Date: April 12, 2011
To: Board of Directors
From: John Dumas, Director of Wholesale Markets Operations, ERCOT
Subject: Price Corrections for De-energized Settlement Points in Day-Ahead Market (DAM) and RTM Market (RTM) affected by Data Error

Issue for the ERCOT Board of Directors

ERCOT Board of Director Meeting Date: April 19, 2011
Agenda Item No.: 16a

Issue:
Pursuant to paragraph 5 of Protocol Section 4.5.3, Communicating DAM Results, and paragraph 4 of Nodal Protocol Section 6.3, Adjustment Period and RTM Operations Timeline, whether the ERCOT Board of Directors (Board) should approve price corrections for DAM Locational Marginal Prices (LMPs) and Settlement Point Prices for Operating Days December 1, 2010 through February 1, 2011, and RTM LMPs and Settlement Point Prices for Operating Days December 1, 2010 through January 31, 2011, for de-energized Settlement Points (including Resource Nodes and DC Tie Load Zones) which were assigned LMPs equal to system lambda due to data error.

Background/History:
The network models used by the DAM for Operating Days December 1, 2010 to February 1, 2011, and by the RTM for Operating Days December 1, 2010 to January 31, 2011, did not contain a sufficient number of Electrical Buses to properly implement the pricing heuristics described in paragraph 9 of Protocol Section 4.5.1, DAM Clearing Process, and paragraph 9 of Protocol Section 6.6.1, RTM Settlement Point Prices. In many stations where Settlement Points became de-energized, there were no other Electrical Buses in the station with which to calculate an LMP. In those cases, the heuristic rules required the Settlement Point to be assigned an LMP of system lambda. This data error resulted in inappropriate DAM LMPs and Settlement Point Prices and inappropriate RTM LMPs and Settlement Point Prices for many Settlement Intervals during the affected Operating Days. On January 31, 2011, ERCOT corrected this data error for all future Operating Days by adding 609 new Electrical Buses to the model.

The December 1, 2010 version of Paragraph 5 of Protocol Section 4.5.3 states the following:

> All DAM LMPs, Market Clearing Prices for Capacity (MCPCs), and Settlement Point Prices are final at 1000 of the next Business Day after the Operating Day. After DAM LMPs, MCPCs, and Settlement Point Prices are final, if ERCOT determines that prices are in need of correction, it shall notify Market Participants and describe the need for such correction. DAM LMPs, MCPCs, and Settlement Point Prices cannot be changed unless the ERCOT Board finds that the DAM LMPs, MCPCs, or Settlement Point Prices are significantly affected by a software or data error.

The December 1, 2010 version of Paragraph 4 of Protocol Section 6.3 states the following:

All RTM LMPs, Supplementary Ancillary Service Market (SASM) MCPCs, and RTM Settlement Point Prices are final at 1600 of the next Business Day after the Operating Day. After RTM LMPs, SASM MCPCs, and RTM Settlement Point Prices are final, if ERCOT determines that prices are in need of correction, it shall notify Market Participants and describe the need for such correction. RTM LMPs, SASM MCPCs, and RTM Settlement Point Prices cannot be changed unless the ERCOT Board finds that the RTM LMPs, SASM MCPCs, or RTM Settlement Point Prices are significantly affected by a software or data error.

ERCOT discovered this data error in January and added the new Electrical Buses on January 31, 2011. By the time the new buses were added, DAM LMPs and Settlement Point Prices and RTM LMPs and Settlement Point Prices had already become final under the ERCOT Protocols. Thus, on March 31, 2011, ERCOT issued a Market Notice announcing ERCOT's intention to remedy these data errors by requesting a price correction at the next regularly scheduled Board meeting. Pursuant to paragraph 5 of Protocol Section 4.5.3 and paragraph 4 of Protocol Section 6.3, ERCOT staff recommends that the Board authorize ERCOT to correct DAM LMPs and Settlement Point Prices for Operating Days December 1, 2010 through February 1, 2011, and RTM LMPs and Settlement Point Prices for Operating Days December 1, 2010 through January 31, 2011, for de-energized Settlement Points which were assigned LMPs equal to system lambda, because such prices were significantly affected by a data error.

