



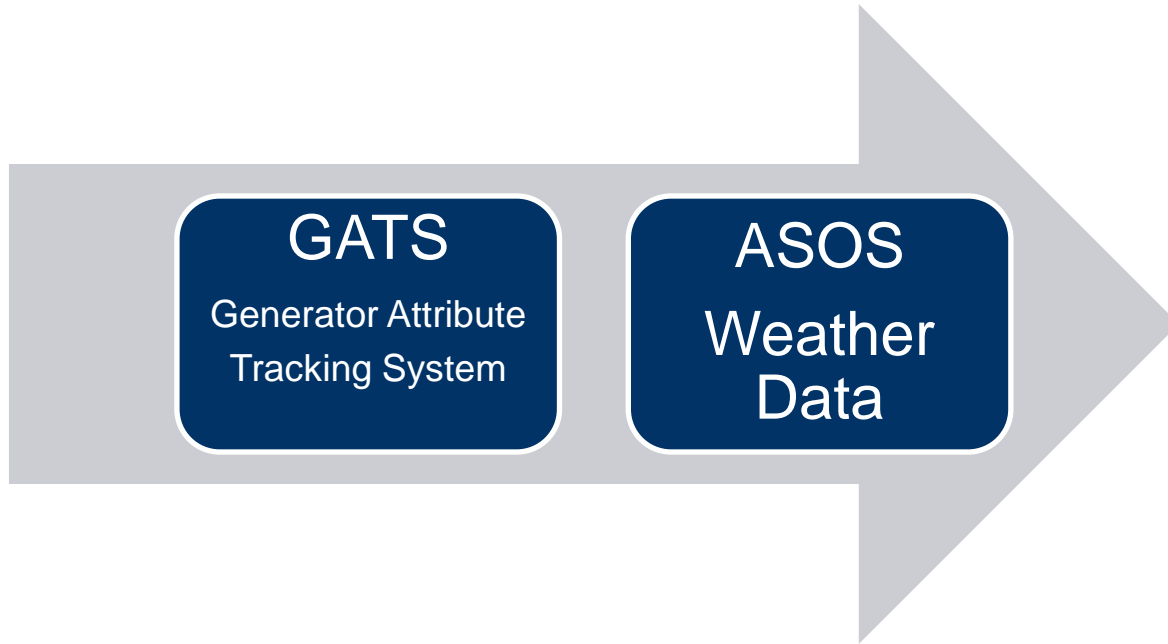
Distributed Solar Generation Backcast

LAS Meeting
May 22, 2018
Molly Mooney

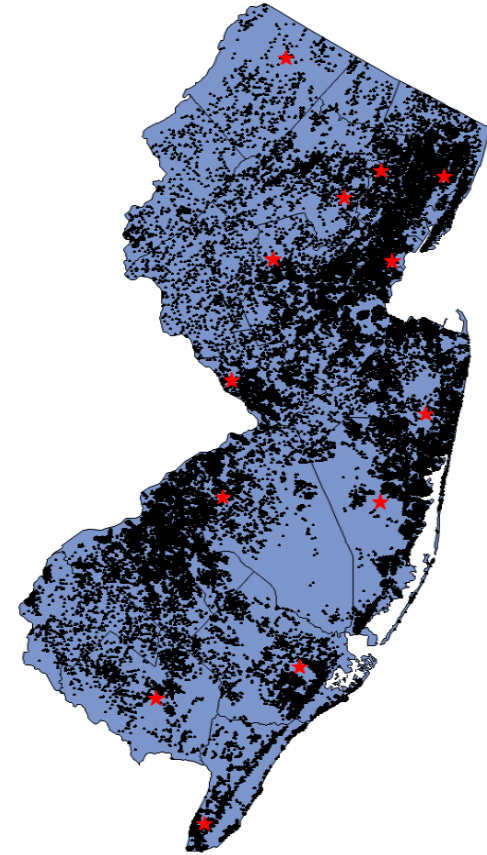
- Distributed solar generation:
 - Are not PJM grid- interconnected (i.e. non-wholesale)
 - Does not go through the full interconnection queue process
 - Does not offer as capacity nor energy resources
 - Nets directly with the load in terms of data submissions
 - Either at a customer site or via the distribution system
 - Does not provide metered production data

PJM uses a two-step approach to address distributed solar generation in the long term load forecast.

