

ICS work product, for discussion purposes Only --2017 Sensitivity Case Results

Case	Description	IRM (%)	NYC (%)	LI (%)		
0	Preliminary Base Case	18.3	81.9	104.2		
	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	26.6	87.8	111.8		
	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)	15.4	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	10.4	76.3	96.9		
	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	14.4	81.9	104.2		
	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	15.5	79.3	104.0		
	Shows the impact of SCRs and EDRPs on IRM.					
6	Emergency Assistance limit of 2750 MW	18.6	82.1	104.5		
	This case uses a grouped interface of all NYCA import ties to restrict emergency imports to a level of 2750 MW.					
6a	Emergency Assistance limit of 2250 MW	19.0	82.4	104.9		
	This case uses a grouped interface of all NYCA import ties to restrict emergency imports to a level of 2250 MW.					
7	Indirect Emergency Assistance eliminated—	NE:	Quebec:	Ontario:	PJM:	Total:
	Incremental IRM reported. * NYCA IRM:	20.4	20.4	20.4	20.6	--
	*This case is under review IMPACT:	2.1	0	0	0.2	2.3

	This case zeros out the ties leaving NY in order to prevent loop flow from leaving NY and re-entering NY bypassing constrained interfaces. The external Control Areas are testing parametrically.			
8	Retire Indian Point 2 and 3	LOLE of 0.87 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.			
9	Forward Capacity Market uses all available room (1100 MW) on F-WMA and G-Connecticut interface ties based on the 48/52 % split.			
	Use the methodology expressed in sensitivity case 13 below to export the total amount of contracts that NE will accept over the ties from zones F and G to New England.			
10	GINNA and FITZPATRICK RETIRED USING NORMAL SENSITIVITY METHODOLOGY (ADJUST ZONES A-K)	17.2	84.3	107.3
	Remove the two units and return the LOLE to 0.1 using the typical sensitivity methodology where capacity is added in zones A-K.			
10a	Retire Ginna and Fitzpatrick and perform a tan 45 analysis (IRM/LCR curve)	18.8	82.3	104.5
	Remove the two units and create and IRM/LCR curve using the appendix A (Policy 5-10) methodology. Determine the tan 45 values.			
10b	GINNA and FITZPATRICK RETIRED USING SENSITIVITY METHODOLOGY OF ADJUSTING ZONES A, C, and D.	19.3	81.9	104.2
	Remove the two units and return the LOLE to 0.1 using a sensitivity methodology whereby capacity is added in zones A, C, and D.			
11	Determine IRM and emergency assistance while including all NYCA capacity resources	LOLE: 'As Found' - 0.013 Isolated - 0.124	Import limit: 110 MW	NY reserve level: 25.8
	Start with NYCA "as found". Isolate NYCA by setting all inter-control area ties to zero. Slowly increase the import grouped interface rating used in # 6 above starting from zero and increasing until LOLE is 0.1 days/year. Record the import limit and the NYCA reserve margin level.			
12	One Ramapo PAR out of service	18.6	82.1	104.5
	Reduce the tie from PJME to RECO bubble (5018 line) from 1,000 to 500 MW to represent the PAR not returning.			
13	Sale of Roseton Unit using methodology provided by the NYISO. <u>Full Tan 45 Curves and analysis</u>			
	Use the NYISO suggested IRM methodology where 48% is sourced from zone F and 52% is sourced from zone G. to reflect the potential sale of 511 MW from Roseton Unit 1			

**This isolated reserve level here is lower than case 1 because it does not contain any shifted capacities*