

Customer Driven. Community Focused.



ERCOT

(Electric Reliability Council of Texas)

Wholesale Market Update

AEUOC Meeting
November 2017

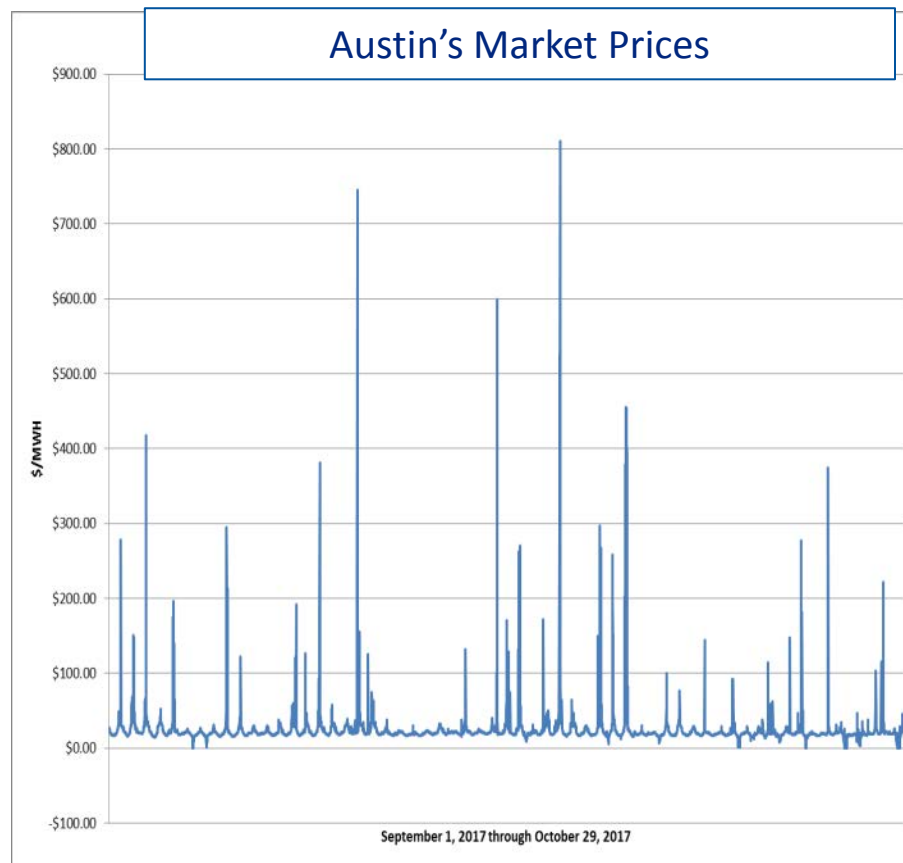
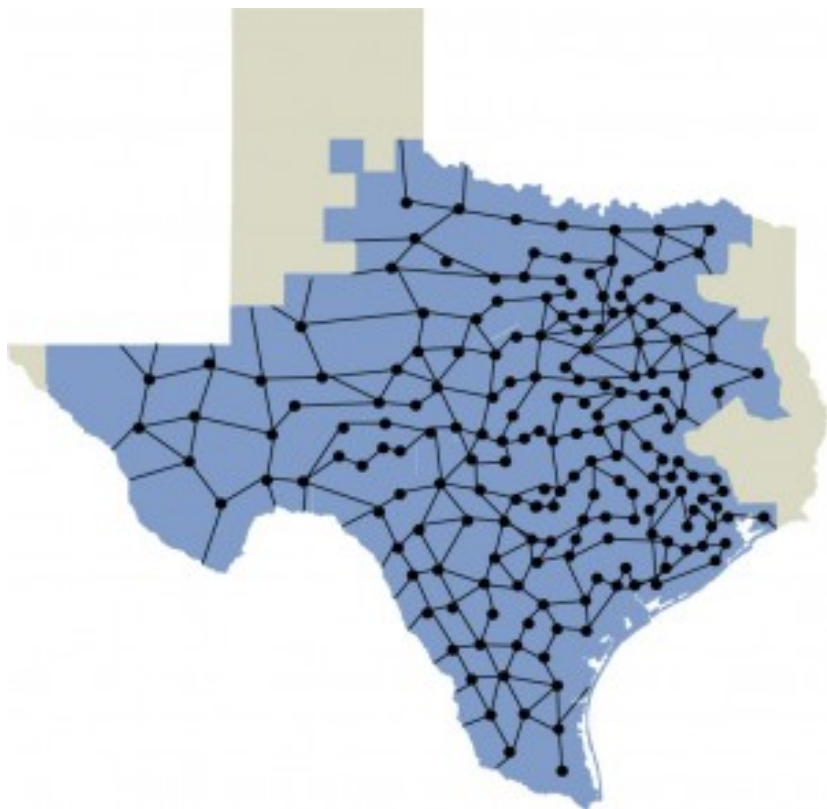


