



Item 4: Periodic Report on Credit Work Group Activity

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Chair, Credit Work Group

Finance & Audit Committee Meeting
June 13, 2016
ERCOT Public

Credit Work Group Update – Reviewed NPRRs

- The following NPRRs were Reviewed by CWG with Potential Credit Impact
 - NPRR 755 Agent-Only QSE Registration – likely no credit impact, monitoring suggested
 - NPRR 760 Calculation of Exposure Variables for Days with No Activity (no vote)
 - NPRR 773 Broadening Scope of Acceptance Letter of Credit Issuers (no vote)
- Other NPRRs Reviewed by CWG without Credit Impact
 - NPRR 738 ERS Performance Calculations during TDSP Outages
 - NPRR 753 Allow AMS Data Submittal Process for TDSP-Read Non-Modeled Generators
 - NPRR 754 Revise Load Distribution Factors Report Posting Frequency
 - NPRR 758 Improved Transparency for Outages Potentially Having High Economic Impact
 - NPRR 761 As-Built Clarification to NPRR 515, Day-Ahead Market Self-Commitment of Generation Resources
 - NPRR 762 Removal of Language Related to Responsive Reserve Provided by DC Ties
 - NPRR 763 As-Built Clarification to NPRR 553, Monthly BLT Payment and Charge for Presidio Exception
 - NPRR 764 QSE Capacity Short Calculations based on an 80% Probability of Exceedance
 - NPRR 766 Alignment of System-Wide Discount Factor Description with Operational Adjustments to RDF
 - NPRR 767 Commitment by RUC for Long Lead Time Resources

Forward Pricing Credit Methodology Update

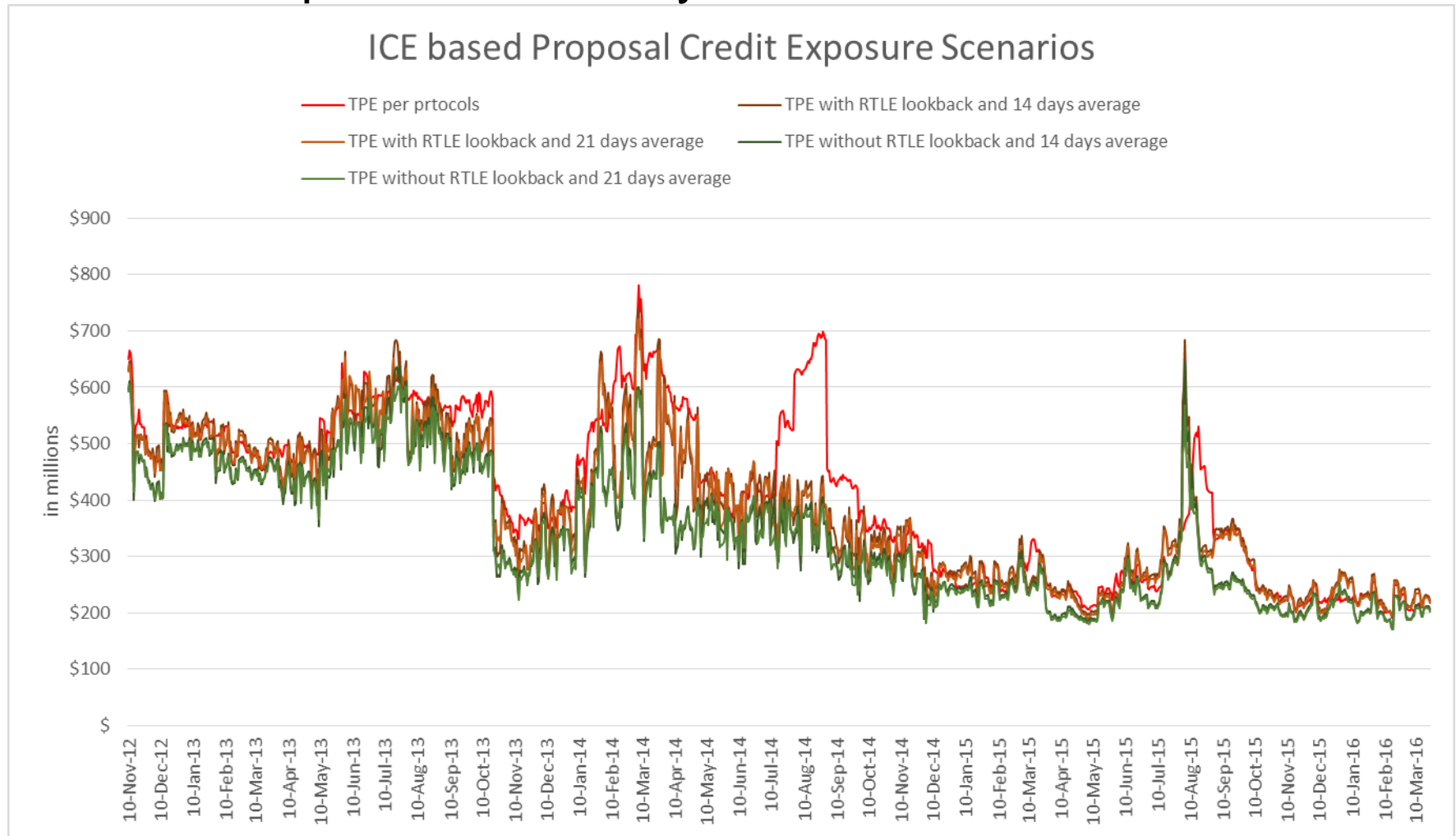
- Draft NPRR Prepared by ERCOT and presented to CWG to incorporate Forward Pricing Credit Methodology:
 - Replaces Seasonal Adjustment Factor (SAF) with Market Adjustment Factor (MAF)
 - Adds Real-Time Forward Adjustment Factor (RFAF) in the Minimum Current Exposure (MCE) and Estimated Aggregate Liability (EAL) calculations
 - Adds Day-Ahead Forward Adjustment Factor (DFAF) in the Estimated Aggregate Liability (EAL) calculation
 - A new report (Forward Adjustment Factors Summary Report) will be added to ERCOT MIS for daily posting

