



Preliminary 2018 Load Forecast

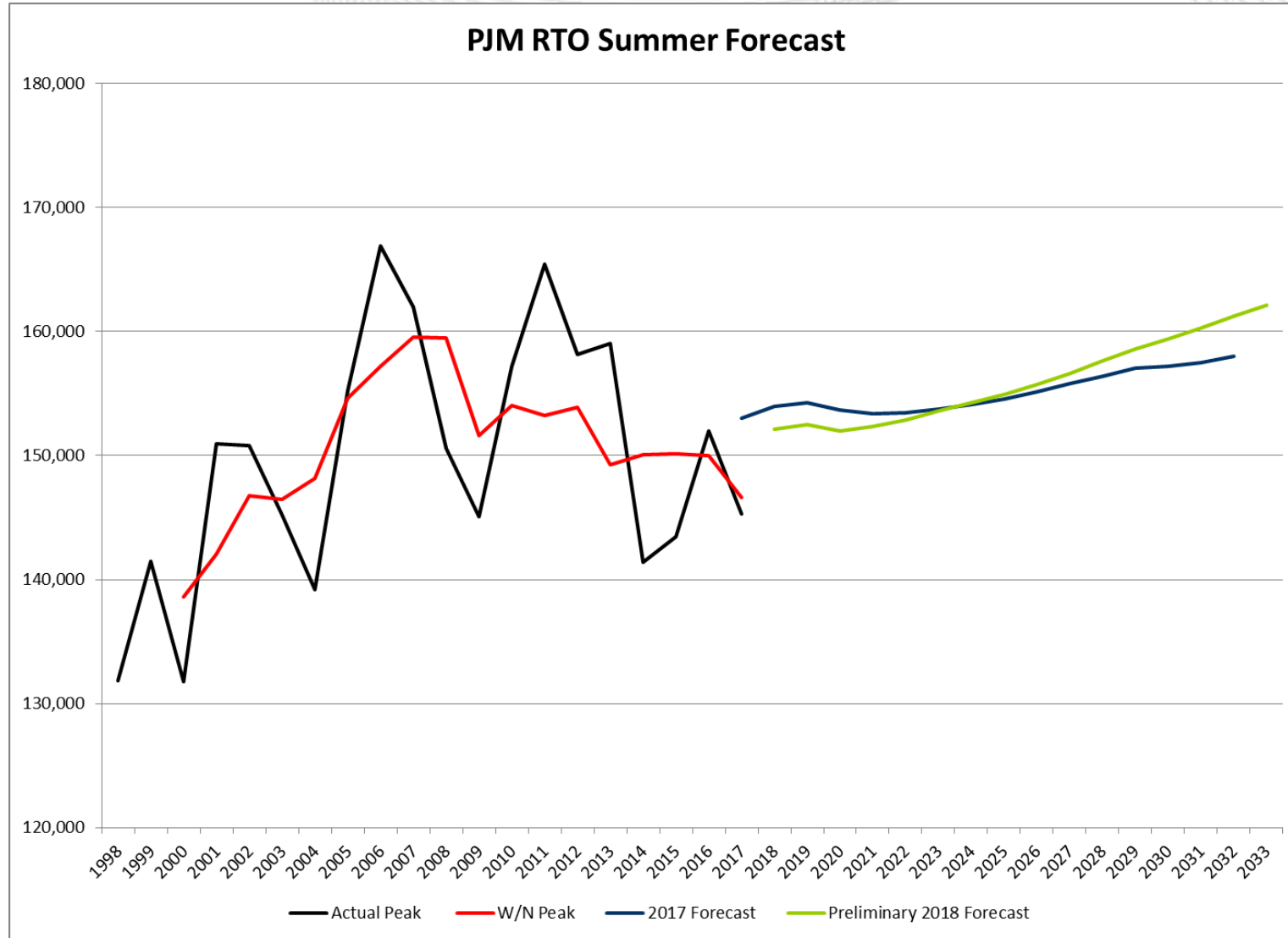
Load Analysis Subcommittee
November 15, 2017

- 2018 Preliminary Load Forecast Review
 - Summer
 - Results
 - Decomposition of Change
 - Winter
 - Results
 - Decomposition of Change
 - Adjustment Requests
- Next Steps

- Estimation Period: January 1998 through August 2017
- Weather Simulation: 1994 to 2016 (299 Scenarios)
- Economics: September 2017 vintage from Moody's Analytics
- Equipment Indices: Based on Itron's 2017 release
 - Benchmarked to EIA's 2009 Residential Energy Consumption Survey (see Item 4 at 7.17.2017 LAS Meeting)
- PJM Solar Addbacks & IHS Solar Forecast (zonal & peak allocation by PJM)
- Forecast Adjustments – APS and Dominion

