

Draft ICS work product, for discussion purposes. Only 2021 Sensitivity Cases.

2021 IRM Study –Sensitivity Cases (based on PBC)

Case	Description	IRM (%)	NYC (%)	LI (%)	IRM% Change from Base Case
0	<b>2020 Preliminary Base Case</b>	20.1	82.7	97.3	-
	This is the Base Case technical results derived from knee of the IRM-LCR curve. All other sensitivity cases are performed as described above.				
1	<b>NYCA Isolated</b>	27.0	87.8	104.3	+6.9
	This case examines a scenario where the NYCA system is isolated and receives no emergency assistance from neighboring control areas (New England, Ontario, Quebec, and PJM). UDRs are allowed.				
2	<b>No Internal NYCA Transmission Constraints (Free Flow System)</b>	18.2	81.3	95.4	-1.9
	This case represents the “Free-Flow” NYCA case where internal transmission constraints are eliminated and measures the impact of transmission constraints on statewide IRM requirements.				
3	<b>No Load Forecast Uncertainty</b>	11.0	75.9	88.2	-9.1
	This scenario represents “perfect vision” for 2020 peak loads, assuming that the forecast peak loads for NYCA have a 100% probability of occurring.				
4	<b>Remove all wind generation</b>	15.2	82.7	97.3	-4.9
	Freeze J & K at base levels and adjust capacity in the upstate zones. This shows the impact that the wind generation has on the IRM requirement.				
5	<b>No SCRs</b>	17.7	79.9	97.8	-2.4
	Shows the impact of SCRs on IRM.				
6	<b>SCR Modeling method update [Tan 45]</b>	20.8	84.0	98.9	+0.7
	Evaluate the effect of SCR duration limitations. Model SCRs as limited to six (6) hours of load reduction per day, with a further daily limit on total energy reduction from SCRs equal to 5 hours of the resource's value. That is, a hypothetical 100 MW of SCRs can reduce load for 6 hours per day but can only reduce load by 500 MWh over the course of that 6 hours.				
7	<b>LI LCR Analysis</b>	<b>LI LCR impacts:</b> LI LFU (-0.9%), LI unit deactivations (-0.4%), LI cable outage rates (-2.3%)			
	Tan 45 analysis was conducted on the three drivers affecting Long Island LCR values				
8	<b>DLRs with new software modeling</b>				
	Use new MARS software version to model the elections of the Duration Limited Recourses				