

## Final Minutes

### **New York State Reliability Council - Installed Capacity Subcommittee (ICS)**

**Meeting #249 – August 4, 2021**

**Webex / Teleconference**

#### **Attendees**

**Present    Phone**

#### **Members / Alternates:**

Brian Shanahan (National Grid) <b>ICS Chair</b> .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Rick Brophy (NYSEG/RG&E) <b>ICS Vice Chair / Secretary</b> .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Rich Bolbrock (Unaffiliated) .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Clay Burns (National Grid) .....	<input type="checkbox"/>	<input type="checkbox"/>
Patti Caletka (NYSEG/RG&E) .....	<input type="checkbox"/>	<input type="checkbox"/>
Ruby Chan (CHG&E) .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Sanderson Chery (Con Edison) .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mark Cordeiro (PLM) .....	<input type="checkbox"/>	<input type="checkbox"/>
John Cordi (NYPA) .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
John Dellatto (PSEG LI) .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ed Gilroy (NYSEG/RG&E) .....	<input type="checkbox"/>	<input type="checkbox"/>
Glenn Haake (NYPA) .....	<input type="checkbox"/>	<input type="checkbox"/>
Jim Kane (NYPA) .....	<input type="checkbox"/>	<input type="checkbox"/>
Dmitriy Kiselev (Con Edison) .....	<input type="checkbox"/>	<input type="checkbox"/>
Howard Kosel (Con Edison) .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mike Mager (MI) .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Aydemir Nehrozoglu (Con Edison) .....	<input type="checkbox"/>	<input type="checkbox"/>
Chris Wentlent (MEUA) .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Brian Wilkie (National Grid) .....	<input type="checkbox"/>	<input type="checkbox"/>
Rich Wright (CHG&E) .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mark Younger (Hudson Economics) .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Khatune Zannat (PSEG LI) .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### **Advisers/Non-member Participants:**

John Adams (ICS Consultant) .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Leen Almadani (CHG&E) .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ethan Avallone (NYISO) .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Liam Baker (Eastern Generation) .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Samantha Bergami (NYISO) .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Josh Boles (NYISO) .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mitch Braun (Unknown) .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Andrea Calo (CES) .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ryan Carlson (NYISO) .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Jie Chen (Potomac) .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Frank Ciani (NYISO) .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
John Dellatto (Unknown) .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Greg Drake (ICS Consultant) .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Nelson Eng (Con Edison) .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Adam Evans (DPS) .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Kenneth Galarneau (Ravenswood) .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ricardo Galarza (PSM Consulting) .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Nate Gilbraith (NYISO) .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Chris Gloria (Con Edison) .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ying Guo (NYISO) .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Chris Hall (NYSERDA).....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Karl Hofer (Con Edison).....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Alexis Hormovitis (NYISO) .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Yvonne Huang (NYISO) .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Chris LaRoe (Brookfield) .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Scott Leuthauser (HQUS) .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Dave Lundeen (Marabito) .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Tim Lundin (LS Power) .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Norman Mah (Con Ed Energy) .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Randy Monica Jr. (Unknown).....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Matthew Napoli (Unknown) .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Kevin Osse (NYISO).....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Carl Patka (NYISO).....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Julia Popova (NRG).....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Richard Quimby (DPS).....	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mariann Wilczek (PSEG LI) .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## **1. Roll Call – R. Brophy**

- Roll call was conducted.

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

- Chair B. Shanahan called the NYSRC ICS meeting to order at 10:00 A.M. on August 24, 2021.
- Brian Shanahan had added an agenda item – a review of the revised Corporate Goals for the NYSRC. The RRS had commented on what ICS had previously commented on and did some revisions. ICS will compare and contrast the two versions then provide thoughts and comments on it.

## **3. Approval of Minutes for Meeting #248 – B. Shanahan**

- The meeting minutes were approved with the revision regarding outage rates incorporated into the final version.

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

- 220-1: Ongoing, will be reporting on later this year
- 233-1: TBD, on the list of future white papers
- 247-1: B. Shanahan collaborating with Y. Huang, will discuss in September meeting
- 247-2: May be revised depending on changes to our corporate goal document
- 247-3: G. Drake working with NYISO to confirm, completion date changed to September
- 247-4: In progress
- 247-5: Complete – Assumptions Matrix Attachment E4 has been updated with the aggregated cable outage rates
- 247-7: N. Gilbraith confirmed there will be a 20MW change to the Barrett unit dynamic limit for LIPA. The zone K export limit will change from 200MW to 220MW, that's with one of the two Barrett units out. NYISO will review it at the August 17 meeting.
- 247-10: Y. Guo has a presentation on this today (7.3)
- 247-11: F. Ciani will have updated for September's meeting materials
- 247-12: Per N. Gilbraith, Neptune is still expected to return to service prior to next summer's summer capability period, therefore, per out inclusion rules it should be modeled in-service and we have a sensitivity (#8) if it does not.
- 247-14: This will be completed today
- Current white papers: SCR modeling – some members interested in reviewing SCR duration limits. Need to also make sure we look at the full set of constraints on SCRs today as a package to be sure that is the correct way to model SCRs.