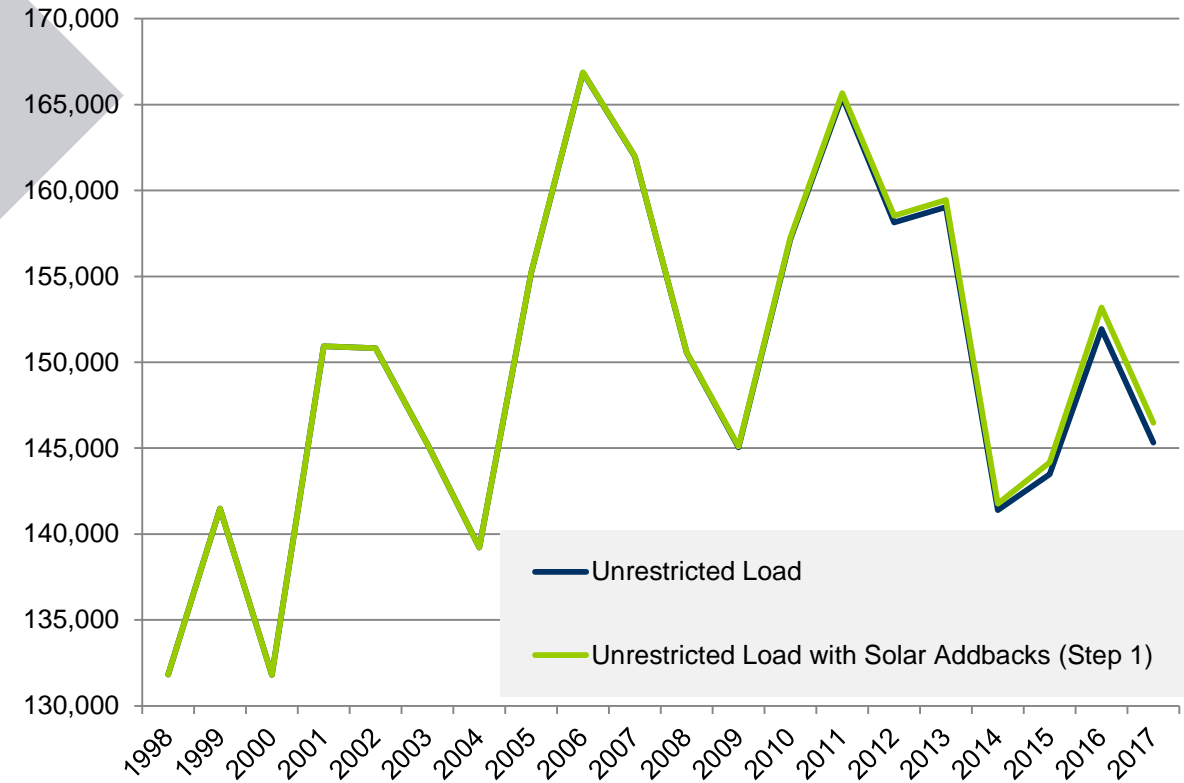
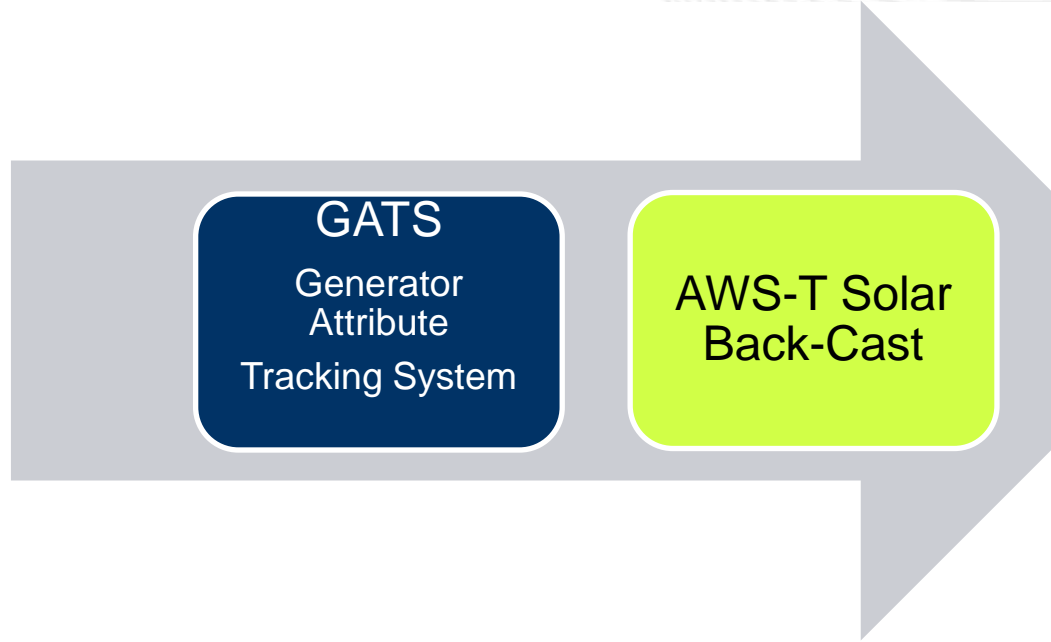
- Step 1 (current process):
To account for the historical impacts of distributed solar