
Item 7: TAC Report

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2013 TAC Chair

Board of Directors Meeting
ERCOT Public
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Summary of TAC Update

Revision Requests Recommended for Approval by TAC – Unopposed (Vote – Consent Agenda):

- NPRR491, Updated Demand Response Information for ERCOT
- NPRR513, Removal of Nodal Implementation Surcharge
- NPRR515, Day-Ahead Market Self-Commitment of Generation Resources
- NPRR516, Change to Verifiable Cost Manual Revision Process
- NPRR517, Revisions to the Telemetry Standards and State Estimator Standards Approval Process
- NPRR522, Adjustment of Demand Response Performance for Distribution Losses
- NPRR523, Available Credit Limit (ACLC and/or ACLD) Calculations During Computer System Failures
- NPRR525, Elimination of Three-Year Expiration for CRR Auction Revenue Distribution Methodology
- NPRR526, Frequency of Audit on ERCOT Model
- NPRR531, Clarification of IRR Forecasting Process Posting Requirement
- PGRR027, Analysis of Subsynchronous Resonance Studies in Transmission Studies (with 7/2/13 TAC comments)

Summary of TAC Update

Phase 2, Implementation of NPRR509, Shortened RTM Settlement Timeline (Discussion and Possible Vote)

Methodology for Setting the Shadow Price Caps and Power Balance Penalties in Security-Constrained Economic Dispatch (Vote)

Recommendation on Planning Reserve Margin and Effective Load Carrying Capability of Wind (Vote)

Review of Credit Parameters (Vote – During F&A Report)

June and July TAC Highlights

Guide Revisions Approved by TAC

Phase 2, Implementation of NPRR509, Shortened RTM Settlement Timeline (Discussion and Possible Vote)

On 3/19/13, the ERCOT Board approved NPRR509 which introduced a two-phased approach to reduce the Real-Time Market Settlement timeline:

Phase One:

- Reduced the posting requirement for the Initial Settlement Statement from nine to eight days after the Operating Day.
- Implemented April 1, 2013

Phase Two:

- Will further reduce the posting requirement for the Initial Settlement Statement to seven days after the Operating Day.
- The posting date of Final Settlement Statements is reduced from the 59th day after the Operating Day to the 57th day after the Operating Day to compensate for the two days eliminated from the Initial Settlement Statement posting.
- Will be implemented August 1, 2013 unless the ERCOT Board affirmatively votes to delay implementation of this paragraph to a later date or condition.

Phase 2, Implementation of NPRR509, Shortened RTM Settlement Timeline (Discussion and Possible Vote)

- During initial consideration of NPRR509, both TAC and COPS recommended a phased implementation in order to allow time to address any issues or concerns that may arise from the initial reduction in the Settlement timeline and to evaluate the accuracy and completeness of meter data.
- After implementation of Phase One, a COPS working group hosted weekly conference calls to review impacts; no significant issues were raised.
- During the review, the group considered analysis that estimated the number of ESI IDs with load data available for Initial Settlement on various settlement timelines, according to data available per current business practices. The estimations indicated no significant reduction to the availability of ESI ID data when reducing the posting requirement for Initial Settlement Statements to seven days after the Operating Day.

On 7/2/13, TAC unanimously voted to endorse proceeding with the August 1, 2013 implementation of Phase Two to reduce the posting requirement for the Initial Settlement Statement from eight to seven days after the Operating Day and to reduce the posting date of the Final Settlement Statements from the 59th day after the Operating Day to the 57th day after the Operating Day.

Methodology for Setting the Shadow Price Caps and Power Balance Penalties in Security-Constrained Economic Dispatch (Vote)

- Paragraph (4) of Protocol Section 6.5.7.1.11, Transmission Network and Power Balance Constraint Management, requires ERCOT to determine the methodology for setting maximum Shadow Prices for network constraints and for the power balance constraint. Following review and recommendation by the TAC, the ERCOT Board shall review the recommendation and approve a final methodology.
- On 5/2/13, TAC voted via roll call to recommended approval of the proposed revisions to methodology for setting maximum Shadow Prices as recommended by AEP and as revised by Luminant and requested ERCOT to return with an Impact Analysis to the June TAC. There were two opposing votes from the Generator and IPM Market Segments and ten abstentions from the Generator (3), IPM (3), IREP (3) and IOU Market Segments.

