

# NYSRC Installed Capacity Subcommittee

Meeting #158

**April 2nd, 2014**

**10:00 a.m. – 3:00 p.m.**

Meeting Minutes

## Attendees

	Present	Tel
Members / Alternates:		
Mr. Yuri Fishman (LIPA) .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Rich Wright (CHG&E) .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mr. Gregory Chu (Con Edison), <b>ICS Vice Chair/Secretary</b> .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Syed Ahmed (National Grid) .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Richard Brophy (NYSEG-RGE) .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Robert Boyle (NYPA) .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Mark Younger (Hudson Energy Economics, LLC.) .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Advisers/Non-member Participants:		
Ms. Erin Hogan (NYSERDA), <b>ICS Chair</b> .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Frank Ciani (NYISO) .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Greg Drake (NYISO) .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Nicholas Occhionero (NYPSC) .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Ed Schrom (NYPSC) .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mr. Al Adamson (Consultant) .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Frank Vitale (Consultant) .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. John Adams (Consultant) .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mr. Scott Leuthauser (Consultant for H.Q. Services) .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Henry Chao (NYISO) .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Howard Tarler (NYISO) .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Wes Yeomans (NYISO) .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mr. Dana Walters (NYISO) .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Mr. David Allen (NYISO) .....  .....   
 Dr. Kai Jiang (NYISO).....  .....

Guests Present:

Mr. Shaun Johnson (NRG) .....  .....   
 Mr. Timothy G. Lundin (Customized Energy Solutions).....  .....   
 Mr. Jim Scheiderich (Energy Curtailment Specialist).....  .....

**1. Action Item – Voltage Reduction**

Yuri Fishman (PSEG-LIPA) stated that they do not have any data available that shows voltage reduction decline with time, even though the general feeling is that there may be reduction over time. Jim Scheiderich (Energy Curtailment Specialist) mentioned that at a FERC conference about winter operations, Vice President of Operations in PJM said that the benefit of VR is usually lost after an hour or two after implementing the program. Chair Erin Hogan (NYSERDA) said that if this is the case, it would seem as though the NYISO system operators would have noticed this effect too. Mark Younger (Hudson Energy Economics) wondered if we should derate the amount of MW if VR cannot be maintained over several hours.

Chair Hogan asked if the NYISO has looked at how many times VR was called, which Wes Yeomans (NYISO) mentioned at a prior meeting he would check back and find out. Greg Drake (NYISO) said he did not receive an update from Mr. Yeomans. Mr. Drake also confirmed that VR MWs are adjusted to peak conditions, but he does not know how the transmission owners perform the adjustments. Vice Chair Gregory Chu (Con Edison) said he would check back about the adjustments. Chair Hogan asked all transmission owners to check how many times VR have been activated, for how long, and how the VR MWs are adjusted to peak conditions from testing results. **(AI 158-1)**

Mr. Younger mentioned that it is important if VR MWs are not expected to last through multiple hours, we should derate their contribution in the model. Syed Ahmed (National Grid) cautioned that MARS model outage EVENTS, and when

an event has occurred, EOP are called to supplement the shortage. Vice Chair Chu also stated that running the model hourly to identify discrete effects of VR on an hourly basis, would result in “hourly loss of load” metric and that is not the reliability criterion of 0.1 “daily loss of load”. We in fact, do not have an acceptable criterion for HLOLE. Former Chair Bob Boyle also stated that we don’t model consecutive hours, but rather, at each hour, if events occurred and if EOP is needed for that hour.

Al Adamson (NYSRC – Consultant) asked perhaps the NYISO operation can provide some idea about why they don’t degrade the VR if that indeed exists. Dana Walters (NYISO) said that degradation probably isn’t considered because VR is called based on the system conditions at the time, as a part of their decision process. Mr. Walters further stated that if Mr. Scheiderich is right and voltage reduction would disappear after an hour, operators would be able to return VR after an hour since the system wouldn’t be different with or without VR. Yet operators would not be comfortable returning VR MWs until the peak has passed, which is usually several hours.

Mr. Adamson is not comfortable with derates without actual data as evidence. Mr. Younger agreed with Mr. Adamson.

## **2. SCR Baseline Study**

Donna Pratt (NYISO) said that the NYISO has posted the result of the SCR baseline study and is currently soliciting feedback from stakeholders by 4/18/2014. Ms. Pratt said that the NYISO will then provide a formal response to the feedbacks by the 2<sup>nd</sup> quarter of 2014. She expects no market rule changes will be enacted for 2014.

Mr. Boyle asked that since the study is for 2015, if the NYISO envision any changes by 2015. Ms. Pratt said no change is expected.

## **3. Environmental Regulation Impacts**

Peter Carney (NYISO) presented on the anticipated environmental regulation impacts on the IRM study.

Mr. Carney provided the time line of the upcoming environmental initiatives. Best Available Retrofit Technology (BART) is already enacted due to its compliance date of January 1<sup>st</sup>, 2014. This regulation affects large coal units like Danskammer 4. Other plants are Trigen-Syracuse (which has retired) and Jamestown. Mr. Carney said that the rule is not expected to affect unit output capacities, although it is unit by unit specific rule. Units can comply by burning cleaner fuel.