Forward Pricing Credit Methodology Update

- Suggested Methodology to Model ICE Futures Prices:
 - Utilize Daily Peak futures and Daily Off-Peak futures contract prices from ICE for determining projected forward price
 - Calculate daily average futures price as $(16 * \text{Peak price} + 8 * \text{Off-peak price}) / 24$ with substitution of most recent price for missing price data
 - Apply forward adjustment factors to MCE, RTLE and DALE
 - Use weight factors for 3 forward weeks to determine the numerator of the forward adjustment factor for MCE, RTLE and DALE
 - Use 14 RTM settled operating days in the current calculation to determine denominator of forward adjustment factor for MCE and RTLE
 - Use 7 DAM settled operating days in the current calculation to determine denominator of forward adjustment factor for DALE
- Continued ongoing CWG discussions on proposed Forward Pricing Credit Methodology draft NPRR language and calculation methodology in the coming months to prepare a final NPRR.

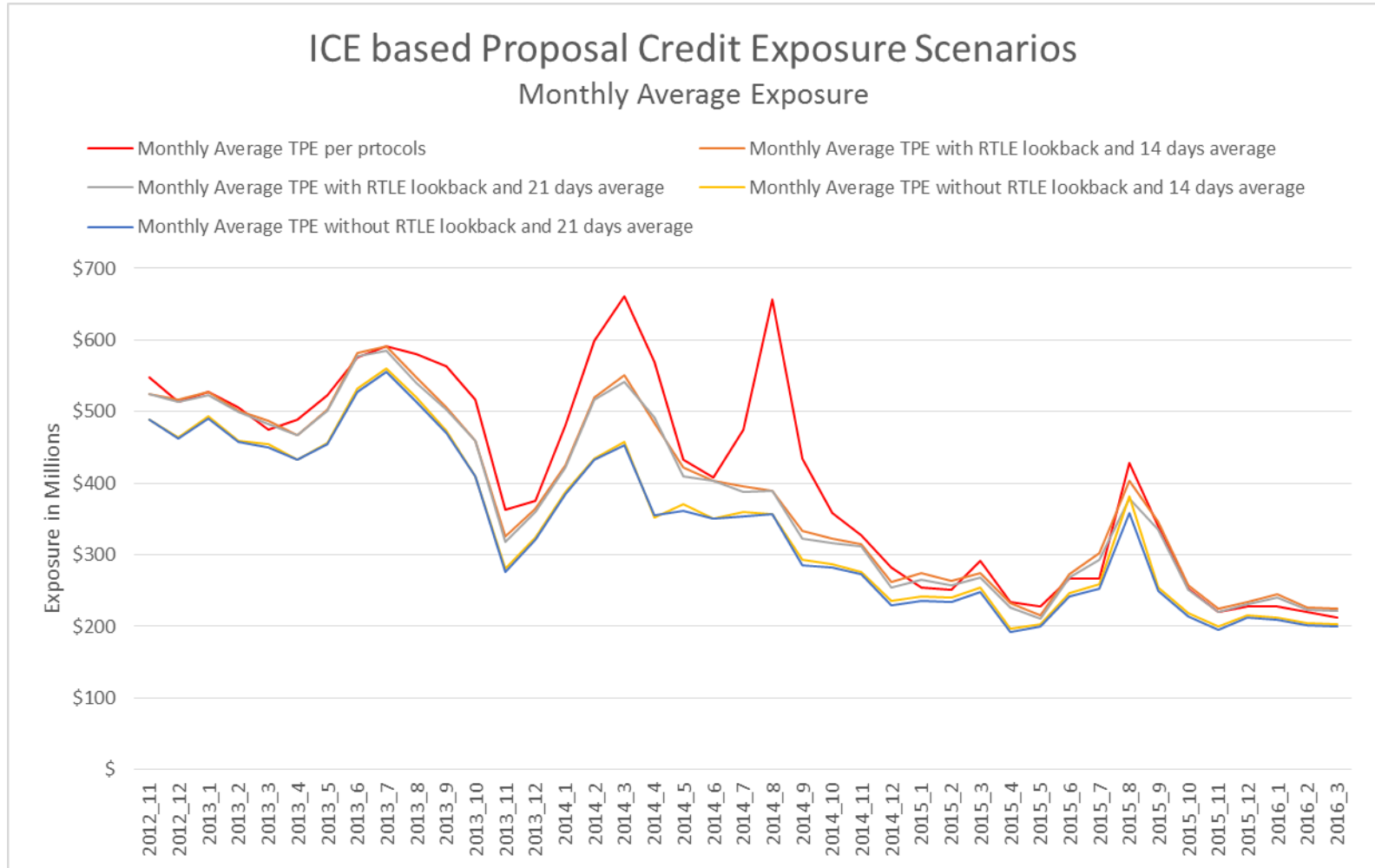
Credit Exposure Analysis using ICE Prices

Results – Exposure Summary:



Credit Exposure Analysis using ICE Prices

Results – Monthly Average Exposure:



Credit Exposure Analysis using ICE Prices

Results – Market-wide Exposure options descriptive statistics:

- Average exposure under all proposed options is significantly lower
- There is high correlation between exposure under proposed options to exposure under current protocols
