



2018 RRS Results

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- Some statements regarding RAAS endorsement are still tentative
- Final values are identical to preliminary values reported at September PC meeting

- 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

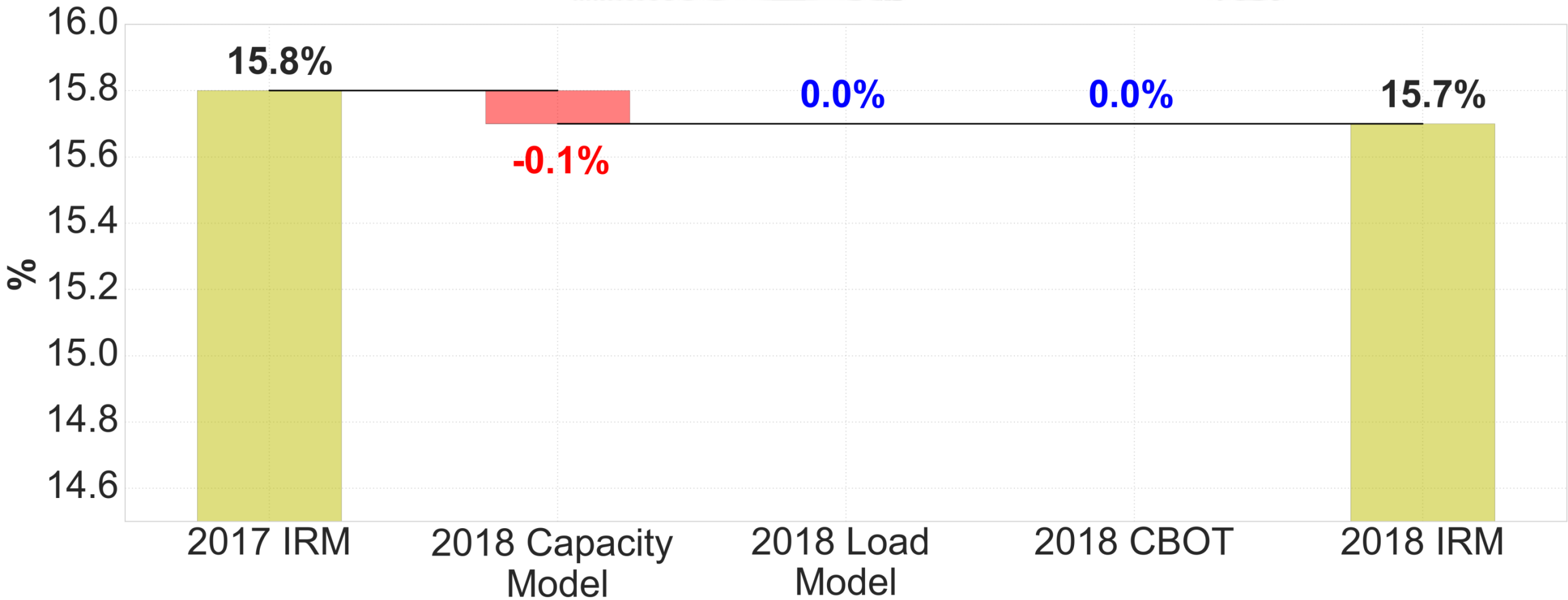
2018 RRS Study results:

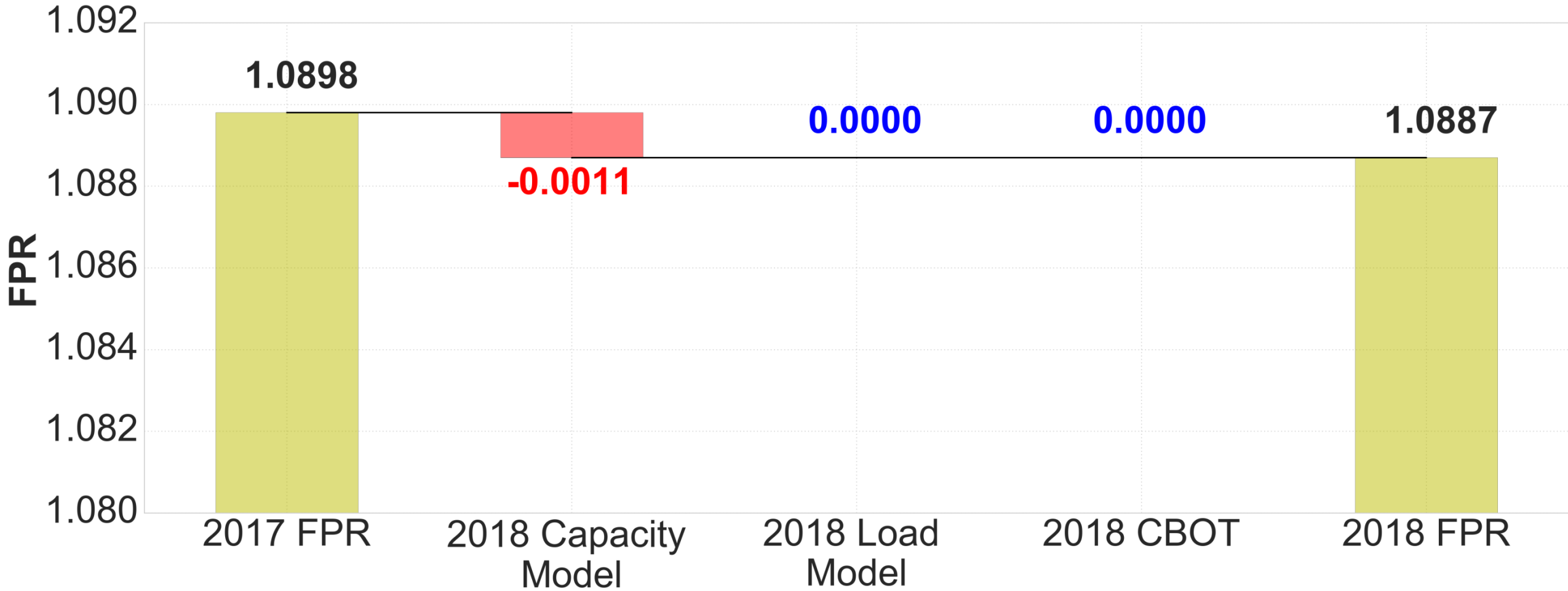
RRS Year	Delivery Year Period	Calculated IRM	Recommended IRM	Average EFORD	Recommended FPR*
2018	2019 / 2020	15.97%	16.0%	6.08%	1.0895
2018	2020 / 2021	15.89%	15.9%	6.04%	1.0890
2018	2021 / 2022	15.84%	15.8%	6.01%	1.0884
2018	2022 / 2023	15.66%	15.7%	5.90%	1.0887

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)



2018/19 Winter Weekly Reserve Targets

Month	% Available Reserves	Max % Available Reserves (by Month)
December	17.86%	22%
	21.71%	
	21.98%	
	10.00%	
January	19.66%	28%
	12.74%	
	24.43%	
	27.22%	
February	20.08%	24%
	23.73%	
	18.70%	
	14.84%	

Corresponding values last year were:

December: 23%
 January: 27%
 February: 25%

- Nothing has changed/added/deleted in the 2018 RRS relative to the 2017 RRS

- Endorsement of the Recommended IRM and FPR values in the table on the top half of slide 4.
- Endorsement of the Winter Weekly Reserve Target (WWRT) Values for 2018/19 as shown below

Month	WWRT
December 2018	22%
January 2019	28%
February 2019	24%

- Oct. 11 - PC: Review of final report and vote on recommendation to the MRC
- 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