



# 2017 RRS Results



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Planning  
RAAS Meeting  
October 4, 2017

- Some statements regarding RAAS endorsement are still tentative
- Final values are identical to preliminary values reported at 9/7 RAAS meeting

- Study results will re-set IRM and FPR for 2018/19, 2019/20, 2020/21 and establish initial IRM/FPR for 2021/22.
- Capacity model built with GADS data from 2012-2016 time period.
- PJM and World load models based on 2003-2012 time period and 2017 PJM Load Forecast.
- Study assumptions were endorsed at May, 2017 PC meeting.
- Load Model selection was endorsed at July, 2017 PC meeting.



# 2017 RRS Results vs 2016 RRS Results

## 2017 RRS Study results:

RRS Year	Delivery Year Period	Calculated IRM	Recommended IRM	Average EFORD	PJM August-to-July Peak Ratio*	World Peak Ratio at PJM Peak**	Recommended FPR***
2017	2018 / 2019	16.06%	<b>16.1%</b>	6.07%	97.0%	97.4%	<b>1.0905</b>
2017	2019 / 2020	15.92%	<b>15.9%</b>	5.99%	97.0%	97.4%	<b>1.0896</b>
2017	2020 / 2021	15.88%	<b>15.9%</b>	5.97%	97.0%	97.4%	<b>1.0898</b>
2017	2021 / 2022	15.77%	<b>15.8%</b>	5.89%	97.0%	97.4%	<b>1.0898</b>

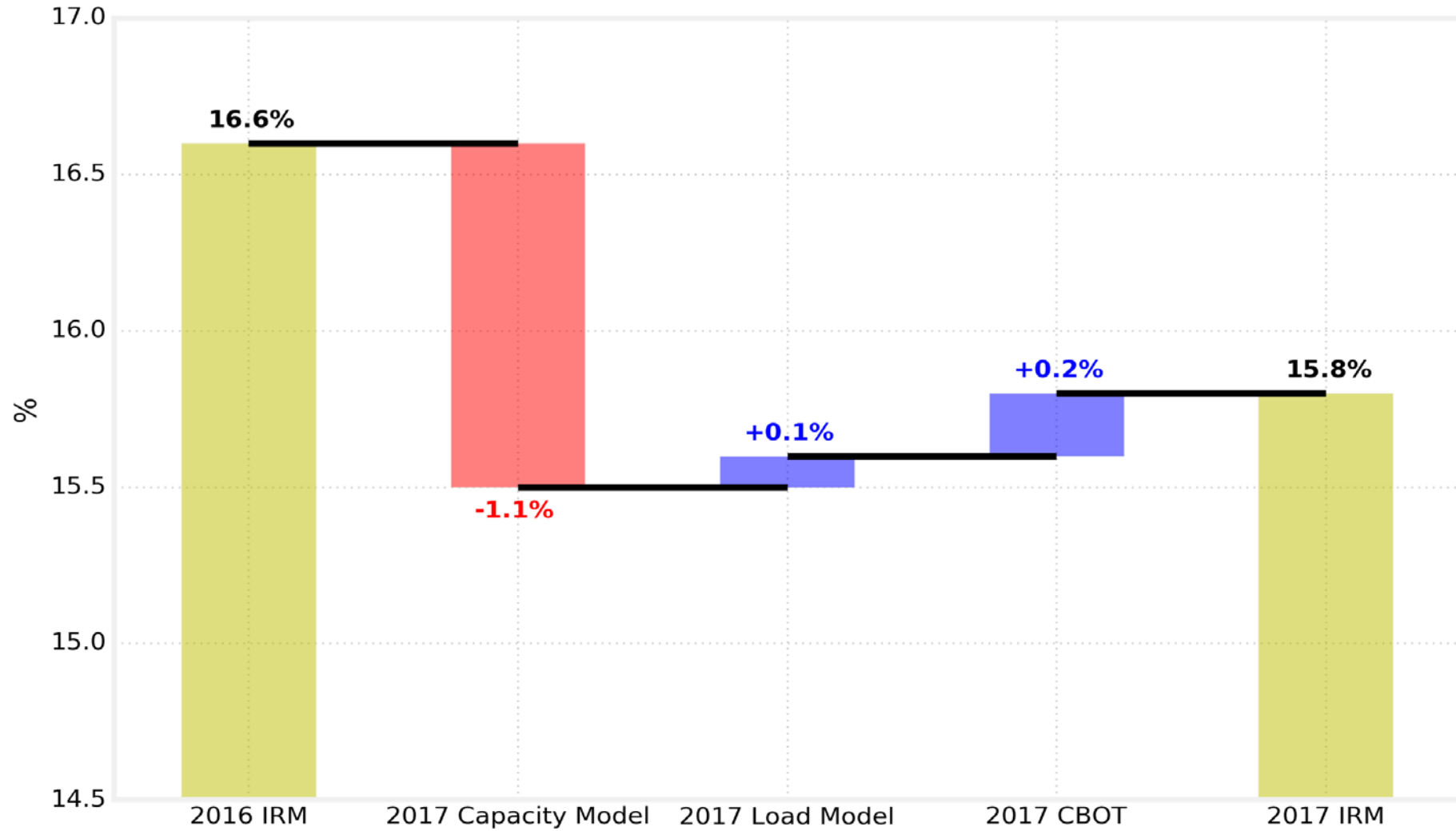
## 2016 RRS Study results:

