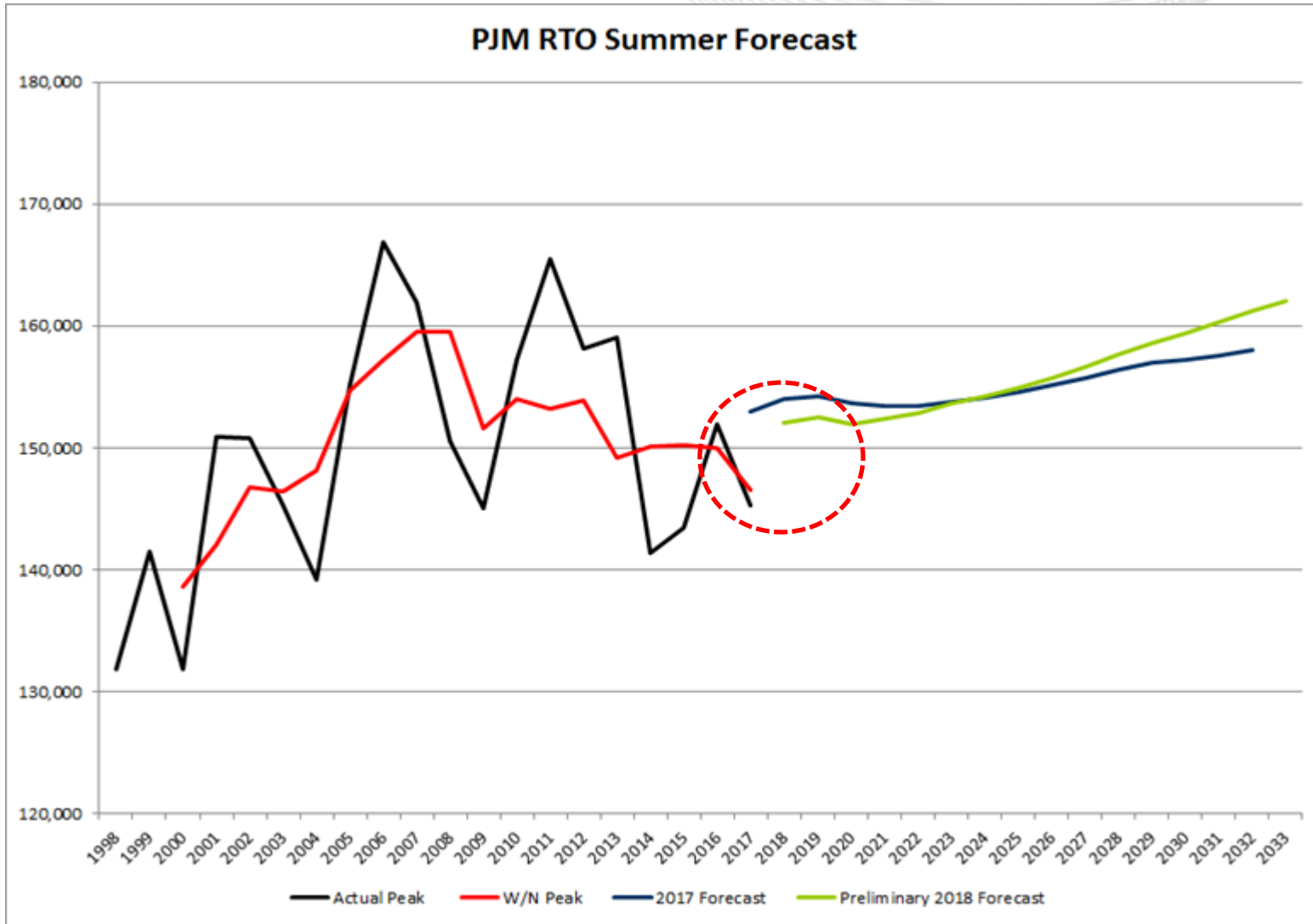




Load Forecast Model Estimation Period

