



Transmission Expansion Advisory Committee Meeting

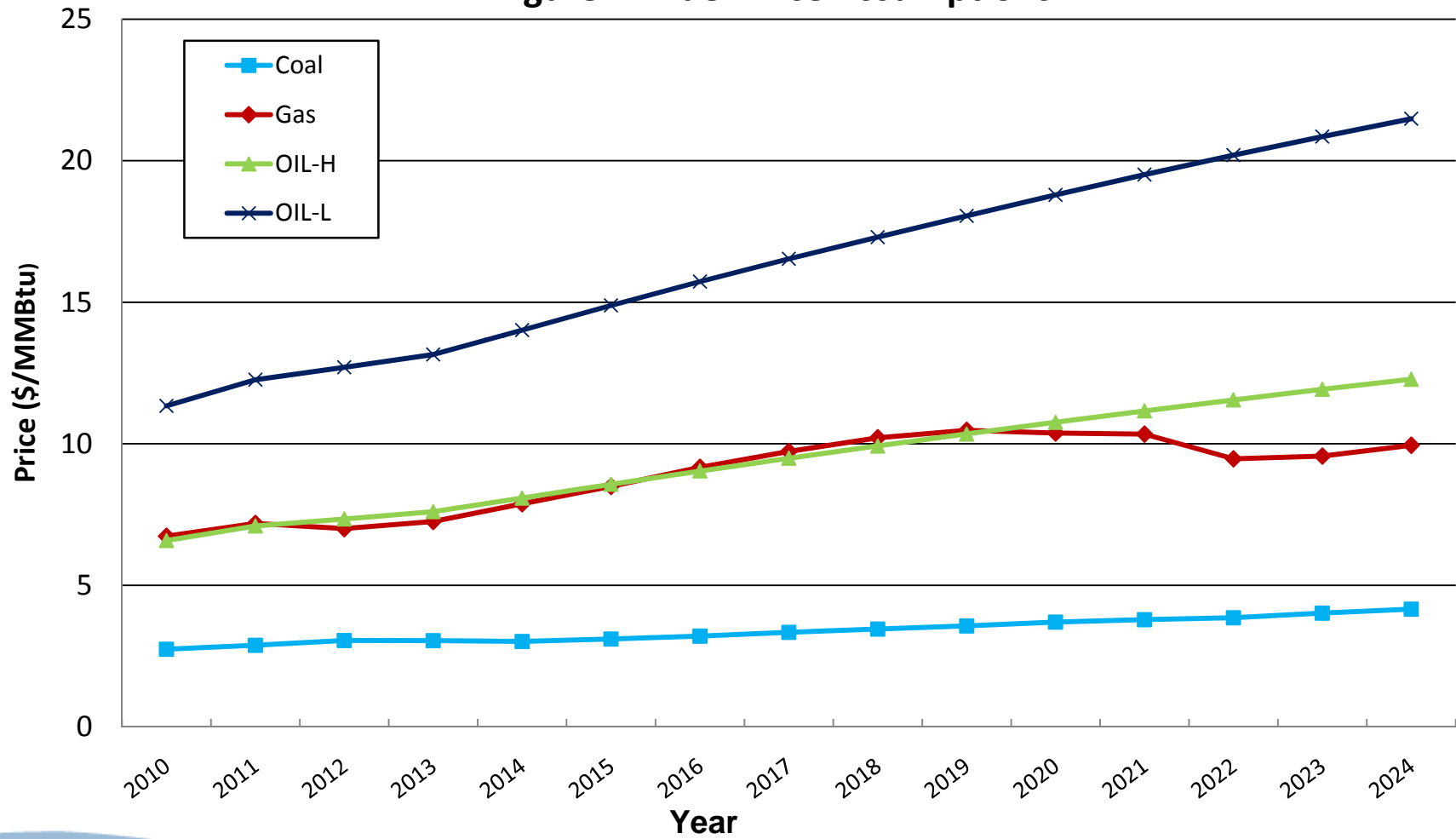
2010 Market Efficiency Analysis Preliminary Input Assumptions

February 10, 2010

- Study years: 2010, 2013, 2016, 2019, 2024
- PROMOD IV model from Ventyx
- Underlying input data contained in PROMOD Powerbase (February 2009 update)
 - Updated fuel and emission costs as well as verified generating units based on November 2009 PROMOD Powerbase update.
- Powerflow Cases*
 - 2010 power flow case to represent today's "as-is" system
 - 2014 RTEP power flow case to represent future system

