

**Draft Minutes**

**New York State Reliability Council - Installed Capacity Subcommittee (ICS)  
Meeting #278 – June 28<sup>th</sup>, 2023  
Microsoft Teams**

**Attendees** **Present**   **Phone**

**Members / Alternates:**

Brian Shanahan (National Grid) <b>ICS Chair</b> .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Noor leghari (NYSEG/RG&E) .....	<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"/>
Sanderson Chery (Con Edison).....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
John Dellatto (PSEG LI).....	<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"/>

**Advisers/Non-member Participants:**

Alan Ackerman (CES).....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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"/>
Grant Flagler (Con Ed Energy) .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Kenneth Galarneau (Rise Light & Power) .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Ricardo Galarza (PSM Consulting) .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Chris Hall (NYSERDA).....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Karl Hofer (Con Edison).....	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Erin Hogan (DOS) .....	<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"/>
Anand Chandrashekar (NYISO) .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Otito Onwuzurike (NYISO) .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Julia Popova (NRG).....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Richard Quimby (DPS).....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Monica Jr., Randy (DPS).....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Josif Figueroa (NYISO) .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Pallas LeeVanSchaick (Potomac) .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Ben O'Rourke (NYISO) .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Michael Swider (NYISO) .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sushil Silwal (NYISO) .....	<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"/>
Madeline Mohrman (NYISO).....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Shashwat Tripathi (NYISO).....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Dylan Zhang (NYISO) .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mike Cadwalader .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
William Gunther (Con Edison) .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Thomas primrose (PSEG LI).....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Harry Fox (NYISO) .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Richard Bratton .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Caroline kucher .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Emily Fernandes (NYISO) .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Patrick Danner (NYPA) .....	<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**

- Yvonne introduces Harry and Bianca.
- No additional Agenda items

### **3. Approval of Minutes for Meeting #277 – B. Shanahan**

- Minutes approved.

### **4. Review of Action Items List – B. Shanahan**

- Actions Items: No changes.
- Current White Paper Topics: Ongoing. No changes.
- Model Improvement Future work: EOP activations
  - To Keep this item here
- Model Improvement Future work: Maintenance Scheduling
  - This item should be kept on. Especially with Changes in system that may introduce higher loading to winter when maintenance is scheduled along with shoulder season, this work becomes more significant.
- Model Improvement Future work: Uniform vs Dynamic load Forecast uncertainty Factors
  - Completed. Presentation being discussed.
  - LCR optimizer project is being discussed at the ICAP working group. The proposal to soothe out the cost curve to minimize fluctuation. There is a consumer impact analysis that is proposed.
- Future White Paper/Study Topics: No changes.

### **5. Chair update on recent EC actions – B. Shanahan**

- Brian updated EC on whitepaper discussions. No actions required.

### **6. Approval of IRM PBC Assumptions Matrix– M. Lucas**

- NYISO received updated information on the anticipated retirement date.
- Updated ELR elections are expected in August 2023 for inclusion in the final base case.
- Special case resources item was updated to reflect preliminary SCRs in July for inclusion final base case.
- Attachment A2 was updated capturing the 2024 NYCA summer load forecast model.
- Attachment A3 captures the 2024 NYCA winter load forecast model.
- Attachment D captures EOP items. Item #1 represents the SCR preliminary numbers.
- Attachment E1 there has been an update to the IRM topology.
- Attachment E4 captures the five year average cable outage rate.
- Attachment F captures the SCR preliminary values.
- Attachment G: Change in Copenhagen Wind.

#### **6.1 Topology Update – Y. Huang**

- Minor changes to the transfer limits between Zone K and the rest of the system. Assumption changes in the underlying load level.

#### **6.2 Preliminary SCR Value– S. Tripathi**

- NYISO calculates SCR zonal performance factors for IRM studies based on historical SCR data and then applying adjustment factors.
- There are additional inputs since 2023 IRM studies.

#### **6.3 Discussion on Capacity Limited Resources – Y. Huang**

- Ongoing discussion in the ICAP working group to address the capacity limited resources issues with MW.
- For reliability concern, CLR units were reviewed by NYISO with Gary and John.

- No assumptions change intended for these units in this year IRM study. Information on potential impact to be brought to the ICS.

