



2018 RRS Results

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Resource Adequacy Planning
Markets & Reliability Committee
October 25, 2018

- Study results will re-set the IRM and FPR for 2019/20, 2020/21, 2021/22 and establish initial IRM and FPR for 2022/23.
- Capacity model built with individual unit GADS data from 2013-2017 time period for all weeks of the year except the winter peak week.
 - For the winter peak week, the capacity model is created using historical actual RTO-aggregate outage data from time period DY 2007/08 – DY 2017/18 (in addition, data from DY 2013/14 was dropped and replaced with data from DY 2014/15)
- PJM and World load models based on 2003-2012 time period and 2018 PJM Load Forecast.
- Study assumptions were endorsed at June, 2018 PC meeting.
- Load Model selection was endorsed at July, 2018 PC meeting.

2018 RRS Results vs 2017 RRS Results

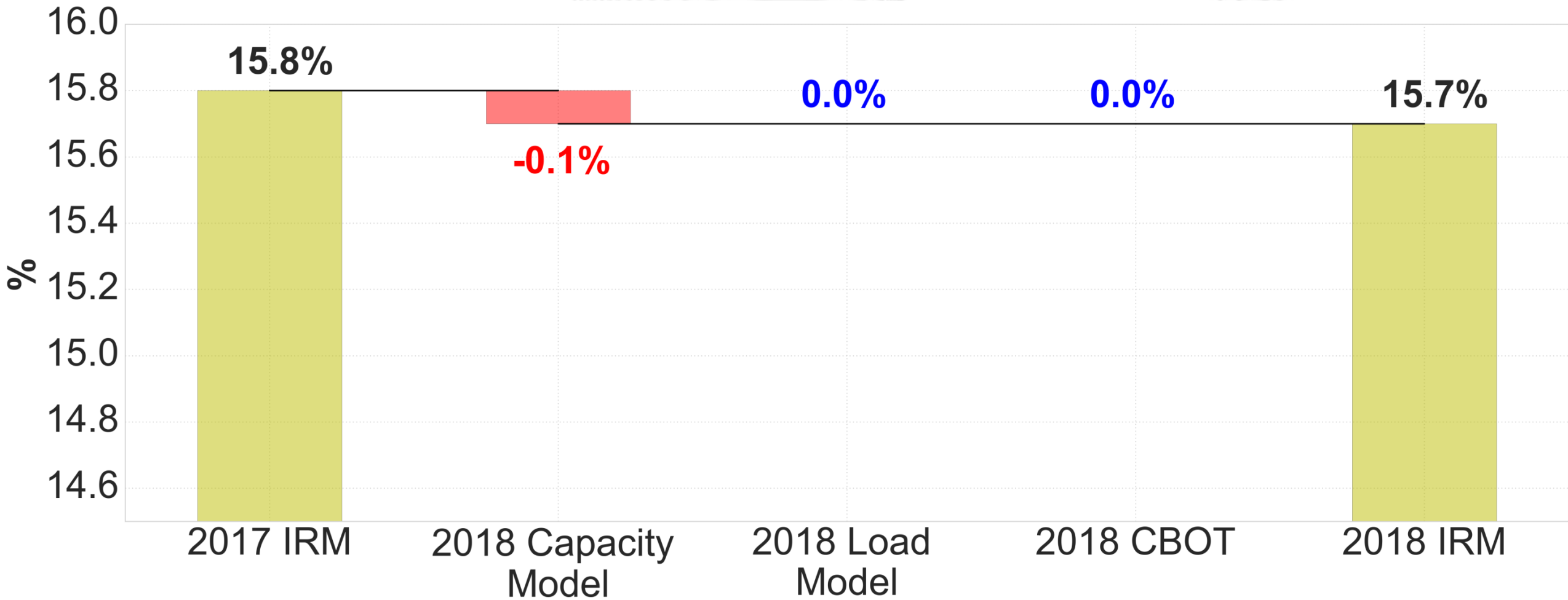
2018 RRS Study results:

