ercot

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Transmission Planning
Load Forecast Review Process

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May 2018
OMS Forecasting Workshop

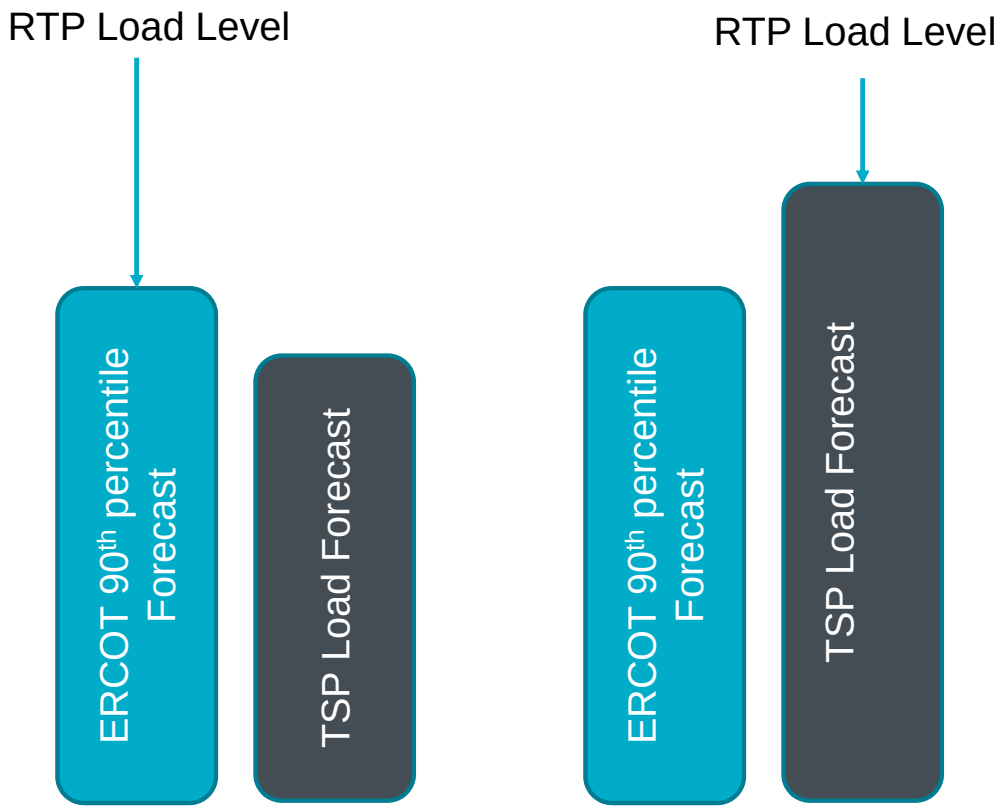
Agenda

- Background
- New Load Forecast Review Process
- Questions

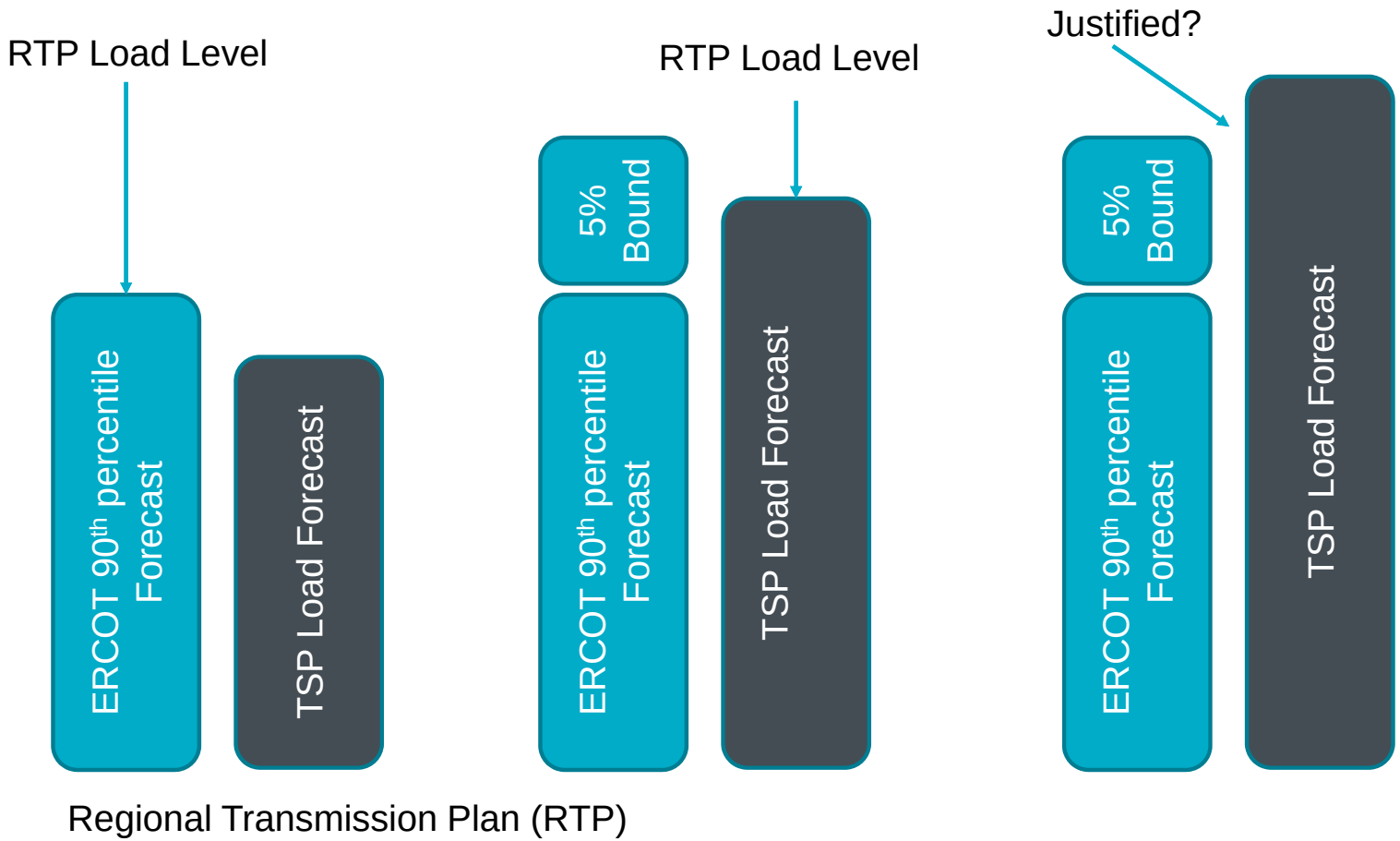
Background

- Focused on Tier 1 projects which are currently >= $50M
- TSP forecasts are for delivery point max demand
- Sum all TSP load forecasts within a weather zone and compare to the ERCOT 90th percentile forecast
- The highest forecast was used
- No review of TSP forecasts

Previous Load Forecast Review Process



New Load Forecast Review Process



Regional Transmission Plan (RTP)

Load Forecast Comparison

- If summed TSP Weather Zone forecast is higher than ERCOT 90th percentile forecast + 5% bound
  - TSP can provide signed financially binding agreements from customers as evidence of increased load in their territory
  - These agreements are kept confidential by ERCOT
  - No speculative load is included
  - If there is no signed financially binding document, the load is not included

Experience from 2017 Load Forecast Review

- What evidence is accepted?
- Is there a MW cutoff?
- Confidentiality
- How will the new loads be handled?
- Fast growing load area concerns

Load Forecast Review Process

Conclusion

- ERCOT has developed procedures that will be used to review load forecasts
  - The goal is to ensure that ERCOT is comfortable with the load forecasts
  - ERCOT is appreciative of the support provided by TSPs

Long-Term System Assessment (LTSA)

- The Long-Term System Assessment (LTSA) is a planning study conducted by ERCOT System Planning per its obligation under PURA Section 39.904[1] and the ERCOT Planning Guide. The LTSA analyzes system conditions 10 to 15 years in the future and uses a scenario-based approach to transmission planning, in which ERCOT Planners study the economic and reliability needs of the system across a wide range of scenarios.

- Scenarios
  - Created in a collaborative manner through meetings with Market Participants
  - Include load impacts such as high growth industries and areas, rooftop PV, energy storage, electric vehicles, demand response, energy efficiency, extreme weather, recession, etc.
  - Fuel/technology prices, environmental regulations, capital costs, DC Tie additions, etc.