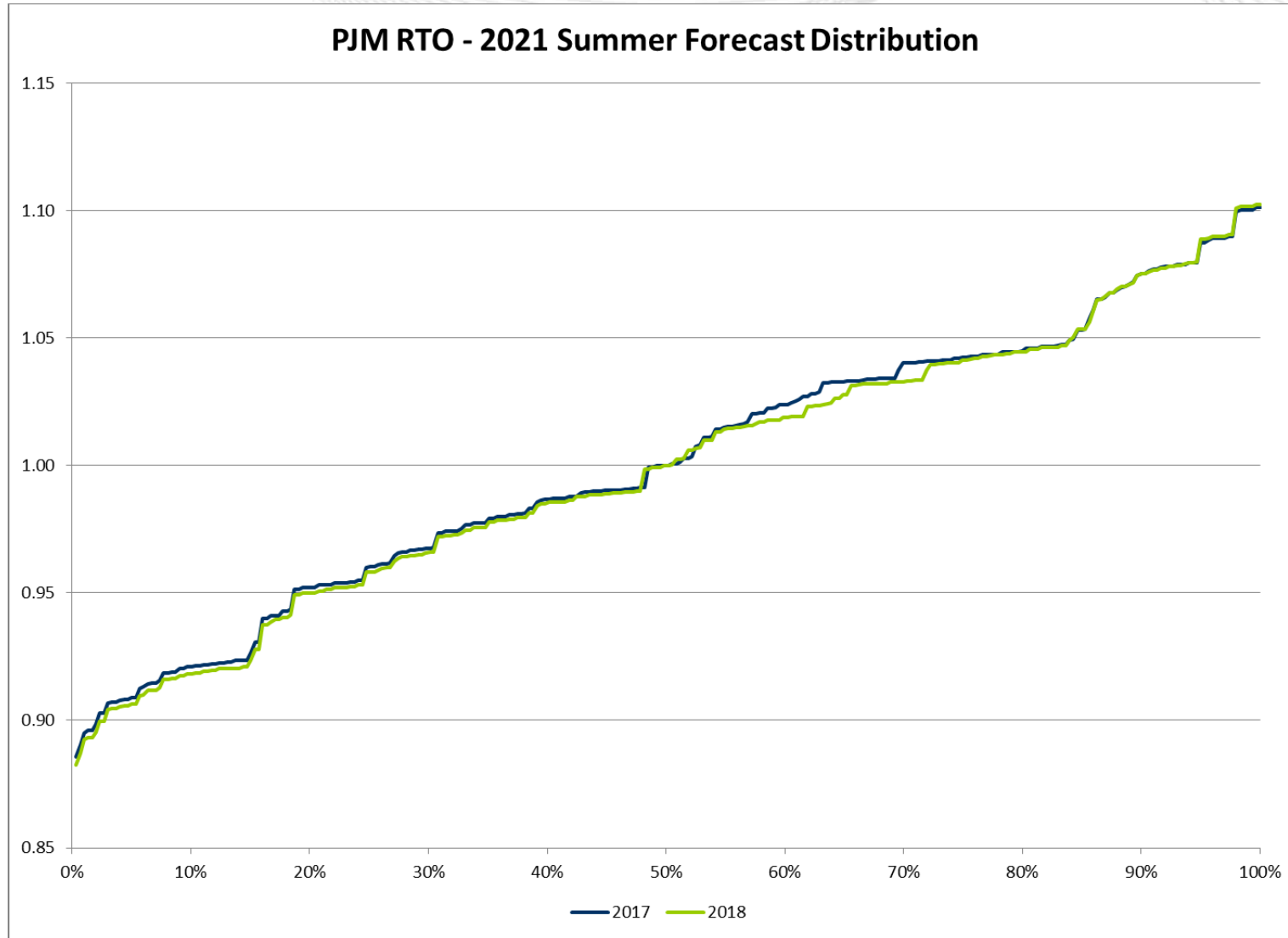


PRELIMINARY - PJM RTO Summer Forecast

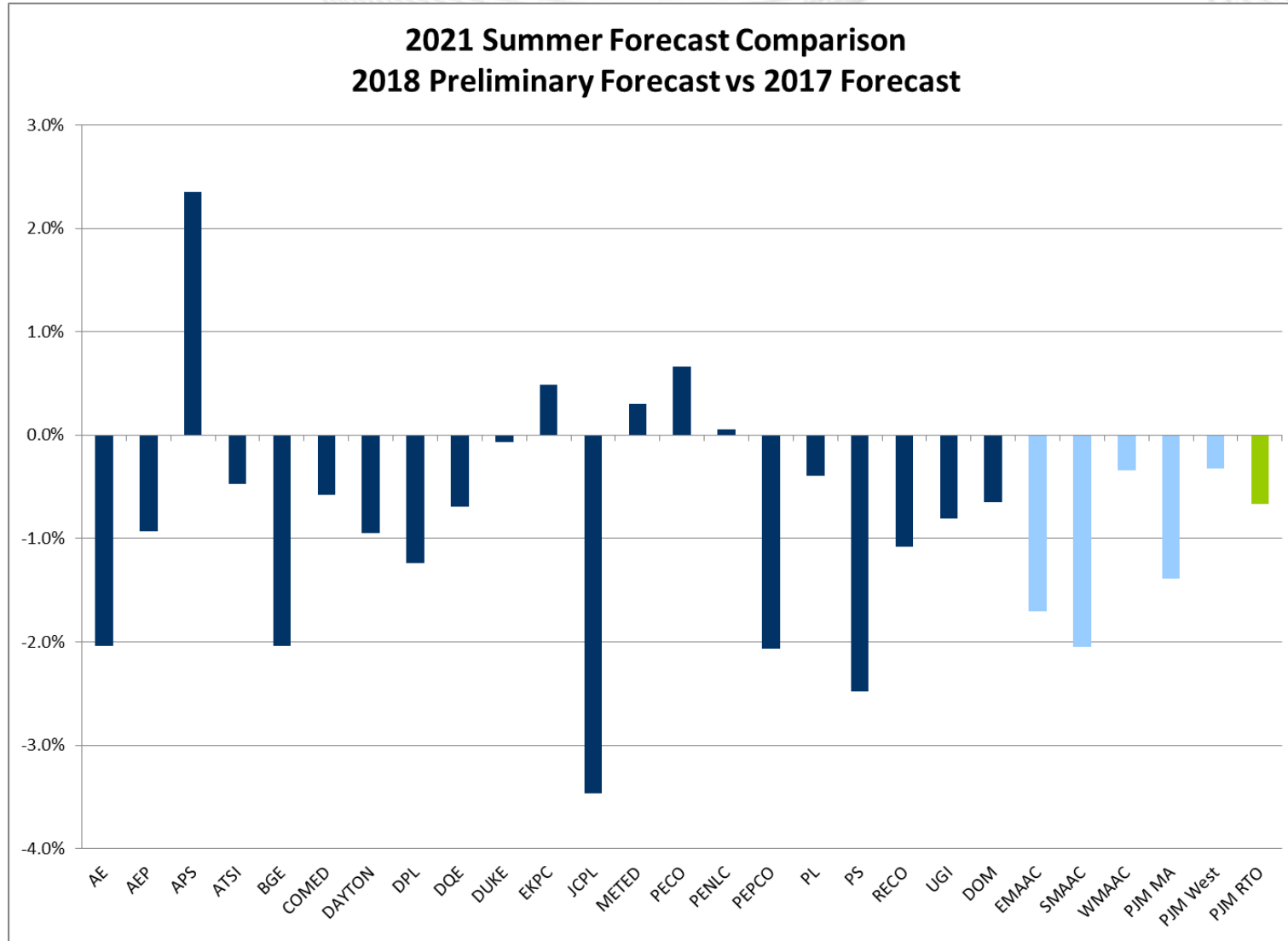




PRELIMINARY - PJM RTO Summer Forecast Distribution



PRELIMINARY - 2021 Summer Forecast Comparison



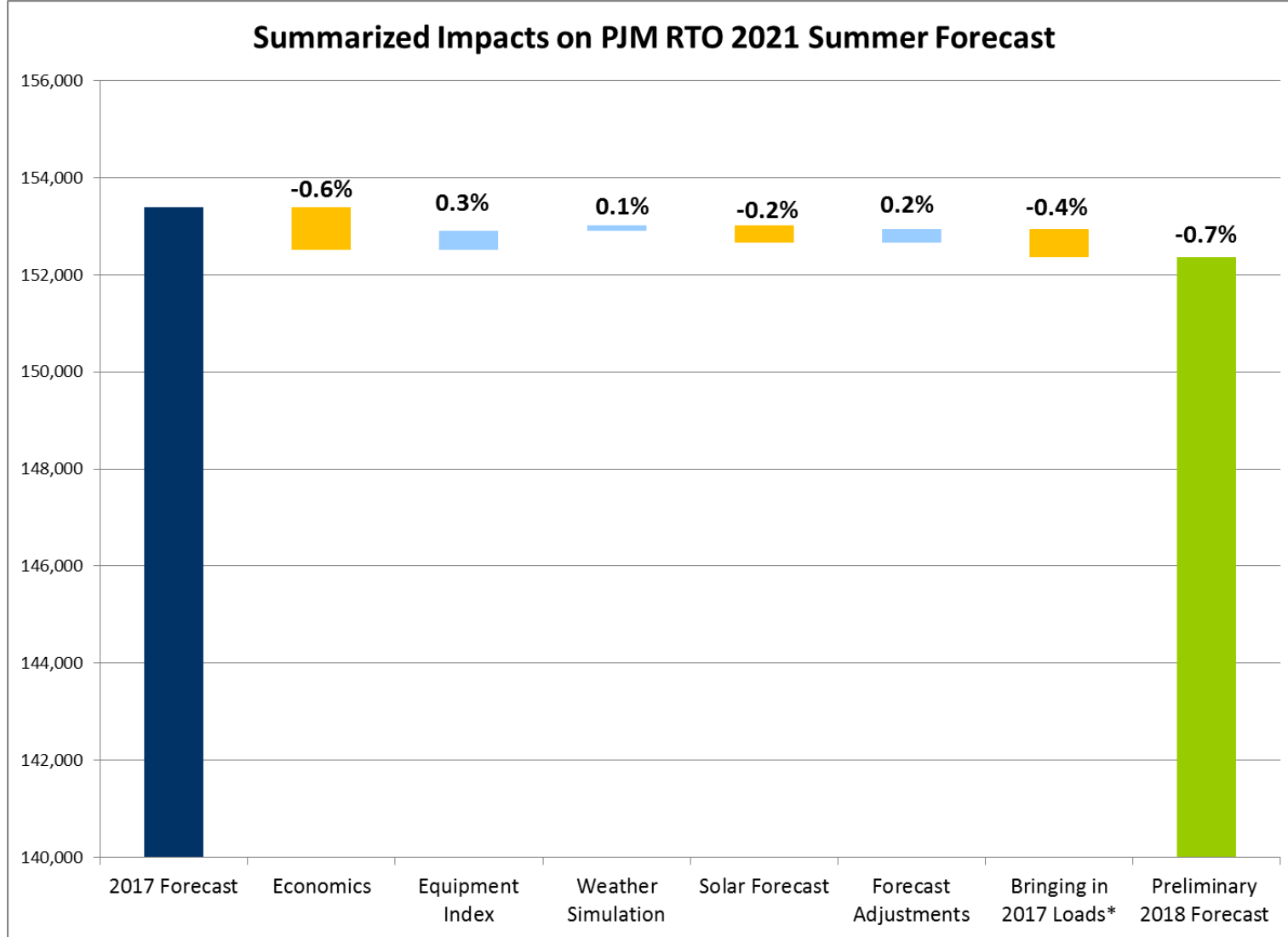
- Decomposition contributions are computed by one-by-one changing the parameters that drive the forecast. The forecast descriptions below correspond with the decomposition chart.

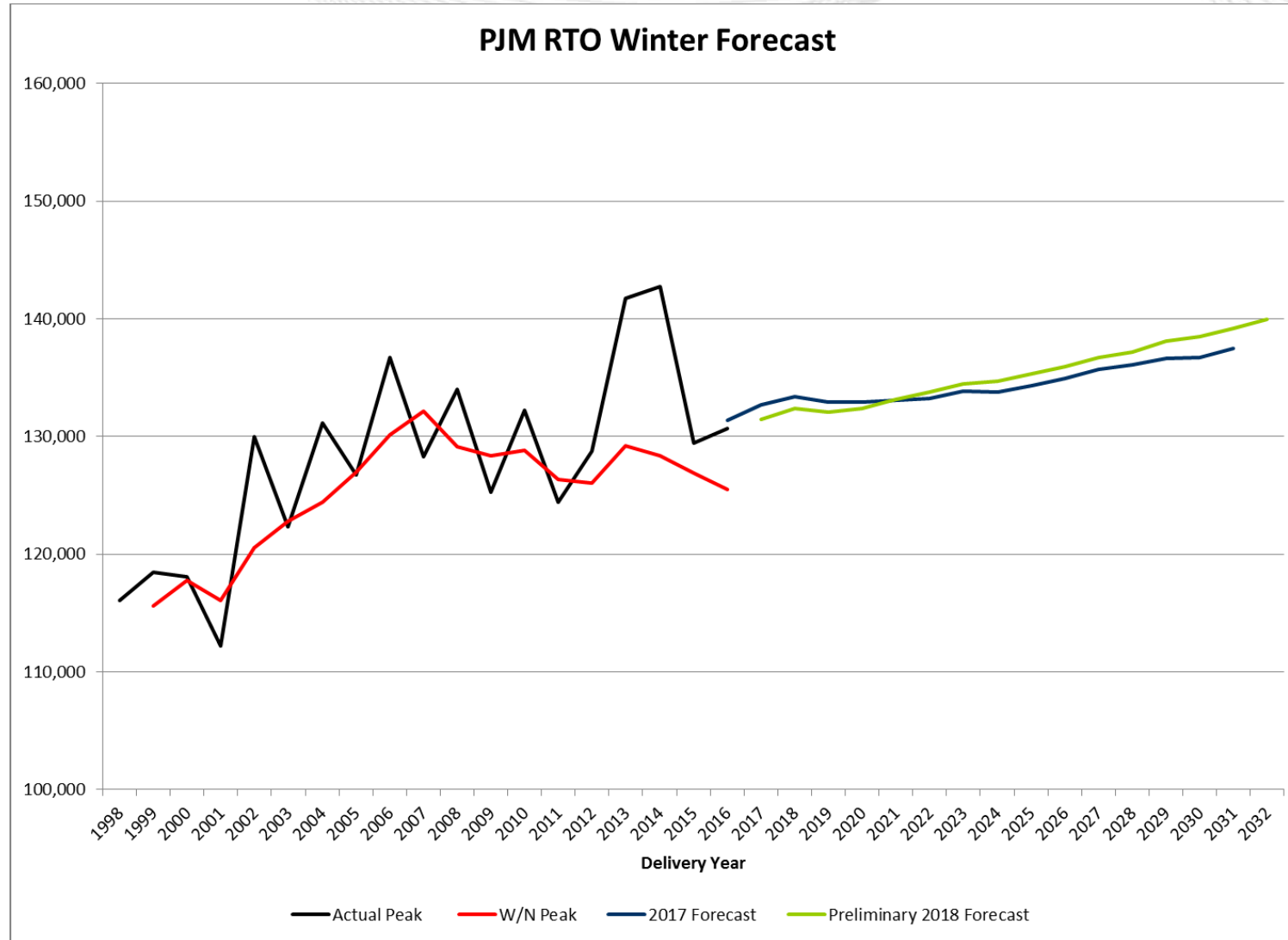
	Forecast Run	Description	Parameter						
			ECONOMICS	EQUIPMENT INDEX	WTHR SIM	SOLAR FCST	FORECAST ADJUSTMENTS	ESTIMATION PERIOD	
Forecast	F2018_S0	2017 Forecast	September 2016	2016	1993-2015	2017	2017	1998-2016	
	F2018_S1	Economics	September 2017	2016	1993-2015	2017	2017	1998-2016	
	F2018_S2	Equipment Index	September 2016	2017	1993-2015	2017	2017	1998-2016	
	F2018_S3	Weather Simulation	September 2016	2016	1994-2016	2017	2017	1998-2016	
	F2018_S4	Solar Forecast	September 2016	2016	1993-2015	2018	2017	1998-2016	
	F2018_S5	Forecast Adjustments	September 2016	2016	1993-2015	2017	2018	1998-2016	
	F2018_S6	Bringing in 2017 Loads*	September 2016	2016	1993-2015	2017	2017	1998-2017	
	Prelim2018	Preliminary 2018 Forecast	September 2017	2017	1994-2016	2018	2018	1998-2017	

*The process of "Bringing in 2017 Loads" is bringing in new metered load history, new addback history and re-estimation/extension of the solar back-cast history.