NOx Reasonably Available Control Technology (RACT) will come into effect July 1<sup>st</sup>, 2014. Gas Turbine NOx limits have not changed, but boiler limits did. During the ozone season, which is from May to end of September, the limits are daily. Outside of the of the ozone season they become block limits. SCR is needed to get compliance for coal units. Mr. Carney said that no units have expressed concerns about staying below the limits, although he felt it would be harder for older gas turbines. Chair Hogan asked if the units can buy allowances. Mr. Carney said they can trade with units in a grouped (bubbled) region, but not with everyone. There's no true allowance system to buy from.

For Mercury and Air Toxics Standards (MATS), the compliance date is 4/16/2015, with 1 year extension for units currently retrofitting, and units which are Reliability Critical Units get 2 years of extension. Mr. Boyle asked if there were many units requesting extensions. Mr. Carney and the NYISO said there were requests but declined to comment on the volume of the requests.

Cross State Air Pollution Rule (CSAPR) is currently being considered in the court system, and CAIR remains in effect until a new rule is developed.

Best Technology Available (BTA) is in place to protect marine life from plant cooling systems. Indian Point will have the BTA decision by 2016 at the earliest. Mr. Carney has listed the plants that are affected by this rule in a table in the presentation.

Finally, Regional Greenhouse Gas Initiative (RGGI) has lowered CO2 cap by 45% which may impact the price but not unit availability.

#### **4. Policy 5 Changes**

John Adams (NYSRC – Consultant) provided a table of the proposed Policy 5 language change for the members. ICS members discussed about the proposed Policy 5 change to explicitly state June 1<sup>st</sup> as the new projects inclusion date.

Mr. Adams stated the inclusion date had been May 1st, the beginning of the capability period, but was pushed back to June 1st due to operational date of Neptune. He noted that members discussed in detail about its treatment since it was going to be in after May 1<sup>st</sup>.

Mr. Boyle does not support the June 1<sup>st</sup> inclusion date because NYPA feels that not recognizing units that goes online during summer period is not appropriate. We are, in essence, not recognizing the changes in the system, especially since the unit forecast was done at least 6 months, if not a whole year, ahead of time in the study. He said that we have a model lock-down date by end of September, and that would be a more appropriate inclusion date.

Mr. Drake was concerned about the lack of time to incorporate large changes to the base case and the ability to run the new model by the late lock-down date.

Rich Brophy (NYSEG) stated that having this date as the cut-off date seem contrary to the whole study process since we have built in the schedule a model lock-down date much later in the year, plus we have special sensitivity case for changes after the lock-down date as well.

Chair Hogan stated that it is unlikely that a new generator would come into service in the middle of summer.

Vice Chair Chu questioned the reasoning of excluding a unit that could assist summer demands simply because the expected installation date is after June 1st.

Mr. Ahmed agreed with Mr. Boyle, and has recommended we should match the model lock-down date instead of June 1<sup>st</sup> as the inclusion date.

Mr. Younger related the resource inclusion to the load shape that the NYISO would need to use for the case. He stated that the NYISO would have a hard time determining how to shift the load shape if a unit comes in at the August time frame. Mr. Boyle said that lock-down date would have just one shift, with all of the assumptions locked down by then.

Mr. Younger said that the IRM study only assume one set of resources for the year. However, the model changes resources mix throughout the year, based on dates entered into the model for resources that would enter service in the middle of the year. Chair Hogan asked the NYISO if the model needs the resources to be the same the whole, and Frank Ciani (NYISO) said no since the model brings the unit online based on the user input “in service” date.

Mr. Drake cautioned that new units would have better than fleet average EFORd. By including them, we would have lowered IRM. If these units failed to materialize, then reliability could be impacted. This is the conservative approach.

Chair Hogan asked everyone to go back and think about the inclusion date addition in Policy 5.

Chair Hogan then brought up the question about unit ratings (minimum of DMNC or CRIS) for RNA that differed from IRM but Mr. Ciani mentioned that RNA is now in-line with the IRM study.

Mr. Adams spoke about the Appendix E that deals with transition rate calculation. Mr. Drake said that the transition rate calculation is being done by computer software, so he suggested that this shouldn't be included, or described, in Policy 5 or in the appendix. Mr. Boyle said that perhaps Policy 5 should explain a little about the calculation since it is a change from the past method.

Chair Hogan has asked the members to review the Policy 5 additions proposed by John Adams (NYSRC – Consultant) by next ICS meeting. **(AI 158-2)**

## 5. TSO WG

Mr. Adamson stated that to represent transmission outage into the system, we may need actual outage data. He spoke with Peter Altenburger (National Grid) EC member, and Mr. Altenburger said that National Grid has some outage data available for us to use, which was excellent news. Vice Chair Chu mentioned that he followed up on the scope, and created a list of all of the lines that make up the interested interfaces identified within the scope. He circulated that list, along with the owners of the line, to TSO-WG members earlier in this meeting. Vice Chair Chu transmission owners NYSEG, NYPA, and National Grid owns the lines for the interested interfaces and he's requesting those TO members to assist in finding out if actual outage data is available from their own company.

