

Draft Minutes
New York State Reliability Council, L.L.C. (NYSRC)
Executive Committee
Meeting No. 210 – October 14, 2016
Albany Country Club, Voorheesville, NY

Members and Alternates

in Attendance:

Curt Dahl, P.E.	PSEGLI – Member – Chair
Peter Altenburger	National Grid, USA – Member – Vice Chair
George Loehr	Unaffiliated Member
William H. Clagett	Unaffiliated Member - Phone
Bruce Ellsworth	Unaffiliated Member
George Smith, P.E.	Unaffiliated Member
Richard J. Bolbrock, P.E.	Municipal & Electric Cooperative Sector – Member
David Johnson	Independent Power Producers of NY – Member
Ray Kinney	New York State Electric & Gas/RG&E – Member
Jim McCloskey	Central Hudson Gas & Electric – Member - Phone
Mayer Sasson	Consolidated Edison Co. of NY, Inc.- Member
Mike Mager	Couch White (Large Customer Sector) - Member
Sunil Palla	NYPA – Member

Other

Paul Gioia, Esq.	Counsel
Carl Patka, Esq.	New York Independent System Operator (NYISO)
Wes Yeomans	New York Independent System Operator (NYISO)*
Rob Pike	New York Independent System Operator (NYISO) - Phone
Dana Walter	New York Independent System Operator (NYISO)
Don Raymond	Executive Secretary
Mariann Wilczek	PSEGLI - ICS Vice Chair
Roger Clayton	Electric Power Resources, LLC – RSS/RCMS Chair
Al Adamson	Treasurer, Consultant
Tim Lundin	NYPA
Leka Gjonaj	NYS Department of Public Service

Visitors- (Open Session)

Philip Fedora	Northeast Power Coordinating Council (NPCC)
Kelli Joseph	NRG
Mark Younger	Hudson Energy Economics, LLC

“*” Denotes part-time

- 1.0 **Introduction** – Chairman Dahl called the NYSRC Executive Committee (Committee) Meeting No. 210 to order at 9:30 a.m. on October 14, 2016.
- 1.1 **Meeting Attendees** – All Members and/or Alternate Members (or representatives) of the NYSRC Executive Committee were in attendance.
- 1.2 **Visitors** – See Attendee List, page 1.
- 1.3 **Requests for Additional Agenda Items** – None
- 1.4 **Declarations of “Conflict of Interest”** – None
- 1.5 **Executive Session Topic** – None

2.0 Meeting Minutes/Action Items

- 2.1 **Approval of Minutes for Meeting No. 209 (September 9, 2016)** – Mr. Raymond introduced the revised draft minutes of the September 9, 2016 Executive Committee meeting which included all comments received to date. There were no additional comments. Mr. Ellsworth moved for approval of the draft minutes. The motion was seconded by Mr. Bolbrock and unanimously approved by the Executive Committee members – (13 to 0). The Executive Secretary will post the minutes on the NYSRC website – **AI #210-1.**
- 2.2 **Action Items List** – The Executive Committee reviewed the Outstanding Action Items list and accepted removal of the following items:

<u>Action Item #</u>	<u>Comments</u>
205-4	Replaced by Item #209-3.
208-3	Mr. Boyle provided the Parametric Study Results at the September 9, 2016 Executive Committee meeting.
208-4/193-3	PRR #131 was approved for “Post for Comment” at the September 9, 2016 Executive Committee meeting.

3.0 Organizational Issues

3.1 NYSRC Treasurer’s Report

- i. **Summary of Receipts & Disbursements** - Mr. Adamson introduced the Summary of Receipts and Disbursements which shows a surplus of \$235,000 at the end of September 2016. The fourth Quarter Call-for-Funds of \$120,000 is fully paid with the receipt of \$80,000 in September 2016 from four members and an additional \$40,000 from two members in October 2016. Also, Mr. Adamson noted that the year-end variance from Budget is projected to be a surplus of \$148,000.
- ii. **2016 Audit** – Mr. Adamson requested and received a proposal from Slocum, DeAngelus & Associates, Inc. of \$3,425 to perform the 2016 audit and prepare the 2016 Federal tax forms. This is about a 3.0% increase over the previous year. Following further discussion, Mr. Adamson recommended acceptance of the proposal. Dr. Sasson moved for the approval of Slocum, DeAngelus & Associates, Inc. to perform the 2016 audit. The motion was seconded by Mr. Loehr and unanimously approved by the Executive Committee – (13 to 0).