- Relative Variability is similar across all options

Statistic	TPE per protocols	TPE with RTLE lookback and 14 days average	TPE with RTLE lookback and 21 days average	TPE without RTLE lookback and 14 days average	TPE without RTLE lookback and 21 days average
Correlation with TPE per protocols		87%	88%	86%	87%
Mean	\$409	\$383	\$378	\$342	\$338
Std Dev	\$143	\$126	\$125	\$116	\$115
Relative Variability (Std Dev / Mean)	35%	33%	33%	34%	34%

Credit Work Group Update - Other Topics

- Review Counter-Party (CP) Credit Application
 - ERCOT has proposed changes to the Counter-Party (CP) Credit Application to reflect estimated energy sales as QSE-to-QSE energy sales as well as correct minor technical issues and protocol section references.
 - Proposed changes unanimously approved by CWG.
- Review of IEL Calculation for New Market Entrants
 - ERCOT proposed changes in the Initial Estimated Liability (IEL) language clarifying the reference to estimated energy sales as QSE-to-QSE energy sales to align proposed changes in the Counter-Party Credit Application.
 - Proposed changes were unanimously approved by CWG and ERCOT staff will submit a draft NPRR reflecting such clarifications.
- Review Credit Exposure and Loss Given Default
 - ERCOT provided a quarterly update on Total Potential Exposure, Excess Collateral Holdings, and Expected Loss Exposure as of January 2016
 - Data was presented by Market Segment and Credit Rating and ERCOT will provide a summary of exposure changes in the next quarterly update