Chair Hogan asked the group to create a schedule for this task. **(AI 158-3)** and target February 2015 for a deadline to determine if further study is needed. Mr. Adamson said that we probably need to decide by February 2015 just to determine if we should pursue the full system wide study.

Mr. Ahmed said that looking at the list of the lines supplied by Vice Chair Chu, he emphasized that number of lines per interface is not the only crucial part, as the derating capacity states of the interface, which would include various lines being out individually or concurrently, is just as if not more important to model. He believe that there are no current historical data available for the derates based on lines out. He suggested that perhaps Con Edison would just try to model Branchburg-Ramapo line's outages as a start. Vice Chair Chu has no problem of modeling that line with outages, he pointed out that it is only one of the many lines for UPNY/SENY interface, and it isn't an internal interface. Vice Chair Chu will consider this proposition. Mr. Younger expressed concerns that modeling this line would not be informative.

Vice Chair Chu stated that, echoing what Mr. Ahmed mentioned about derating states, the NYISO would likely have to provide assistance because the new

ratings for the outages has to be derived from PSS MUST (power flow) runs, which he is unable to perform.

Mr. Ahmed asked the NYISO to ensure NPCC Annual Transmission Review criteria is satisfied during the NYISO study of interface capacity derates. He also requested Mr. Ciani to provide a presentation that CP-8 had involvement about looking at transmission outage probabilistic modeling and the difficulty people face. **(AI 158-4)**

Mr. Boyle said that determining capacity derate seems like a major hurdle for the study. He also mentioned that there may be R&D money available to perform this particular study.

Vice Chair Chu will schedule a conference call for the WG. **(AI 158-3)**

## **6. Assumption Matrix**

Mr. Drake said that the white paper for PJM DR study, listed under PJM external control areas parameters of the matrix, was deleted since the study is not expected to be completed by this year.

Mr. Ahmed asked if the NYISO will look at actual wind units' performance for this year. Mr. Drake said yes. Mr. Ahmed asked if we had agreed to do this review every year. Mr. Drake said the NYISO would look back and see the characteristics. Mr. Drake further clarified that we are not using average 5-year worth of wind unit data, which members thought the NYISO would. Mr. Boyle thought the NYISO previously said there was no historical pattern for the wind shape, yet they are now proposing to look back at the characteristics. Mr. Drake said that he would like to model wind probabilistically like a thermal unit, where the unit would have a chance to be in or out of service and with proper duration (transition rates). He did say that he has not consulted with GE about the modeling difficulties. Mr. Ahmed suggested that the NYISO should look at the distribution of 2 years' historical data and use that distribution to generate the probable wind shape. Chair Hogan asked if there's a need for documentation about this task, Mr. Drake said not at this point, but possibly in the future.



Mr. Adamson wondered if the NYISO foresee any problem from the assumption matrix that may delay the study. Mr. Drake said no.

## 7. PJM DR

Mr. Ciani said there was no update on the modeling of PJM DR because he was focusing his efforts on reviewing the new MARS version 3.18 that has the expanded EOP fields. The NYISO will perform the benchmarking, with last year's base case to see how the changes in the EOP steps will work out with 20 steps.

Mr. Boyle asked for the list of model changes. Mr. Ciani said that the model now uses a new compiler. He also said that previous version calculated LOLE with only the base load shape, even though there are multiple load shapes being used in the model. That has been corrected in the version 3.18, where the LOLE would be computed, for each bin/load shape, with its own load shape. He also said there's 20% speed up based on the 64bit version. Also there is a change in maintenance model, now non-thermal units can now be zeroed out. Reporting of groups (such as LHV) is now visible in the output.

Chair Hogan asked for the NYISO to provide a list of the changes for members to digest the differences. Mr. Ciani said he would put together the changes. **(AI 158-5)** Typically, he said, the NYISO will look at a run of 1000 iterations comparison of runs from last version versus this version to determine if the new version of the software is suitable for use.

Secretary: Gregory Chu

*(Con Edison)*

---

Next meetings:

Meeting 159, Tuesday, April 29<sup>th</sup> at NYISO HQ  
Meeting 160, Wednesday, June 4<sup>th</sup> at NYISO HQ  
Meeting 161, Friday, June 27<sup>th</sup> at NYISO HQ  
Meeting 162, Tuesday, July 29<sup>th</sup> at NYISO HQ  
Meeting 163, Wednesday, September 3<sup>rd</sup> at NYISO HQ  
NYSRC Installed Capacity Subcommittee  
Meeting Minutes for ICS meeting #158– 20140402 Final

Meeting 164, Wednesday, October 1<sup>st</sup> at NYISO HQ  
Meeting 165, Tuesday, October 28<sup>th</sup> at NYISO HQ  
Meeting 166, Monday, December 1<sup>st</sup> at NYISO HQ

---