Update Overview

- Electric Markets
- Recent Developments
- How does these developments affect the market and Austin Energy



Electric Market Managed



Average price = \$26 Megawatt Hour



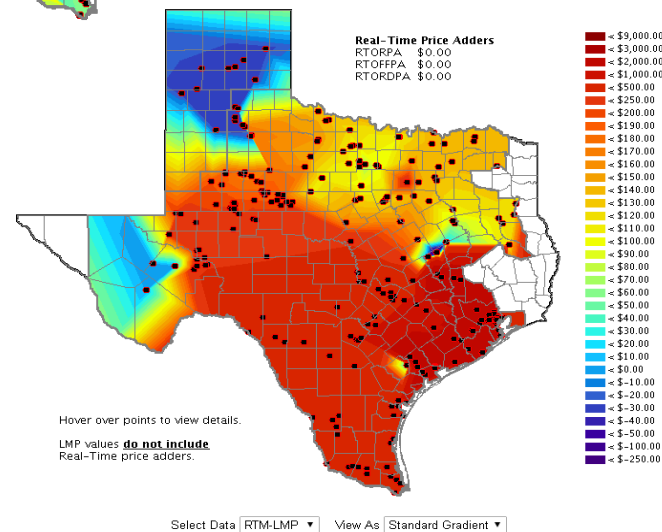
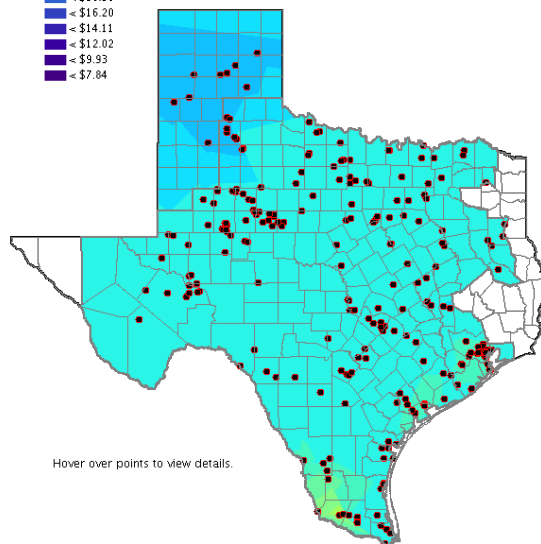
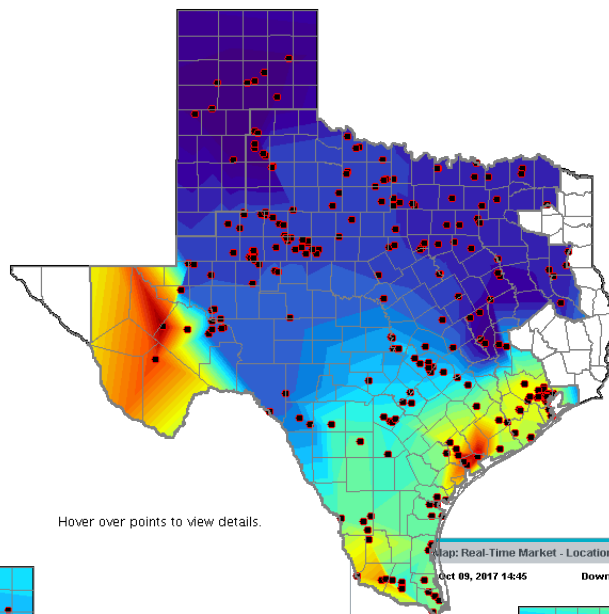
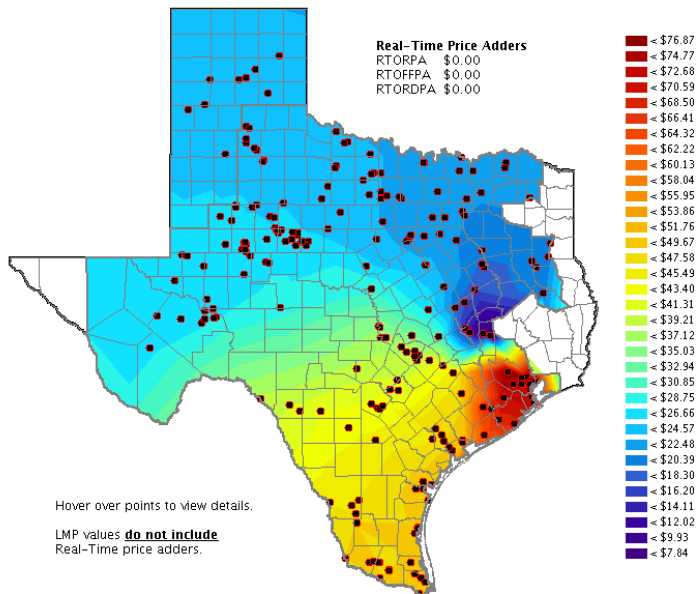
Real-time Prices Fluctuate All Day Everyday