## **5. Status update to milestone tasks for the 2022 study – N. Gilbraith**

- We are on track with all the milestones for the 2022 study. We have or will shortly provide GE with the database. The August 17th meeting is scheduled to get the Tan45 results out. The parametric results are out today. We have a September deadline for TO proposed topology updates – at this point the only update NYISO sees is the 20MW update for LI.

## **6. Updates to the 2022 Preliminary Case Assumptions – K. Osse**

- This is the final Preliminary Base Case Assumptions Matrix. Added two new attachments: Attachment C – NYCA Five Year Derating Factors and Attachment E4 – 5 Year Average Cable Outage Rate. Other than the two new attachments there are only minor changes since the last presentation.

- For Attachment E4, the NYISO said they combined the data for zones J and K to protect the confidentiality of each of the facilities. M. Younger theorized, based on public information, that all of the increase from last year to this year is coming from facilities going into Zone K and asked the NYISO, if possible, to provide separate Zone J and Zone K numbers. K. Osse was going to look into whether they could provide that information and will get back to the group at the August 17 meeting.
  - New action item #247-15: Disaggregated Cable Outage Rates for Zone J and K.

## **7. Preliminary Base Case Parametric Results Update**

### **7.1. Results Update – N. Gilbraith**

- The ICS reviewed the 2022 parametric case results and no significant concerns were identified at this point. G. Drake did have a number of questions that he will send to the NYISO and look for their responses at the August 17 meeting, he will also send them out to the ICS group by the end of the week. New action item #247-16.
- Material Changes numbers 1 – 11 were reviewed and discussed at the June 29 meeting. F. Ciani picked up the discussion at today's meeting with #12.
  - #12: When the DMNC values were updated this year, several of the units that were identified a maintenance units last year had zero DMNCs this year. They took out those units and identified some new units in J and K as replacements to get to the 50MW maintenance schedule for the database.
  - #13: The amount of voltage reduction went down in total by ~50MWs compared to last year.
  - #14: The SCR MWs and outage rates stayed about the same, the distribution and location of the SCR MWs changed.
  - #15: Total impact of the LIPA and NYC outage rates and the cable outage rates the NYISO calculates.
  - #16: PJM LOLE was a lot higher this year compared to last year.
- The eight Non-Material changes had a 0.09% impact on the NYCA margin.

### **7.2. Final SCR Values and Performance – Samantha Bergami**

- NYISO presented a follow-up to the preliminary model values presented at June 2 ICS meeting where they utilized the July 2020 SCR enrollment data. The July 2021 updates are reflected in today's presentation. The background and Appendix data and information has not changed.
- ICS reviewed the Final SCR model values for the 2022 IRM study. There is no significant change in the effective performance factor compared to the 2021 IRM study. The slight increase in the model value percentage (+0.8%) is a result of improved performance. The decrease in the model value MWs is driven by a decline in the July 2021 SCR enrollments.

### **7.3. Zone K Margin question: Action Item 247-10 – Ying Guo**

- At the June 29 ICS meeting, concerns were raised why the Long Island (Zone K) reserve margin increased while other margins declined when the analysis updated the 2021 Gold book load forecast for 2022.
  - There is a 90.4 MW decline for the non-coincident peak (NCP) forecast for Zone K which caused the Zone K's reserve margin to increase about 1.56%. To adjust LOLE back to 0.1, the NYISO removed capacity from all zones including Zone K. This adjustment lowered Zone K's reserve margin (0.64%), but overall Zone K's reserve margin is still higher than the base case (1.01%).

- The updated Gold Book load forecast for other zones has increased. The NYISO removes capacity from all zones to adjust LOLE back to 0.1, these adjustments resulted in a decrease in the other zones' reserve margins.
- F. Ciani explained that a parametric is designed to provide an incremental change – magnitude and direction, and confirm that the results make sense. When some in the group questioned the amount of the increase, Frank went on to explain that because we are now adding more and more renewables, and with the ELR model as shapes, small changes are going to have a magnified impact because of the 8760 profile. Our full adjustment methodology was designed and geared for a single hour, thermal capacity dominated system and as we move towards one that is going to be more and more dominated by renewables and shapes, that whole process needs to be looked at.
- M. Younger stated the issue is that our methodology works best when the impacts across the state are even. If load had gone down 1% everywhere our parametric step probably wouldn't be that far off. But when things change more on Long Island and less in other places then the fact that we are not running a Tan45 which would probably show that the parametric step is not likely to be that accurate. Frank agreed and said that's why as the parametric has evolved over the years we've isolated cases where we can, e.g., when we do a generator retirement we do an upstate retirement versus a downstate retirement so the retirement doesn't impact the LCRs. However, for some parametrics it is very difficult to do that. Mark said that is why he thinks it would be appropriate, if the NYISO can speed up the process sufficiently, to try to imbed some Tan45s in the midst of the parametric study steps. Frank agreed but noted the limitations of the parametric schedule and the time intensive requirements of each Tan45 run. Mark anticipates that the addition of all the OSW coming in will result in the parametrics being increasingly off and suggested the NYISO needs to find a way to fit even a limited number of Tan45s in the schedule.

