



Date: April 13, 2010
To: ERCOT Board of Directors
From: Brad Jones, Technical Advisory Committee (TAC) Chair
Subject: Generation Adequacy Task Force Report Recommendation

Issue for the ERCOT Board of Directors

ERCOT Board of Directors (ERCOT Board) Meeting Date: April 20, 2010

Agenda Item No.: 14a

Issue:

Generation Adequacy Task Force Report.

Background/History:

The August 18, 2009 ERCOT Board received an update on ERCOT's Emergency Interruptible Load Service (EILS) program. One result of the Board's discussion was a suggestion that EILS be included as a Resource in ERCOT's Capacity, Demand and Reserve (CDR) report. The CDR report, a forecast of future demands and resources for the summer and winter peak Load periods in the current and five future years, had not previously included EILS in the reserve margin calculations.

Based on the ERCOT Board's EILS discussion and the ever-changing Resource landscape in ERCOT, the Chair of the Wholesale Market Subcommittee (WMS) reconstituted the Generation Adequacy Task Force (GATF) at the August 19, 2009 WMS meeting. The GATF was an existing joint task force of the WMS and the Reliability and Operations Subcommittee (ROS) and had been inactive since 2007. In addition to EILS, WMS members suggested the GATF also take into consideration such issues as how variable Resources are accounted for in the CDR, peak Load calculations, whether a 12.5% margin is adequate for the amount of wind generation on the system, and the treatment of air permits and Signed Generation Interconnect Agreements (SGIA) when determining whether or not new Resources should be included in the reserve margin calculation.

The GATF met numerous times in late 2009 and early 2010. In addition to the issues suggested by WMS, the GATF also developed an update to its charter and goals, performed a detailed review of the process and inputs into Loss-of-Load-Probability (LOLP) studies, reviewed ERCOT Staff's Load forecasting processes; developed a recommendation for EILS and other demand response programs; and reviewed all the inputs, assumptions, and format of the CDR report.

On February 17, 2010, WMS unanimously voted to endorse the GATF recommendation. On March 4, 2010, TAC also unanimously recommended approval of the GATF recommendation report. All Market Segments were represented at both meetings.

On March 23, 2010 the ERCOT Board of Directors remanded the GATF Report to TAC to include comments made by the General Counsel at the ERCOT Board meeting. On April 8,



2010, TAC unanimously recommended approval of the revised GATF Report.

Below is a summary of the GATF Report. The complete GATF Report to TAC is included in Attachment A.

Summary of the GATF Report:

ERCOT will perform an updated Loss of Load Probability (LOLP) Study prior to the May 2010 CDR update. Some of the primary assumptions going into the study, as discussed by GATF and included in the report are:

- The LOLP study year will be 2012.
- Transmission topology will be modeled in a "single node" arrangement, although separate studies will be performed once LOLP cases are developed to look at transmission needs probabilistically.
- Natural gas-fired combined cycle combustion turbines and natural gas-fired simple-cycle combustion turbine peaking units will be used for new unit additions when determining reserve margins and the Effective Load Carrying Capability of wind resources.
- To determine the ELCC of wind generators, perform the LOLP calculations utilizing the same methodology as the 2007 study with one slight modification. ERCOT Staff will determine the ELCC for each region (north/west and south) to determine if there are significant differences between the two. If so, ERCOT will add a line item in the CDR showing the ELCC for each. If not, then the ELCC of wind generators in both regions will be combined on a capacity weighted basis in the CDR. Once the ELCC of wind generation is determined, ERCOT Staff will compare the ELCC values with actual wind operational data to ensure reasonableness.
- Solar plants will be treated the same as conventional generation in the LOLP until a threshold level of 200 MW has a SGIA.

EILS will be included in the CDR utilizing the following methodology:

- For the winter period, utilize the "current year" quantity of procured EILS, use only the Oct.-Jan. Contract Period, and use the simple average of 2 Time Period procurements (Business Hours 3 and Non-Business Hours).
- For the summer period, utilize the "current year" quantity of procured EILS and use the actual May procurement amount for Business Hours 3 (this procurement is for the June through September contract period).
- For the later years in the planning periods (years 2 through 5), a 10% growth rate in EILS will be used, with ERCOT Staff reviewing this growth rate, and possibly amending the rate, as additional EILS procurement data is collected.

Other Demand Response Programs

- Advanced metering programs will not be included in the reserve margin calculations at this time. ERCOT Staff will continue to monitor progress in advanced metering programs and may include them in the future once additional information is collected.

CDR Inputs, Calculations and Format

- New Unit Additions – The GATF specifies that ERCOT Staff will contact Generating Entities that already have a SGIA and air permit to confirm the in-service dates referenced in those documents are still applicable.
- Mothballed Capacity – Continue to utilize the current "mothballed" capacity methodology based on the lead time and probability information furnished by generation owners as per the requirements in ERCOT Protocol Section 6.5.9.3, Generation Resource Return to Service Updates.
- DC Tie Capacity – No changes recommended to the current methodology of including 50% of DC Tie Capacity in the reserve margin calculation.
- “Switchable” Capacity – No changes recommended. Utilize the resource capacity reported in the RARF for the switchable units and the data provided pursuant to ERCOT Protocol Section 16.5.3, Requirements for Reporting and for Changing the Terms of a Resource Registration.
- Netting of Generation and Load – No suggested changes to the generation and load netting methodology for private use networks.
- Retired Capacity – Modify the CDR line item for retired capacity to read “Pending Unit Retirements” for instances in which a generation resource owner has notified ERCOT they intend to cease operations for a particular resource within a certain period of time, yet ERCOT Staff may still be evaluating the resource for potential RMR service when the CDR is published.

Key Factors Influencing Issue:

The GATF met, discussed the issues and submitted a recommendation report to WMS. The WMS and TAC both unanimously endorsed the GATF Report. The Board remanded the GATF to TAC for revision. TAC unanimously approved a revised GATF Report.

Alternatives:

1. Approve the TAC recommendation on the GATF Report as described above or as modified by the ERCOT Board;
2. Reject the TAC recommendation on the GATF Report;
3. Defer decision on the merits of the TAC recommendation on the GATF Report; or
4. Remand the GATF Report to TAC with instructions.

Conclusion/Recommendation:

As more specifically described above, TAC recommends that the ERCOT Board approve the GATF Report recommendations.



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

WHEREAS, the Electric Reliability Council of Texas, Inc. (ERCOT) Board of Directors (Board) deems it desirable and in ERCOT's best interest to approve the Generation Adequacy Task Force (GATF) Report.

THEREFORE be it RESOLVED, that the ERCOT Board hereby approves the Generation Adequacy Task Force (GATF) Report.

CORPORATE SECRETARY'S CERTIFICATE

I, Bill Magness, Interim Corporate Secretary of ERCOT, do hereby certify that, at its April 20, 2010 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 April, 2010.

Bill Magness
Interim Corporate Secretary