The ICS Report for the July 29, 2014 Meeting

Summer Maintenance
ICS held a conference call on July 18th to discuss the summer maintenance. John Adam presented two options to calculate the value, one using the historical method and an alternative calculation method. The alternative method evaluated the correlation between maintenance and loads greater than 85 percent of the forecasted 2013 peak load. On higher load days, the maintenance was significantly lower than lower load days. Some thought this information was helpful and the approach has merit, but all thought evaluation of additional study years would help determine the validity of the analysis. There was general consensus, but not unanimous to use the historical method. All agreed that the alternative method will be evaluated further for next year’s study. Summer maintenance will be modeled at 50 MW divided equally between upstate and downstate.

Preliminary Parametric Analysis
The group reviewed the preliminary parametric analysis to evaluate the incremental changes to the modeling assumptions to identify any potential errors if results appeared counter intuitive. The group will review the final parametric analysis and present the results to the EC at the September meeting.

The retired Dunkirk 2 unit, 75 MW in Zone A, resulted in a 0.3% increase in the reserve margin. Part of this higher than expected increase may be from a path from Zone A through PJM to NYC that drives up the statewide reserve margin. When comparing the impacts to reserve margin between Dunkirk 2 and Danskammer, ICS observed that Dunkirk 2 increased the reserve margin much more than Danskammer, the larger unit in the lower Hudson Valley which decreased the reserve margin by 0.04%. The respective EFORD’s of these units may be contributing to the differential. Notice on Attachment C of the Assumption Matrix, Zone F-I EFORD in 2011, when Danskammer was last in service, was almost 14% and it’s rolling 5-year average is almost 2% higher than last year. Compared to Zone A-C 2011 EFORD was approximately 2.5% and its rolling 5-year average was lower by approximately 0.5%. It should be noted, however, the small impact of Danskammer was consistent with the analysis conducted when Danskammer was removed; it increased the statewide IRM very little and had a greater impact on the LCRs.

During the course of discussions, the NYISO attributed these results partly to the methodology of how capacity is added and removed in different parts of the state. This methodology has been developed over a number of years and in most cases the results are consistent with expectation, but on occasions there are anomalies. ICS will discuss the methodology in greater detail for next year’s study.
List of Sensitivities

The IRM sensitivities are categorized in Policy 5 as MARS Parameter Impacts, Assumption Uncertainty Impacts, Impacts of Future System Changes and the study typically includes ten sensitivities. To arrive at this targeted number, the group conducted a series of screening steps. First we eliminated those sensitivities from the 2014-2015 IRM study that we thought provided little value. This included elimination of the following:

- Higher Outside World reserve margins
- Lower Outside World reserve margins
- Retirement Cayuga and Dunkirk
- Limit SCR calls to 5 per month

Next the group identified those that are necessary because they are used in the report to identify MARS parameter impacts and include the following:

1. NYCA isolated
2. No internal NYCA transmission constraints
3. No load forecast uncertainty
4. No wind capacity
5. No SCRs and EDRP

Finally, the group reviewed those sensitivities proposed by the EC and others to understand the variable that the sensitivity is to evaluate and to discuss how it would be modeled. The group easily finalized the following sensitivities for inclusion for this year’s study.

6. Multi-load shape feature used with new peak logic feature turned off
7. Use the 2002 load shape without the multi-load shape feature
8. Set PJM LOLE capped at 0.15
9. Remove Danskammer from base case

We are asking the EC to approve the 9 of the 10 sensitivities. The one sensitivity remains may be retirement of Indian Point 2 & 3 scenario or a scenario with a nomogram to evaluate simultaneous deliver of natural gas. Some thought the Indian Point 2 & 3 added little value to determining the IRM and that this scenario has been studied for years so the impact is fully known. However, others noted that this scenario was one that the EC has been historically interested in.

There was significant debate as to whether a sensitivity is needed to assess if both Danskammer and Roseton could operate simultaneously on natural gas. Danskammer Units 1 and 2 are 125 MW with dual fuel capability, while Units 3 and 4 are 375 MW with only natural gas capability with an unknown amount of firm transportation service. Roseton is a 1,200 MW dual fuel unit and it’s not clear if this unit has any natural gas delivery rights. Both generating stations are in close proximity of each other and rely on the same natural gas pipeline. The NYISO reported that this natural gas pipeline has sufficient capacity to deliver enough natural gas to generate
1,200 MW based on review of an Article VII natural gas siting application. NYISO also noted that the Roseton Unit can operate entirely on oil without exceeding its emission limits. It was questioned if this sensitivity is necessary because if Danskammer 3 and 4 burned natural gas there would be approximately enough natural gas pipeline capability for 825 MW and the remaining capacity of Roseton can burn oil.

The group did not reach a definitive decision. Consequently, we are asking the EC for permission to bring our recommendation on this sensitivity back next month.