



# **Credit Transition to Nodal**

**(Preliminary)**

**CWG/MCWG meeting**

**October 22, 2010**

# Topics

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- **Nodal exposure – how much collateral**
- **TCR and CRR Credit Limits**
  - Unsecured credit
  - TCR collateral disposition
- **December 2010 TCR and CRR Auction Overlap**
- **December 2010 CRR Auction Specifics**
- **Preliminary Credit Cutover Timeline**
- **Approach for estimating initial exposure in CMM**
- **Counter-Party Authorized Reps**

## Nodal exposure – how much collateral

- **How much collateral is needed in Nodal?**
  - If activity in the ERCOT market
    - Increases, collateral requirement will increase correspondingly
      - May be offset to some extent from collateral not required by bilaterals / energy trades
    - Stays the same (e.g. using energy trades and minimal RT), collateral requirements will be comparable with Zonal
- **Market participants knowledgeable about Nodal should be working with their financial counterparts to ensure adequate liquidity for the level of activity they anticipate in the market**

# Nodal exposure – how much collateral

## Example

<u>Zonal</u>	<u>Zonal</u>	<u>ERCOT Volume</u>	<u>% of Total Vol</u>	<u>ERCOT Price</u>	<u>ERCOT Exposure per day</u>
<b>Total load</b>					
Bilateral	900				
BES	100	100		50	\$ 5,000
Total	1,000	100	10%		\$ 5,000

<u>Nodal - indicative "steady state"</u>	<u>Nodal</u>	<u>ERCOT volume</u>		<u>ERCOT price</u>	<u>ERCOT Exposure</u>
<b>Total load</b>					
Energy Trades	500				
Generation Resources your QSE represents	100				
Day Ahead Market	300	300		45	\$ 13,500
Real Time Market	100	100		50	5,000
Total	1,000	400	40%		\$ 18,500

## Example of data seen in MT5 (not expected to be indicative)

<u>Total load</u>	<u>Nodal</u>	<u>ERCOT volume</u>		<u>ERCOT price</u>	<u>ERCOT Exposure</u>
Energy Trades					
Generation Resources your QSE represents					
Day Ahead Market	600	600		45	\$ 27,000
Real Time Market	400	400		500	200,000
Total	1,000	1,000	100%		\$ 227,000

# TCR and CRR Credit Limits

- **Unsecured credit for TCR Auction**
  - Total unsecured credit limit was set as of Oct 1
  - EAL calculated from the October 21<sup>st</sup> Zonal Invoice will be used to determine Zonal exposure
  - ERCOT will notify TCR Account Holders of how much unsecured credit is available for TCR auction by October 25<sup>th</sup> (Total unsecured less QSE exposure)
  
- **Unsecured credit for CRR Auction**
  - Total unsecured credit limit was set as of Oct 1
  - EAL calculated from the October 28<sup>st</sup> Zonal Invoice will be used to determine Zonal exposure
  - ERCOT will notify CRR Account Holders of how much unsecured credit is available for TCR auction by November 1<sup>st</sup> (Total unsecured less QSE exposure)

# TCR and CRR Credit Limits

- **TCR Collateral Disposition**

- *IMPORTANT REMINDER* – TCR collateral “goes away” after the last TCR Auction Invoice is paid since TCRs are not referenced in the Nodal Protocols
  - Guarantees or LCs currently in place for TCR auctions cannot be used for Nodal activity, including CRR auctions
    - Language in those documents is specific to TCRs and retires with TCRs
    - CPs should plan to replace (if they are not already) these collateral documents with collateral valid for Nodal (including CRRs)
      - » ERCOT will notify those that have these forms of collateral; however, each CP should double check internally about what is needed
    - Note: Guarantees and LCs held for QSE activity ARE valid for Nodal activity, including CRRs, as well as QSE activity
  - Cash collateral can be refunded or transferred to the Nodal collateral pool upon request
    - Send requests to [ercotcredit@ercot.com](mailto:ercotcredit@ercot.com)