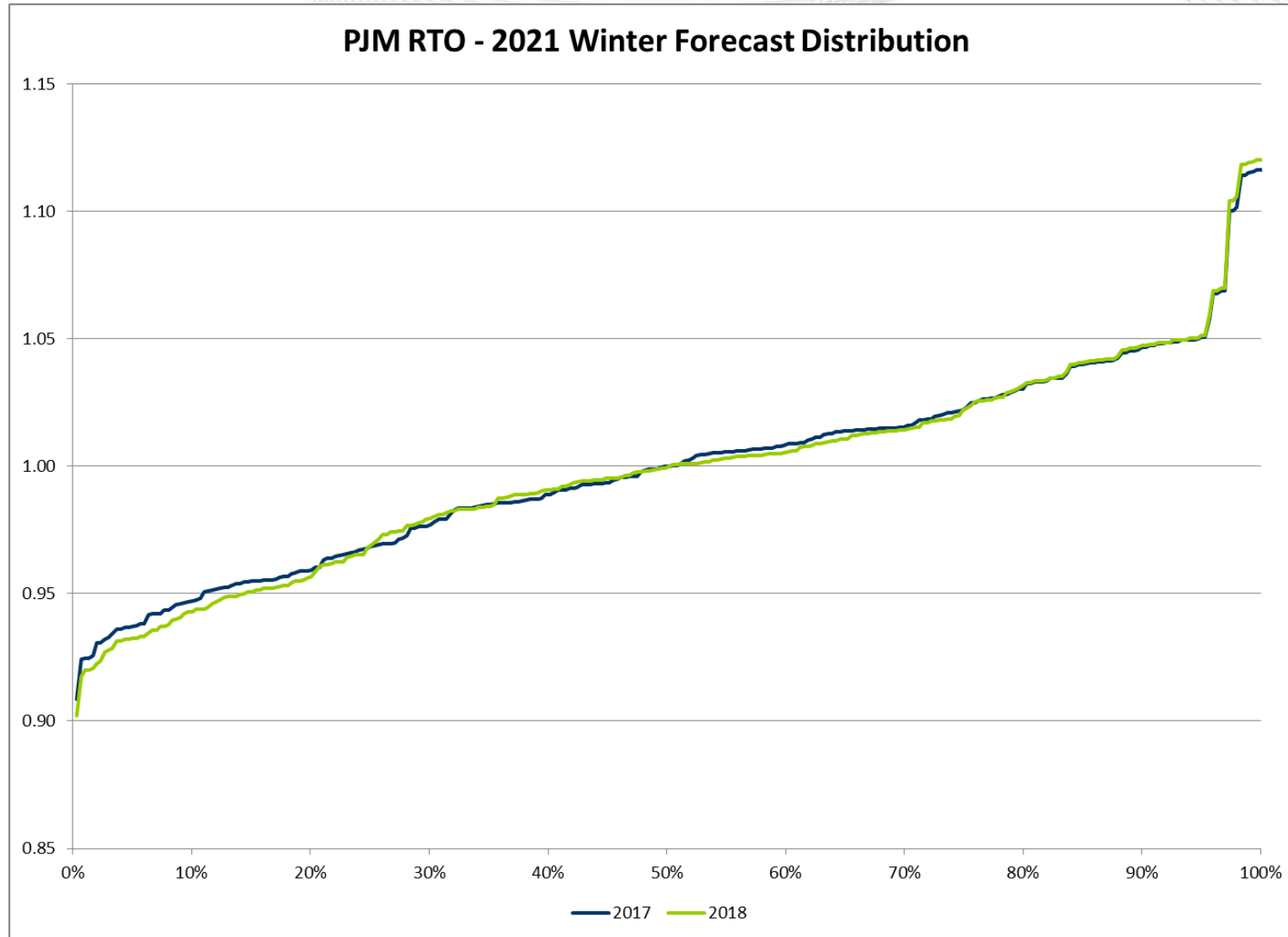
PRELIMINARY – Summer 2021 Decomposition of Change



