Item 6: Periodic Report on Credit Work Group Activity

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Chair, Credit Work Group

Finance & Audit Committee Meeting

ERCOT Public
April 18, 2016

Credit Work Group Update – Reviewed NPRRs

- No NPRRs were Reviewed by CWG with Credit Impact

- Other NPRRs Reviewed by CWG without Credit Impact
  - NPRR 709 Revisions to Alternative Dispute Resolution Procedure
  - NPRR 744 RUC Trigger for the Reliability Deployment Price Adder and Alignment with RUC Settlement
  - NPRR 745 Change ERS Availability from an Hourly to 15-minute Interval Evaluation plus Other Minor Changes
  - NPRR 746 Adjustments Due to Negative Load
  - NPRR 748 Revisions Associated with COM-002-4 and Other Clarifications Associated with Dispatch Instructions
  - NPRR 752 Clarification of Revision Request Process

Credit Work Group Update – 2016 Proposed Seasonal Adjustment (SAF) Factors

- At the February 2016 meeting, the Credit Working Group reviewed ERCOT's recommendations for 2016 Seasonal Adjustment Factors (SAF).

- CWG unanimously voted to endorse SAF 2016 Option 1 as presented by ERCOT Staff for Summer 2016 factors.

Month	SAF at 100%	SAF 2016 Option 1	SAF 2016 Option 2	SAF 2015
June	100%	115%	115%	115%
July	100%	125%	150%	125%
August	100%	175%	200%	200%
September	100%	100%	100%	100%

Credit Work Group Update – 2016 CWG Goals

- The following CWG Goals for 2016 were reviewed and unanimously approved at the March 2016 CWG meeting:

<u>2016 Credit Working Group Goals</u>

- Pursue seasonality-based approach (Forward Curve-based replacement for NPRR638) in collateral requirements
- Explore using Counter-Party specific ratings for collateral requirements
- Clarify the market's risk tolerance/appetite level
- Evaluate potential market risk under current credit rules and rules in flight
- Examine a framework for reviewing rules in flight
- Potential usage of letter of credit and credit insurance

Forward Pricing Credit Methodology Update

- ERCOT Forward Curve Data Analysis
  - CWG review of historical ICE data
  - Price correlation analysis: ICE vs. ERCOT Hubs

Hourly Correlation	HB_BUSAVG	HB_HUBAVG	HB_WEST	HB_SOUTH	HB_HOUSTON	HB_NORTH
HB_BUSAVG	100%					
HB_HUBAVG	100%	100%				
HB_WEST	99%	99%	100%			
HB_SOUTH	99%	99%	97%	100%		
HB_HOUSTON	98%	98%	95%	98%	100%	
HB_NORTH	100%	99%	99%	98%	96%	100%

Daily Correlations	HB_BUSAVG	HB_HUBAVG	HB_WEST	HB_SOUTH	HB_HOUSTON	HB_NORTH
HB_BUSAVG	100%					
HB_HUBAVG	100%	100%				
HB_WEST	98%	99%	100%			
HB_SOUTH	99%	99%	97%	100%		
HB_HOUSTON	98%	99%	96%	98%	100%	
HB_NORTH	100%	99%	98%	98%	97%	100%

Forward Pricing Credit Methodology Update

- CRIM workgroup met on March 3rd and April 11th to discuss methodology to incorporate ICE forward curves – topics included:

- **Operational Considerations:**
    - Forward Curve to Utilize – e.g. ERCOT North Hub; 50% North + 50% South; etc.
    - Trading Block to Utilize – e.g. 7x24; 5x8; 70% 5x8 and 30% Wrap; etc.
    - Forward Period to Incorporate – e.g. 7 days; 14 days; 21 days; etc.
    - Potential Decay Factor – e.g. 1 day forward at 100%; 2nd at 97%; 3rd at 94%; etc.
    - ERCOT Credit Factors Impacted – e.g. MCE; DALE; RTLE; RTLF; URTA; IEL; etc.
    - RTSPP Denominator Lookback Period – e.g. 7 days; 14 days; 11 to 21 days; etc.
    - How to Handle Missing Days/Data – e.g. repeat previous; inter/extrapolate; etc.
- **Strategic Considerations:**
    - Minimum Trigger Threshold – unless forward price calculations increase by xx% or yy standard deviations (or other 'trigger') then no 'credit adder'; etc.
    - Linier or Non-linier 'Credit Adder' Treatment – if forward price calculations increase by xx% does the 'credit adder' also increase by xx%; more; less; etc.
    - Guardrails – not to increase more than xx%; decrease more than yy%; etc.
    - Forward curve vendor 'hard coded' in protocols by name? Periodic review of pricing correlation and TAC/BoD affirmation? Selection by bidding process? etc.

Forward Pricing Credit Methodology Update

Further Analysis for Forward Credit Exposure:

Compare aggregated market wide exposure of existing credit calculations by counterparty to the following scenarios using ICE Futures prices:

- How many forward days should be used for averaging?
  - Scenario 1: 14 days
  - Scenario 2: 21 days

- Should RTLE look-back be continued?
  - Scenario 1: with current look-back period for RTLE to determine Maximum RTLE
  - Scenario 2: without any look-back for RTLE

Credit Work Group Update - Other Topics

- Discussion on the development of a Draft NPRR to account for Credit Calculations for days with no activity.
  - Currently ERCOT considers days with no activity as null values instead of zero, inflating certain credit variables.

- A failure in the CRR engine during the January 2016 annual auction caused credit to be 'locked' beyond the expected release time.
  - The auction calendar has deadlines which largely cannot be changed for many periods, but there may be room for TAC to adjust certain windows.

- A Market Participant made a presentation proposing ERCOT not require annual audited financial statements for 'cash-only' counterparties.
  - ERCOT staff stated that many Market Participants are 'cash only' and not requiring audited financials would hinder ongoing 'know your customer' and due-diligence efforts.

- A Market Participant proposed that ERCOT offer a 'temporary suspension' mechanism for entities unable to satisfy ERCOT requirements for posting additional collateral.
  - Extensive market redesign would be required, especially for LSEs.

Credit Work Group – Upcoming Activities

- Review Credit Exposure and Expected Loss Calculations for Q1 2016 by Counterparty Segment and Credit Quality

- Review Counterparty Credit Application and ERCOT staff suggested modifications

- Review IEL Calculation Formulas for new market entrants

- Continue efforts to incorporate forward curve pricing into credit calculations, including NPRR development