Since these new Electrical Buses and their respective LMPs were not implemented before February 1, 2011, ERCOT recommends assigning an appropriate LMP and recalculating the Settlement Point Price based on the new LMP for each Security Constrained Economic Dispatch (SCED) interval in which Settlement Points were de-energized. ERCOT recommends that the appropriate LMP be determined by using the average of the LMPs of Electrical Buses that were energized in that interval in the next connected stations.

To allow for any appeal of the Board's decision, ERCOT staff would begin resettlement of the impacted Operating Days no earlier than 36 days after the Board issues a Resolution authorizing these price corrections.

ERCOT staff's recommended price corrections for DAM LMPs and Settlement Point Prices for Operating Days December 1, 2010 through February 1, 2011 are being sent to Board members via email communication. ERCOT staff is finalizing the calculation of the RTM LMPs and Settlement Point Prices for Operating Days December 1, 2010 through January 31, 2011, and will email those data to the Board as soon as they are available. All data will be posted to the Board's webpage on the ERCOT website.

Key Factors Influencing Issue:

Due to a data error, some of the de-energized Settlement Points were inaccurately assigned LMPs equal to system lambda during Operating Days December 1, 2010 through February 1, 2011, which resulted in inappropriate DAM LMPs and Settlement Point Prices for Operating Days December 1, 2010 through February 1, 2011, and inappropriate RTM LMPs and Settlement Point Prices for Operating Days December 1, 2010 through January 31, 2011. Since these prices are considered final under the ERCOT Protocols, ERCOT staff recommends that

the Board approve price corrections for the affected DAM and RTM Settlement Intervals.
Alternatives: 1. Approve the ERCOT staff recommendation on the price corrections as described above or as modified by the Board; 2. Reject the ERCOT staff recommendation on the price corrections; 3. Defer decision on the price corrections; or 4. Instruct ERCOT staff to consider further information on the price corrections.
Conclusion/Recommendation: As more specifically described above, ERCOT staff recommends that the Board approve the price corrections of DAM LMPs and Settlement Point Prices for Operating Days December 1, 2010 through February 1, 2011, and RTM LMPs and Settlement Point Prices for Operating Days December 1, 2010 through January 31, 2011, for de-energized Settlement Points which were assigned LMPs of system lambda due to data error.

ELECTRIC RELIABILITY COUNCIL OF TEXAS, INC.
BOARD OF DIRECTORS RESOLUTION

WHEREAS, paragraph 5 of the December 1, 2010 version of Nodal Protocol Section 4.5.3, Communicating Day-Ahead Market (DAM) Results, authorizes the ERCOT Board of Directors (Board) to approve price corrections only upon a finding that DAM Locational Marginal Prices (LMPs), Market Clearing Price for Capacity (MCPCs), and Settlement Point Prices have been significantly affected by a software or data error;

WHEREAS, paragraph 4 of the December 1, 2010 version of Nodal Protocol Section 6.3, Adjustment Period and Real-Time Market (RTM) Operations Timeline, authorizes the ERCOT Board of Directors (Board) to approve price corrections only upon a finding that RTM LMPs, Supplemental Ancillary Services Market (SASM) MCPCs, and Settlement Point Prices have been significantly affected by a software or data error;

WHEREAS, the Board deems it desirable and in the market's best interest to correct DAM LMPs and Settlement Point Prices for Operating Days December 1, 2010 through February 1, 2011 and RTM LMPs and Settlement Point Prices for Operating Days December 1, 2010 through January 31, 2011 for de-energized Settlement Points which were assigned LMPs equal to system lambda due to data error;

THEREFORE BE IT RESOLVED that the Board hereby authorizes ERCOT staff to implement the appropriate price corrections no earlier than 36 days after the date this Resolution is adopted.

CORPORATE SECRETARY'S CERTIFICATE

I, Bill Magness, Corporate Secretary of ERCOT, do hereby certify that, at its April 19, 2011 meeting, the ERCOT Board passed a motion approving the above Resolution by _____.

IN WITNESS WHEREOF, I have hereunto set my hand this ___ day of April, 2011.

_____
Bill Magness
Corporate Secretary