



# Peak Shaving Frequency Analysis

Summer-Only Demand Response Sr. Task Force  
May 9, 2018

- For years 2009 through 2017, compared PJM's day-ahead peak forecast to the summer peak forecast from that year's PJM Load Forecast Report.
- The number of times each zone's day-ahead forecast exceeded a percentage (90%-100%) of its summer forecast was calculated.
- Analysis was only conducted for zones for which comparable short-term and long-term forecasts were available.
- Day-ahead forecasts reflect the 10AM release for 2016 and 2017, the noon forecast for all other years.
- PJM's current load forecast model was use for all years of the analysis.



Summers 2009-2017

### Number of Peak Shaving Events Triggered by Day-Ahead Forecast

Test Load: % of Summer Peak Forecast

	Zone	90%	91%	92%	93%	94%	95%	96%	97%	98%	99%	100%
Average	AEP	17.2	14.3	12.3	9.4	6.7	5.6	4.3	2.6	1.8	0.6	0.3
Average	APS	17.6	15.6	13.6	11.6	9.4	7.8	6.6	4.9	3.8	3.3	2.2
Average	ATSI	12.4	10.8	9.4	7.9	7.1	6.3	5.1	4.2	3.6	2.7	2.2
Average	COMED	9.1	7.6	6.7	6.1	4.9	4.1	3.2	2.4	2.1	1.7	1.4
Average	DAYTON	15.7	12.8	9.9	8.4	6.9	5.6	4.6	3.6	2.7	2.1	0.9
Average	DEOK	9.0	7.3	5.4	4.4	3.9	3.0	2.3	1.6	1.0	0.9	0.6
Average	DLCO	12.9	10.7	9.1	8.0	6.4	5.6	4.0	2.8	2.1	1.8	1.4
Average	DOM	28.0	25.6	21.7	18.6	16.2	13.9	10.7	8.2	6.3	4.8	4.1
Average	MIDATL	13.8	12.3	10.6	9.1	6.8	5.4	3.9	3.0	1.7	1.7	1.1
Maximum	AEP	31	27	25	21	16	13	12	10	6	2	1
Maximum	APS	39	39	36	32	28	25	22	18	14	12	8
Maximum	ATSI	26	24	22	21	20	18	16	15	12	10	8
Maximum	COMED	19	18	18	17	14	12	11	10	9	7	6
Maximum	DAYTON	29	23	20	20	17	16	14	14	12	12	6
Maximum	DEOK	29	28	26	21	20	18	17	12	8	8	5
Maximum	DLCO	27	23	22	18	18	17	12	8	7	6	6
Maximum	DOM	57	52	46	43	38	33	25	22	20	11	11
Maximum	MIDATL	28	25	21	18	14	13	9	8	5	5	4
Minimum	AEP	3	2	2	2	1	0	0	0	0	0	0
Minimum	APS	6	4	3	3	2	1	0	0	0	0	0
Minimum	ATSI	0	0	0	0	0	0	0	0	0	0	0
Minimum	COMED	0	0	0	0	0	0	0	0	0	0	0
Minimum	DAYTON	4	2	1	0	0	0	0	0	0	0	0
Minimum	DEOK	0	0	0	0	0	0	0	0	0	0	0
Minimum	DLCO	3	1	1	1	0	0	0	0	0	0	0
Minimum	DOM	12	11	10	6	4	3	3	2	1	0	0
Minimum	MIDATL	6	4	4	2	1	1	0	0	0	0	0