3.2 Other Issues - None

4.0 Capacity Subcommittee (ICS) Status Report/Issue

4.1 ICS Chair Report – Ms. Wilczek reported that the ICS met on October 5, 2016. She focused the discussion on the topics below:

- (a) Preliminary Base Case – Ms. Wilczek indicated that the 2017 preliminary base case including Ginna and Fitzpatrick Nuclear Plants produces an IRM of 18.3% with LCRs of 81.9% and 104.2% for

NYC and Long Island, respectively. This is a 0.8% increase over the final 2016 IRM. The LCRs for NYC and Long Island are increased by 1.4% and 1.7%, respectively. The increase in IRM can largely be attributed to: (i) Updated PJM, IESO, NE and Quebec modeling (+0.5%), (ii) Updated generator EFORds (+0.4%), and (iii) New wind capacity (+0.4%).

(b) Emergency Assistance Study – The NYISO responded to a request from ICS for additional information on ~~the excess capacity levels i.e. excess emergency reserves,~~ at neighboring systems excess 10 minute operating reserves during its ~~peak high load~~ hours. The NYISO ran two sensitivities with Emergency Assistance (EA) ~~capacity limits held on a~~ at preliminary ~~basis at~~ values of 2750Mws and 2250Mws. The resulting IRMs were 18.6% and 19.0%, respectively. The preliminary base case, with ~~out limited EA,~~ ~~the present EA model~~ has an EA of 2920 Mws. ICS has given this activity a low priority (completion in the spring of 2017) in order to focus on the IRM base case. Following further discussion, the Executive Committee directed the removal of four sensitivity cases that were not fully understood and/or did not conform to Policy 5 requirements.

(c) Locational Export Capacity – Ms. Wilczek reported that the NYISO presented a market method to adjust for capacity leaving a constrained area and purchased by a neighboring Control Area. The NYISO has determined from load flows that 48% of the total Mws sold from zones G,H,I,J could be exported across the Western MA interface and 52% exported to ISO-NE through the Connecticut interface.

The impetus for the sensitivity case is an ~~proposal~~ ISO-NE tariff filing to FERC that would allow any unit that has ~~sold capacity previously been qualified to sell capacity in ISO-NE~~ to sell into ISO-NE's Reconfiguration Auction beginning in March 2017. ~~ISO-NE has filed with FERC for the necessary tariff changes.~~ The NYISO has filed to intervene and is requesting that FERC delay ISO-NE's request to a later time period to allow neighboring ISOs to adjust to the changing market. FERC is expected to respond on October 18, 2016. Dr. Sasson noted that the proposed modeling above has not been fully vetted and, therefore, the NYISO is not ready to proceed at this time – **AI #211-2**. Two of the sensitivity cases (#9 and #13) measure the impact of the modeling change. Also, Dr. Sasson pointed out that the NYSRC concern is reliability only and that it should take a neutral position on the market approach in the IRM Report. ~~Dr. Sasson pointed out that a unit from Zones G,H,I has already sold capacity for the 2018 and 2019 capability years and the NYISO will need to model this case next year in its IRM/LCRs study.~~

(d) NYISO LCR Studies – Ms. Wilczek indicated that Navigant Consulting, who is assisting the NYISO in analyzing GE's MARS results, discussed their findings with ICS. The MARS results are an attempt to optimize the LCRs based on price while meeting Policy 5 IRM requirements. ICS remain concerned about the adherence to Policy 5 and ~~requested~~ being regular updates on GE's and Navigant's progress. Mr. Adamson expressed concern that Policy 5 includes the Tan 45 methodology for determining the LCRs while the NYISO study is using an optimization method based on price. Also, the NYISO Study ~~methodology would necessarily~~ may change the LOLE reliability of local zones (i.e. NYC and Long Island). Mr. Patka stated that there is no current plan to replace the Tan 45 methodology ~~for determining IRMs,~~ though the NYISO is looking into potential alternatives. Further, if such a plan was to be contemplated, the NYISO would first come to the NYSRC with a recommendation because of the Policy 5 requirements. Dr. Sasson expressed concern that a market approach could result in lesser payments to NYC generators ~~who are already financially strapped~~ and reduce capacity payments to a point that may threaten the financial feasibility of some NYC units leading to retirements.