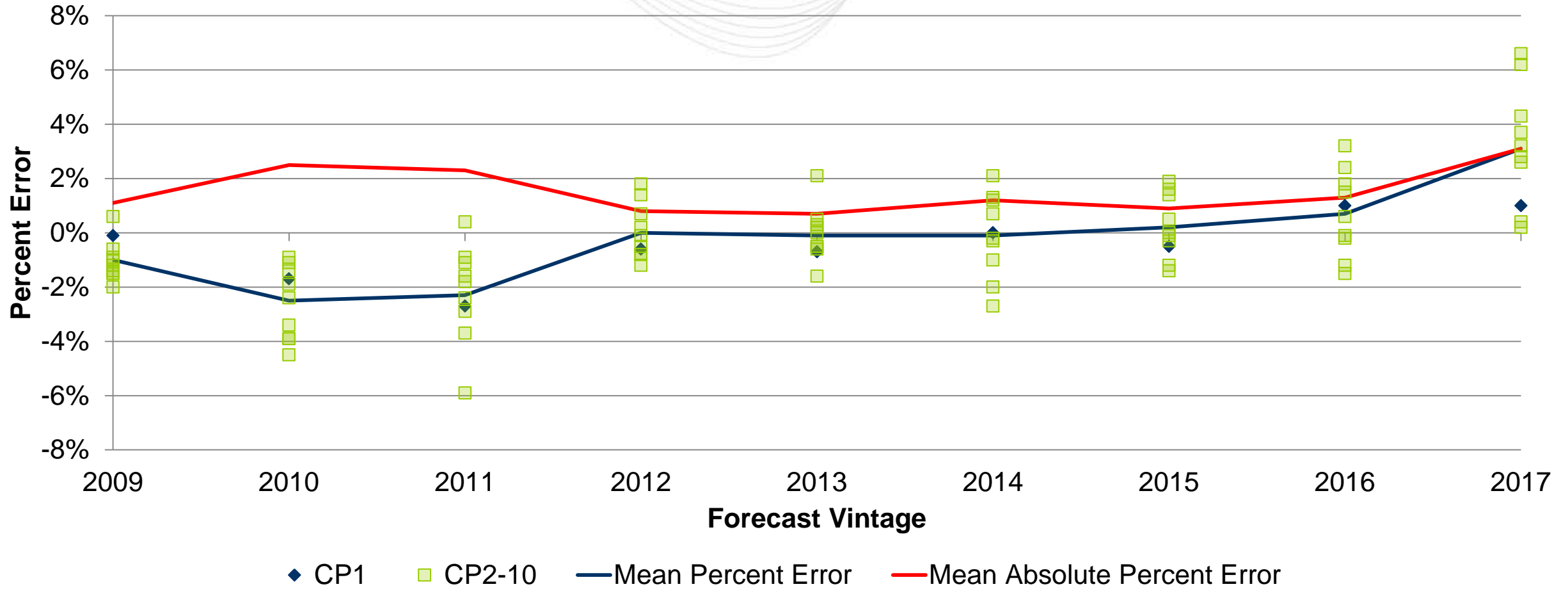
Load Analysis Subcommittee
March 14, 2018



