

Draft Minutes

**New York State Reliability Council - Installed Capacity Subcommittee (ICS)
Meeting #259 – March 29, 2022
Microsoft Teams**

Attendees **Present** **Phone**

Members / Alternates:

Brian Shanahan (National Grid) ICS Chair	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Noor Leghari (NYSEG/RG&E) ICS Vice Chair / Secretary	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Rich Bolbrock (Unaffiliated)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Clay Burns (National Grid).....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Ruby Chan (CHG&E)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sanderson Chery (Con Edison).....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Ayman Elkasrawy (NYSEG/RG&E)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Jim Kane (NYPA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Howard Kosel (Con Edison).....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mike Mager (MI)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Chris Wentlent (MEUA).....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Rich Wright (CHG&E)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mark Younger (Hudson Economics)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Khatune Zannat (PSEG LI)	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Advisers/Non-member Participants:

John Adams (ICS Consultant)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
David Allen (NYISO).....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Leen Almadani (CHG&E)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Josh Boles (NYISO)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Andrea Calo (CES)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Ryan Carlson (NYISO)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Jie Chen (Potomac)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Adam Evans (DPS)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Grant Flagler (Con Ed Energy)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Ricardo Galarza (PSM Consulting)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Karl Hofer (Con Edison).....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Yvonne Huang (NYISO)	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Gary Jordon (ICS Consultant)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Tim Lundin (LS Power)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Randy Monica Jr. (DPS)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Philip Moy (Unknown)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Julia Popova (NRG).....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Zack Smith (NYISO).....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mariann Wilczek (PSEG LI)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Lucas Carr (NYISO)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mikaela Lucas (NYISO)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Benjamin Cohen (NYISO)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Pallavi Jain (NYISO)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Christopher Jylkka.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Pallas LeeVanSchaick (Potomac).....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Richard Bratton.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Corinne Didomenico (NextEra)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Bill Acker	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Dylan Zhang	<input checked="" type="checkbox"/>	<input type="checkbox"/>

1. Roll Call – N. Leghari

- Roll call was conducted.

2. Introduction and Request for Additional Agenda Items - B. Shanahan

- No additional Agenda Items

3. Approval of Minutes for Meeting #272 – B. Shanahan

3.1 Meeting #272 – N. Leghari

- Meeting Minutes #272 has been approved.

4. Review of Action Items List – B. Shanahan

4.1 ICS 2023 Roster Update – B. Shanahan

- Two versions of the Roster.
- Will be posted to the Reliability Council Website
- Not a lot of updates for this year’s list. Brian deleted couple of people and added one “Hilme Athar”.
- Khatune’s name to be removed (after the meeting) and replaced by “John Dellatto” for PSEG LI.
- To add “Bill Acker”.
- The complete version with email addresses not to be posted publicly.

5. Chair Update on recent EC actions – B. Shanahan

5.1 White Paper / Resource Adequacy Modeling Strategic Plan Feedback

- Brian provided verbal update.
- EC expresses support for the plan for this year. Scopes of white papers to be presented this month.
- Brian added new action item 265-2.
- M. Younger recommended additional piece of analysis to answer question: “How hard would it be to run a sensitivity case that instead of having outage rates of Y49, will have the actual outage schedule from 2021 for instance?”
- Y. Huang: NYISO doesn’t have real transition times between outages and no outage.
- M. Younger: Concern about the risk of real outages being wiped away by the five year average.
- M. Mager: Proposal should have clear definitions.
- P. Moy/Khatune: LIPA to come up with a proposal in the next ICS meeting.
- Y. Huang: recommended in addition to the proposal, listing the type of analysis that will be required from NYISO for resources allocation.

5.2 Action Item 265-2 (Policy 5 Change)

- Brian added new action item 265-2.
- No change to 220-1.
- EC were in agreement with Phase 4 High renewables white paper scope to defer to October 2024.
- Going through the current white paper topics, future work and future white paper topics
- Last item to be removed from ongoing model improvement work “Evaluate uniform versus dynamic load forecast uncertainty factors ...”

6. 2023 White Paper / Study Prioritization Topic Discussion - B. Shanahan / Y. Huang

6.1 Gas Constraint Whitepaper – P. Jain / L. Carr

- Background: Thermal units encountering fuel availability issues in winters.
- Three main questions:
 1. **What are the characteristics of the winter constraint? What time should it be applied and where? What the MW level of such constraint that should be applied?**
 - M. Mager: we should avoid double counting outages (some outages in these gas constraints might be already accounted for in the IRM study)
 - Gary: We need to collect data differently. Track outages caused by gas constraints.
 - Y. Huang: During study we need to avoid double counting. After finishing study, we can recommend a path for data collection.
 - M. Younger: We need to make sure that the effect of gas constraint (shortage of gas) whether the demand from the generator was so high that the unit fell short of it or the demand was low so the available gas was enough to supply the demand.
 2. **What reasonable levels of such constraints should be represented in the IRM study?**
 3. **What is the best modelling approach to represent these characteristics in the RA models? Market design is also working on modelling improvement, so models need to be aligned.**
 - Q: are weather outages assumed in addition to the units?
 - Y. Huang: Temperature derates are already factored in the IRM study. Gas availability is a different scenario.
 - M. Younger: some weather conditions might not pose as double counting.
 - Q: Will the imports of gas from ISO-NE or other zones be considered?
 - Y. Huang: EOP whitepaper will address the assistance available during IRM study.
- Whitepaper will address all existing and planned initiatives.