Also, the market approach could discourage developers from considering NYC sites due to lowered capacity payments.

(e) Base Case Assumption Matrix – Ms. Wilczek pointed out that since the July 2016 approval of the Assumption Matrix, the forecasts for NYCA load and SCRs have changed to ~~33,363~~ 33,273Mws and 1192Mws, respectively. Mr. Ellsworth moved for approval of the changes to the Assumptions

Matrix. The motion was seconded by Mr. Altenburger and unanimously approved by the Executive Committee – (13 to 0).

5.0 Reliability Rules Subcommittee Status Report/Issues

5.1 RRS Status Report & Discussion Issues – Mr. Clayton reported that a joint RRS/RCMS meeting was held on October 6, 2016. Two separate meetings were held, each with its own agenda and minutes. He summarized RRS’s current activities which are included in Sections 5.2 – 5.6 below.

5.2 Status of New/Revised Reliability Rules

i. Proposed NYSRC Reliability Rules Revision

a. List of Potential Reliability Rules (“PRR”) Changes – Mr. Clayton introduced the List of Potential Reliability Rule Changes:

PRR # 128, Definition of Bulk Power System. PRR 128 is tabled pending the NPCC review of A-10 revisions. The following PRRs were approved for “Posting for Comment”:

1. PRR #131C, Dual Fuel Testing Requirements,
2. PRR #133, F Restoration Plan, and
3. PRR #134, I.5 Disturbance Recording.

PRR #132, I.4 Transmission Data received final approval at the September 9, 2016 Executive Committee meeting and will be included in the next update to the RR&C Manual.

PRR #135, G.4(R2) System Restoration From Eligible Black Start Resources is under RRS review.

5.3 Proposed NYSRC Reliability Rule Revisions

a. Status of New/Modified Reliability Rules

1. PRRs for EC Final Approval

- None

2. PRRs for EC Approval to Post

- None

3. PRRs for EC Discussion

- None

5.4 Addition to Policy 1 – Mr. Clayton introduced a proposed new Section 10 to Policy 1 titled, Reliability Rules Development Recognizing NERC and NPCC Standards and Criteria. Section 10 is a guide to address the actions to be taken when the NYSRC Rules (Requirements) are more or less stringent or specific than the NPCC Standards and Criteria and includes regular monitoring. Mr. Ellsworth moved for approval of the revision to Policy 1. The motion was seconded by Dr. Sasson and approved by the Executive Committee – (13 to 0).

5.5 NERC Standards Development – The NYSRC voted “Yes” on IRO-002-5 and TOP-001-4 which was consistent with the positions of NGrid, ConEd, and NPCC.

5.6 Other RRS Issues –

i. RRS Status Report – See Section 5.2.

ii. NYSDEC Conference Call – Mr. Clayton reported that the NYISO is performing a study to determine the impact of the EPA’s Clean Power Plant (CPP) initiative. The CPP requires a 30% reduction in CO₂ emissions by 2030. The final report is expected to be available by December 15, 2016. Mr. Walters agreed to provide a presentation to the Executive Committee at its January 8, 2017 meeting – **AI #210-3**.

Also, Mr. Clayton noted that there is significant concern on the part of the Generator Sector regarding compliance with the NO_x and O₃ requirements for 2017. They may have difficulty obtaining the necessary amount of allowances due to availability and/or price.

6.0 Reliability Compliance Monitoring Subcommittee (RCMS) Report/Issues

6.1 RCMS Status Report & Discussion Issues – Mr. Clayton reported that RCMS met on October 6, 2016 following the RRS meeting to review the status of the 2016 New York Reliability Compliance

Program.

