

Date: July 9, 2013
To: ERCOT Board of Directors
From: Kenan Ögelman, Technical Advisory Committee (TAC) Chair
Subject: Recommendation on Planning Reserve Margin and Effective Load Carrying Capability of Wind

Issue for the ERCOT Board of Directors

ERCOT Board of Directors (ERCOT Board) Meeting Date: July 16, 2013

Agenda Item No.: 7.3

Issue:

Protocol Section 3.2.6.1, Minimum ERCOT Planning Reserve Margin Criterion, provides that ERCOT shall periodically review and recommend to the ERCOT Board any changes to the minimum ERCOT Planning Reserve Margin.

Background/History:

Protocol Section 3.2.6.1 captures the current ERCOT Planning Reserve Margin criterion of 13.75%, which was approved by the ERCOT Board on November 16, 2010. It also provides that ERCOT shall periodically review and recommend to the ERCOT Board any changes to the minimum ERCOT Planning Reserve Margin.

ERCOT contracted with ECCO International, Inc. to provide an ERCOT loss of load study. The resultant study was reviewed by the Generation Adequacy Task Force (GATF) and then was presented to the Wholesale Market Subcommittee (WMS) on March 13, 2013. The study detail can be found at the following links:

[Loss of Load Probability \(LOLP\) Study Report](#)
[LOLP Study Results](#)

On April 12, 2013, WMS voted to endorse the GATF consensus recommendation #1, which was :

The GATF reviewed the 2012 LOLP study results in detail at its March 22nd and April 5th, 2013 meeting. The GATF members reached a consensus opinion that the LOLP study results are reasonable. GATF recommends using the LOLP results for the 2014 study year, resulting in a 16.1% planning reserve margin and an Effective Load Carrying Capability (ELCC) of non-coastal Texas wind of 14.2% and coastal wind of 32.9%. GATF also points out 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.

The WMS vote carried with four objections from the Consumer Market Segment and one abstention from the Independent Retail Electric Provider Market Segment.

On May 2, 2013, TAC discussed the need for more time to consider the issue and tabled consideration of the Planning Reserve Margin for one month. There was one objection from the Independent Generator Market Segment and three abstentions from the Independent Generator Market Segment.

On June 6, 2013, TAC voted to recommend using the LOLP 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%. TAC noted 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. Further, TAC highlighted 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.

Key Factors Influencing Issue:

TAC reviewed the recommendations before them and voted to recommend to the ERCOT Board the approval of the ERCOT Planning Reserve Margin as described herein.

Conclusion/Recommendation:

As more specifically described above, TAC respectfully recommends that the ERCOT Board approve 16.1% as the Planning Reserve Margin which includes as an input an ELCC of non-coastal Texas wind resources of 14.2% and coastal wind resources of 32.9%, to be used for reserve margin reporting purposes. TAC also notes that 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 and that this recommendation is not intended to establish the value of any resource type in any future market structure.

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

WHEREAS, Protocol Section 3.2.6.1, Minimum ERCOT Planning Reserve Margin Criterion, provides that ERCOT shall periodically review and recommend to the ERCOT Board any changes to the minimum ERCOT Planning Reserve Margin; and

WHEREAS, ERCOT presented to stakeholders a loss of load probability (LOLP) study to quantify the impact of system variability on desired reserve levels and reliability; and

WHEREAS, the Technical Advisory Committee reviewed the ERCOT LOLP study results for the 2014 study year and recommended using a 16.1% Planning Reserve Margin, which utilized as inputs an Effective Load Carrying Capability of non-coastal Texas wind resources of 14.2% and coastal wind resources of 32.9%; and

WHEREAS, after due consideration of the alternatives and recognizing this recommendation is not intended to establish the value of any resource type in any future market structure, the ERCOT Board deems it desirable and in the best interest of ERCOT to utilize 16.1% as the Planning Reserve Margin, based on the methodology used in the LOLP study presented by ERCOT.

THEREFORE, BE IT RESOLVED, that ERCOT is hereby authorized and approved to use 16.1% as the Planning Reserve Margin.

CORPORATE SECRETARY'S CERTIFICATE

I, Vickie G. Leady, Assistant Corporate Secretary of ERCOT, do hereby certify that, at its July 16, 2013 meeting, the ERCOT Board passed a motion approving the above Resolution by _____.

IN WITNESS WHEREOF, I have hereunto set my hand this ____ day of July, 2013.

Vickie G. Leady
Assistant Corporate Secretary