

# 2021 RRS Preliminary Assessment Results

Patricio Rocha Garrido Resource Adequacy Planning Planning Committee August 31, 2021

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## 2021 Reserve Requirement Study (RRS)

- Study results will re-set the FPR and IRM for 2022/23, 2023/24, 2024/25 and establish initial IRM and FPR for 2025/26.
- Capacity model built with GADS data from 2016-2020 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 RTOaggregate outage data from time period DY 2007/08 – DY 2020/21 (in addition, data from DY 2013/14 was dropped and replaced with data from DY 2014/15)
- PJM and World load models based on 2001-2013 time period and 2021
  PJM Load Forecast (released in January).
- Study assumptions were endorsed at June, 2021 PC meeting.
- Load Model selection was endorsed at August, 2021 PC meeting.



### 2021 RRS Results vs 2020 RRS Results

#### 2021 RRS Study results:

RRS Year	Delivery Year Period	Calculated IRM	Recommended IRM	Average EFORd	Recommended FPR*
2021	2022 / 2023	14.92%	14.9%	5.07%	1.0907
2021	2023 / 2024	14.74%	14.7%	5.02%	1.0894
2021	2024 / 2025	14.67%	14.7%	5.01%	1.0895
2021	2025 / 2026	14.64%	14.6%	5.00%	1.0887

#### 2020 RRS Study results:

	Delivery Year	Calculated	Recommended	Average	Recommended
RRS Year	Period	IRM	IRM	<b>EFORd</b>	FPR*
2020	2021 / 2022	14.73%	14.7%	5.22%	1.0871
2020	2022 / 2023	14.51%	14.5%	5.08%	1.0868
2020	2023 / 2024	14.42%	14.4%	5.04%	1.0863
2020	2024 / 2025	14.39%	14.4%	5.03%	1.0865

<sup>\*</sup> FPR = (1 + IRM)\*(1 - Average EFORd)

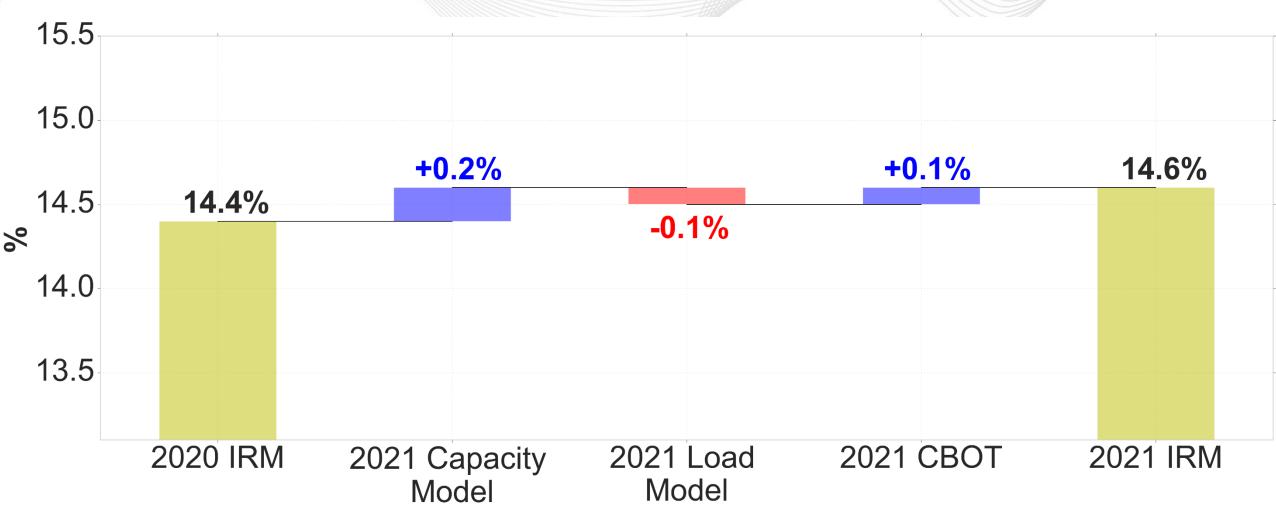


## 2021 FPR - Waterfall Chart





## 2021 IRM - Waterfall Chart





- The 2021 Load Model puts downward pressure on both the FPR and the IRM
- The 2021 Capacity Benefit of Ties (CBOT) puts upward pressure on both the FPR and the IRM
  - The CBOT decreased to 1.47% (2021 RRS) from 1.54% (2020 RRS)
- The 2021 Capacity Model is driving the increase in the IRM and FPR.
  - Average unit size increased to 175 MW (in 2021 RRS) from 159 MW (in 2020 RRS)
  - The Average EEFORd in the 2021 RRS (for DY 2025) is 5.80% whereas in the 2020 RRS (for DY 2024) was 5.78 %



- Aug 31, PC: review of RRS preliminary results
- Sep, RAAS: distribution of final report, request for endorsement of recommended FPR and IRM for DY's 2022/23, 2023/24, 2024/25, and 2025/26
- Oct, PC: vote on FPR and IRM
- Oct-Nov, MRC and MC: review and vote on FPR and IRM
- Dec, PJM Board: final approval



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**2021 Reserve Requirement Study** 



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