- Fuel prices
- Load and energy
- Future generation scenario
- Emissions prices
- Transmission topology
- Carrying charge rate and discount rate

Figure 1 - Fuel Price Assumptions





Load & Energy Input Data

- PJM zonal peak and zonal energy forecast from PJM 2010 Load Forecast Report
- Historical zonal hourly loads used to develop zonal hourly load shape

Table 1 – Forecast PJM Peak and Energy*

	2010	2013	2016	2019	2024
Peak (MW)	147,791	160,631	167,403	172,869	180,936
Energy (GWh)	784,166	851,855	891,842	917,281	961,953

*ATSI Load included in all years

Figure 2 - SO2 Emission Allowance Price Assumptions

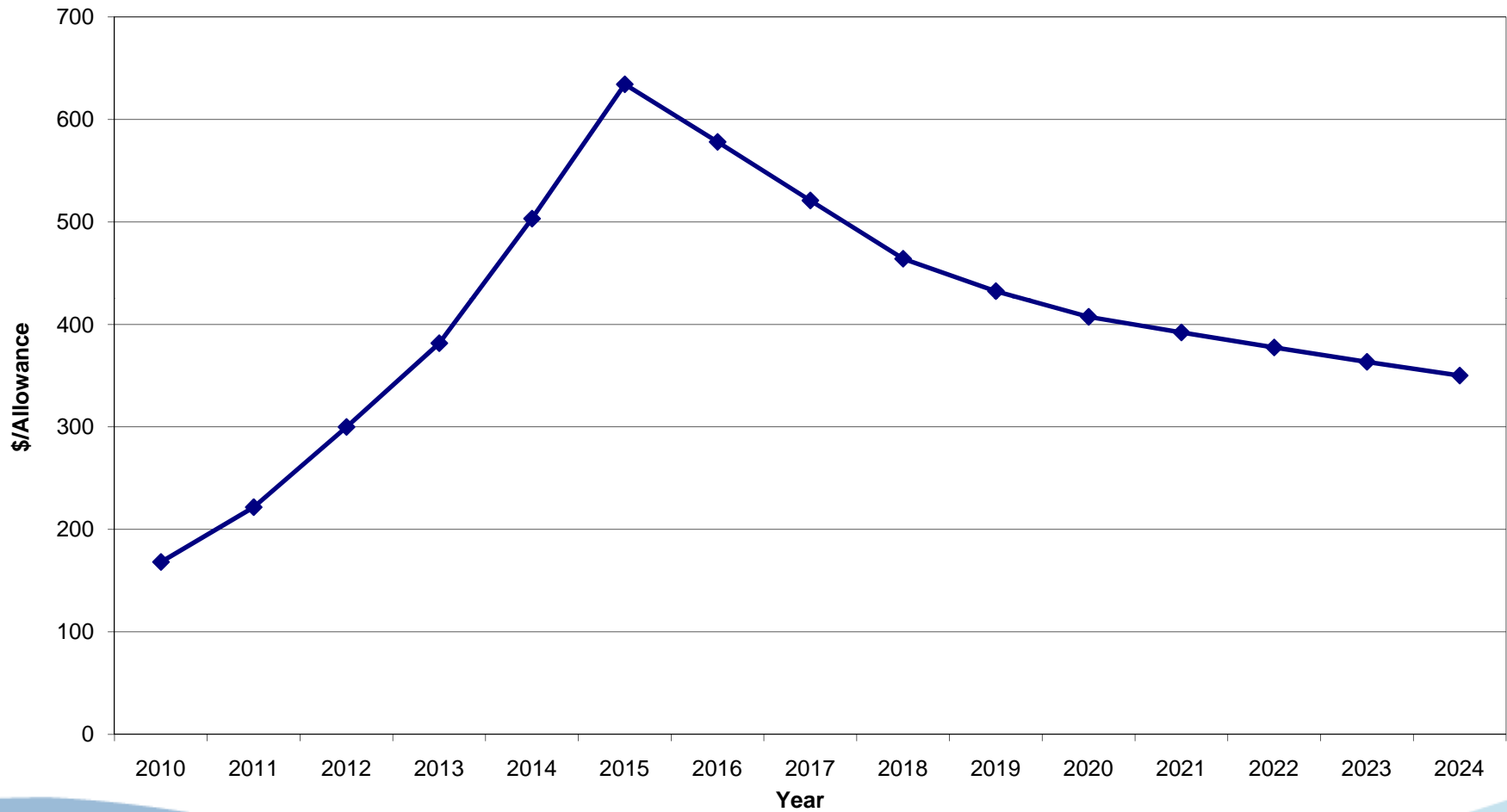


Figure 3 - NOx Emission Allowance Price Assumptions