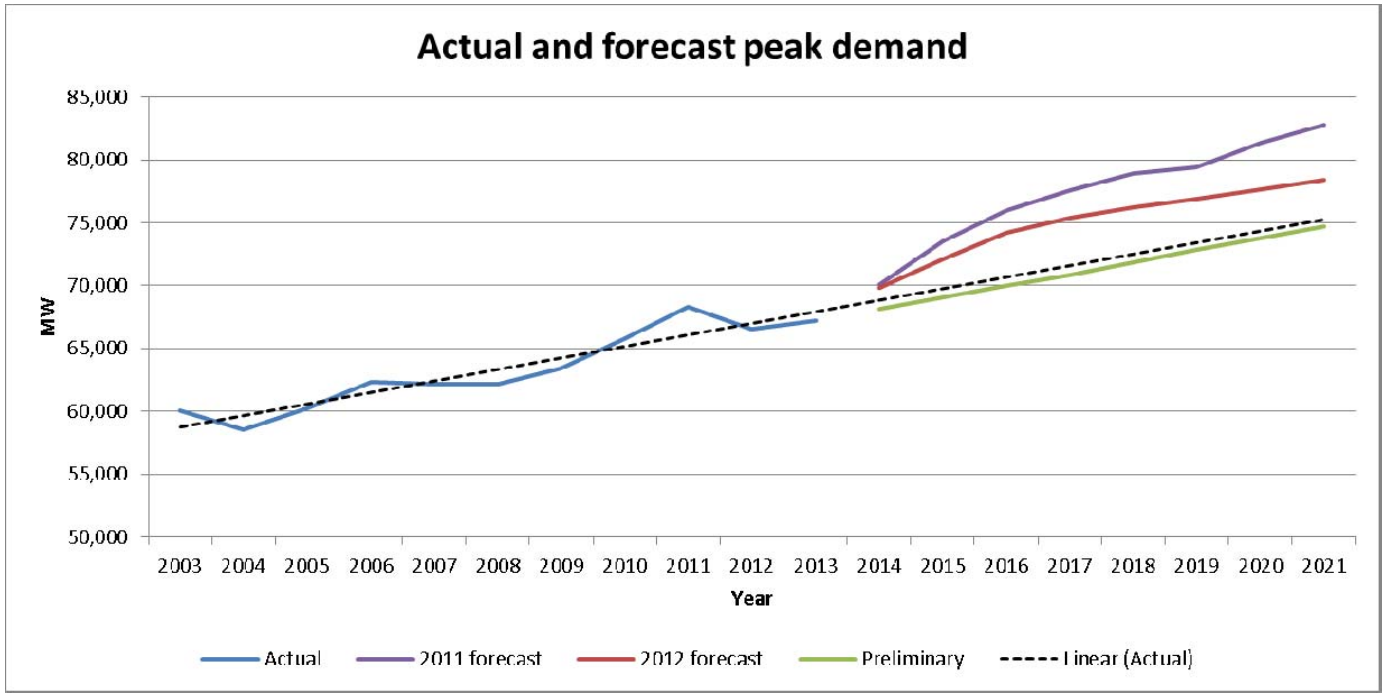
Long-Term System Assessment (LTSA)

- Planners may use the bases cases developed in this study to evaluate large transmission additions to the ERCOT System. Additionally, the study will help facilitate communication and understanding of long-term transmission needs among stakeholders.
- Primary focus is on the 345 kV system

Long-Term System Assessment (LTSA)

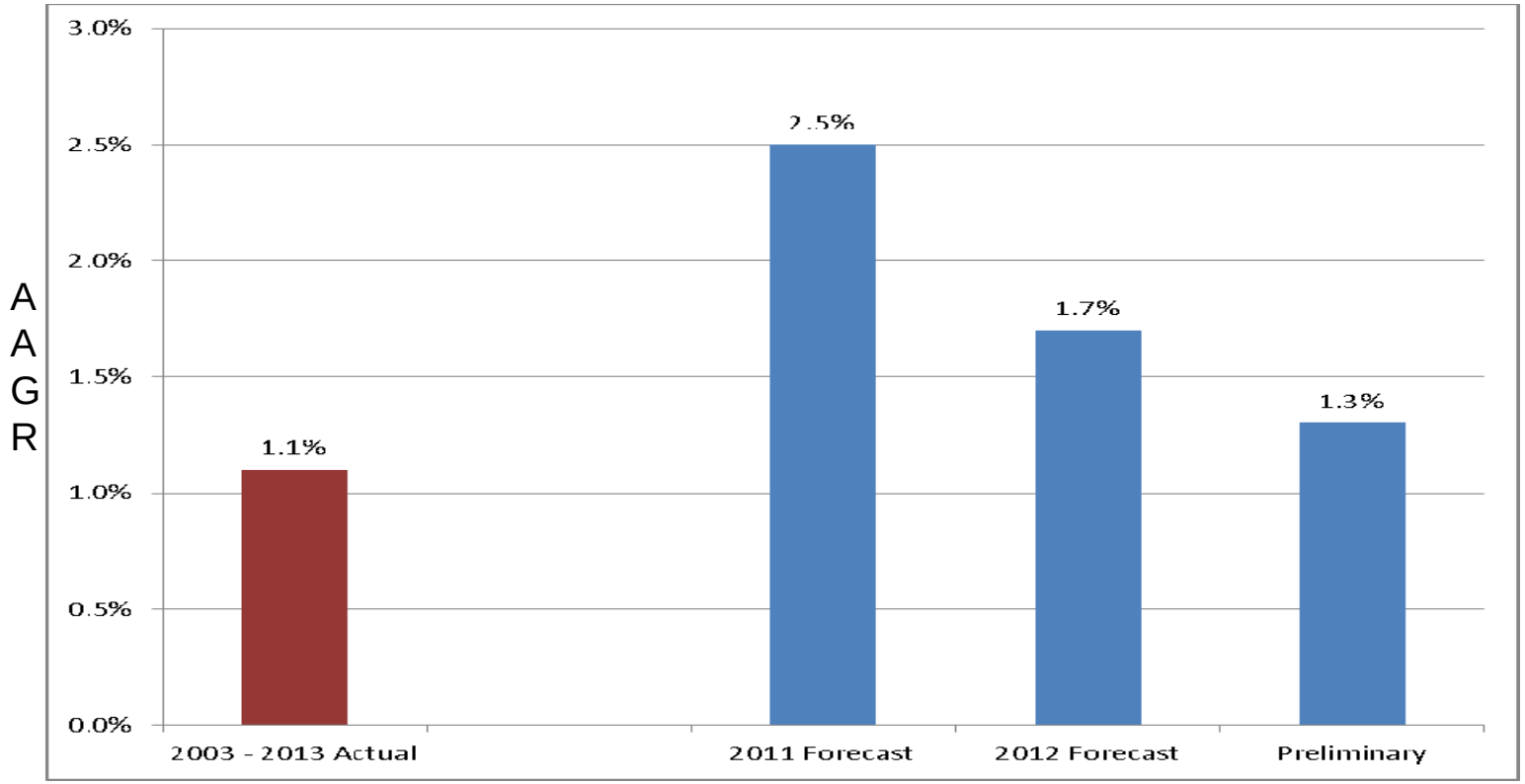
- Section 39.904(k) of the Public Utility Regulatory Act states that the commission and the independent organization certified for ERCOT shall study the need for increased transmission and generation capacity throughout this state and report to the legislature the results of the study and any recommendations for legislation. The report must be filed with the legislature not later than December 31 of each even-numbered year.