- 6.2 2016 New York Reliability Compliance Program (NYRCP)** – RCMS found the NYISO to be in full compliance with the following Requirement(s):
- (a) C.8 (R1), Real Time Operations of the NYS BPS,
 - (b) I.2 (R2), GO Generation Unit Outage Data Report,
 - (c) I.2 (R3), GO Generating Unit Outage Statistic,
 - (d) I.2 (R4), SCR Performance Report, and
 - (e) I.2 (R5), RIP SCR Performance Data Reporting.

7.0 Reliability Initiatives

- 7.1 Defensive Strategies** – Mr. Smith reported that EnerNex provided the first draft of Tasks 3&4 of the MDMS report to the working group. Task 3 is development of the algorithm and Task 4 is testing the algorithm using PSS/E. The drafts are primarily results without adequate explanation. Mr. Smith has sent comments to EnerNex and the NYISO is in the midst of its review. Hopefully an executive summary can be provided to the Executive Committee by its November 10, 2016 meeting – **AI # 209-4**.

8.0 State/NPCC/Federal Energy Activities

- 8.1 NPCC Board of Directors (BODs)** – Mr. Forte provided a summary of the Prioritized Reliability Issues List from the NPCC BOD Strategy Session on September 7, 2016. There were two areas of focus: (a) cyber and physical risks and (b) resource adequacy. Questions and/or comments should be directed to Dr. Sasson or Mr. Forte (ConEd).
- 8.2 NPCC Report** – Mr. Fedora reported that NPCC is finishing up its Long Range Adequacy Overview report for 2017 to 2021. The reliability adequacy of each Area is reviewed. Also, every two years the loss-of-load hours and the annual expected unserved energy are calculated for NERC. The report will be reviewed by the TFSS in November 2016 and sent to the RCC for its approval in December 2016. This year NERC has requested the above measures of adequacy on an hourly basis. There is particular concern about Operations during off peak periods. NERC also requested a sensitivity case with a 2% increase in load.
- NPCC is studying the impact of the State Implementation Plans (SIPs) on the NERC reliability services requirements, i.e., voltage, frequency response and ramping. A Phase 1 Report was given to the RCC at the end of September 2016 focusing on voltage in the year 2022 vs. a base case. A Phase 2 study, learning from the results of Phase 1, will look further into the future during peak and spring light load periods when the generation mix may be substantially different. The phase 2 Report will be given to the RCC on December 6, 2016 in Montreal, CAN and issued by year end. The Governmental Affairs Advisory Group’s public meeting will present the preliminary results to State, Federal and Provincial regulators.

9.0 NYISO Status Report/Issues

- 9.1 Reliability Planning Process** – On September 19, 2016 and September 28, 2016 the OC and the MC respectively, concurred with the 2016 RNA and recommended Board approval. The NYISO’s Board will act on the RNA at its October meeting. The final 2016 Reliability Needs Assessment (RNA) finds that: (a) the resource adequacy criterion is met throughout the Study Period and (b) two security related transmission Reliability Needs exist in portions of the Bulk Power Transmission Facilities (BPTF) beginning in 2017. They are the New York State Electric & Gas Corp. (NYSEG) Oakdale 345/115 kV transformer, and the Long Island Lighting Company d/b/a Long Island Power Authority (LIPA) East Garden City to Valley Stream 138 kV line.
- 9.2 CARIS** – The CARIS 2 base case is completed and no specific 2016 CARIS 2 project proposals were submitted as of September 30, 2016. Empire Connector has requested an additional CARIS study to assess the economic impact of a new transmission facility connecting Marcy and New York City. The study is on-going.

The NYISO staff is continuing its internal assessment of appropriate metric methodologies for estimating the capacity benefits of transmission projects as well as other potential metrics of project impact.