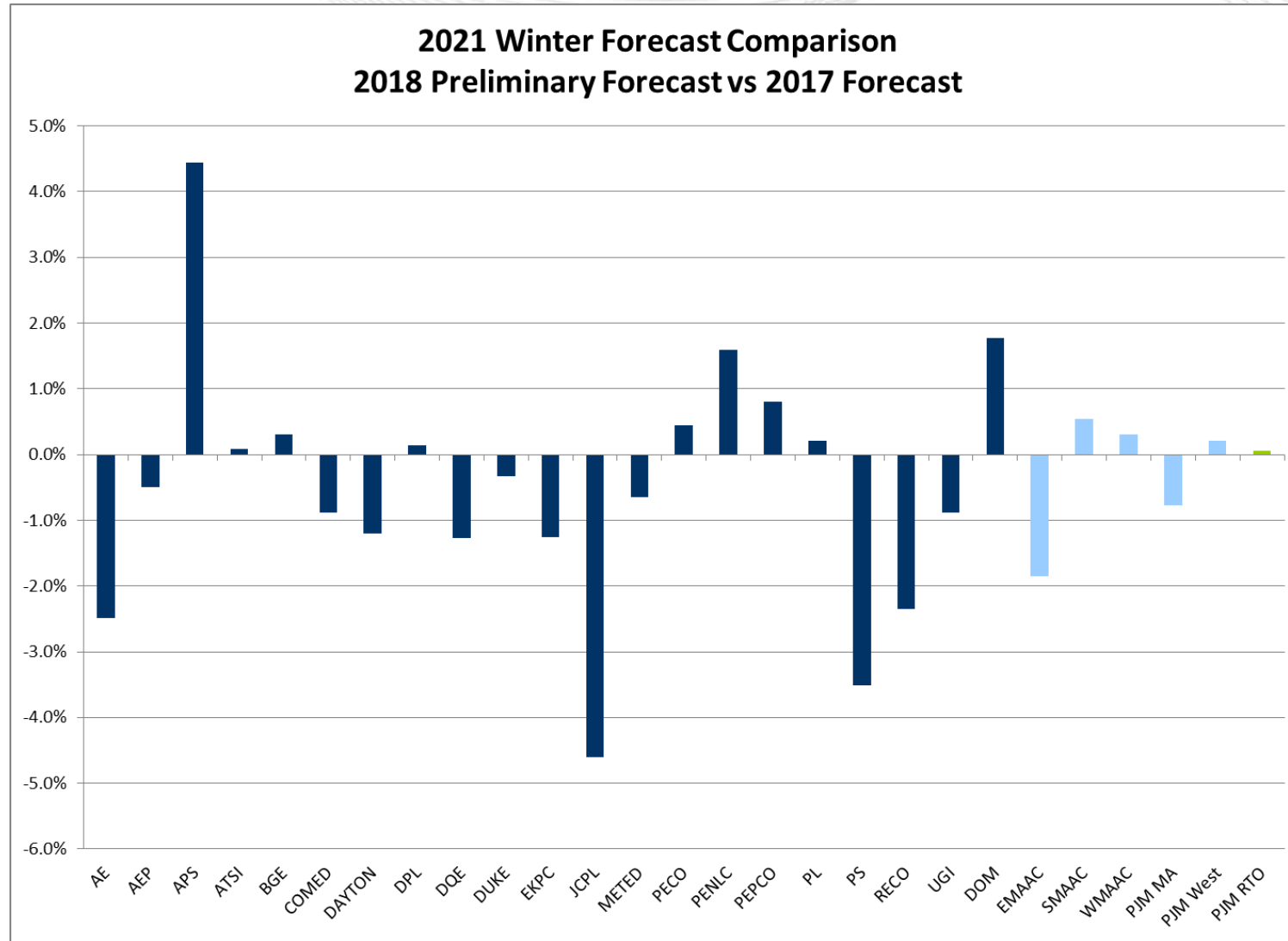




PRELIMINARY - PJM RTO Winter Forecast Distribution

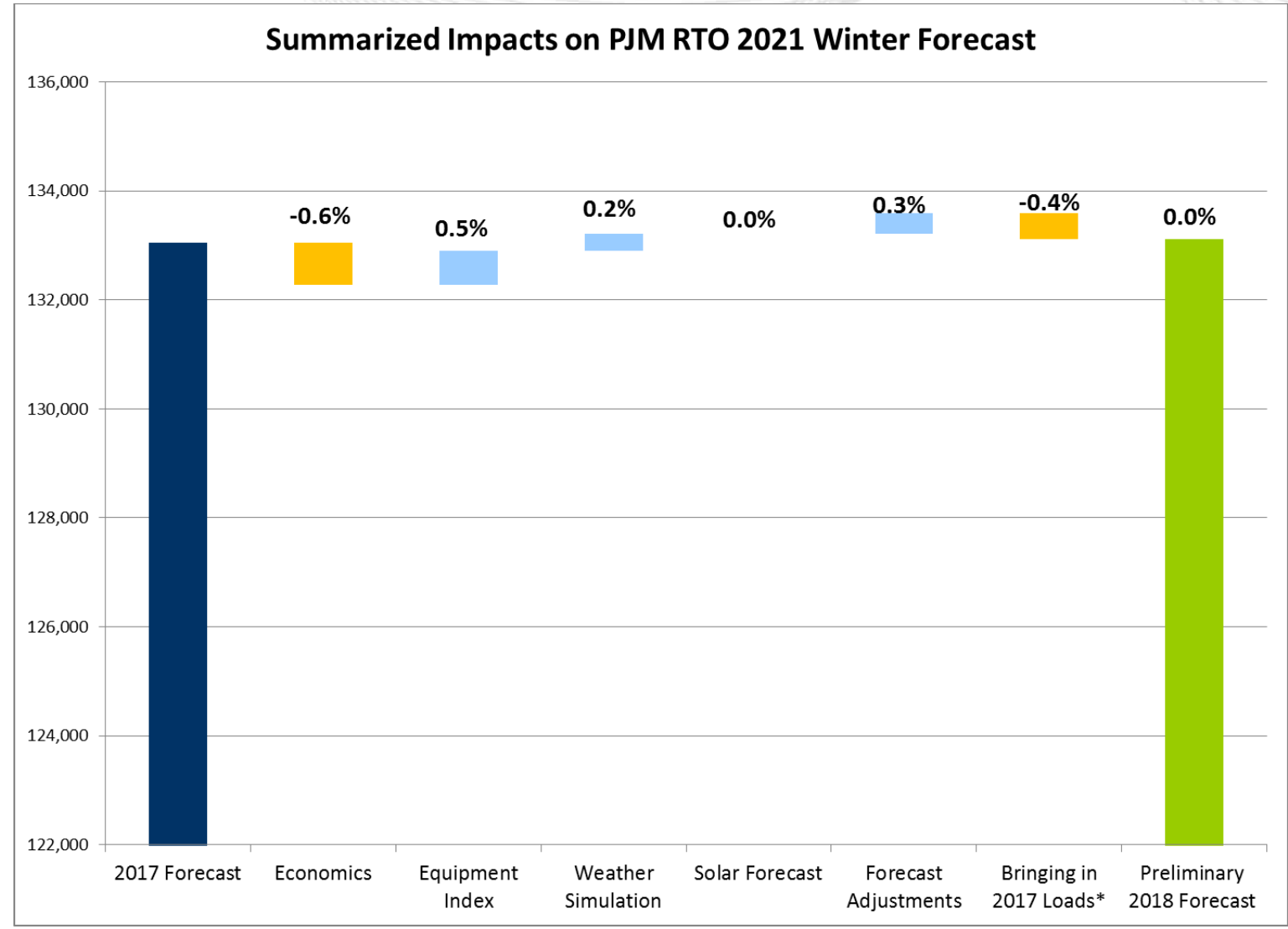


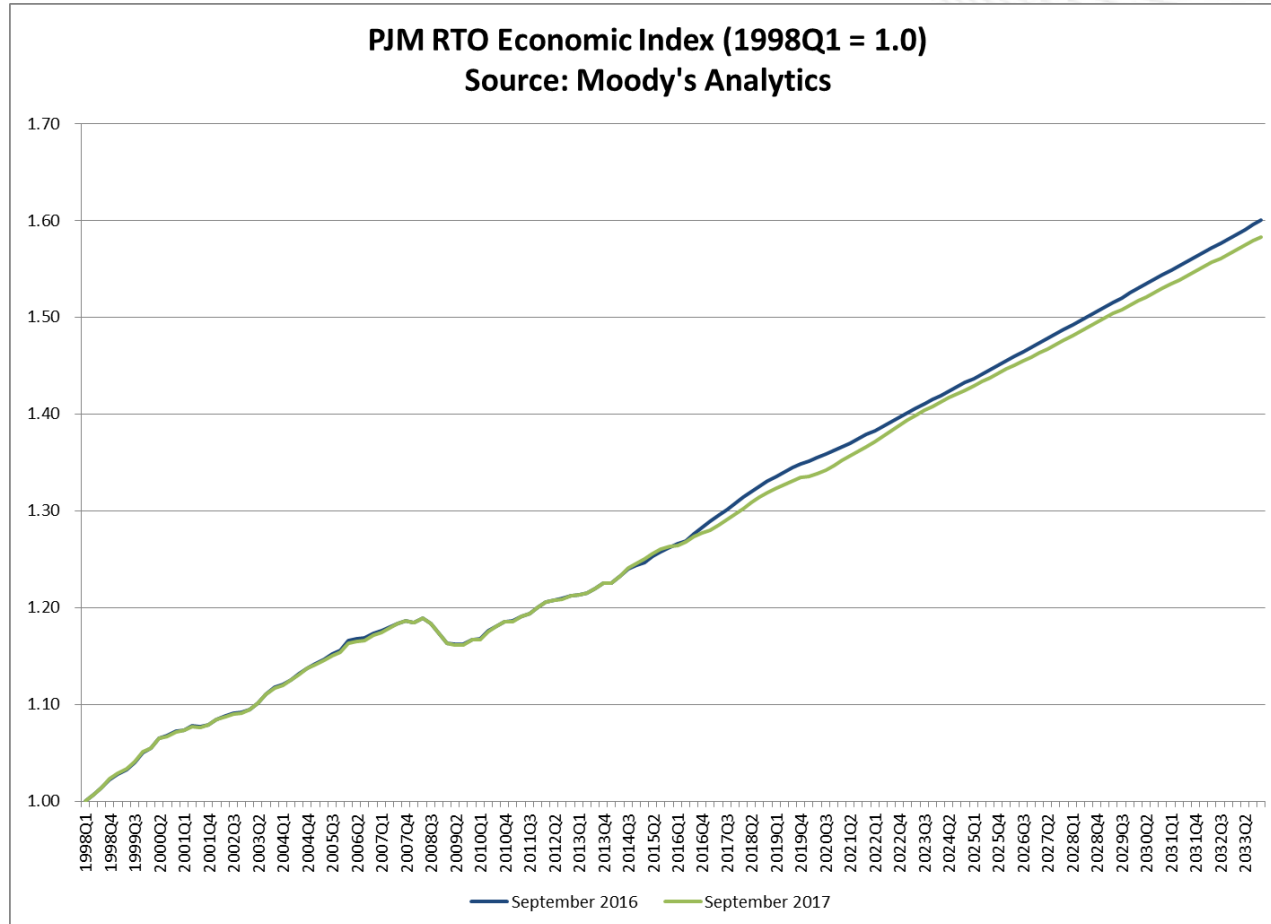
PRELIMINARY - 2021 Winter Forecast Comparison