- Work will be divided into 2 phases
- 1. Research Phase: scan other jurisdictions' practice and conduct additional internal analysis.
- 2. Modelling Phase: establish reasonable levels of the constraints.
- 3. Future work could handle dual fuel units
 - M. Mager: Will you investigate interstate pipelines as well as potential projects for such pipelines?
 - P. Jain: Only existing projects. Model will be flexible to accommodate other projects that get approved.
 - Howard: What is that thought process for dual fuel units during the first round of research?
 - P. Jain: we are going to consider their gas portion as potentially unavailable during the winter constraints situation. We are not considering the oil portion of the unit, storage and other characteristics due to limited bandwidth.
- Coordination will take place with the efforts of capacity accreditation project.
- Going over the timeline of the study in 2023. Research to be completed by Q2 -2023. Findings to be presented in December ICS meeting.
- Approved.

6.2 EOP Review Whitepaper – R. Carlson / E. Fernandes

- Plan to research the EOP in the resource adequacy model.
- Background: Currently, EOPs are triggered when there is not enough capacity to meet the demand. EOPs include SCRs, voltage reduction, operating reserves, and Emergency Assistance “EA” from neighboring control areas.
- Currently, the EA global limit is 3500 MW from all areas modeled at Step 8.
 - Gary: How do we determine if reserves are available on neighboring systems?
 - R. Carlson: Excess MWs at neighboring areas over their needs.
 - Gary: We should be cautious if we plan to increase this EA limit.
 - B. Shanahan: Where did the 3500 MW limit come from?
 - R. Carlson: J. Adams performed a study several years ago to come up with this number and data provided by NYISO operation that were analyzed to determine how much excess reserves would be available in neighboring areas.
 - Question: Why this number was considered rather than numbers from MARS? Is it to be conservative?
 - M. Younger: It comes from J. Adams' study that there were some units that were assumed to be available in the neighboring areas despite the fact they were not turned on.
 - Y. Huang: Considering the MARS (RA) model, it is not only about the 3500 MW limit, but also about individual ties as well as policy 5 requirement that we need to have all external areas sharing the same peaking days as NYISO as well as not modelling the externals better than their criteria. “Combined Package of EOP”. We are trying to understand how the model is going to play in today's database and how do we want to change that reflecting the future winter constraints anticipated.
- The ICS wanted to explore allowing additional support as subset of the current EA limit.
- Modeling additional imports may lower SCR activations and the system LOLE and remove the output window limitation on the ELR model.
 - Question: Why are we removing ELRs when they are being saved to such situation?
 - Y. Huang: If you do changes in EOP, that will have impact on the ELR configuration and performance.
 - Gary: Are we going to review the order of EOP?

- M. Younger: The order we have them in matches the Emergency operation Manual. Suggesting changes to the wording on slide 3 to replace the word “Additional support” with “some of the support”. Is the idea to look at what level of transaction might be allowed earlier versus later?
- R. Carlson: We will be reviewing imports and exports prior to EOP as well as viewing when EA should be called upon and at what step.
- Objective and scope: Answer four questions
 1. How EOPs are modelled in MARS?
 2. How do neighbors support NYCA during emergency conditions?
 3. How much can we depend on them during emergency scenarios?
 4. Is it appropriate to consider support from neighboring systems on top of ICAP supplies of ICAP supplies in the IRM study ahead of the EOPS?
- Question: Is there an opportunity to focus the Winter RA model to match the capability year instead of the calendar year?
- Capacity accreditation Coordination.
- Timeline
- Approved.

7. Capacity Accreditation Modeling Improvement Plan – Z. Smith

- Identification of limitations and constraints from 2022 study to be investigated this year for better ways of modelling.
- Four areas of enhancement.
 - 1- Gas Constraints
 - 2- Start-up times
 - 3- SCR Modelling
 - 4- Correlated Derates
- M. Younger: Correlated Derates are no restricted to Ambient Temp discussion but also emergency capacity?
- Z. Smith: Yes.
- M. Mager: Will there be any linkage between SCR Modelling and possible future changes to SCR program?
- Z. Smith: The plan for this year is to better reflect the Market Model. There is a separate project for engaging the demand side.
- M. Younger: Is there a timeline for Derates (temperature adjusting the DMNCs)?
- Z. Smith: Slide 18 has the timeline.
- Timeline of addressing these issues from a Market standpoint.

8. Initial Assumptions Matrix Review – M. Lucas

- No significant change from last year.
- Receive data by Mid-April.
- To be updated with Transfer limits.
- M. Younger: Does Planning or operation think that topology they have been using for STAR in 2024 will be updated? Y. Huang: Continuously coordinating with Planning and Operation.
- B. Shanahan: Will the matrix be updated in April? Y. Huang: Yes

9. Review of IRM Milestone Schedule for 2024/25 IRM Study – for ICS Approval – B. Shanahan

- Brian, Yvonne and Gary have gone over it.

- Schedule updated.
- Just updated the schedule with all dates for ICS and EC meetings.
- No significant changes or fundamentally different.
- M. Younger suggested adding the word “meeting” to ICS.
- Gary suggested removing the year “2024” from IRM meeting, since it’s changing every year.
- Rearranging the boxes to reflect correct sequence of posting and approval actions.
- M. Younger suggested creating separate boxes for EC actions.
- M. Younger suggested to remove reference to date being preliminary from footer.
- Schedule approved.

10. Additional Agenda Items

- Discussion by M. Younger on Nuclear Derates.
- M. Younger to have a presentation on the topic next ICS meeting.

Next Meeting

Meeting #274 – Wednesday, March 1st, 2023, 10 am – Microsoft Teams