- 9.3 Public Policy Transmission Planning Process** – On July 16, 2015, the PSC declared a Public Policy Transmission Need (PPTN) in Western New York. The solicitation for solutions was issued on November 1, 2015 and solutions were due on December 31, 2015. The NYISO reviewed 15 proposals received from eight developers and performed the Viability and Sufficiency Assessment (VSA). The draft VSA was issued on April 29th, 2016, and the final report was published on May 31, 2016. The NYISO identified ten viable and sufficient projects and recommended certain non-bulk transmission upgrades also be made to fulfill the objectives of the transmission need identified by the PSC. On June 22, 2016 the PSC issued a SAPA notice seeking public comment on whether there continues to be a need for transmission in Western New York with comments due August 8, 2016. On December 17, 2015, the NYPSC issued an Order finding that there is a transmission need driven by Public Policy Requirements to increase transfer capability of the Central East and UPNY/SENY interfaces. The NYISO issued a solicitation for solutions on February 29, 2016, and received 16 projects by April 29, 2016. The NYISO performed VSAs, and published the draft VSA report on September 29, 2016. The draft report shows that 13 projects are viable and sufficient. On August 1, 2016, the NYISO initiated the 2016 Public Policy Transmission Planning Process (PPTPP) cycle by issuing a solicitation for proposed transmission needs driven by Public Policy Requirements. Proposed needs were submitted to the NYISO by 12 entities on September 30, 2016. The NYISO filed the proposals with the NYPSC on October 3, 2016, for its consideration. If the NYPSC determines that there is a need for transmission, the NYISO will solicit projects from developers to fulfill that need.
- 9.4 NYISO Clean Power Plan (CPP) Study** – The objective of the NYISO CPP study is to provide input to the State’s planning process on issues relating to electric system reliability, efficiency and emissions. A presentation was made with results of Phase 1 to the ESPWG on July 5, 2016. The NYISO will conduct resource adequacy analysis for the year 2030 as Phase 2 of the study and issue a final report by the end of 2016.
- 9.5 Interregional Transmission Studies**
- i. EIPC Study** – Phase I – Final 2015 EIPC Roll-up Report was completed in March 2016 and posted to the EIPC website: <http://www.eipconline.com/non-doe-documents.html>. In Phase II, two webinars will be scheduled to provide EISPC with overviews of the Regional and interregional Planning Processes under FERC Order 1000.
 - ii. IPSAC** – The Joint ISO/RTO Committee (JIPC) reviews on an ongoing basis interconnection projects that may have interregional impacts. Through 2016, the JIPC will continue efforts to develop and improve procedures for interregional coordination. Also, the JIPC is continuing to develop, coordinate and maintain an interregional production cost data base. The next IPSAC webex meeting is scheduled for December 9, 2016.
- 9.6 Other Studies/Activities** – None
- 10.0 Market Initiatives Impacting Reliability** – Mr. Pike (NYISO) discussed updates to market initiatives that are felt to have significance from a reliability perspective. The Behind the Meter: Net Generation Model will clearly explain rules whereby generation whose primary purpose is to serve onsite load can sell its excess generation into the wholesale electric markets. The NYISO received stakeholder approval of the market design in December 2015 and has received FERC approval of the relevant tariff changes. The NYISO anticipates implementation of the software to facilitate participation in the 4th Quarter of 2016. Distributed Energy Resources Roadmap - The NYISO has commenced discussions on the future of the current Demand Response programs in the context of the NY State REV initiative and the post Supreme Court ruling on FERC 745. The NYISO is soliciting stakeholder feedback at this point. A draft white

paper on the DER Roadmap is expected in August 2016.

The Comprehensive Shortage tariff changes were implemented in November 2015. The Comprehensive Scarcity pricing tariff changes were implemented in June 2016. Improvements to fuel and performance incentives are aimed at creating additional incentives for ICAP suppliers to be available on critical operating days. The NYISO is recommending suspension of efforts on fuel constrained offers to evaluate the potential needs of energy storage and distributed energy resources. After developing a greater understanding of potential market needs, further work will be prioritized and completed.