generation, PJM back-casts hourly values by zone. These estimates are then **added** to the unrestricted load used in PJM load models.



New Jersey Solar with Weather Stations



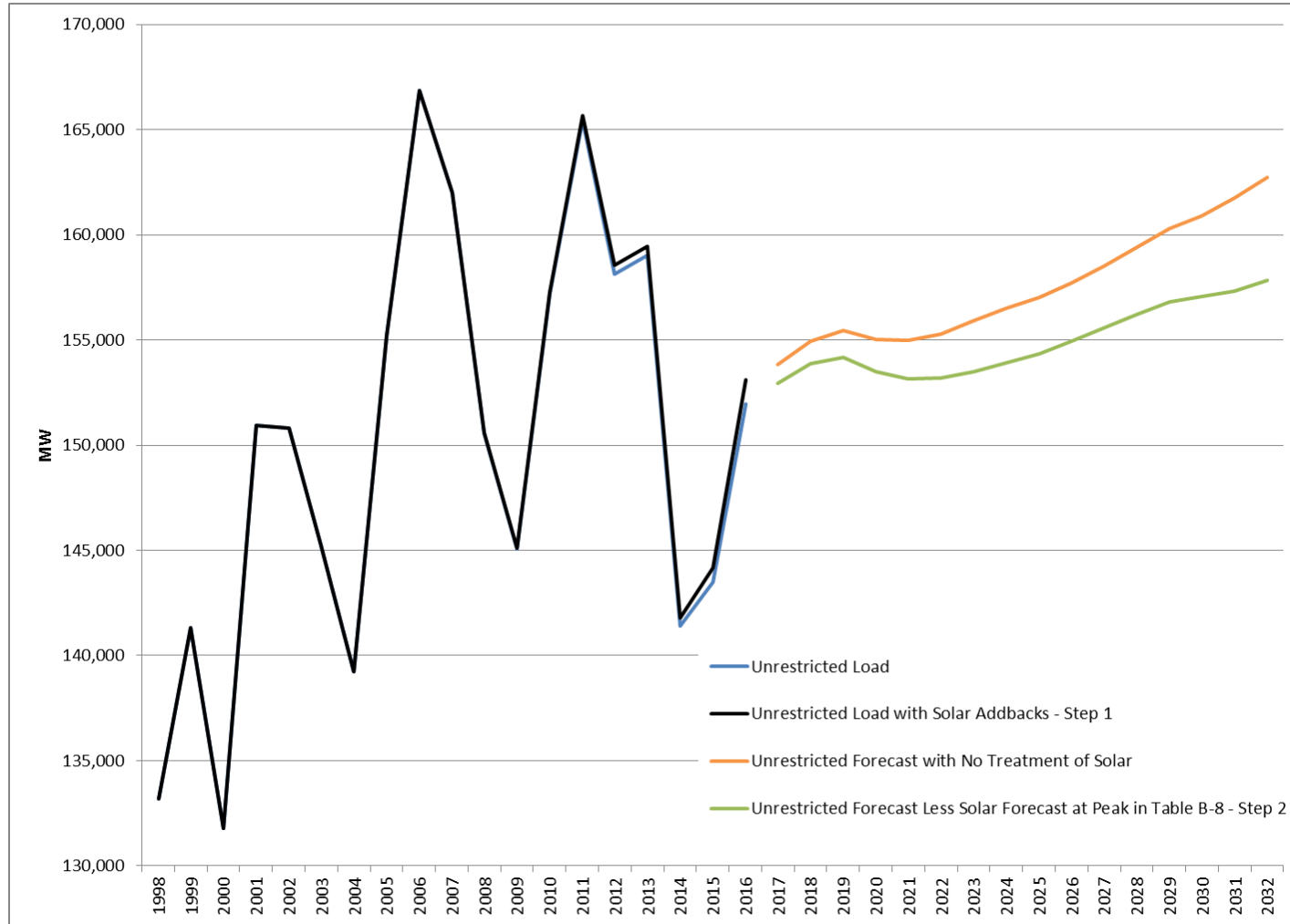
Process Review (Step 1: AWS-T back-cast)





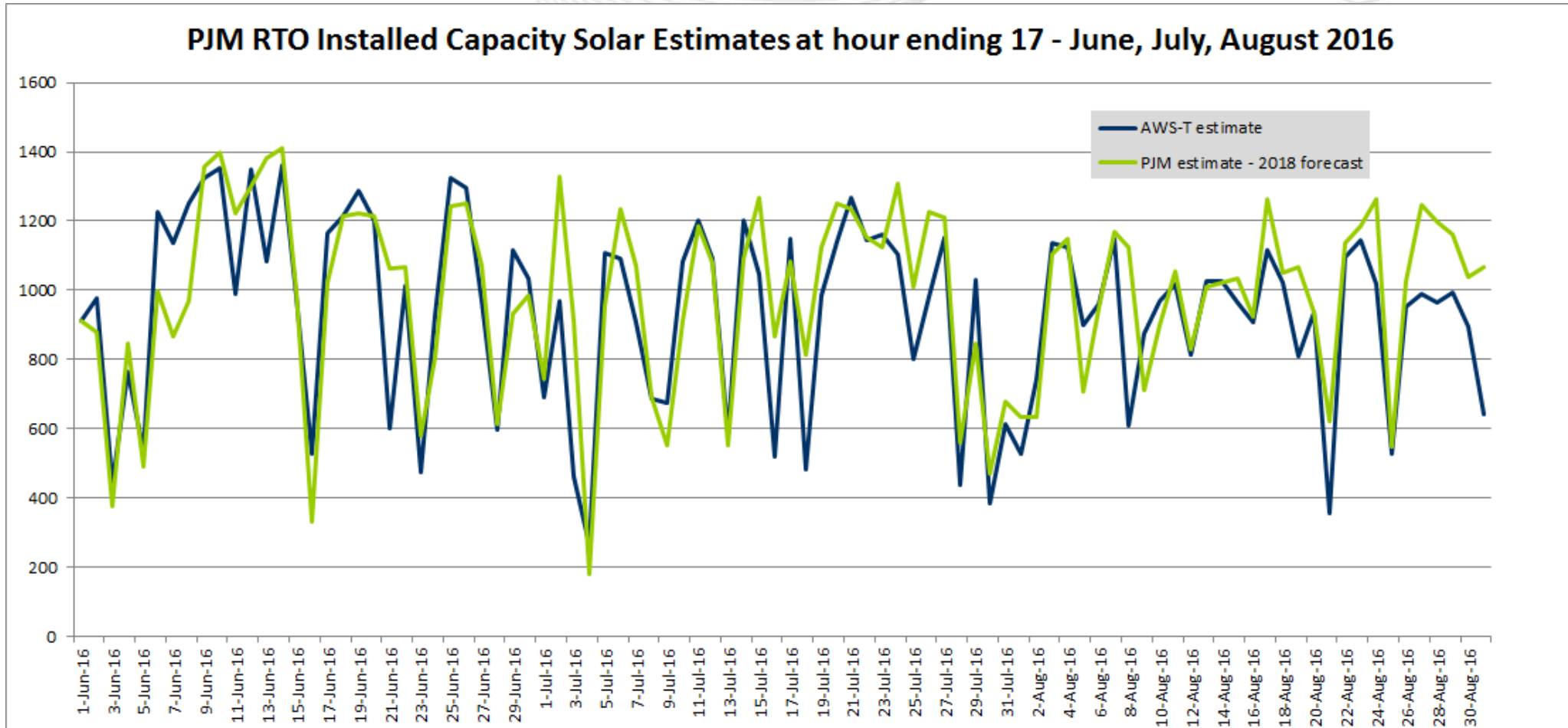
Long Term Forecast: Process Review