LMP Contour Map: Real-Time Market - Locational Marginal Pricing

[Help?](#)

Last Updated: Mar 17, 2017 14:40

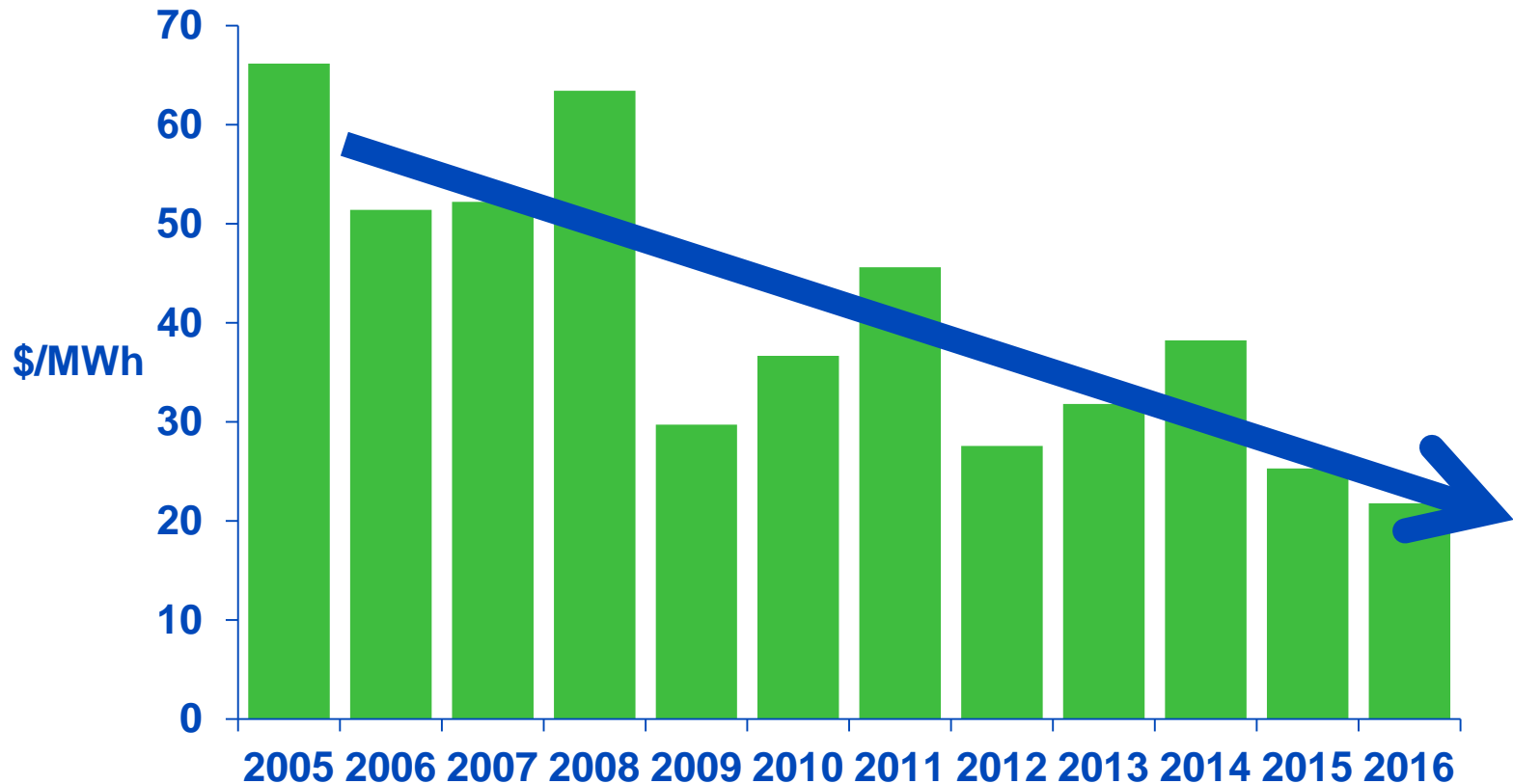
Download KML: [Contours and Points](#) / [Points Only](#) / [TX Counties](#) / [ERCOT Region](#)





