Draft ICS work product, for discussion purposes Only -2018 Sensitivity Case Results

Case	Description	IRM (%)	NYC (%)	LI (%)		
0	Final Preliminary Base Case	18.7	81.4	103.9		
	This is the Base Case technical results derived from knee of the IRM-LCR curve. All other sensitivity cases are performed off of this run					
1	NYCA Isolated	26.1	86.6	110.6		
	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	No Internal NYCA Transmission Constraints (Free Flow System)	16.7	NA	NA		
	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	No Load Forecast Uncertainty	11.5	76.3	97.4		
	This scenario represents "perfect vision" for 2017 peak loads, assuming that the forecast peak loads for NYCA have a 100% probability of occurring. The results of this evaluation help to quantify the effects of weather on IRM requirements.					
4	Remove all wind generation	15.0	81.4	103.9		
	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	No SCRs & no EDRPs	15.8	78.6	103.7		
	Shows the impact of SCRs and EDRPs on IRM.					
6	Remove CPV Valley Energy Center					
	A full tan 45 curve case based on removing the addition of CPV-VEC (678 MW) from the base case.					
7	Limit Emergency Assistance from PJM to all of NYCA to 1500 MW	18.7	81.4	103.9		
	This case uses a grouped interface of all PJM to NYCA import ties and restricts the grouping to a limit of 1500 MW					
8	Retire Indian Point 2 and 3 *	LOLE of 0.55 days/year				
	Starts with the base case and removes the Indian Point Units. The LOLE is recorded. This sensitivity was performed without adding any additional capacity.					

Case	Description	IRM (%)	NYC (%)	LI (%)		
9	Model 2,000 MW of additional Wind resources (adjusted back using zones A-F only).	23.2	81.4	103.9		
	Add Wind capacity to the existing fleet of wind generation to the order of 2,000 MW. This will increase the NYCA participating wind fleet to 3,733 MW.					
10	Model 2,000 MW of additional bulk Solar resources	23.3	80.4	106.3		
	Add Solar capacity to the existing fleet of bulk Solar generations to the order of 2,000 MW. This will increase the NYCA participating bulk Solar fleet to 2,032 MW.					
11	Model 2,000 MW of Wind and 2,000 MW of Solar additions (4,000 MW total). <u>Perform tan 45.</u>					
	Add the resources totaling 4,000 MW from the above cases 9 and 10. Perform a tan 45 curve and analysis.					
12	Model 2,000 MW of Wind and 2,000 MW of Solar additions (4,000 MW total).	28.7	80.0	105.7		
	Add the resources totaling 4,000 MW from the above cases 9 and 10. Perform this case using the standard sensitivity methodology.					
13	Remove the 3500 MW EA Limit into NYCA	18.5	81.2	103.7		
	Remove the 3500 MW Emergency Assistance grouped limit entering NYCA from its neighbors. UDRs rema					
14	Model a 500 MW Locality export to New England	N/A	N/A	N/A		
	Given time, model a capacity sale of 500 MW from zone G to NY's Western Mass and Connecticut zones.					

^{*}The removal of Indian Point in this IRM sensitivity case is different than the sensitivity removing Indian Point as reported in the RNA process because the RNA process starts with an "as found" system, while the IRM sensitivity cases start with the system at "criteria" (0.1 LOLE).