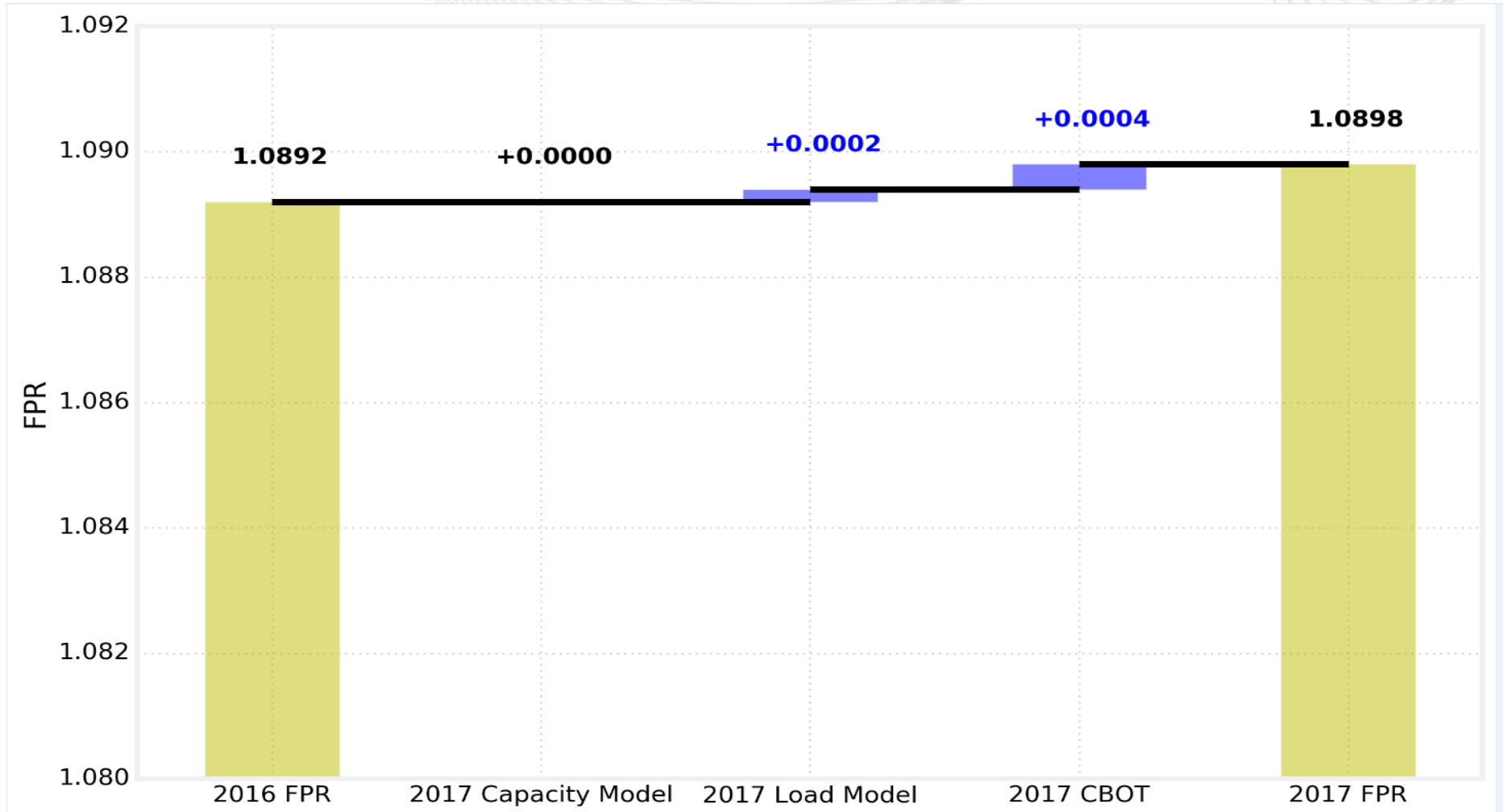
RRS Year	Delivery Year Period	Calculated IRM	Recommended IRM	Average EFORD	PJM August-to-July Peak Ratio*	World Peak Ratio at PJM Peak**	Recommended FPR***
2016	2017 / 2018	16.60%	<b>16.6%</b>	6.54%	96.9%	97.0%	<b>1.0897</b>
2016	2018 / 2019	16.67%	<b>16.7%</b>	6.59%	96.9%	97.0%	<b>1.0901</b>
2016	2019 / 2020	16.64%	<b>16.6%</b>	6.59%	96.9%	97.0%	<b>1.0892</b>
2016	2020 / 2021	16.64%	<b>16.6%</b>	6.59%	96.9%	97.0%	<b>1.0892</b>

