional capacity from flowing into NYCA and provide support, and in essence lower our actual needs for capacity to maintain our reliability.

Mr. Walters reiterated that there needs to be a balance between NYCA and its neighbor's reserve margin so that neither party would be relying on the assistance of the other region. To answer a concern that Mr. Younger had with PJM modeling, the NYISO has and will continue to review the topology and interface limits to ensure that this balance is maintained.

5. Shifting Capacity Methodology

Chairman Boyle said that in the past when sensitivity was studied, we typically shift the capacity into zones A, C and D so we don't lose the megawatts, but in a wind capacity sensitivity study, the capacity was shifted into zones J and K instead. The question for the members was that should we include a rule in Policy 5 that dictates how the capacity shift in sensitivity should be performed, or should we leave it at a case by case basis. Mr. Ciani preferred having some flexibility, other than a rule, as long as buy-in is obtained by the ICS members. Chairman Boyle suggested that as long as the NYISO present the recommended shift to the group BEFORE the study, a rule is probably not needed. The members agreed.

6. Multi-year Load Shape Model

Mr. Adams said that the NYISO will present some MARS run results at the next ICS meeting. **(AI 146-4)**

Mr. Younger recommended that as a part of the presentation, the NYISO should provide number of days SCR was called in the model.

Mr. Adamson said that in June, ICS needs to determine based on the presented information, to include this new method in this year's base case.

7. Probabilistic Wind Shape Model

Mr. Drake stated that a draft paper will be presented at the next meeting that describes the methodology and the results of using a probabilistic wind shape model. **(AI 146-5)**

8. Statistics for SCR Performance

Donna Pratt (NYISO) said that she will provide some CBL statistics with voluntary information included at the next ICS meeting. **(AI 146-6)**

9. Policy 5 Modifications

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.

Mr. Younger suggested that if a locality does not have sufficient capacity to shift out of, capacity should be allowed to be shifted into the localities to facilitate the creation of the curve. Chairman Boyle added verbiage that would add capacity to the locality if there are insufficient amount of capacity to shift into the localities.

Mr. Chu questioned the “additional capacity” to facilitate the creation of the curve because adding capacity to the system, in locality or outside of the localities, the IRM will be affected, which will also change point on the curve that’s being studied.

Mr. Chu sees two possible scenarios. One is that the locality does not have enough capacity to shift out. The other is that the entire New York State, or upstate in particular, does not have enough capacity to shift back down to the locality. In the normal curve creation, capacity is shifted out of ACD to the desired IRM, and then capacity is shifted out of J and K to upstate for the proper LCR to obtain 0.1 at that IRM amount. If the localities do not have sufficient capacity to shift upstate, it actually means that the amount of capacity shifted out of ACD is too much to ensure reliability. In essence, the curve is being shifted to the right of the chart. There’s actually no need to shift capacity from ACD to J/K because that particular IRM is actually insufficient to support the state reliability criteria of 0.1. This is akin to picking a 13% IRM and there are no % of LCR capable of supporting NYCA 0.1 LOLE. Therefore, the first point on the curve would need to be some larger % IRM, like 16% for example, where there is a % of LCR that can support 0.1 LOLE.

The second scenarios is implausible because if the entire state does not have enough capacity and some needs to be added to the system, we cannot generate the curve because the system is entirely unreliable in the as-is

condition. Under this situation, we would need to add capacity to the system but then this IRM study, which is looking for the minimum amount of capacity from as-is, would actually be moot since the as-is is not even enough to maintain reliability. We would be unable to maintain reliability and would be in trouble immediately.

Mr. Drake said that NYISO has never been performed the reverse shift in the past and will need to perform studies to determine the impact, prior to adding it as a change in the Policy methodology.

Mr. Walters stated that this issue came from the CARIS study. The CARIS study has a different purpose and is not a minimum study. Mr. Younger said that CARIS may require a tangent 45 study for the future case.

Syed Ahmed (National Grid) agreed that tangent 45 method is not appropriate for CARIS study purposes. Mr. Ahmed stated that being the 2 studies, IRM and CARIS, do not have the same underlying concept and objectives (short term versus long term), we should not be rushing to modify the policy that would satisfy one study but may not satisfy the other. He further stated that Mr. Walters need to inform ESPWG that Policy 5 is used to ensure IRM can be determined to ensure reliability. Mr. Walters agree with Mr. Ahmed and would bring this issue back to ESPWG.

Mr. Vitale also reminded the members that while we have more capacity now, but we may eventually have capacity shortfall and we would need to determine the necessary steps (adding capacity, type of capacity, etc.) to ensure reliability.

Chairman Boyle believe that for the special sensitivity case, the EC would defer to the ICS for the study, much like the HTP case. Mr. Adamson thinks that the EC will not approve the special sensitivity itself, but instead ICS needs to do so.

The NYISO added some verbiage about the “special sensitivity” needs to be “material in nature”. The members did not agree with this phrase and in fact, some members felt the phrase is too nebulous. Mr. Walters stated the purpose here was to avoid rerunning the entire base case due to some small change in

the system. The two intents the NYISO would like to demonstrate in the phrase were 1. To prevent minor changes that has no significant impact to the case to warrant a completely different base case and tangent 45 runs. 2. To prevent arbitrarily changes to be introduced by an interested party just because we are interested in seeing the impact.

In the end, the members agreed on the phrase “any SUBSTANTIAL assumption”.

The NYISO will circulate the changes of Policy 5 to ICS members for review. **(AI 146-7)**

10. APA Methodology

Mr. Drake presented the preliminary results from the deviation study. He said that the results have not been vetted by Dr. Channan Singh yet, and the presentation will only present the NYISO discovery thus far.

The root causes of the EFORd deviation were due to raw data issues and the treatment of the data. He stated that some event data were out of chronological order. Reserve shutdown events were also missing. Finally, overlapping and misclassified event raw data contributed to the deviations. One interesting discovery was that APA methodology/software would skip a year if reserve shutdown events were not reported.

Data treatment issue stem from the ratio of derating hours of demand were estimated in different ways between market method and APA method.

The NYISO at the end concluded that APA is appropriate for use in the model for most of the units, but it will continue to be improved to ensure all of the variations in data can be reduced, even with complex events.

The NYISO will provide a finalized version of the findings, showing the reduction in variance after implemented enhancement and the results properly vetted by Dr. Singh. **(AI 146-8)**

Secretary: Gregory Chu

(Con Edison)

Next meetings:

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