Agenda Item 4.1: ICS Report to NYSRC Executive Committee (EC)
November 1, 2023, ICS Meeting #282
Prepared for: November 9, 2023, EC Meeting
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4.1.1   2024 IRM FBC Results

ICS Reviewed and approved the 2024 FBC Tan45 results. There was significant discussion about the results in light of an issue regarding the Transmission Security Limits (TSL) that will be used by NYISO when conducting the LCR analysis, this issue will be discussed as a separate agenda item. Despite the issue to be discussed, ICS elected to approve the FBC Tan45 results which are consistent with NYSRC Policy 5 requirements. The relevant Tan45 curves, data points and IRM tables are included as attachments.

2024 - 2025 IRM FBC Tan45				
Summary Results				
	IRM	**J LCR**	**K LCR**	**G-J**
IRM Tan45	23.100	72.730	103.207	84.577

4.1.2   Standard Error Analysis

NYISO conducted the standard error analysis for the 2024 FBC and determined that the number of replications needed to achieve a standard error of .025 needed to be increased from 2,750 to 3,250 replications. It is expected that as more constraints are introduced into the model the number of replications may continue to increase.

4.1.3   Gas Constraint Modeling Whitepaper

NYISO presented several modeling approaches to represent gas unit availability in the MARS model and their respective impacts on the IRM. Although the results showed minor differences there was discussion about testing the different approaches on a system that has higher winter LOLE to better evaluate the approaches. NYISO plans to recommend an approach by the end of 2023 and issue a report in early 2024.

4.1.4   Transmission Security Limit (TSL) Floor Assessment

At ICS meeting #281 it was discussed that based on Transmission Security Floors (TSL) that are incorporated into the NYISO's LCR study that there may be a situation where locking the Tan45 IRM would result in a system that is better than 0.1 days/yr when respecting the TSL floors. The typical process is for NYISO to take the NYSRC approved IRM and use that value in the LCR study. In this instance, because the IRM would be locked at the NYSRC approved IRM, the model can only make LCR adjustments to achieve an LOLE of 0.1 days/yr. Because the IRM is locked and the NYC and LI preliminary LCRs were below the TSL floors the model will increase NYC and LI LCRs to the TSL floor and the only option left to adjust is the LHV LCR. The LHV LCR can only be adjusted down to 81% before hitting the LHV TSL floor, doing so would result in a system that is better than criterion at 0.069 days/yr. NYISO performed an additional analysis that locked in the LCRs at the TSL floors and adjusted the IRM to get back to criterion of 0.1 days/yr which resulted in an IRM of 21.5%. ICS recommended presenting the NYISO's analysis to the EC and to including it as a sensitivity in the IRM study. A separate presentation from the NYISO is attached to provide more details on this topic.

	IRM	Preliminary LCRs			
		NYC	**LHV**	**LI**	**LOLE (days/yr)**
2024 FBC Tan45	23.10%	73.73%	84.58%	103.21%	0.100
TSL Floors		81.70%	81.00%	105.30%	
Tan45 IRM + TSL Floors	23.10%	81.70%	81.00%	105.30%	0.069
Adjust IRM + TSL Floors	21.50%	81.70%	81.00%	105.30%	0.100