The NYS Public Service Commission (PSC) initiated the “Proceeding on Reforming the Energy Vision (REV)” with the goal of aligning electric utility practices and the regulatory paradigm with technological advances in information management, power generation, and distribution. These changes include: (a) a new business model in which Distributed Energy Resources (DERs) become a primary tool in the planning and operation of electric systems. Utilities would be encouraged to invest in DERs that help to avoid or defer the need for more historically traditional distribution system investments and (b) the establishment of a Distributed System Platform Provider (DSPP) that actively manages and coordinates DERs while providing a market in which customers are able to utilize DERs in response to dynamic system conditions. Such customers would provide, and be compensated for, any system benefits associated with their responses. The NYISO is supporting efforts by the Joint Utilities reviewing ISO-DSP interaction and coordination.

FERC directed the NYISO to develop and file a set of rules to designate resources for Reliability Must Run (RMR) service to ensure the continued reliable and efficient operation of the power system and the NYISO Markets. The structure and administration will require: (a) specifying the retirement notification obligations, (b) a process for evaluating alternative solutions, (c) definition of compensation and cost allocation provisions, and (d) expectations for participation in the capacity and energy markets. A proposed solution framework was developed by the NYISO and filed with FERC. In addition, the NYISO is exploring enhancements to its long-term planning process to support identification and development of solutions for potential generator retirements. FERC has ruled giving the NYISO further compliance obligations in its ruling on the RMR proposal. The NYISO has developed and filed the further compliance requirements with input from the stakeholders.

The NYISO has initiated stakeholder discussion on evaluating alternate Methodologies for Setting Locational Capacity Requirements (LCRs). There are multiple possible approaches to determine the LCR requirement for a Capacity Zone after the IRM has been set under NYSRC’s Policy 5. The NYISO recognizes that some methodologies may require modifications to the NYSRC’s Policy 5 which must be approved by the NYSRC.

The NYISO continued discussions with stakeholders on alternative methods for determining Locational Minimum Installed Capacity Requirements (LCRs). This effort will look for ways to optimize LCRs based on minimizing capacity costs statewide while maintaining the maximum Loss of Load Expectation criteria, and addressing any cost allocation rules to ensure that loads are paying their fair share of capacity costs. The NYISO reviewed preliminary results in September 2016, and is preparing material to review the draft methodology in October 2016 and final findings in December 2016 with stakeholders and the NYSRC’s ICS committee.

The Demand Curve Reset process has been initiated to perform a reassessment of the capacity market demand curve parameters to be effective beginning with the 2017 Summer Capability Period. The Analysis Group has been selected to perform the study and has facilitated discussions on potential peaking unit types, the gross cost of such units, and the potential energy and ancillary service revenues available to the different unit types and locations. The Analysis has issued its final report with recommendations on the demand curve parameters. The NYISO has issued its final report with preliminary recommendations on the demand curve.

Since the announcement of the NYS PSC REV initiative, there has been a growing interest in Wholesale Market Participation of Storage Resources. Currently, the NYISO has several resource classifications

that can accommodate participation of storage in the wholesale markets that include: (1) Energy Limited Resource (ELR); (2) Limited Energy Storage Resource (LESR); and, (3) Demand Side Ancillary Services Program (DSASP). New storage resource characteristics may facilitate additional opportunities to participate in the markets. The NYISO initiated discussions in the Market Issue Working Groups to engage stakeholders in: (1) a review of resource characteristics, (2) existing market rules that define the opportunities for storage resources to participate in the markets, and (3) an evaluation of revisions that may be necessary to accommodate new storage resources. At the end of September 2016, the NYISO reviewed market concepts and an anticipated timeline for pursuing revisions to the market capabilities. The NYISO MMU has raised concerns with the capacity market pricing outcomes if resources located in import constrained localities sell their capacity to external control areas (Capacity Exports from Localities). Currently, Roseton has been awarded a forward capacity market obligation for the 2018/2019 period. ISO-NE is pursuing changes that would accelerate opportunities for participation and would allow resources to participate in the 2017/2018 auctions. The NYISO has initiated discussions with stakeholders on reviewing the underlying market concerns and the MMU's proposed solution. Also, the NYISO and ICS are reviewing methodologies for evaluating the impacts of a local capacity export on the IRM and LRCs.