Comparison of historical forecasts



2011 forecast based on Moody's base scenario (2012 – 2021)
2012 forecast based on Moody's low scenario (2013 – 2022)

Comparison of historical forecasts – annual average growth rate



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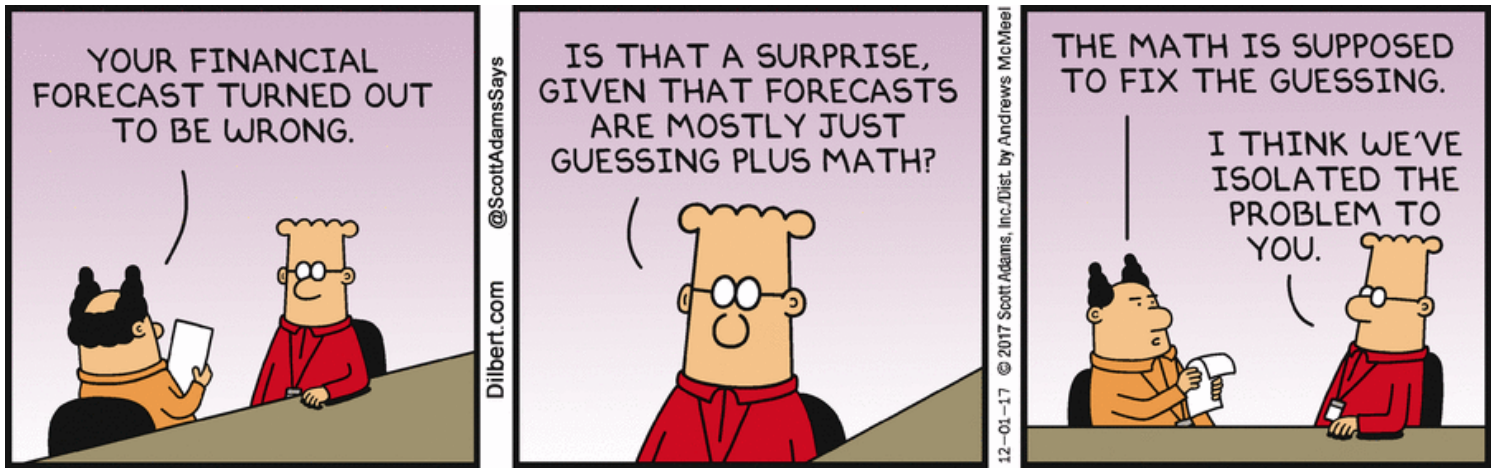
Questions?


YOUR FINANCIAL FORECAST TURNED OUT TO BE WRONG.
IS THAT A SURPRISE, GIVEN THAT FORECASTS ARE MOSTLY JUST GUESSING PLUS MATH?
THE MATH IS SUPPOSED TO FIX THE GUESSING.
I THINK WE'VE ISOLATED THE PROBLEM TO YOU.
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