



**Date:** November 10, 2009  
**To:** Board of Directors  
**From:** John Dumas, Manager Operations Planning  
**Subject:** 2010 Ancillary Services Methodology Recommendation

**Issue for the ERCOT Board of Directors**

**ERCOT Board of Director Meeting Date:** November 17, 2009

**Agenda Item No.:** 08c

**Issue:**

Whether the Board should approve the proposed changes to the methodology for determining Ancillary Service Requirements as presented herein, and reaffirm the unchanged sections of the document until the next revision.

**Background/History:**

Ancillary Services are necessary to maintain the reliability of the ERCOT system. The ERCOT Protocols define these Ancillary Services and charge ERCOT with determining a methodology for the minimum levels of Ancillary Services required. ERCOT Staff developed proposed changes to the methodology previously approved by the ERCOT Board on February 17, 2009.

The revised methodology description is attached hereto as Attachment A. The revised methodology was reviewed and approved by the Technical Advisory Committee (TAC) at its November 5, 2009 meeting.

Section 6.4.1(2) of the ERCOT Protocols states that, “ERCOT shall at least annually, determine with supporting data, the methodology for determining the minimum quantity requirements for each Ancillary Service needed for reliability, including the percentage of Load acting as a Resource allowed to provide Responsive Reserve Services calculated on a monthly basis.”

Section 6.4.1(4) of the ERCOT Protocols requires that, “The ERCOT Board shall review and approve methodology for determining the minimum Ancillary Service requirements and the monthly percentage of Load acting as a Resource allowed to provide Responsive Reserve.”

ERCOT Staff and TAC respectfully recommend revised requirements to be effective in January 1, 2010.

**Key Factors Influencing Issue:**

Ancillary Services are necessary to ensure that there are sufficient resources to serve system load and maintain system frequency in the ERCOT system. Determining the minimum amount of services required to do this is based on operating experience, analysis and engineering judgment. The proposed methodology reflects ERCOT’s best judgment on minimum Ancillary Services needed for the ERCOT single Balancing Authority.



The changes from the 2009 Methodology for Determining Ancillary Services Requirements document approved by the Board on February 17, 2009 are related to the Non Spinning Reserve Services. The changes are shown in red-line in Attachment A, and can be summarized as follows:

- Establishes a cap of 2000 MW on Non Spinning Reserve Services for each hour.
- Calculates a net load average forecast error for each of the 4 hour blocks that are included in the Non Spinning Reserve Service requirement calculation. The average forecast error is set to zero when the average error indicates an average under-forecast occurred.
- Sums the Non Spinning Reserve Service requirement that is based on the load and wind forecast uncertainty with the average net load forecast error. The average over-forecast error is adjusted down if the sum exceeds 2000 MW. The adjusted average hourly net load forecast error will be subtracted from the load forecast for the corresponding hours.
- Purchases a minimum Non Spinning Reserve Service amount equal to the largest unit in ERCOT for hours 7 – 22.

**Alternatives:**

1. Approve the recommendation on the “2010 ERCOT Methodologies for Determining Ancillary Service Requirements” as endorsed by the TAC or as modified by the Board;
2. Reject the recommendation, leaving current methodology unchanged; or
3. Remand to ERCOT Staff with instructions.

**Conclusion/Recommendation:**

TAC and ERCOT Staff respectfully recommend that the Board approve the proposed changes to the methodology for determining Ancillary Service Requirements as presented herein to be effective January 1, 2010, and reaffirm the unchanged sections of the document until the next revision.



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

WHEREAS, after due consideration of the alternatives, the Board of Directors (Board) of Electric Reliability Council of Texas, Inc. (ERCOT) deems it desirable and in the best interest of ERCOT to comply with the requirements of the ERCOT Protocols that charge ERCOT, at least on an annual basis, to determine a methodology for the minimum levels of Ancillary Services required; and

WHEREAS, the ERCOT Board further deems it desirable and in the best interest of ERCOT to approve the recommendations of TAC and ERCOT Staff to change the methodology of determining Ancillary Service Requirements as reflected in the 2010 ERCOT Methodologies for Determining Ancillary Service Requirements, which are attached hereto as Attachment A.

NOW, THEREFORE, BE IT RESOLVED, that the 2010 ERCOT Methodologies for Determining Ancillary Service Requirements, which are attached hereto as Attachment A, are hereby authorized and approved in each and every respect to be accepted by ERCOT as the methodology for determining Ancillary Service.

**CORPORATE SECRETARY'S CERTIFICATE**

I, Michael G. Grable, Corporate Secretary of ERCOT, do hereby certify that, at its November 17, 2009 meeting, the ERCOT Board of Directors passed a motion approving the above Resolution by \_\_\_\_\_.

IN WITNESS WHEREOF, I have hereunto set my hand this \_\_\_\_ day of \_\_\_\_\_, 2009.

\_\_\_\_\_  
Michael G. Grable  
Corporate Secretary