

**Agenda Item 4.1: ICS Report to NYSRC Executive Committee (EC)**

June 26, 2024, ICS Meeting #291

Prepared for: July 12, 2024 EC Meeting #303

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**4.1.1 Tan 45 Methodology Review**

NYISO presented an informational update on the Tan45 methodology study.

**Alternative Low Point Analysis**

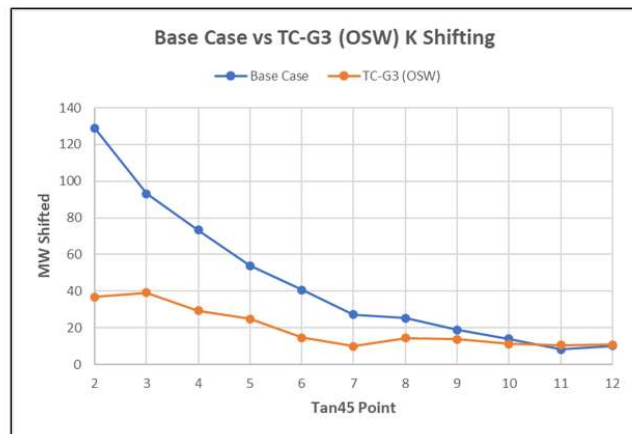
- Traditionally, removing capacity from zones with excess capacity west of the Central-East interface (A, C, and D) resulted in the lowest possible IRM and highest LCRs. When significant OSW is added downstate, this approach no longer yields the lowest possible IRM. Instead, using an alternate method that also removes capacity from zones J and K led to an ~1% lower IRM while maintaining the 0.1 LOLE.
- Removing representative fossil units rather than a zonal average EFORD unit was suggested to align with the State’s clean energy goals.
- Removing capacity from zones A, C, D, J, and K at the outset may impact upstate-downstate balance.
- NYISO will verify that UCAP translation factors are consistent with each future scenario.

**Unforced Capacity Reserve Margin (URM) Analysis**

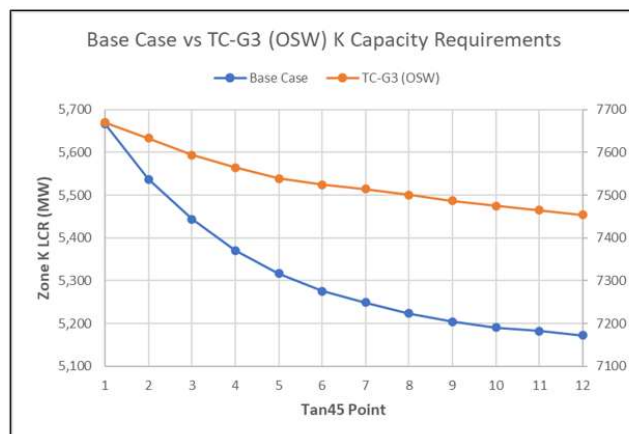
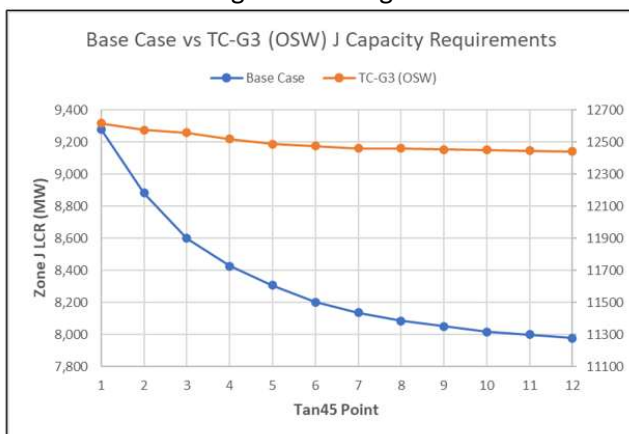
- The base case URM is 4.5%. By comparison, the +9 GW LBW case had a 0.7% lower URM while +9 GW FTM PV had a 7% higher URM.

**OSW Results: Additional Analysis**

- Adding 9 GW OSW downstate leads to a flattening of the J and K curves as fewer MW are required to be shifted from downstate to upstate to maintain 0.1 LOLE as the IRM increases, leading to issues with the Tan45 process.
- These charts show the amount of additional MW shifted out of Load Zones J and K from the prior Tan45 point to maintain the target LOLE as the IRM increases



- These charts compare the MW capacity requirements along the Tan45 curve adjusting the starting point and axis to better align the scaling in each case



#### **4.1.2 BTM Solar Modeling and Impact Assessment**

NYISO presented the combined effect of the alternative load shape adjustment methodology and explicitly modeling BTM solar as DSM units, avoiding the large IRM shifts seen earlier in the year. The combined effect reduced the IRM by 0.6% and increased the LCRs. For base case sensitivities, modeling only BTM solar as a DSM unit was preferred.

#### **4.1.3 Topology Update**

NYISO proposed and ICS accepted topology updates for the PBC.

- The West Central reverse limit was updated from 2,275 MW to 2,200 MW with no IRM or LCR impact based upon testing on the 2024-2025 FBC.
- The Central East forward limit was updated with a 75 MW derate for an outage of the Marcy STATCOM for all Oswego complex combinations. There is no IRM impact due to this change based upon testing on the 2024-2025 FBC.
- The UPNY-SENY limit remains unchanged. Prior work suggested including the Dover PAR outage would not change the limit, but obtaining regular formal studies of such limits is of interest.
- NYISO will return to ICS with any updates to the topology to reflect the expected Dover PAR status.

NYISO proposed and ICS approved “to no longer seek TPAS review and approval of proposed IRM topology updates and instead leverage SOAS/OC approvals for limits that originate from NYISO Operations.” The RNA is only completed once every two years whereas the summer assessment is completed every year.

#### **4.1.4 Parametric Results IRM 2025-2026 PBC**

Adding the 3 new solar generators increased the IRM by 0.86% and other changes were non-material. The completed PBC results will be available at the next meeting.

#### **4.1.5 Final Assumptions Matrix IRM 2025-2026 PBC**

NYISO presented the completed assumptions matrix and added notes to incorporate other updates from this meeting including those from 4.1.7 below. ICS approved the updated assumption matrix with these changes and will repost as a redline version v5.1.

#### **4.1.6 Proposed Sensitivities for IRM 2025-2026 PBC**

ICS requests EC input on potential PBC sensitivities prior to formally requesting approval at the August meeting. The top 5 sensitivities are standard. ICS is inclined to drop sensitivity 4a because of overlap with 4b and potential confidentiality concerns given the difference between 4a (no LBW) and 4b (no wind) is one facility. For additional sensitivities, both the winter gas constraints and explicit modeling of BTM solar were included. The winter gas constraints sensitivity would mirror the recently completed whitepaper but start from the current PBC and focus on two firm oil levels, e.g., NYISO’s estimate of 11,000 MW and a lower number such as 8,000 MW.

#### **4.1.7 NYSRC Recommendations for Adoption**

Gary Jordan proposed and ICS accepted the following changes for the PBC:

- Limit voluntary curtailment and public appeals to 3 calls/year
- Switch to 10-year cable transition rates
- Apply line specific limits to the HVDC lines importing from PJM to the localities and extend the PJM dynamic EA group to include PJM G ties. The proposed PJM limits would not limit capacity sold over the lines and would only apply to emergency assistance.

The proposed changes increase the IRM by 0.27%, J LCR by 3.54%, K LCR by -0.09%, and G-J Locality by 2.58% based upon testing on the 2024-2025 FBC.