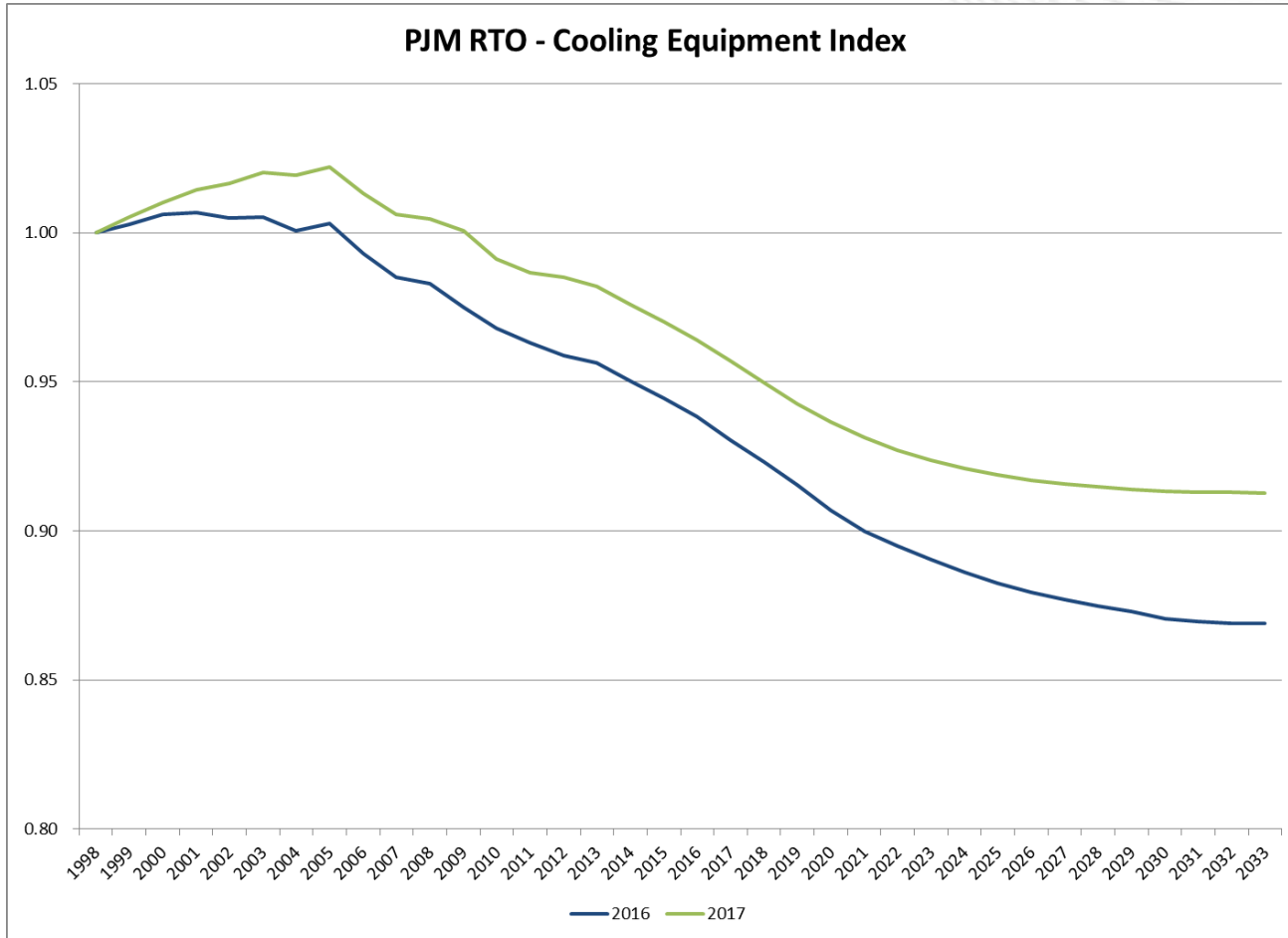


PRELIMINARY – Winter 2021/22 Decomposition of Change



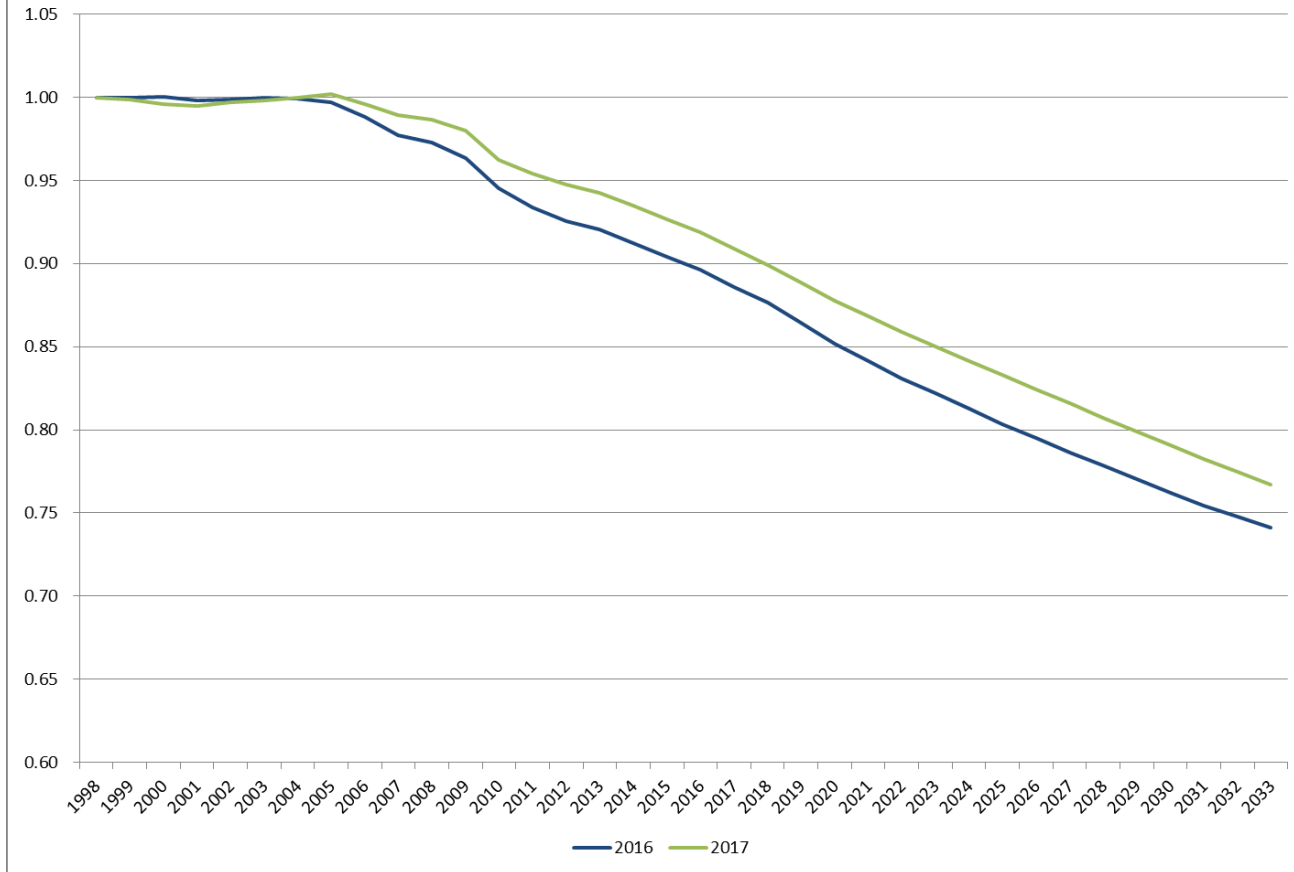


- 2017 is 0.8% lower than assumed last year
- Average annual growth rate is roughly the same in the 3-year time horizon, yet slightly faster over the 5-year horizon (1.34% this year versus 1.26% last year)



