

Market Continuity

WMS

11/02/16

What is Market Continuity?

- The processes by which ERCOT market-related systems and activities are returned to normal operations following a triggering event which disables all, or a significant portion of, the necessary data and/or infrastructure for operations of those markets for a long enough period of time that patchwork measures are inadequate.
- Assumption if the markets are suspended, the general continuity processes are the same regardless of cause.
 - Time duration may differ depending on the triggering event.



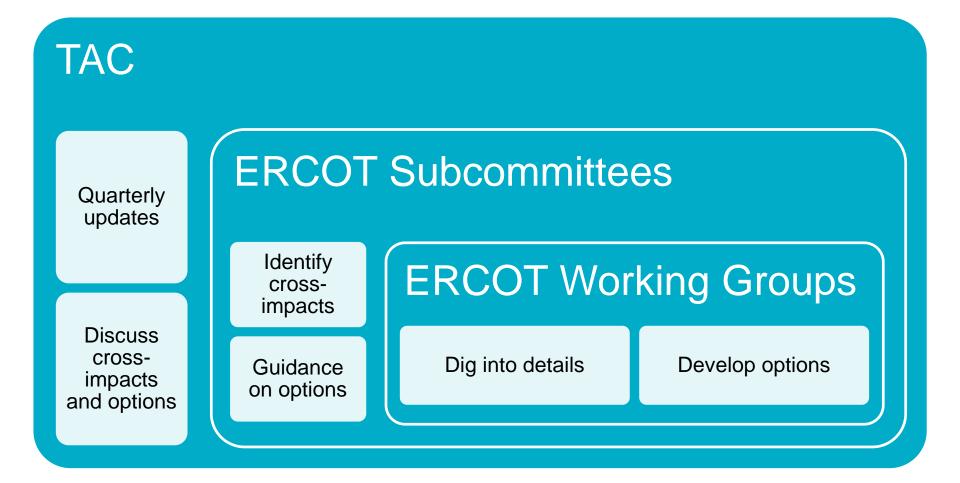
PUBLIC

Overview from Market Continuity Workshop

- ERCOT staff held workshop on May 2nd.
 - 28 in person
 - 48 dialed into WebEx
- Framing issues by topic
 - Restarting of the Real Time and Day Ahead Market
 - Credit policies
 - Settlements during the interruption and subsequent restoration period
 - Retail transaction processing
- TAC directed ERCOT to bring issues to WMS for assignment / discussion.



Following Governance Structure



erco

| Real Time Market | Day Ahead Market CRR | Credit | ment Retail |
|---------------------|-------------------------|--------|-------------|
| Торіс | Issue | | Proposed WG |
| | | | |

| RT / DAM | Should DAM be successfully completed before restarting Real-Time Market? If not, should SCED be restarted using mitigated Offers for Operating Days for which DAM has not run? If so, should the prices from those SCED runs be considered as valid prices for settlements? | Assigned by WMS on 6/8 to QMWG |
|----------|---|--|
| | | |



| Real Time Market | Day Ahead Market | CRR | Credit | Settlement | Retail | |
|---------------------|---------------------|-----|--------|------------|--------|--|
|---------------------|---------------------|-----|--------|------------|--------|--|

| Торіс | Issue | Proposed WG |
|----------------|--|--|
| RT / DAM / CRR | What to do with the DAM results for the hours with no corresponding RTM runs? If DAM results are invalidated, what about corresponding CRR results? | Assigned by WMS on 6/8 to QMWG |
| CRR | What to do with CRRs with no corresponding RT and DAM? | Assigned by WMS on 6/8 to CMWG |
| | | |



| Real Time Market | Day Ahead Market | CRR | Credit | Settlement | Retail | |
|---------------------|---------------------|-----|--------|------------|--------|--|
| | | | | | | |

| Торіс | Issue | Proposed WG |
|--------|--|---|
| Credit | Would modifications to credit requirements be appropriate to facilitate DAM restart? These might include Temporary provision of unsecured credit Delayed invoice payments Discretionary waiver of collateral calls If so, over what period of time? | Assigned by WMS on 6/8 to CWG |
| | | |



| Real Time Market | Day Ahead Market CRR Credit Settle | ement Retail |
|---------------------|--|--|
| Торіс | Issue | Proposed WG |
| Settlement | Should ERCOT plan to pay generators during the outage event? | Assigned by WMS on 6/8 to QMWG |
| Settlement | How are verifiable costs for renewables addressed? | Assigned by WMS on 6/8 to RCWG |
| | | |



Real Time Market

CRR

Credit

Settlement

Retai

| Торіс | Issue | Proposed WG |
|------------|--|--|
| Settlement | Where would interim funding come from? Options could include a standby letter of credit to fund interim payments. Depending upon the nature and duration of the outage event, the cost for make-whole payments could be material. Allocation of make-whole costs to Market Participants would not occur until after the markets are fully restored. This allows time for TDSP meter data submittal and ERCOT settlement reconciliation efforts. | Assigned by WMS on 6/8 to CWG |
| Settlement | What would be the methodology for uplift? How to address meter usage data availability / application of estimation and usage profiles (metered and non-metered accounts)? | Assigned by WMS on 6/8 to QMWG |



Real Time Market

Retail

| | Торіс | Issue | Proposed WG |
|-----|--------|--|--|
| | Retail | What are the next steps to agree upon Retail restart procedures? NAESB or other system outages? TDTMS Manual workaround, how would those need to be adjusted? TXSET Joint meeting – inviting participation from TDTMS/ TXSET/AMWG | RMS assignment 08/02 – for all three issues use the 2 nd day of TXSET scheduled meeting? Aug 18 inviting participation from TDTMS/ TXSET/AMWG/RMS |
| | Retail | Does anything need to be added to facilitate and scale the Safety Net process for use over a longer period of time? | See above |
| | Retail | How to address meter data usage availability and loading (backlog processing) | See above |
| PUE | | | 10 |



WMS/RMS assign issues

Discussions for next 2-3 months at working groups

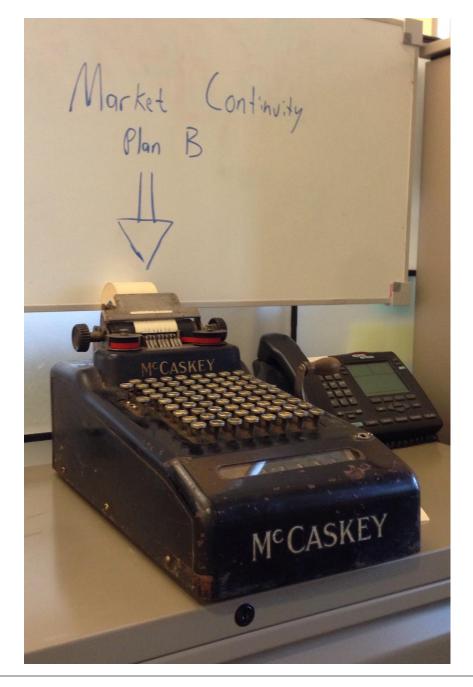
Quarterly updates brought back to TAC for cross impact discussions



PUBLIC

Market Continuity

ERCOT Stands Ready





PUBLIC