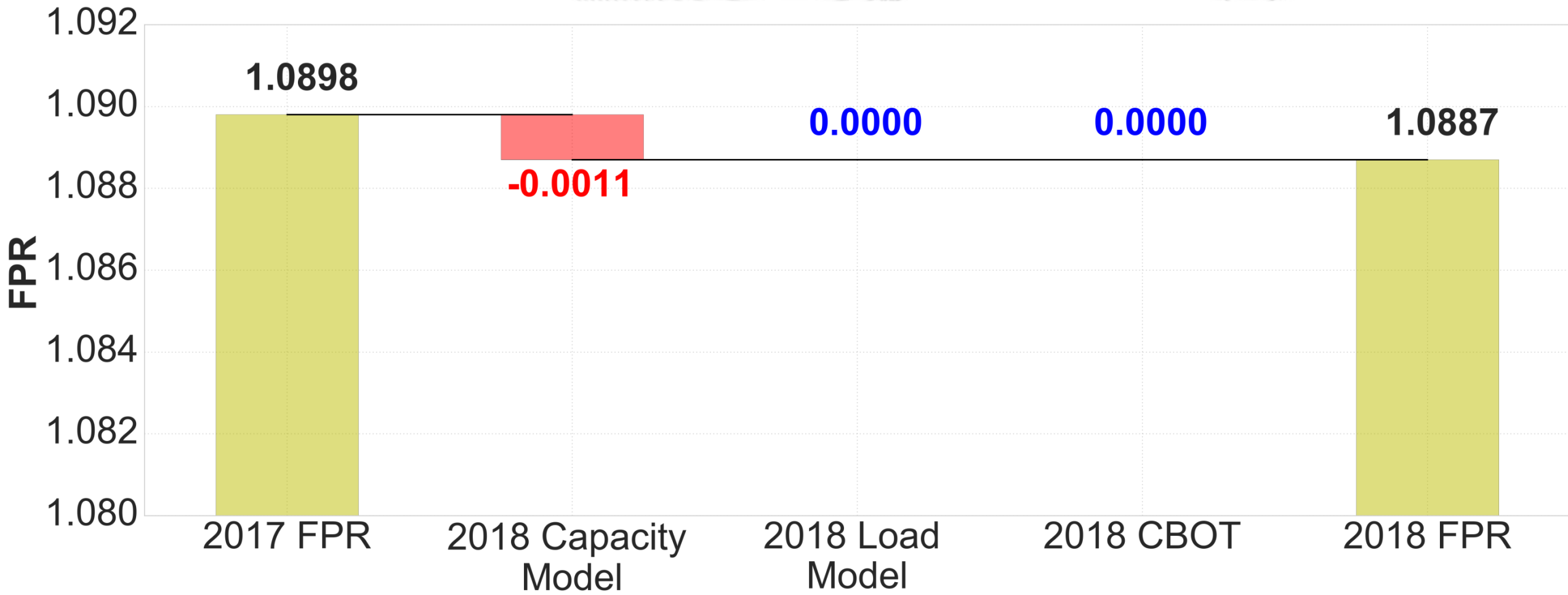
RRS Year	Delivery Year Period	Calculated IRM	Recommended IRM	Average EFORD	Recommended FPR*
2018	2019 / 2020	15.97%	16.0%	6.08%	1.0895
2018	2020 / 2021	15.89%	15.9%	6.04%	1.0890
2018	2021 / 2022	15.84%	15.8%	6.01%	1.0884
2018	2022 / 2023	15.66%	15.7%	5.90%	1.0887

2017 RRS Study results:

RRS Year	Delivery Year Period	Calculated IRM	Recommended IRM	Average EFORD	Recommended FPR*
2017	2018 / 2019	16.06%	16.1%	6.07%	1.0905
2017	2019 / 2020	15.92%	15.9%	5.99%	1.0896
2017	2020 / 2021	15.88%	15.9%	5.97%	1.0898
2017	2021 / 2022	15.77%	15.8%	5.89%	1.0898

* FPR = (1 + IRM)*(1 - Average EFORD)





- The 2018 Capacity Model is driving the decrease in IRM and FPR
 - Specifically, the standard deviation of the RTO-wide Forced Outages distribution in the 2018 RRS is less than in the 2017 RRS (1.2 % vs 1.3 %). This reduction in standard deviation can be attributed to a lower average unit size (121 MW in 2018 RRS vs 129 MW in 2017 RRS)

- Endorsement of the Recommended IRM and FPR values in the table below.

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These recommendations were endorsed unanimously by the Planning Committee.

- **Oct. 25 - MRC: Second read of study results and vote on recommendation to the MC**
- Oct. 25 - MC: Vote on recommendation to the PJM Board
- Dec. 5 - PJM Board: Final Approval of IRM and FPR for each of the next four Delivery Years