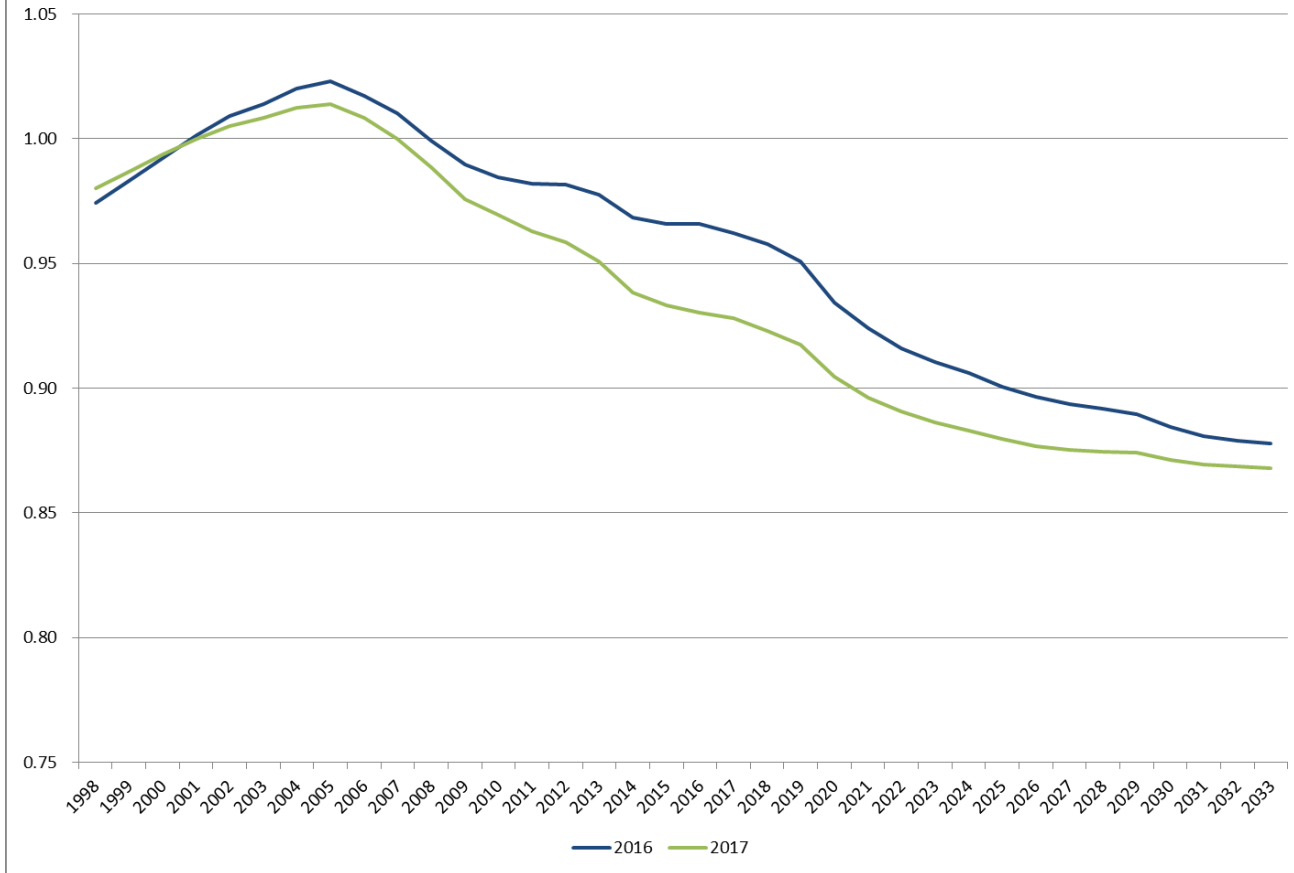
- 2017 is 2.8% higher than last year (mostly reflective of residential changes made mid-year)
- Index declines at a slower rate over the 3 and 5-year forecast horizon
 - -0.6% vs -0.8% average annual growth over 2018-2021
 - -0.5% vs -0.7% average annual growth over 2018-2023

