

# Historical Performance of Base Capacity Resources (Wind and Solar)

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PJM examined the performance of wind and solar resources over two sets of hours:

- 1. Suggested Intermittent Performance Hours under CP
  - Period covered is 6/1/2013 2/29/2016
  - All days in Jan. and Feb. HE 0600-0900 and 1800-2100 (1424 total hours)
  - All days in June, July and Aug. HE 1500-2000 (1656 total hours)
- 2. All hours in which load exceeded the 50/50 W/N seasonal peak (hours associated with loss of load risk)
  - Period covered is 6/1/2008 12/31/2015
  - 68 summer hours exceeded the 50/50 W/N summer peak
  - 143 winter hours exceeded the 50/50 W/N winter peak



# Intermittent Unit Capacity Factors CP Performance Hours

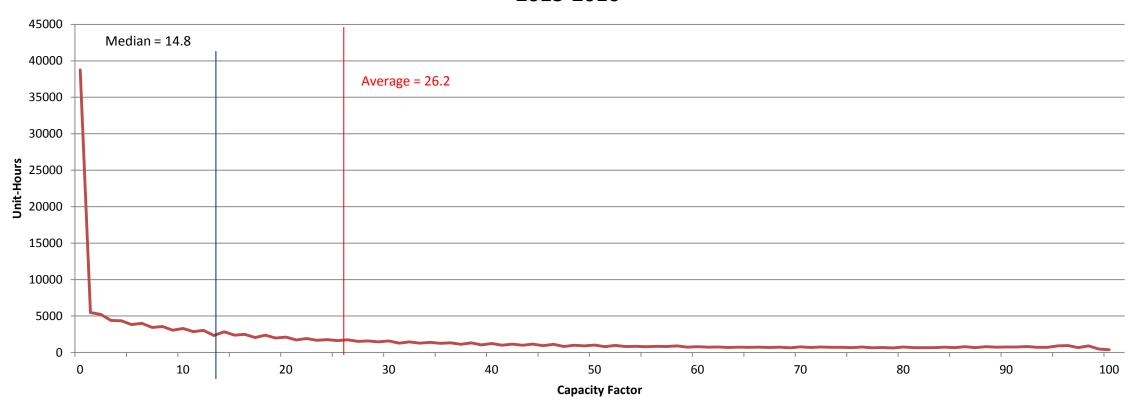
Unit Type	Summer Hours		Winter Hours		All Hours	
	Average	Median	Average	Median	Average	Median
Wind	15.0	7.4	39.0	33.3	26.2	14.8
Solar	30.1	24.8	2.0	0.0	17.0	2.7

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#### Wind Performance in CP Hours Capacity Factor Data Profile

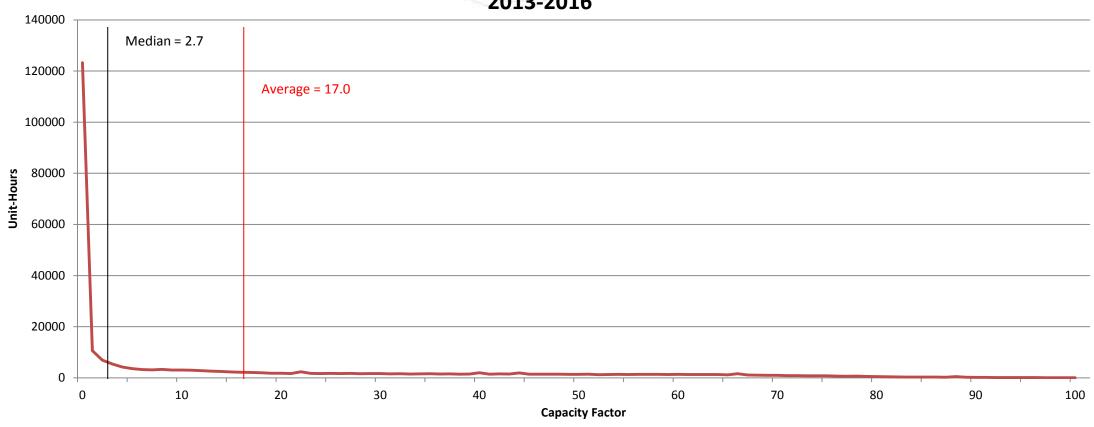
### Wind Performance Across all CP hours 2013-2016





#### Solar Performance in CP Hours Capacity Factor Data Profile

## Solar Performance Across all CP hours 2013-2016





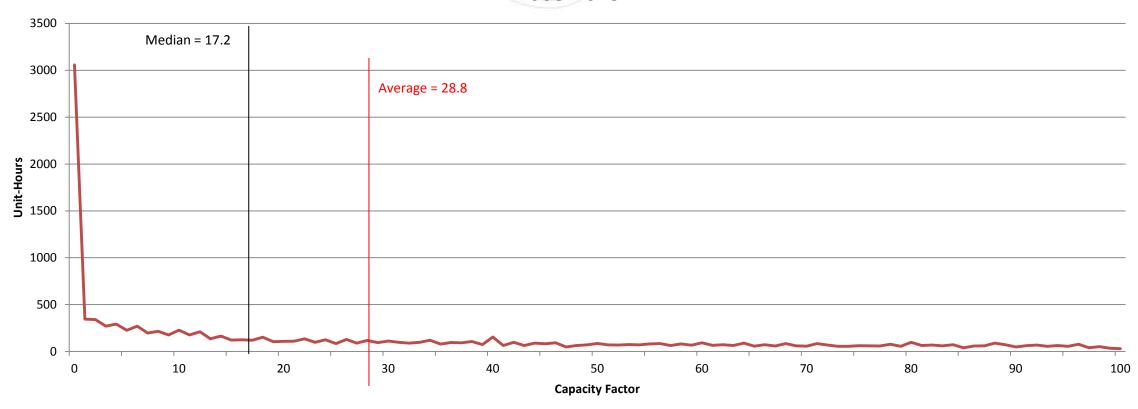
#### Intermittent Unit Capacity Factors Hours when Load > 50/50 W/N Peak

<b>Unit Type</b>	Summer Hours		Winter Hours		All Hours	
	Average	Median	Average	Median	Average	Median
Wind	11.2	4.5	36.8	31.6	28.8	17.2
Solar	42.2	42.1	15.3	0.0	21.3	3.2



# Wind Performance Hours when Load > 50/50 WN Peak Capacity Factor Data Profile

### Wind Performance Across all Hours when Load >50/50 WN Peak 2008-2015





# Solar Performance Hours when Load > 50/50 WN Peak Capacity Factor Data Profile

### Solar Performance Across all Hours when Load >50/50 WN Peak 2008-2015