# December 2010 TCR and CRR Auction Overlap

- **ERCOT will offer a December 2010 TCR Auction in addition to the December 2010 CRR Auction**
  - The TCR Auction will occur prior to the CRR Auction
  - Collateral requirements for Auctions
    - TCR collateral will be posted as it has historically been
    - CRR collateral will be posted separately (similar to TCR collateral) for the December 2010 CRR auction (see later slides)
  - The calendar activities for the Auctions overlap such that TCR Auction invoices are
    - published prior to collateral being required for the CRR Auction but
    - due to be paid after the CRR Auction lock date

Note: There are 3 business days between when TCR Auction invoices are published and the CRR Auction lock date
  - The overlap in activities is unavoidable given time constraints. Of course, participation is not required in either Auction.

## December 2010 TCR and CRR Auction Overlap

- Counter-Parties (CPs) who desire to participate in both auctions have several options for managing their collateral during this period
  - Post collateral for the TCR auction and separately for the CRR auction
    - Disadvantage – may have to post higher levels of collateral for a period of days to accommodate both auctions
  - Prepay their TCR invoice before the CRR Auction lock date and roll cash collateral to the CRR auction
    - Advantage – avoid “doubling up” on collateral requirements for TCR and CRR auctions
    - Reminder: Only TCR cash collateral can be “rolled over”
  - Reduce collateral held for TCR invoice to invoice amount and roll collateral to the CRR auction



## December 2010 CRR Auction Specifics

- **As discussed in August and September, the initial CRR Auction (for December 2010) held in early November, will be handled as follows:**
  1. Treated similarly to the current Zonal TCR Auctions
    1. Separate collateral posted
    2. If participating in both the TCR and CRR Auction, CP will need to coordinate collateral between the two auctions
  2. Process
    1. CPs will be notified of the unsecured credit available by November 1
    2. To the extent additional credit is desired, CP must send collateral specifically earmarked for the December 2010 CRR Auction to ERCOT via wire transfer between October 28 and November 8
    3. The combination of posted collateral and unsecured credit allocated by the CRRAH will be the ACL provided for the CRR Auction
  3. Available Credit Limits (ACL) viewable in CRR, not MIS
    - ACLs will be viewable in the CRR Application beginning October 29, 2010
    - ACLs will be viewable only by CRR Account Holders and Counter-Parties and only in the CRR Application leading up to the December CRR Auction (e.g. CMM is in cutover and Credit Reports will not be available on MIS).

# December 2010 CRR Auction Specifics

## Release of CRR collateral / Ongoing collateral requirement for CRR obligations

- The CRR Auction will be complete at the same time as the “soft start” of the Nodal market
- Once the CRR Auction is complete,
  - CRR inventory will be transferred to CMM (in conjunction with soft start)
  - CRR Auction invoices will be reflected in TPE in the Credit Reports until paid
  - Once the CRR Auction Invoice is paid, excess CRR collateral may be refunded, upon request, with the following consideration
    - CRR Obligations will be collateralized in CMM (in conjunction with soft start) as required per Nodal Protocols

# Preliminary Credit Cutover Timeline

## Credit Assumptions

- For the soft start, ERCOT will calculate Total Potential Exposure (TPE) using a) Zonal data and b) binding Nodal data. No non-binding Nodal data will be included in the soft start TPE calculations. Collateral included will be actual collateral held. (details to follow in coming slides)
- CPs participating in the DAM during the soft start will operate within a “real” ACL
  - At this point in the process, CPs should be working within real credit constraints preparatory to Go Live
- Given that the data used in the soft start TPE calculations is binding, ERCOT currently plans to use CMM exposures published beginning November 18<sup>th</sup> for BOTH a) the “soft start” period of Nodal and b) as the bases for binding Zonal collateral requirements
  - The following timeline was developed with that assumption in mind