Methodology for Setting the Shadow Price Caps and Power Balance Penalties in Security-Constrained Economic Dispatch (Vote)

Currently, ERCOT is to modify the Shadow Price Cap for a transmission network constraint that is consistently irresolvable by SCED if either of the following two conditions are true:

- A. A constraint violation is not resolved by SCED or overridden for more than two consecutive hours on more than four consecutive Operating Days; or
- B. A constraint violation is not resolved by SCED for more than a total of 20 hours in a rolling 30 day period.

Summary of proposed changes:

- The TAC recommendation adds a third condition that results in the adjustment of a Shadow Price Cap for a constraint. If a constraint has the same overloaded Transmission Element and Direction as a constraint that has met condition A or B above, its Shadow Price Cap will also be adjusted. This will happen once the net margin of the triggering constraint reaches the \$95,000/MW threshold described in the methodology.
- The Shadow Price Cap for such a constraint will be set to the same value as the constraint that met either trigger condition A or B.
- The Shadow Price Cap will remain in effect for the shorter of:
 - The remainder of the calendar year; or
 - The remainder of the month in which the constraint is determined to be resolvable by SCED.
- Provides a sequence of ERCOT review steps once a constraint meets the trigger conditions and accumulates a net margin that exceeds \$95,000/MW (i.e., review and recall of transmission outages contributing to constraint if feasible, development of Remedial Action Plans, Temporary Outage Action Plans, Special Protection Systems if feasible)

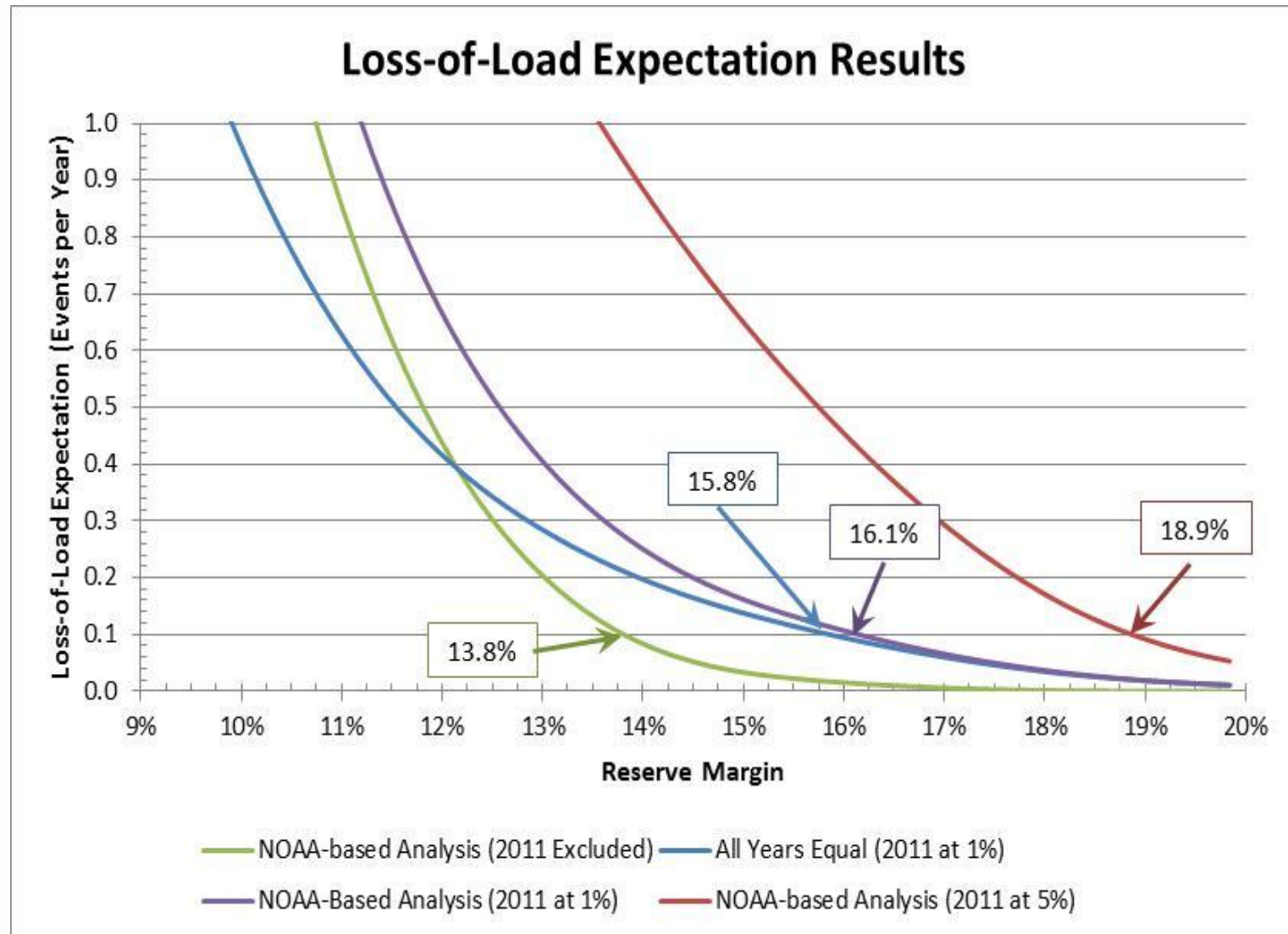
Methodology for Setting the Shadow Price Caps and Power Balance Penalties in Security-Constrained Economic Dispatch (Vote)