RTO Forecast Illustrating the Two-Step Approach PJM RTO Summer Peak

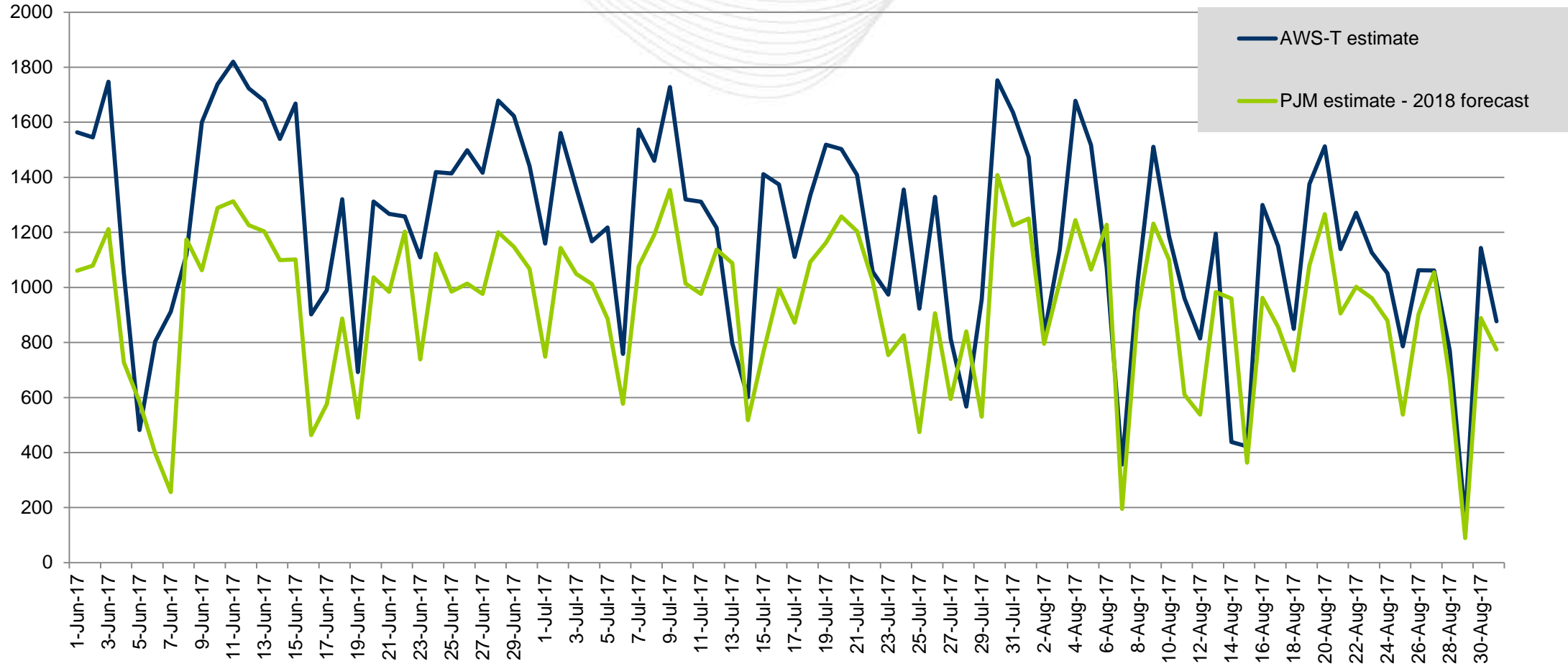


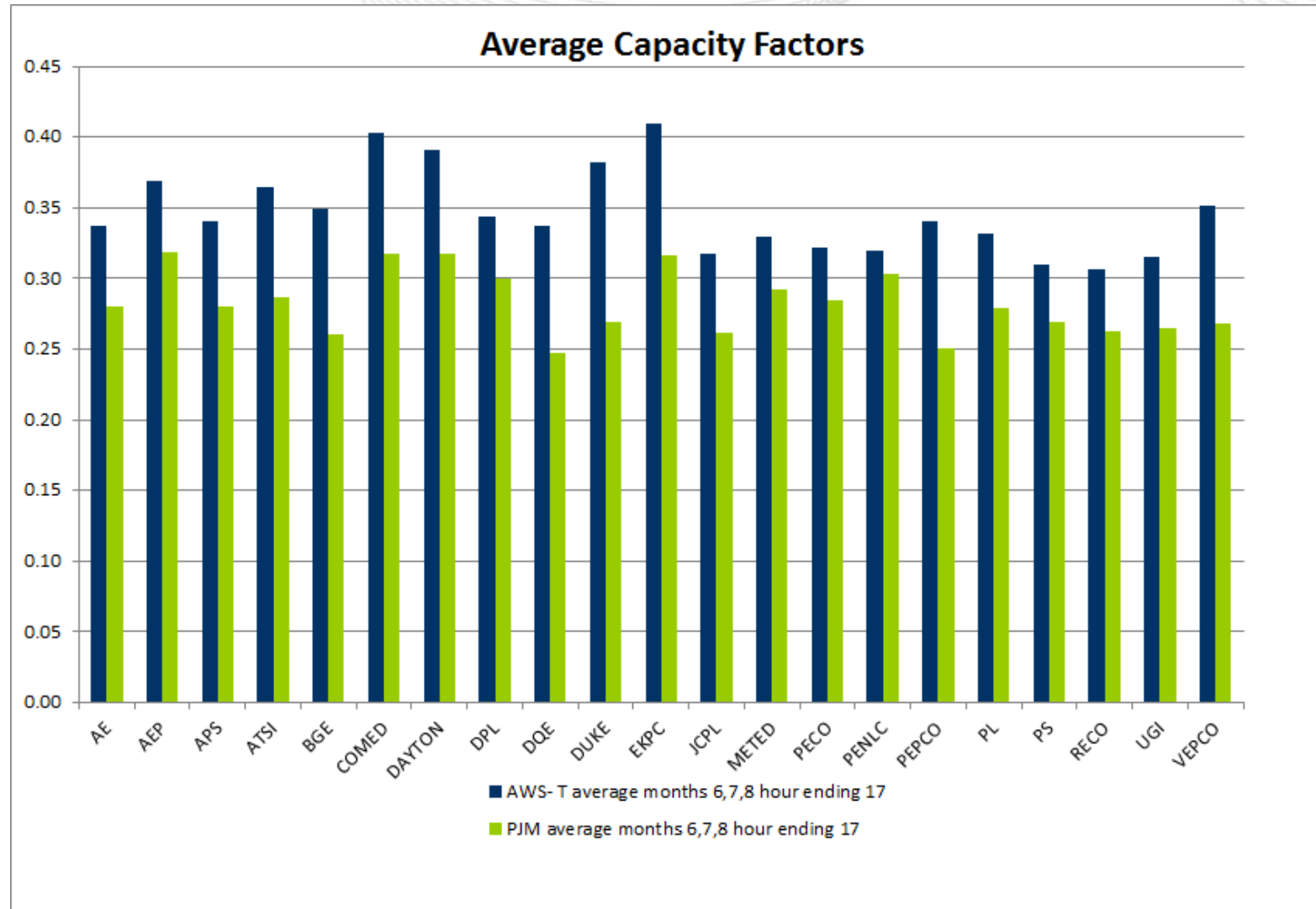
- Compare AWS-T back-cast