#### **8. 2022 Sensitivity list for Approval – G. Drake**

- #6: The preliminary base case does not have the PAR in-service, the sensitivity is to put the PAR in-service.
- #8: Two modeling options; a deterministic 50% unavailable or model the unavailability under the 5-year forced outage rate basis. NYISO said they could model it both ways and run a sensitivity analysis on it then discuss it with ICS. The dynamics are going to be different in terms of the difference between retiring a very poor performing unit or taking a unit and converting it into a poor performer by increasing its EFORD. The two options on how this is modeled will likely have opposite impacts on the IRM.
- #9: NYISO will be able to rollback all the cable rates and then perform a Tan45; demonstrate the impact that updating the cable forced outage rate had on the results this year.
- Three Sensitivities (#10, 11, 12) were approved for consideration outside of the 2022 IRM determination (possibly do in the Jan-Mar 2022 timeframe), or as separate white papers.
- ICS approved the 2022 IRM Sensitivity List.

#### **9. Summer Maintenance Analysis Update - J. Adams**

- J. Adams walked through his review of the 2020 summer maintenance assessment. He looked at summer peak loads of 28,000MWs or higher and tried to determine from the GADs data whether or not there was any maintenance going on. John looked at the months of June through mid-September and reviewed the GADs data for the different types of maintenance outages.
  - It was a warmer summer in 2020 vs. 2019 and the peak day occurred on a normal week day rather than a Saturday as was the case in 2019.

- This year the total recorded events was up to 516 which was substantially higher than last year. John had no explanation for that other than it was a warmer summer, but he wasn't positive that was the reason. 12 events were during peak hours on days when loads exceeded 28,000 MWs.
- Many of the maintenance derates started around midnight and went until 2-3 am, however, the units were still able to operate at full load during the peak hours.
- Out of the total of 516 maintenance events reported during June through mid-September 403 or 78% of those occurred in Zones J & K.
- John recommends maintaining the summer maintenance at 50 MW and distributed as in 2021 - 2022 IRM study in Zones J&K – 25 MW in each Zone.

## **10. NYSRC Corporate Goals – B. Shanahan**

### **10.1. & 10.2 NYSRC Draft 2021/2022 Goals**

- ICS had commented on this in our last meeting, the RRS has provided Brian an update to it. The update in total is looking more at extending it through 2022 versus just a 2021 item.
- ICS reviewed and discussed the changes resulting from RSS input.
  - There were questions regarding exactly what was expected from goal A.1.: “Prepare a scope and implement a Phase 3 High Intermittent Renewable Resource analysis for evaluating the IRM and other reliability impacts of a future NYCA system with a high level of renewable resources.”
    - Brian will bring it back to the EC to get clarification/guidance.
  - Shifting responsibility for goal A.2. from RRS/ICS to RRS/RAWG.
  - Goal C.2.: Questions re “conduct long range IRM studies” in the ICS scope. The other part: “when appropriate ... recognize the need to consider emerging issues in IRM studies” seems to be something more in line with what we can realistically achieve, we’ve already been doing this through white papers. Many felt that we don’t want to be in the business of forecasting IRM out into the future – too many unknowns.
    - General agreement to take out “long range IRM” Suggested language: “Revise the ICS scope to consider emerging issues in IRM studies.” It would be a clarifying change to amplify what our existing practices are. The revise scope could also formalize our white paper process.
    - Brian will bring our comments back to the EC for discussion.

## **11. 2022 NYSRC Draft Meeting Schedule – B. Shanahan**

- Two meeting dates were shifted due to conflicts with NYISO MC meetings. March 30 was changed to March 29 and August 31 was changed to August 30.
- Meeting locations were discussed and it was decided to use WebEx/MS Teams for the regular meetings in January through April and June, and for the mid-month meetings in August and November. In person meetings would be held at the NYISO in May and July through December, subject to change due to revised meeting protocols at the NYISO.
- The updated schedule will be reviewed at the August 17 meeting.

## **12. Additional Agenda Items**

- Greg Drake gave an update to action item 247-3. It has been answered by the NYISO. The rating information provided is reasonable.

### **Next Meeting**

**Meeting #250 – Tuesday August 17, 2021, 10 am – Webex**