

Long Island Tan45 Results: Investigation Proposal

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Background

- 2021 IRM PBC Tan 45 results were discussed with stakeholders at the 9/2 NYSRC ICS meeting
 - http://nysrc.org/PDF/MeetingMaterial/ICSMeetingMaterial/ICS%20
 Agenda%20236/AI%208.0%20-%20IRM21_PBC_Tan45.pdf
- Several Tan45 analyses related to Indian Point Unit 3 (IP3) are being performed
 - Evaluating potential impact of deactivation of IP3 on IRM and indicative LCRs



Propose Additional Investigation

- Further investigation is necessary for LI Tan45 reserve margin
 - Perform additional analyses on several parametric cases that likely contributed to the lower LI Tan45 reserve margin
 - http://nysrc.org/PDF/MeetingMaterial/ICSMeetingMaterial/ICS%20Agenda %20236/AI%207.0%20-%20IRM%202021_Preliminary%20Base%20Case%20Parametric%20Resul ts.pdf
 - LFU impact on LI LCR (Parametric Case #1)
 - LI capacity deactivations Impact (Parametric Case #6)
 - LI cables only (i.e., separate from ConEd cables) (Parametric Case #8)
 - NYISO will perform either Tan45 analyses or isolate the specific LI locational reserve margin change and re-run the parametric case, depending on available time



Proposed Additional Investigation, cont'd

- Results will be discussed with stakeholders at the September 29th ICS Meeting
- To accommodate this work, NYISO proposes to perform the LI Tan45 reserve margin investigation instead of the IRM sensitivity case "External Modeling Method"
 - The first five preliminary sensitivity cases show externals had a similar effect on the IRM as last year
 - See results posted under the agenda item "Sensitivity Results (1-5)"



2021 IRMStudy- Sensitivity Cases (based on PBC)

Case	Description	Reason
0	2021 IRM Preliminary Base Case	These are the Base Case technical results derived from knee of the IRM-LCRcurve.
1	NYCA Isolated	Track Total NYCA Emergency Assistance – NYCA system is isolated and receives no emergency assistance from neighboring control areas (New England, Ontario, Quebec, and PJM). UDRs are allowed.
2	No Internal NYCA transmission constraints	Track level of NYCA congestion with respect to the IRM model — internal transmission constraints are eliminated and the impact of transmission constraints on statewide IRM requirements is measured.
3	No Load forecast uncertainty	Shows sensitivity of IRM to load uncertainty, assuming that the forecast peak loads for NYCA have a 100% probability of occurring.
4	No wind capacity	Shows wind impact and can be used to understand EFORd sensitivity; performed by freezing J & K at base levels and adjusting capacity in the upstate zones.
5	No SCRs	Shows sensitivity of IRM to SCR resources.
6	SCR Modeling method update [Tan 45 #1]	Evaluate the effect of SCR duration limitations. Model SCRs as limited to full performance for 4 hours with lower performance for additional shoulder hours (e.g., hours 5 and 6).
7	External modeling method [Tan 45 #3] Investigate LI LCR	Evaluate use of alternative data or methods to account for externals. Evaluate parameters that likely contributed to the lower LI Tan45 Reserve Margin
8	Impact of planned public policy upgrades [Tan 45 #2]	Revise topology with RNA model. Note: This is for informational purposes only. This will not factor into the 2021 IRM study.

Note: Tan 45 time permitting



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- Maintaining and enhancing regional reliability
- Operating open, fair and competitive wholesale electricity markets
- Planning the power system for the future
- Providing factual information to policymakers, stakeholders and investors in the power system





Questions?