estimates to PJM's current method of back-casting solar generation
- Review capacity factors
- Compare to monthly generation from GATS
- Replace PJM's estimated solar backcast with AWS-T data and review impact on forecast results

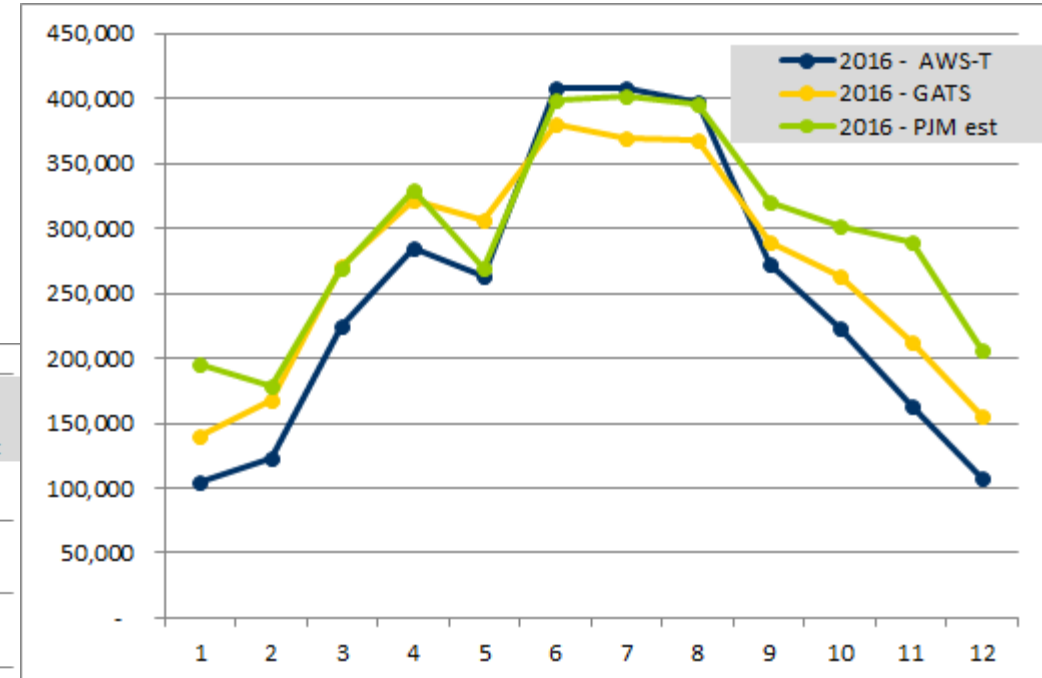
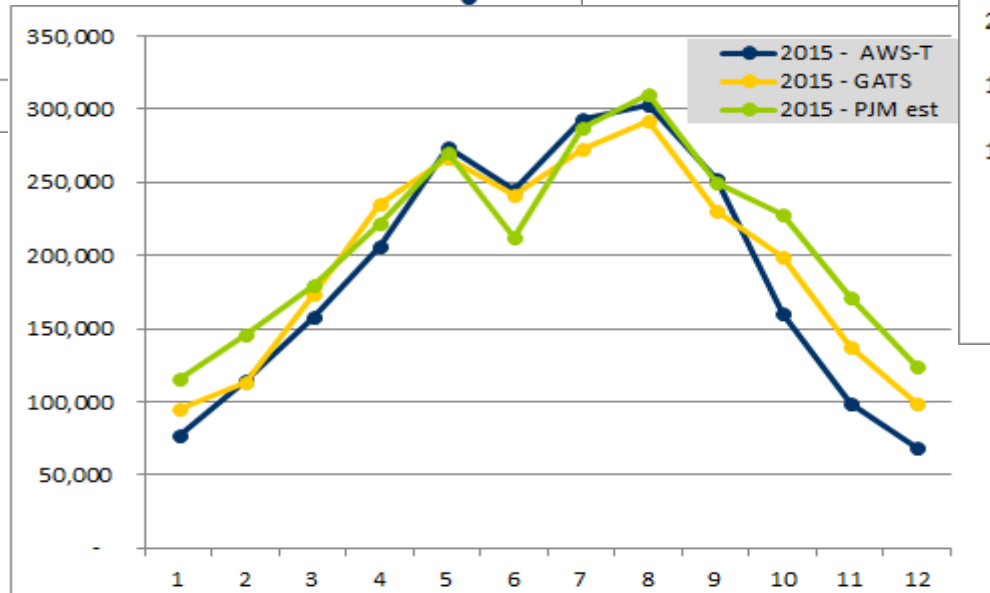
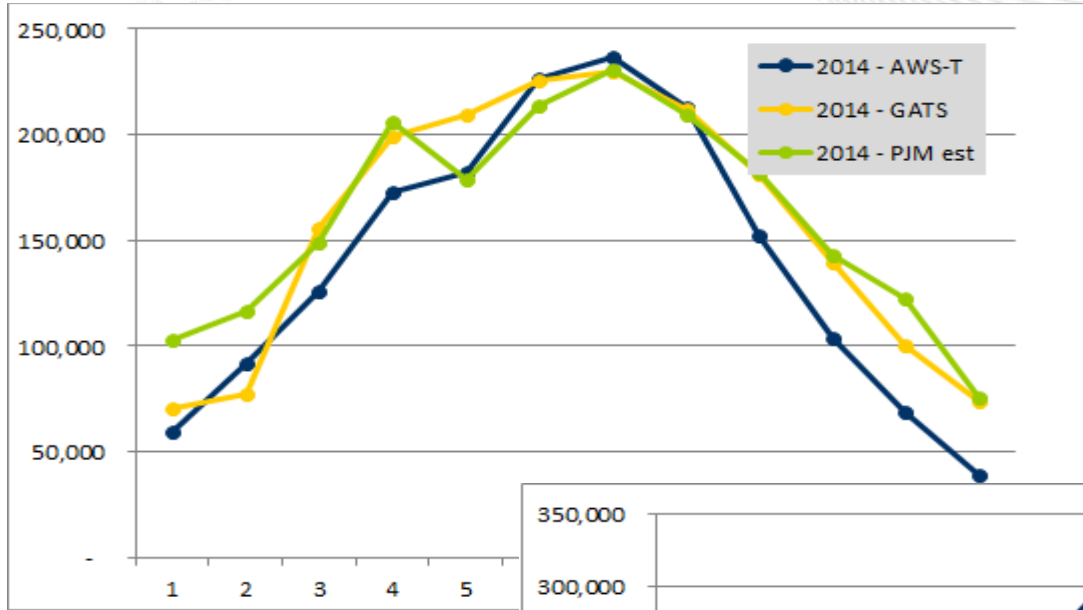
Comparing PJM backcast to AWS-T: Summer 2016



PJM RTO Installed Capacity Solar Estimates at hour ending 17 - June, July, August 2017







Summer Peak Forecast PJM RTO