\* PJM August-to-July Peak Ratio: PJM's August Peak as percentage of PJM's Annual Peak (which occurs in July)

\*\* World Peak Ratio at PJM Peak: World's Peak as percentage of World's Annual Peak at PJM's Annual Peak

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

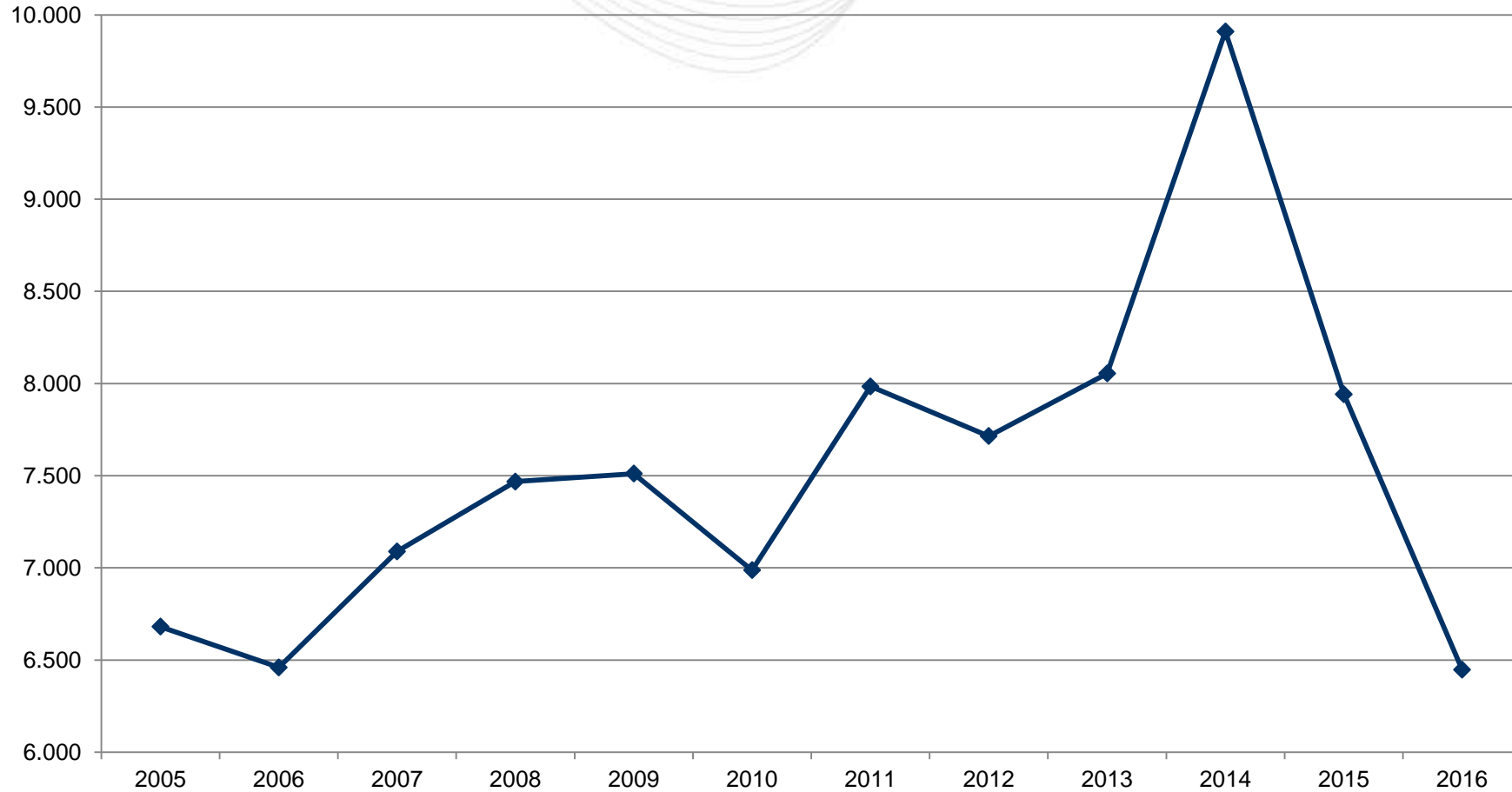




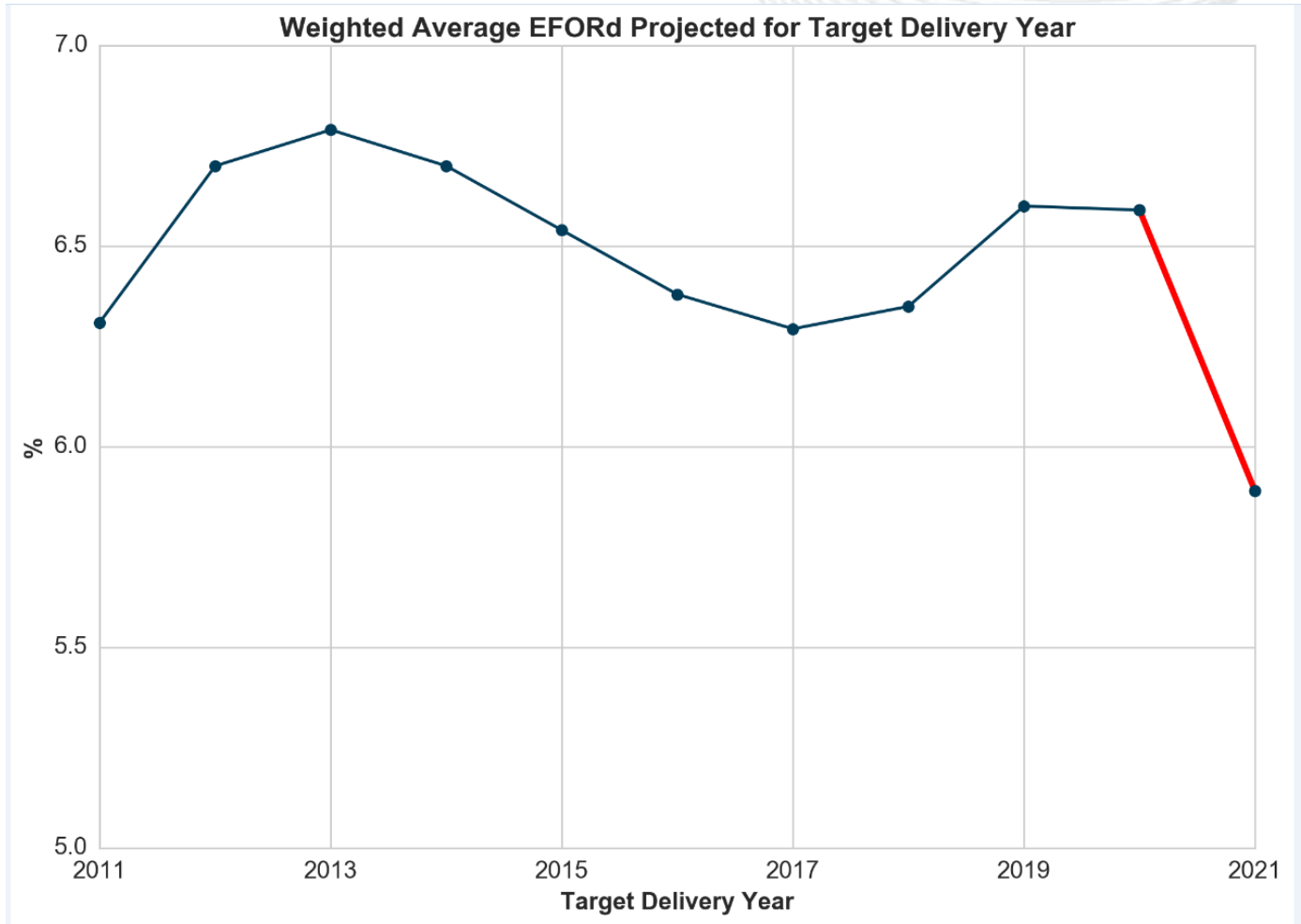


# PJM Weighted-Average EFORd by Calendar Year

## Capacity Weighted Equivalent Demand Forced Outage Rate (EFORd) (%)



# Weighted-Average EFORd Projected for DY



Drop in Weighted Average EFORd Projected for 2021 is due to:

- Large amount of deactivations with high EFORd (**7,150 MW** with **14.56%** Weighted Average EFORd).