PJM RTO - Heating Equipment Index

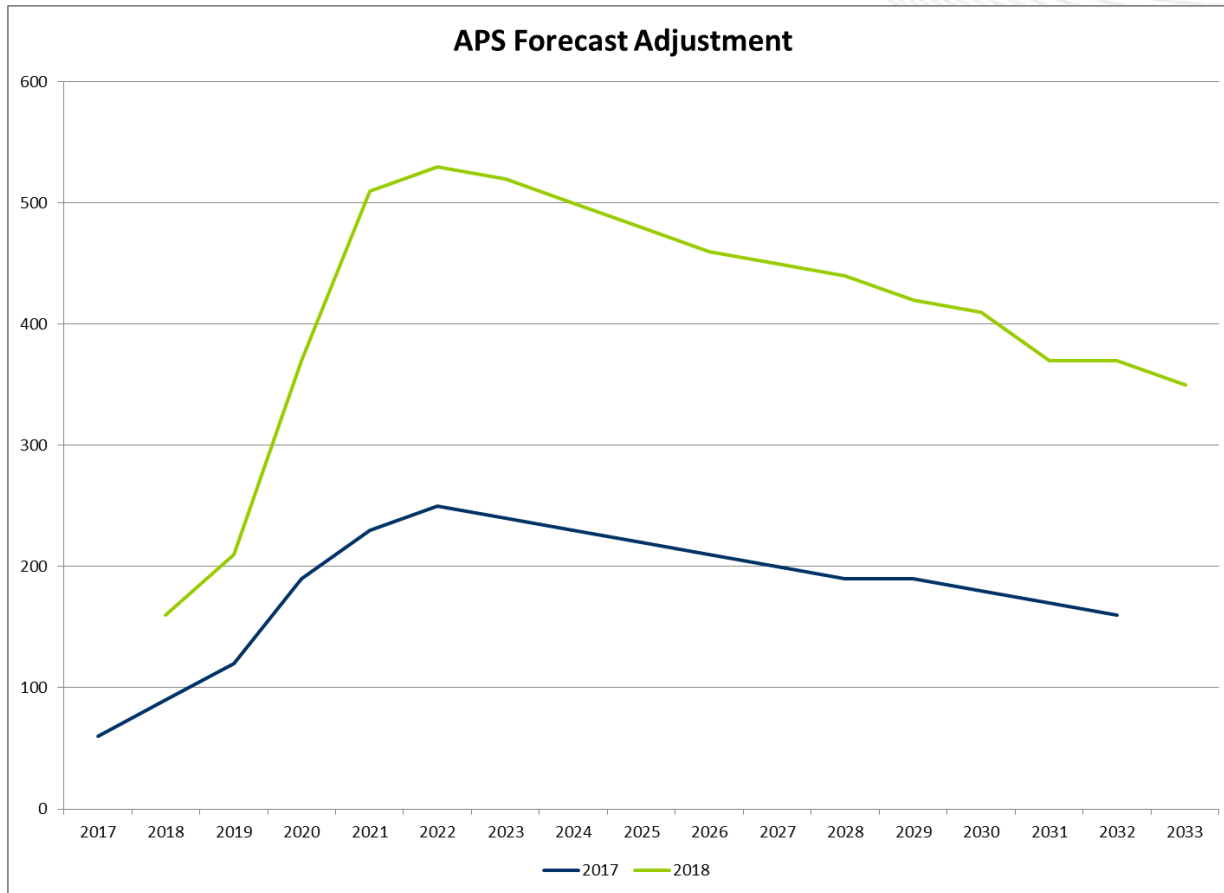


- 2017 is 2.6% higher than last year (mostly reflective of residential changes made mid-year)
- Index declines at a slower rate over the 3 and 5-year forecast horizon
 - -1.2% vs -1.4% average annual growth over 2018-2021
 - -1.1% vs -1.3% average annual growth over 2018-2023

PJM RTO - Other Equipment Index (Month 7)

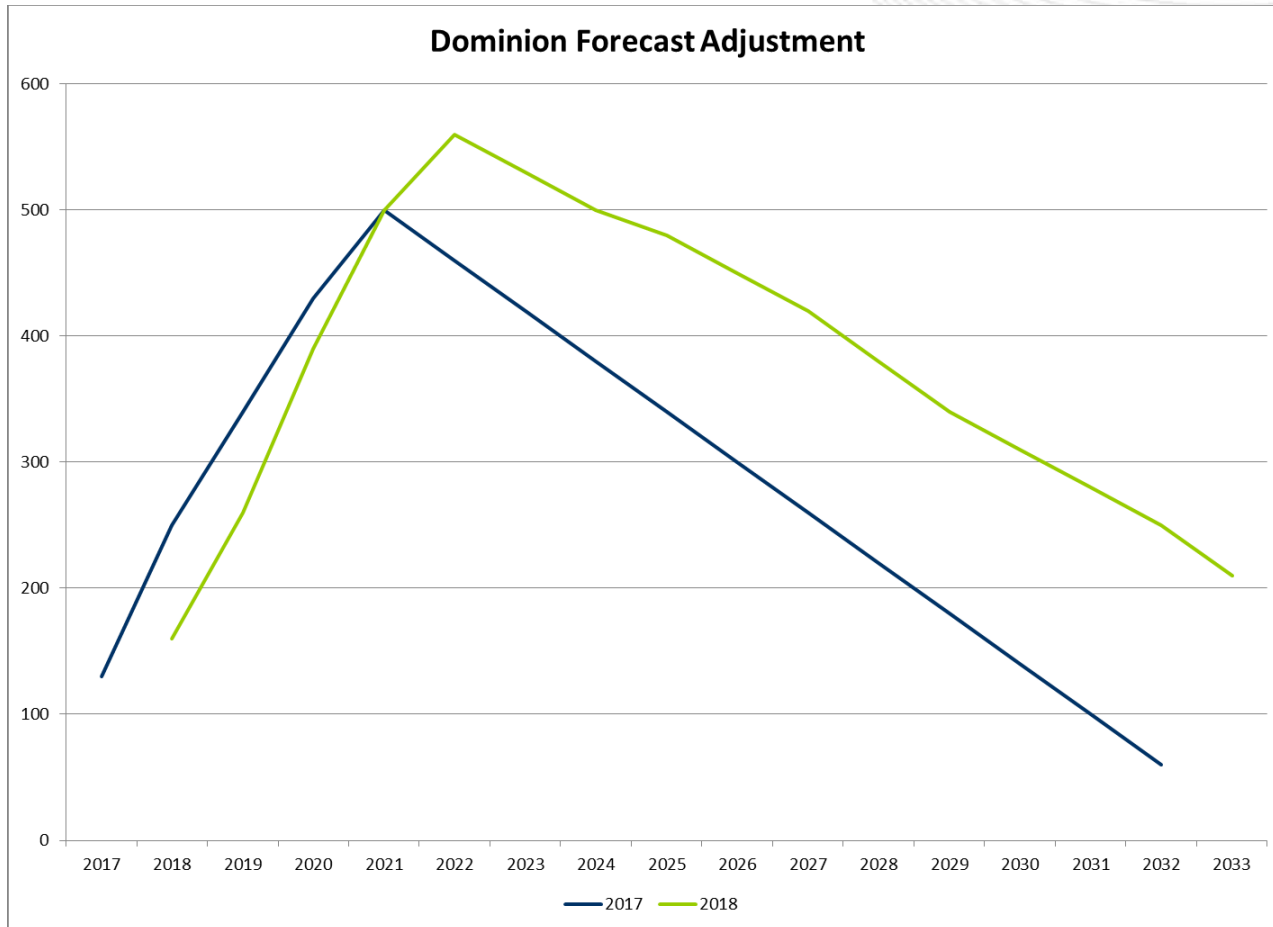


- 2017 is 3.6% lower than last year (mostly reflective of residential changes made mid-year)
- Index declines at a slower rate over the 3 and 5-year forecast horizon
 - -1% vs -1.2% average annual growth over 2018-2021
 - -0.8% vs -1% average annual growth over 2018-2023



- Adjustment made for fracking-related load.
- Total load associated with request was significantly higher than previous year (1150 MW vs 650 MW)
- Declining adjustment in out years reflects capped fracking load and rising embedded.

****Additional details available in write-up with the meeting materials***



- Adjustment made for data center load.
- Total load associated with request was similar
- Declining adjustment in out years reflects capped data center load and rising embedded.

****Additional details available in write-up with the meeting materials***

- Review with Planning Committee (12/14/2017)
- Publish final report in late December
 - Unrestricted Loads Spreadsheet
 - Statistical Appendix
 - Economic Variable and Equipment Index Data
 - Moody's Analytics Economics Report

Additional Slides