ERCOT Average Power Prices

Lower cost resources have driven down wholesale power prices



Declining wholesale prices in ERCOT market

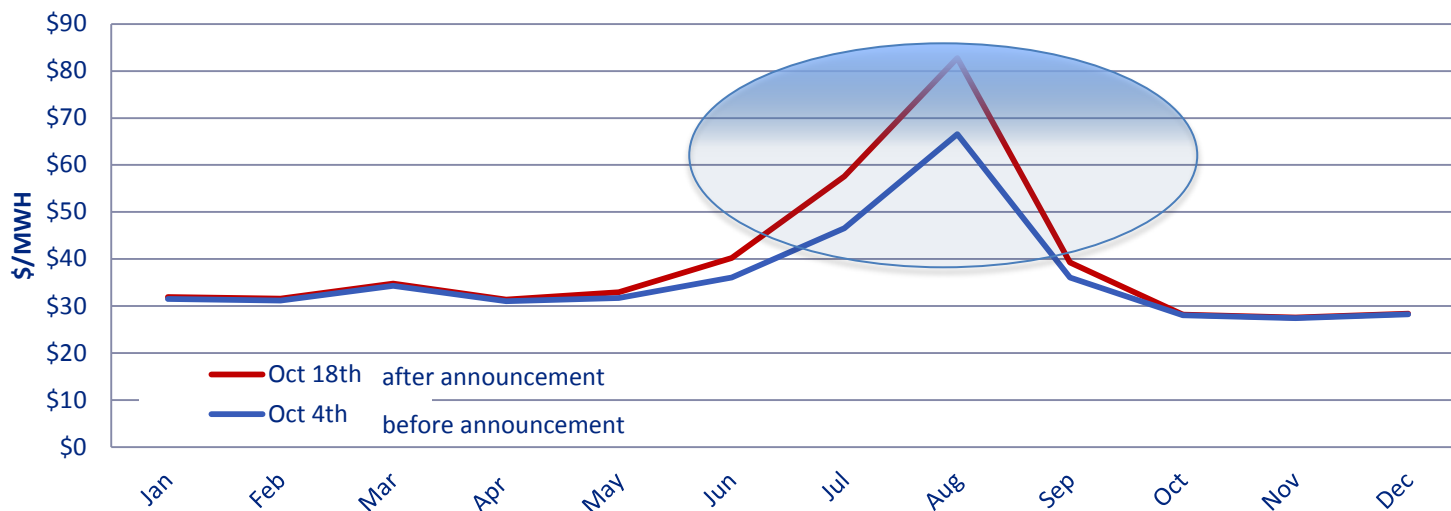
1) Source: ERCOT



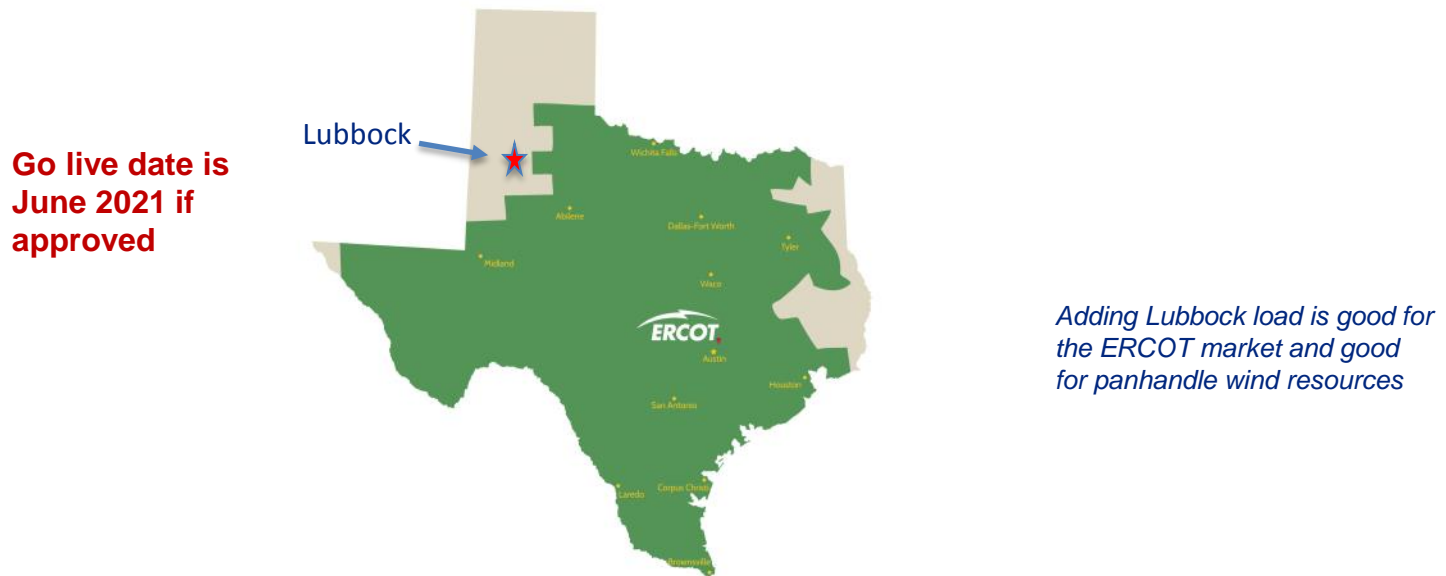
Retirements and Additions

- **Generation Retirements:** *(announced October 2017) - (5% of total ERCOT capacity)*
 - 418 MWs of natural gas fired generation capacity
 - 4,273 MWs of coal fired generation capacity
- **Generation Additions:** *(likely before August 2018)*
 - 1,227 MWs of natural gas fired generation capacity
 - 639 MWs of solar generation capacity
 - 1,715 MWs of wind generation capacity

Load Zone South Forward Prices (2018)