- On 6/3/13, ERCOT distributed an Impact Analysis to TAC noting the following:
 - Cost: Between \$65k and \$85k
 - Estimated Project Duration: 5 – 7 months
 - Impacts: Market Management System and Information Systems Management; ERCOT will also update its business processes. The extent of these impacts depends upon how often the trigger conditions are met. Given historical trends for meeting the trigger condition, ERCOT is not requesting additional staff to support the revision. However, if the trigger conditions are met more frequently, there could be FTE impacts to planning and operations.
- On 6/6/13, TAC voted to recommend approval of the methodology as revised by TAC; to recommend a priority of 2013 and rank of 885; and to recommend an effective date of upon Board approval for the language that does not require system implementation. There was one opposing vote from the Generator Market Segment and four abstentions from the IOU and IPM (3) Market Segments.

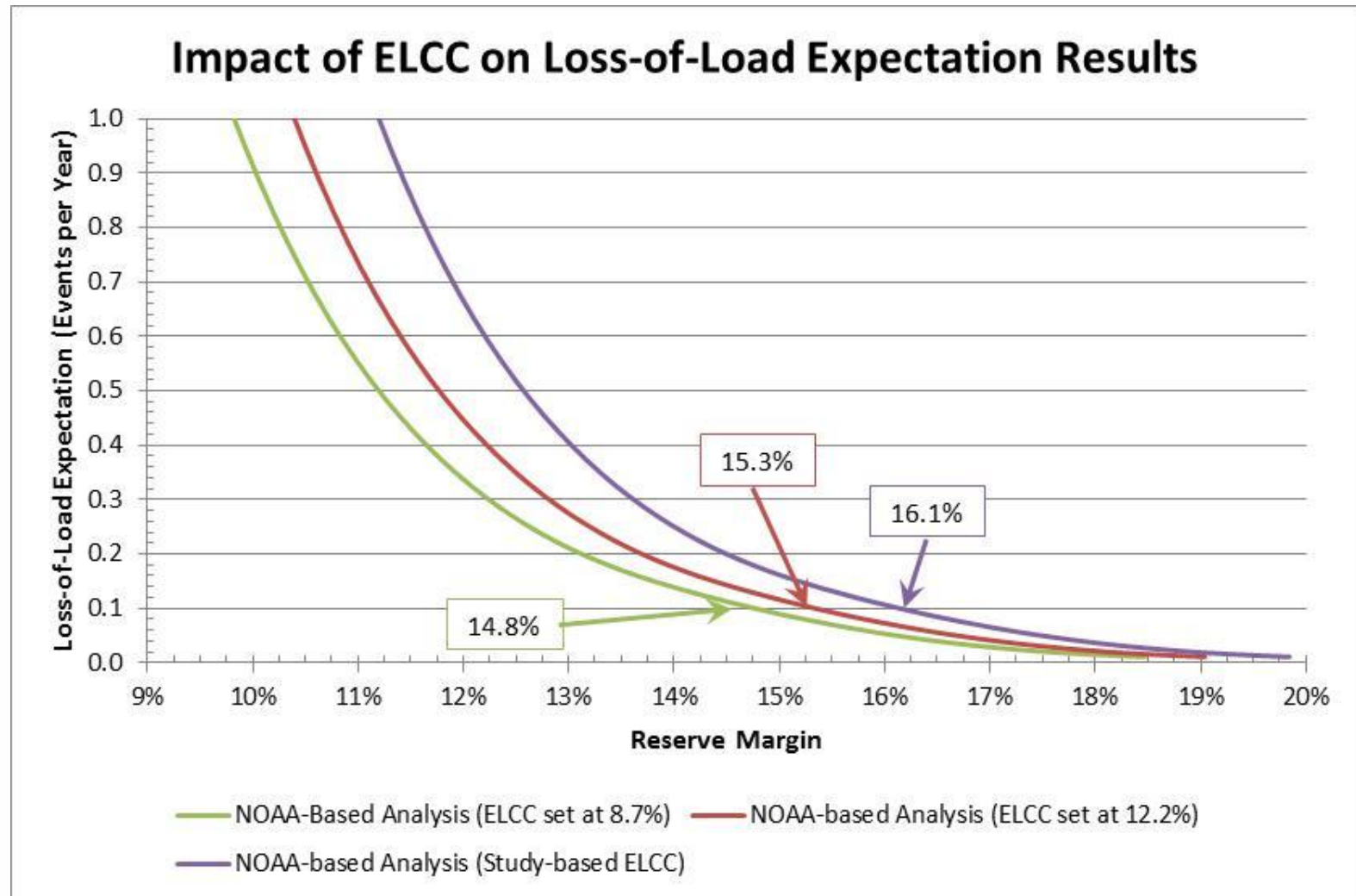
Recommendation on Planning Reserve Margin and Effective Load Carrying Capability of Wind (Vote)

- Protocol Section 3.2.6.1, Minimum ERCOT Planning Reserve Margin Criterion, captures the current ERCOT Planning Reserve Margin criterion as 13.75% and provides that ERCOT shall periodically review and recommend to the ERCOT Board any changes to the minimum ERCOT Planning Reserve Margin.
- Protocol Section 3.2.6.2.2, Total Capacity Estimate, indicates the Effective Load Carrying Capability (ELCC) of Wind-powered Generation Resources will be determined by ERCOT.