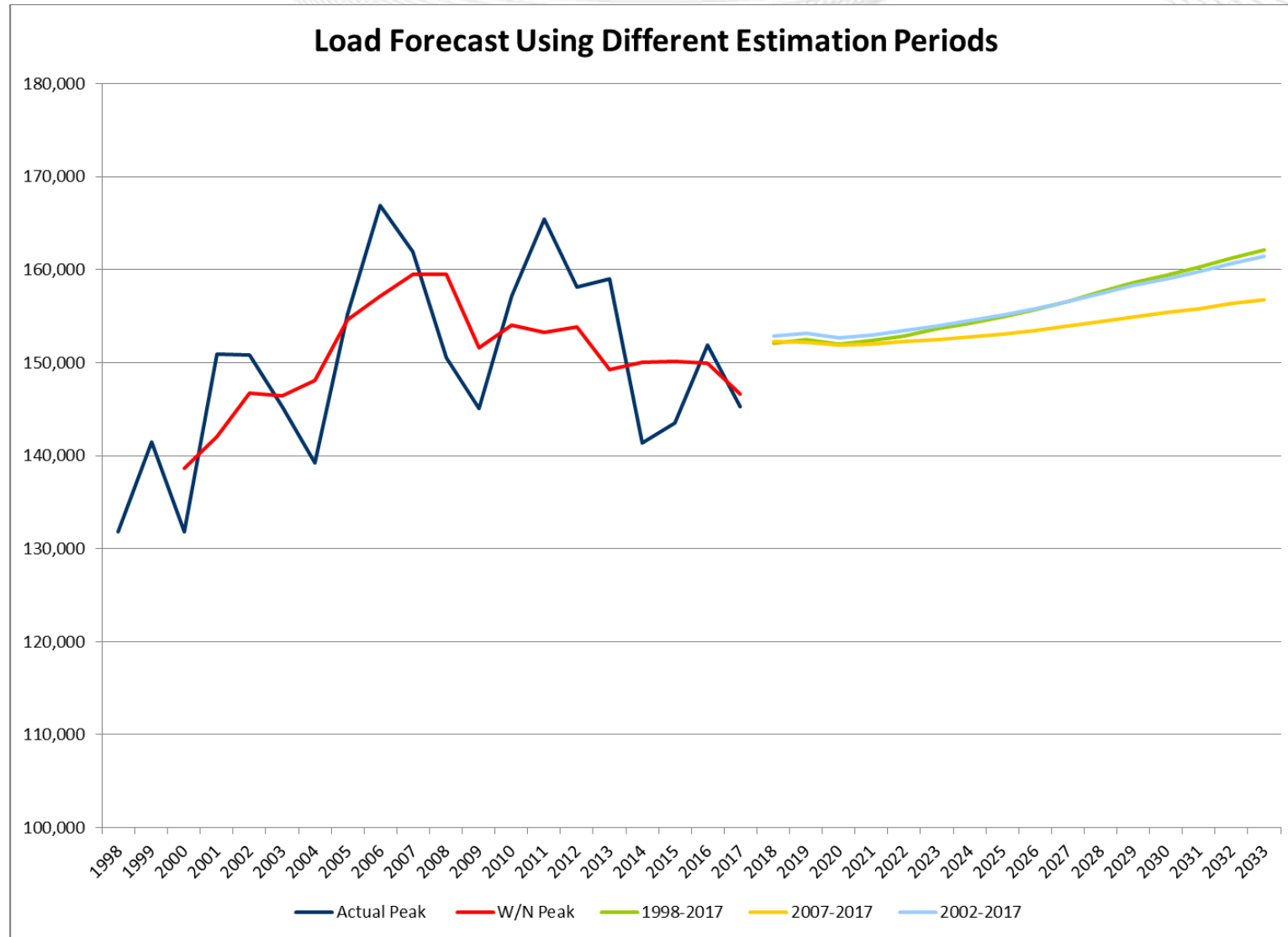
From 2017 Weather Normal Peak to 2018 Forecast is a 3.8% jump

- Two major causes
 - Weather normalization process
 - Forecast process

Summer 10CP Model Error by Forecast Vintage Zero Year Out Forecast



Results of Shortening Estimation Period



- Shortening the estimation period is sometimes appropriate
 - Structural change in the relationship of the dependent and independent variables
 - Or lack of independent variables to explain dependent variable
- PJM believes that structural change has occurred between the dependent and independent variables, but that the introduction of end-use variables and a solar adjustment have addressed this issue (changes that were incorporated starting with the 2016 Load Forecast).

- Shortening the estimation period at this time does not solve the “first year” issue, but does limit the model’s ability to accurately estimate parameters across business and weather cycles
- Instead, PJM believes that it is more worthwhile to continue looking into model redevelopment.
 - Changes to independent variables
 - Changes to model structure