

Estimated Energy Storage Required and Potential Price Necessary to Prevent Deficit on August 8, 2018

Date Time (EDT)	Average Deficit MWhr	Minimum Deficit MW5-min	Energy Storage Systems						Total Storage Used	Storage Margin (MW)	
			Total (MWhr)	9,800	7,800	13,750	2,690	1,250			1,870
			Capacity (MW)	1,400	1,300	2,750	2,690	1,250			1,870
Duration (Hr)	7	6	5	1	1	1					
8/8/2018 03:00	-1,140	-1,390	1,400						1,400	10	
8/8/2018 04:00	-7,951	-8,131	1,400	1,300	2,750	2,690			8,140	9	
8/8/2018 05:00	-5,089	-5,447	1,400	1,300	2,750				5,450	3	
8/8/2018 06:00	-5,881	-6,693	1,400	1,300	2,750		1,250		6,700	7	
8/8/2018 07:00	-6,782	-7,318	1,400	1,300	2,750			1,870	7,320	2	
8/8/2018 08:00	-4,452	-5,294	1,400	1,300	2,750				5,450	156	
8/8/2018 09:00	-2,252	-2,662	1,400	1,300					2,700	38	
Total	-33,548										

NREL Energy Storage Benchmark Prices

\$/KWhr	\$ 308	\$ 313	\$ 321	\$ 501	\$ 501	\$ 501
Total for batteries	\$ 3,018,400,000	\$ 2,441,400,000	\$ 4,413,750,000	\$ 1,347,690,000	\$ 626,250,000	\$ 936,870,000
Grand total	\$ 12,784,360,000					