- On 6/6/13, TAC voted to recommend using the 2012 ERCOT Loss of Load Study results for the 2014 study year, resulting in a 16.1% Planning Reserve Margin and an ELCC of non-coastal Texas wind of 14.2% and coastal wind of 32.9%. The recommendation is not based on any type of economic analyses, but rather on the loss-of-load probability methodology that has been used historically. This recommendation is not intended to establish the value of any resource type in any future market structure. There were four opposing votes from the Consumer Market Segment.
- Changes would start with the Winter 2013 Report on Capacity, Demand and Reserves in the ERCOT Region.

Various Curves Considered



Interaction of ELCC and LOLE



Annual Review of Credit Parameters

The Protocols require ERCOT Board review and approval of certain credit parameters:

- Protocol Section 4.4.10, Credit Requirement for DAM Bids and Offers, requires annual ERCOT Board review of the Procedures for Setting Nodal Day-Ahead Market Credit Requirement Parameters;
- Protocol Section 4.4.10, Credit Requirement for DAM Bids and Offers, requires annual ERCOT Board review of the Point to Point (PTP) Obligation bid reduction factor;
- Protocol Sections 16.11.4.5, Determination of the Counter-Party Future Credit Exposure and 7.5.5.3, Auction Process, require annual review of credit variables (X and Y; A and M); and
- Protocol Section 16.11.4.1, Determination of Total Potential Exposure for a Counter-Party, allows for the Multiplier for Unbilled Real Time Amount (URTA) to be revised by the ERCOT Board.