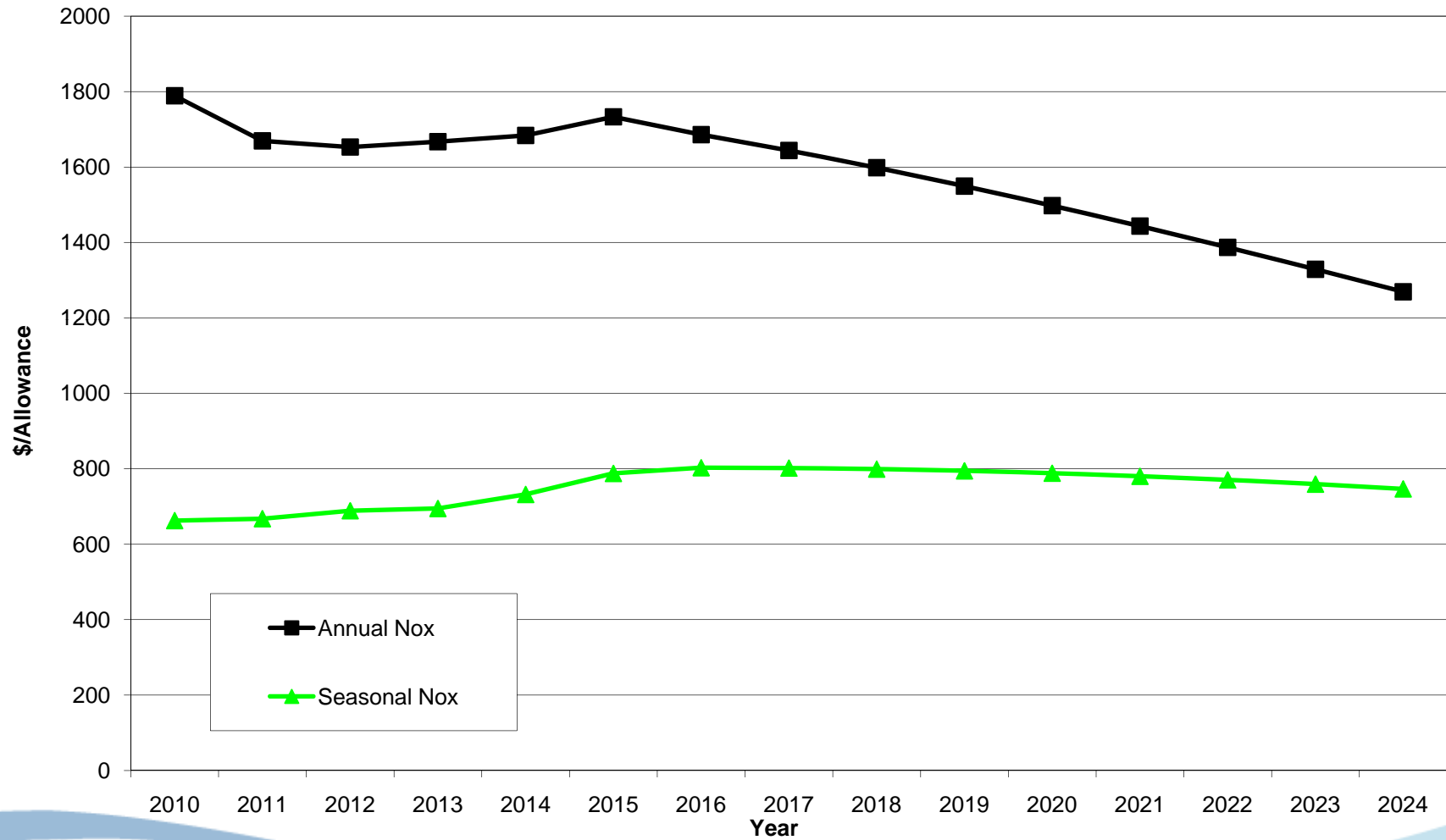
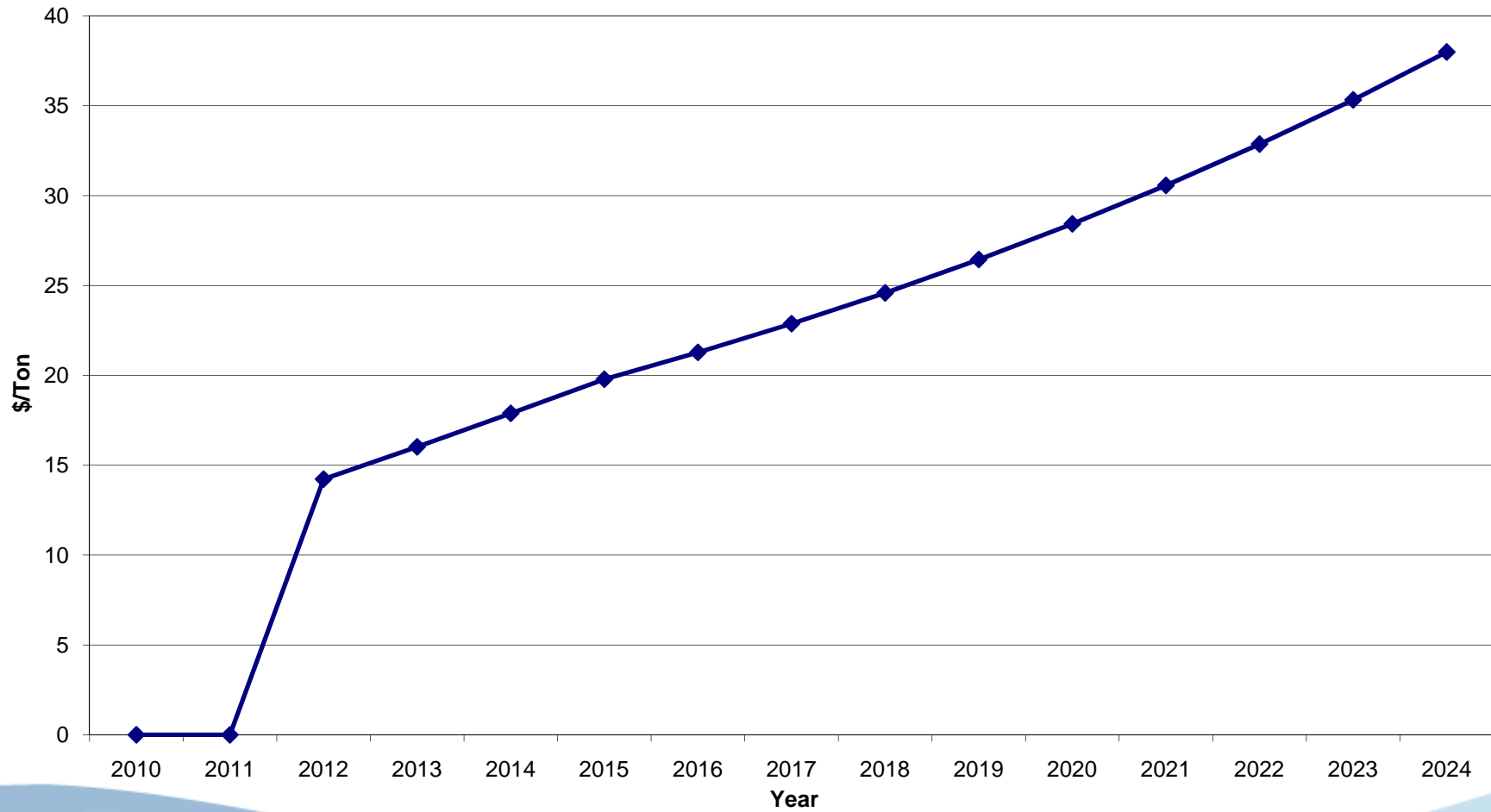


Figure 4 - CO2 Emission Assumptions



- Determine Future generation scenario, Demand Response data, Annual Carrying Charge Rate, and Discount Rate
- Develop Thermal and Voltage Constraints to model in studies
- Begin analysis with regular updates to TEAC