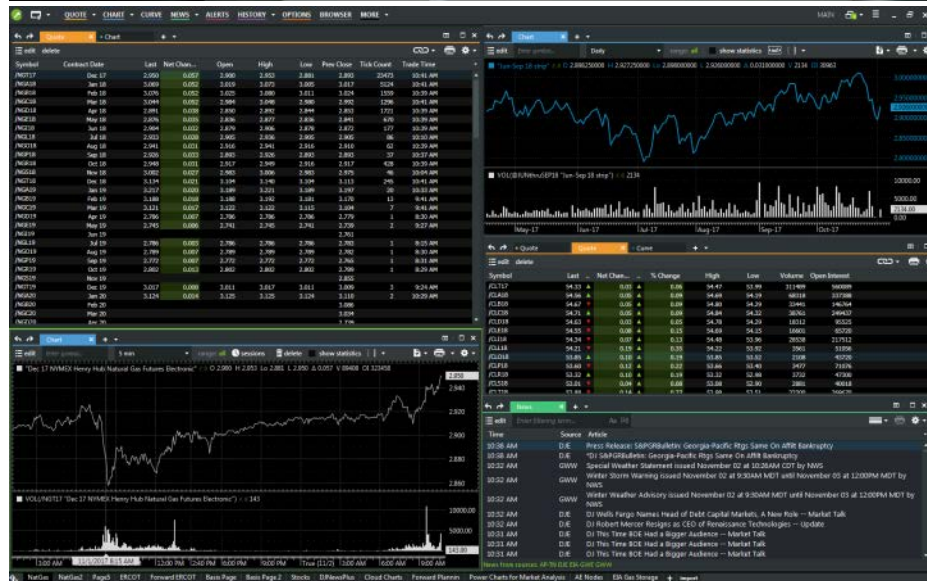
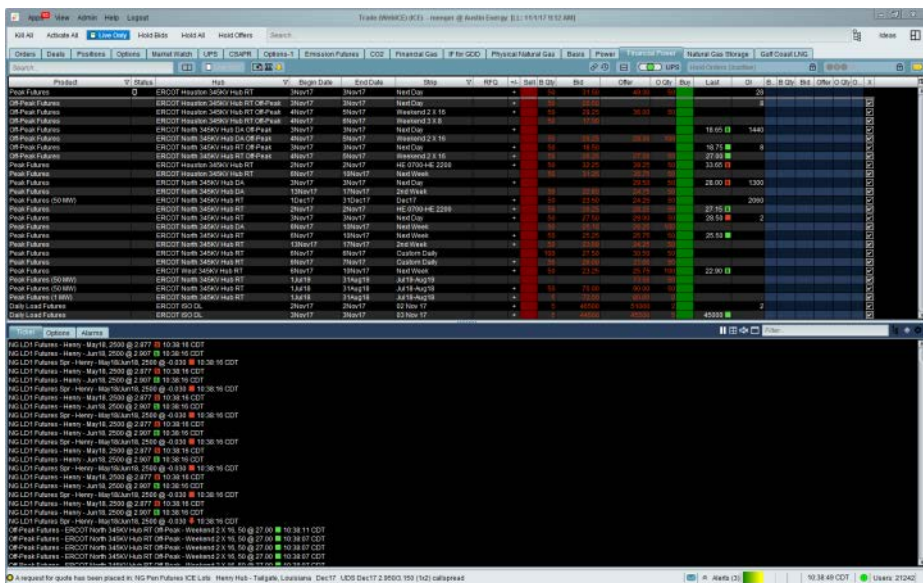
- Major rule changes evaluated currently
 - Public Utility Commission has requested input from market participants
 - Any rule changes will take several years to be in effect
 - Not determined if costs of rule changes outweigh benefits to our customers
 - Although City of Lubbock joining ERCOT market determined this winter



- Rule changes and generation retirements create uncertainty about the future



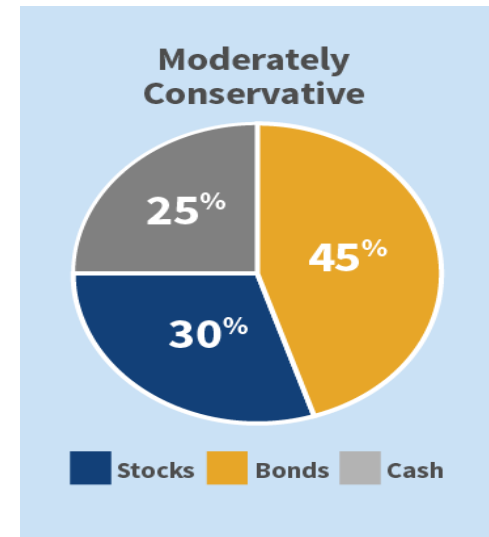
Austin Energy Market Team





Portfolios Managed

- Managing risk on a daily basis differs from the risk managed through the resource plan
- Much like protecting the savings for children's college or your retirement, the city's portfolio is diversified in several ways to help protect it from market risks
- In order to increase certainty after resource plan decisions, your market team manages that portfolio on a daily basis:
 - Real Time Desk manages 5 minutes price changes within next 24 hours and adjusts schedules to minimize impacts
 - Day Ahead Desk forecasts next day to end of month price changes, employs strategies optimizing renewable portfolio
 - Risk Desk actively protects load and markets assets one month to 60 months out in the future.





Effects on Market and Austin Energy

- Our customers are exposed to market risk and they pay for it through the Power Supply Adjustment.
- Long term economic impacts our customers face due to shifts in technology that serve ERCOT's load add uncertainty and could mean upward price pressures on cost of electricity to our customers.
- AE team is protecting and managing against that risk



Questions