11.0 Other Items

11.1 NYISO Monthly Operations Report - Mr. Yeomans provided the Monthly Operating Report. The monthly peak load occurred on Friday, September 9, 2016 at 29,637Mws. The Operating Reserve requirement at the time was 1965Mws resulting in a minimum Operating Capacity requirement of 31, 602Mws. There were no Major Emergencies during the month.

Alert states were declared on 8 occasions – 6 times for emergency transfers. There were no TLR Level 3's declared during the month for a total of zero hours. Reserve activations occurred 8 times. A NERC/NPCC Reportable DCS Event occurred on September 10, 2016 at 18:00. A RPU and SAR were initiated for loss of Bowline 1 loaded at 510Mws. ACE crossed zero, and the RPU was terminated at 18:08. A second Event occurred at 12:02 on September 18, 2016. A SAR was initiated and at 12:03 RPU was initiated for loss of Bowline 1 loaded at 504Mws. ACE crossed zero, and the RPU was terminated at 12:13. The SAR terminated at 12:22.

11.2 Summer 2016 Hot Weather Operations - Summer 2016 experienced above average ambient temperatures and electric loads throughout July 1 – August 31, 2016. The summer 2016 peak load occurred on August 11, 2016 at 32,076Mws. This is the third consecutive summer with the actual peak below the 50-50 peak forecast.

The first significant hot weather was the three days following the Fourth of July weekend when the load reached 29,656Mws. Outages at the time included: (a) the NJ-NY HTP Cable, (b) The Ramapo Phase Angle Regulator Transformer #3500, and (c) all three 345kV Marcy South Series Capacitors. On July 6, 2016 three generating units tripped for a loss of >2,000Mws in Zones G & H. The NYISO immediately scheduled a supplement capacity commitment and all state agencies curtailed non-essential electric loads.

On July 25, 2016 temperatures were projected to reach 95° across Upstate and in NYC. The NYISO put Demand Response for Zones G-K on 21 hour notice. ConEd activated Targeted Demand Response for Subzones J1-J9. NYPA and RG&E activated their own Demand Response programs. Government agencies curtailed non-essential loads and encouraged all residential and business consumers to reduce electric usage. A generator tripped in Southeast NY and the 345kV Marcy South Series Capacitors were bypassed. The supplemental capacity commitment was extended one additional day.

On August 11, 2016 at HB16, the NYISO recorded the summer 2016 peak load of 32,076Mws. There was not a need for statewide supplemental capacity commitments and/or Demand Response activation. Hot weather continued into the next day causing the NYISO to activate Demand Response for all zones from HB13-18 due to projected reserve shortages. All state agencies were directed to curtail non-essential electric usage and residential and business customers were encouraged to reduce electric usage

where possible.

11.3 Western NY Transmission Constraints – Mr. Yeomans discussed recent infrastructure changes and operational factors contributing to real-time transmission constraints in Western NY. Between September 2015 and the spring 2016, more than 3,500Mws of generation in Western NY and PJM were mothballed or retired resulting in increased transmission flows in Western NY. In addition, four load serving 230 or 345kV transformers were installed. In May 2016, Western NY 230 kV reactors were activated to reduce transmission flows by balancing the Niagara 230 and 115kV generation. Operational factors increasing western NY Transmission flows include: (a) intra-day load forecast performance, (b) high western NY loads, (c) summer thermal rates, and (d) transmission terminal limitations. Factors that reduce western NY congestion are future western NY Infrastructure Public Policy Projects and improved OH proxy modeling.

11.4 North American Energy Standards Board (NAESB) – Mr. Ellsworth noted that the NAESB Board will be meeting in December 2016.

12.0 Visitors' Comments – None

13.0 Meeting Schedule

Mtg.

<u>No.</u>	<u>Date</u>	<u>Location</u>	<u>Time</u>
211	November 10, 2016	Albany Country Club, Voorheesville, NY.	9:30 A.M.
212	December 2, 2016	Albany Country Club, Voorheesville, NY.	9:30 A.M.

The Executive Committee Meeting #210 adjourned at 12:30 P.M.