Annual Review of Credit Parameters

On 7/2/13, TAC unanimously voted to recommend that the ERCOT Board:

- Reaffirm the current Procedures for Setting Nodal Day-Ahead Market Credit Requirement Parameters;
- Maintain the current 80% PTP Obligation bid reduction factor;
- Retain the following credit parameters with no revisions where $X = \$1.00$; $Y = \$1.50$; $A = \$0.75$; and $M = 0$; and
- Reduce the Multiplier for URTA from 12 to 10 days effective September 1, 2013.

The Finance and Audit Committee will provide their recommendation on the credit parameters in their upcoming report.

June and July TAC Highlights

Notice of TAC Rejection of NPRR508, Setting of Real-Time LMPs During EEA ERS/Load Resource Deployment

- This NPRR would have administratively set Locational Marginal Prices at the System-Wide Offer Cap during SCED executions in which ERCOT has entered an Energy Emergency Alert (EEA). This situation coincides with the deployment of Emergency Response Service Resources and/or Responsive Reserve Service supplied by Load Resources.
- On 6/6/13, the TAC vote to recommend approval of NPRR508 as recommended by PRS in the 5/16/13 PRS Report failed via roll call vote. There were thirteen opposing votes from the Cooperative (3), Generator (2), IPM (3), IREP (4) and Municipal Market Segments and two abstentions from the Generator and IOU Market Segments. Due to lack of a subsequent passing vote, NPRR508 was deemed rejected by TAC under Section 21.4.8, Technical Advisory Committee Vote.

June and July TAC Highlights

Notice of TAC Rejection of GDF Suez Appeal of PRS Rejection of NPRR544, Energy Offer Curve Requirements for Generation Resources Assigned Non-Spin Responsibility

- This NPRR would have added a requirement on QSEs assigned Non-Spin responsibility submit their Energy Offer Curve above a linear curve that starts at \$120 and ends at \$3,000.
- On 7/2/13, the TAC vote to grant the GDF Suez appeal, to grant NPRR544 Urgency, to recommend approval of NPRR544 as amended by the 6/11/13 GDF comments and to forward to the Board failed. There was one vote in favor from the Generator Segment; 23 opposing votes from the Consumer (6), Cooperative (4), Generator, IPM, IREP (3), IOU (4) and Municipal (4) Segments; and five abstentions from the Generator (2) and IPM (3) Segments.

June and July TAC Highlights

Fast Responding Regulation Service Pilot Project

On 7/2/13, the TAC unanimously voted to recommend the Board extend the Pilot project as currently constructed until 2-28-14 and to direct ERCOT to prepare an NPRR to implement an ancillary service product for Primary Frequency Response that can be provided on a technology-neutral basis by qualified resources.

30-Minute Emergency Response Service Pilot Project

On 7/2/13, TAC chose to make no recommendation on this pilot.

Revised RMS Procedures

On 7/2/13, the TAC unanimously voted to revise the RMS Procedures. The revisions expand RMS responsibilities to include monitoring of Advanced Metering Systems issues and Smart Meter Texas portal as well as add the Advanced Metering Working Group to the list of RMS working groups.

Notice of Guide Revisions Approved by TAC

COPMGRR035, Synchronization of NPPRR347 and NPPRR509.

This COPMGRR aligns the Commercial Operations Market Guide with revisions made to the Protocols pursuant to NPPRR347, Single Daily Settlement Invoice and Updates to Credit Calculations, including addition of a Minimum Collateral Exposure Component, approved by the ERCOT Board on 8/16/11; and aligns the COPMG with the changes proposed in NPPRR509, Shortened RTM Settlement Timelines.

NOGRR119, Load Shed Table.

This NOGRR updates the ERCOT Load Shed Table for 2013.