# Preliminary Credit Cutover Timeline

- **Deciding factors include the following:**
  - The calculations in CMM using Zonal data produce substantially similar results to what is currently experienced in Zonal
  - Exposure for binding Nodal activity prior to December 1, 2010 should be collateralized. CMM is the most efficient way to accomplish this
  - Making the change for credit effective November 18<sup>th</sup> will allow both ERCOT and Counter-Parties time to work through any issues before the remainder of the market starts up
  - Making the change for credit effective November 18<sup>th</sup> will reduce the confusion as to which set of reports (Zonal vs Nodal) to use between November 15<sup>th</sup> and November 30<sup>th</sup>

# Preliminary Credit Cutover Timeline

- **Thursday, November 11<sup>th</sup>**
  - Zonal invoice published
  - **NOTE** - last Zonal EAL credit calculation from which a collateral call will be made (system will be maintained through Go Live and will be available for a period beyond Go Live)
    - The Zonal Invoice published on November 18<sup>th</sup> will be captured in CMM and Zonal collateral calls will be made based on exposure calculated in CMM using a) Zonal and b) binding Nodal data
- **Monday, November 15<sup>th</sup>**
  - Initial DAM run in “soft start” - without CMM credit constraints
    - “e” factors set at 1/0/1
  - Initial “soft start” TPE published
    - TPEs in the “soft start” reflect real exposure and collateral only – no non-binding data will be included
    - Non-binding - No collateral calls sent based on these calculations. However, TPE will be binding on November 18<sup>th</sup>, so CPs should plan to cover any deficit quickly
  - Initial “soft start” ACL sent to CRR and DAM
- **Tuesday, November 16<sup>th</sup>**
  - Initial DAM run in “soft start” – with CMM credit constraints

# Preliminary Credit Cutover Timeline

- **Thursday, November 18<sup>th</sup>**
  - Zonal invoice published
  - **NOTE:** CMM calculation of TPE will be used as a) the basis for the soft start Nodal ACL and b) the binding Zonal credit calculation from which a collateral call will be made
    - The Zonal Invoice published on November 18<sup>th</sup> will be captured in CMM and Zonal collateral calls will be made based on exposure calculated in CMM using a) Zonal and b) binding Nodal data
    - From this point forward, ERCOT will use the CMM calculation of TPE as the basis for determining credit exposure for both Zonal and Nodal
- **Saturday/Sunday, November 20<sup>th</sup> – 21<sup>st</sup>**
  - CMM calculations will run, Credit Reports will be published and ACLs will be sent to CRR and DAM on non-business days
- **Thursday - Sunday, November 25<sup>th</sup> - 28<sup>th</sup> – Thanksgiving holiday**
  - CMM calculations will run, Credit Reports will be published and ACLs will be sent to CRR and DAM on non-business days

# Preliminary Credit Cutover Timeline

- **Monday, November 29<sup>th</sup>**
  - Zonal invoice published
  - Send ACL for initial binding DAM (afternoon)
- **Tuesday, November 30<sup>th</sup>**
  - Initial binding DAM
    - “e” factors set at 1/0/1
- **Wednesday, December 1<sup>st</sup> – “Go Live”**

# Approach for establishing the initial exposures in CMM

- **Nodal Soft start beginning November 15<sup>th</sup>**
- **Zonal binding collateral requirements beginning November 18<sup>th</sup>**
  - During this period – ERCOT will publish Credit Reports and send ACLs daily based on data that

## **Includes**

- Actual collateral held (including CRR collateral, excludes TCR collateral)
- Zonal data to establish TPE's (see next slides for details)
- Binding Nodal activity
  - CRR inventory from December 2010 auction will impact FCE component
    - Collateralized in CMM as required per Nodal Protocols
  - CRR Auction invoices will be reflected in CMM until paid
- First Priority Security Interest to the extent executed and perfected

## **Excludes**

- Non-binding Nodal activity resulting from soft start (e.g. DAM results, RT activity, etc)



# Approach for establishing the initial exposure in CMM

## Key Components

- A **Estimated Aggregate Liability (EAL)**  
- "Core" collateral calculation

Highest ADTE - estimate of historical and projected RT activity (See Note)

OUT - outstanding historical activity (invoiced and estimated)

## For "Soft Start" and Go Live

Soft start - At least nine (9) Zonal invoices will be uploaded into CMM for soft start and ADTE calculations will be based on those Zonal invoices.