- Large amount of additions with low EFORd (**16,980 MW** with **4.42%** Weighted Average EFORd). Additions include only those queue projects that have executed an Interconnection Service Agreement.



# Winter Weekly Reserve Target (WWRT)

Month	% Available Reserves	Max % Available Reserves (by Month)
December	18.53%	23%
	22.37%	
	22.63%	
January	10.69%	27%
	20.28%	
	13.18%	
	24.89%	
February	26.56%	25%
	20.70%	
	24.37%	
	19.09%	
	14.91%	

- Winter 17/18
- Recommended WWRT values:
  - Dec 17: 23%
  - Jan 18: 27%
  - Feb 18: 25%

- References to DR Factor and XEFORd have been removed
- Removal of ISO-New England from World
- Change to the Generation Interconnection Forecast subsection:
  - All projects with a signed ISA are included at their MW capacity value

- PC meeting on October 12
  - Review RRS Report and vote on recommendation to MRC
- MRC meeting on October 26
  - Review RRS Report and vote on recommendation to MC
- MC meeting on December 7
  - Vote on recommendation to PJM Board
- PJM Board - December
  - Final approval of IRM and FPR for 2018/19, 2019/20, 2020/21 and 2021/22.

- Endorsement of IRM and FPR for Delivery Years 2018/19 – 2021/22 as indicated on slide 4.
- Endorsement of Winter Weekly Reserve Target Values of 23% for December 2017, 27% for January 2018 and 25% for February 2018 as indicated on slide 7.
- Comments on RRS Report.