



2018 RRS Preliminary Assessment Results

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- 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 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

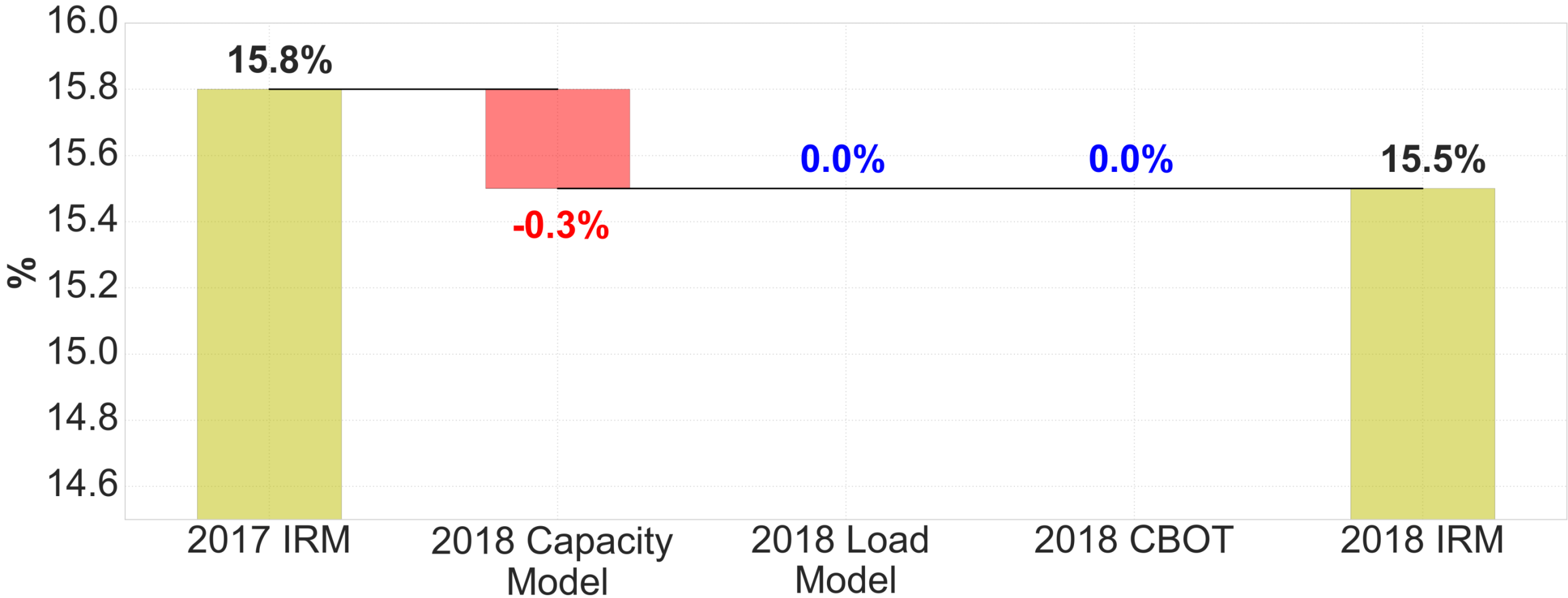
2018 RRS Study results:

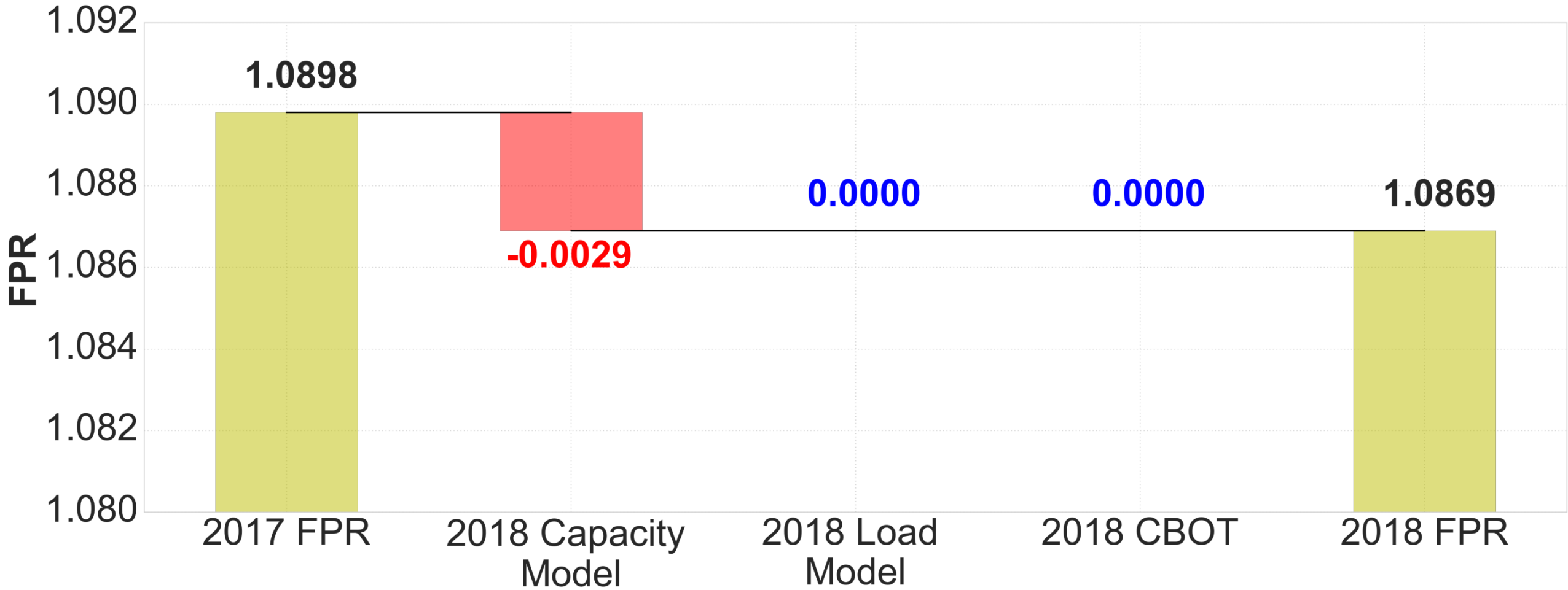
| RRS Year | Delivery Year Period | Calculated IRM | Recommended IRM | Average EFORD | Recommended FPR* |
|----------|----------------------|----------------|-----------------|---------------|------------------|
| 2018 | 2019 / 2020 | 15.80% | 15.8% | 6.08% | 1.0876 |
| 2018 | 2020 / 2021 | 15.73% | 15.7% | 6.04% | 1.0871 |
| 2018 | 2021 / 2022 | 15.68% | 15.7% | 6.01% | 1.0875 |
| 2018 | 2022 / 2023 | 15.50% | 15.5% | 5.90% | 1.0869 |

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 Load Model as well as the 2018 Capacity Benefit of Ties have no impact on the change in IRM and FPR
 - This is mainly due to the fact that the Load Model time period (2003-2012) in the 2018 RRS is the same as in the 2017 RRS
- 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)
 - Therefore, it can be concluded that the 2018 RRS Capacity Model has less uncertainty than the 2017 RRS Capacity Model, resulting in a lower IRM and FPR

- Sep 13, PC: review of RRS preliminary results
- Oct, RAAS: distribution of final report, request for endorsement of recommended IRM and FPR for DY's 2019, 2020, 2021, and 2022
- Oct. 11, PC: vote on IRM and FPR
- Oct-Nov, MRC and MC: review and vote on IRM and FPR
- Dec, PJM Board: final approval