Go Live - Zonal invoices will continue to be uploaded and will continue to drive this component while Nodal invoices roll in. Zonal invoices will "roll off" over time.

### **Nodal invoices -**

Soft start - Non-binding invoices WILL NOT be included.

Binding invoices WILL be included.

Go Live - Binding invoices WILL be included.

### **Zonal invoice**

Soft start - Zonal invoices will be included.

Go Live - Zonal invoices will be included.

### **Payments**

Soft start and Go Live - Payments of Zonal invoices that include Initial statements will be reflected the day after they are received as an OIA adjustment. Payments of Zonal invoices that include only Final, Resettlement or True Up statements will be posted the day after the due date. Payments of Nodal invoices will be reflected the day after they are received.

# Approach for establishing the initial exposure in CMM

## Key Components

UDAA - Unbilled Day Ahead (an estimate of DAM activity prior to an invoice being generated).

DALE - projected forward DAM activity

IEL - Initial Estimated Liability

## For "Soft Start" and Go Live

Soft start - Non-binding DAM activity (including UDAA) WILL NOT be included in TPE.

Go Live - Binding DAM activity WILL be included in TPE beginning with the binding DAM run on November 30. UDAA will be updated daily thereafter.

***NOTE: ERCOT will "ramp up" for DALE using UDAA as it did in the 168-hour test (so DALE won't hit as a "lump sum" with the first invoice). To "ramp up," ERCOT will multiply the UDAA by a factor of 5 each day (for the first three days - December 1-3) until the first DAM invoice is published.***

Soft start - Non-binding DAM activity WILL NOT be included.

Go Live - No DALE calculation December 1-3 since no DAM invoices have been published. DALE will be calculated using the first DAM invoice and will appear on Credit Reports beginning Saturday, December 4, 2010.

***Note: Since the first DALE impact will occur on a Saturday, ERCOT will discount the DALE by 25% for Saturday and Sunday, December 4 and 5, 2010. DALE will be calculated at 100% beginning with Credit Reports posted Monday, December 6, 2010 and ACLs sent Monday evening for Tuesday, December 7, 2010.***

Used as needed for CPs not active in the Zonal market or for new sub-QSEs

# Approach for establishing the initial exposure in CMM

## Key Components

- B **Aggregate Incremental Liability (AIL)**
  - Reasonableness test for ADTE for RT activity
  
- C **Future Credit Exposure (FCE)**
  - Forward value of CRRs held

Note: If a Counter-Party believes that their Zonal ADTE is not representative of their anticipated Nodal RT activity, they can provide an estimate of anticipated RT activity and ERCOT will consider revising ADTE appropriately.

## For "Soft Start" and Go Live

Soft start - Zonal BES data will be uploaded and used as a proxy for RT activity. Zonal bilaterals will be used as a proxy for Energy Trades.

Go Live - Zonal data will be used through operating day November 30, 2010. Nodal data will roll in as it occurs. Zonal data will roll off over time.

Soft start - Calculated as per Nodal Protocols

Go Live - CRR Obligations - Calculated as per Nodal Protocols

# Counter-Party Contact information

- Reminder – If you haven't already, please complete the Notice of Change of Information (NCI) form to designate an a) Authorized Representative and also a b) Backup Authorized Representative for your Counter-Party (overall rather than for a specific QSE or CRRAH)
  - Market Notice went out on September 13, 2010
  - ERCOT will contact these designated individuals along with the credit contacts for credit purposes such as collateral calls, late payment notices and breach or default notices.