## 7. Review of Updated Parametric Results– M. Lucas

- Since the last ICS meeting, the updated material items include BTM solar load shape adjustment and load forecast uncertainty.
- For Non-material items, internal topology update was added in item #5.
- Preliminary SCRs update has no impact on IRM.
- There were miscellaneous data corrections findings.
  - M. Younger: There is a big divergence between what comes out of the LCR process and what comes out of the Tan45 process.
- The LCR optimizer is a tool that NYISO deployed to calculate LCRs with input everybody agreed on including approved IRM and the cost curve.

## 8. Initial Sensitivity Case List – L. Carr

- No change to Case 0, 1, 2, &3.
- Case 4 divided into: Case 4a (A-F shifting) and Case 4b (A-k Shifting) including both land-based and off-shore wind.
- No change to case 5.
- Two special sensitivities discussed last meeting were added.
- Case 6: Emergency Assistance (EA) Impact that Shows impact of modifying EA from neighboring areas modeled during the Emergency Operating Procedures (Tan45). Modelling aligns with the recommendations made in the whitepaper.
- On top of case 6, a basic winter constraints case (7) will be run to show the impact to reliability when winter capacity is reduced.
- Discussion on how to run the sensitivity.
- Additional suggestions to be sent before next meeting.

## 9. Interim EOP Whitepaper Discussion Continuation – Y. Huang

- Previous month discussion., three perspectives were looked at:
  1. How all the assumptions play out in the simulation.
  2. Operation experience with neighbors.
  3. Look at other regions' experience.
- Current assumptions are too optimistic. Consider some limitations moving forward.
- **External Area Model:**
  - Gathered information from PJM. Data showing large amount of surplus. Significant adjustment for compliance with Policy 5.
- **Modelling consideration options:**
  1. Get better data
  2. Increase targeted LOLE during Policy 5 adjustments
  3. Getting in the EOPs issues during Policy 5 adjustments.
  4. Adding limitations from topology modelling.
- **Factors to screen these options:**
  1. Feasibility,
  2. Seasonality,
  3. Different Bin assumptions,
  4. Goal of Policy 5,
  5. Do we have a justifiable model, or can we repeat the analysis?

- Drawbacks of considerations (options) 1-3 were discussed.
- Option 4 which is adding limitation on transfer capabilities seems to be the way forward.
- **Historical Data Analysis**
  - As discussed at the last meeting, NYISO need to perform review of the data, look historically at the level of extra reserve.
  - Correlate Data of external jurisdictions to NYCA load at the same timeframes.
  - NYISO to present analysis with historical data on next meeting.
- **Regional Future conditions**
  - Reliability Assessment shows low operating margins in Ontario and New England for summer 2023
  - Neighboring jurisdictions especially IESO and ISO-NE are pretty tight.
- **Winter Consideration**
  - Winter is generally less constrained.
  - Margins in New England and Quebec are low.
  - PJM's reliability risk shifted to Winter.
  - Ontario shifting to winter peaking on 2030s.
- **Advancing EA consideration**
  - NYISO aims to develop a more conservative EA modeling or limit EOPs in the revised modelling.
  - Advancing EA prior to EOPs improves the ELR functionality.
  - NYISO recommends not to consider advancing EA prior to EOPs in the IRM model under this whitepaper.
- **Next Steps**
  - Bring analysis with historical data for neighboring jurisdictions and test cases in the next meeting.
  - NYISO aims to provide initial recommendation for revised EA modelling next meeting.
  - Detailed version of report to be available by the end of August.
- Brian to coordinate presentation to EC.

#### **10. Update on non-participating units – R. Carlson**

- In Attachment G1 in assumptions matrix, table representing wind units not currently participating in the ICAP market. Takeaways on why these units were not selling their capacity to New York. After survey, the units were found to be participating in ISO-NE market that have obligations through forward capacity market auction.
- According to change in rules, participants in ISO-NE market can provide (RAS?) to New England while selling ICAP capacity to new York.
- Only Roaring Brook, Fenner and Cassadaga have crests. Copenhagen lost their crest.

#### **11. Additional Agenda Items**

- No additional Agenda items.

#### **Next Meeting**

**Meeting #279 – Wednesday, August 2<sup>nd</sup>, 2023, 10 am – KCC**