



# MEMO

**Date:** November 9, 2004  
**To:** Board of Directors  
**From:** Read Comstock, TAC Chair  
**Subject:** Closely Related Elements (CREs) Approval

## **Issue for the ERCOT Board of Directors**

**ERCOT Board of Director Meeting Date:** November 16, 2004

**Agenda Item No.:** 8c

### **Issue:**

Designation of Commercially Closely Related Elements (CREs) in the ERCOT transmission system as they relate to Commercially Significant Constraints and Congestion Zones.

### **Background/History:**

#### Section 7.2.1.3, Determining Closely Related Elements (CREs)

By November 1 of each year, the appropriate ERCOT subcommittee will report to the TAC and ERCOT Board with recommended CSC designations, resulting Congestion Zone boundaries, CRE designations and associated Boundary Generation Resources for ERCOT Board review and approval.

#### **CREs are defined as**

“Those transmission facilities that have shift factor impacts similar to those associated with a particular Commercially Significant Constraint (CSC), and for which there exists a limited amount of Boundary Generation Resources between it and the particular CSC, so that the zonal deployment of Balancing Energy Service is effective in mitigating Zonal Congestion.” Protocols, Section 2.

The ERCOT Protocols define two types of transmission congestion: (1) CSC Congestion and (2) Local or Operational Congestion. CSC Congestion is that transmission congestion that is determined to be “commercially significant” and is used to establish annual Congestion Zones. The Protocols require ERCOT to identify CSCs on an annual basis in the process described in ERCOT Protocols Section 7.2.1. The Board approved the CSCs for 2005 at the October.

When facility outages prevent the normal methods of monitoring CSCs for zonal congestion management, CREs are used as the reference transmission facilities for monitoring transmission loading, zonal congestion, and the calculation and deployment of Balancing



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Energy to resolve zonal congestion.

ERCOT Staff has performed analysis to identify appropriate CREs as part of the CSC designation analysis. The Congestion Management Working Group (CMWG), under the auspices of the WMS and TAC, has been working on this issue for several months. The CMWG, WMS and the TAC support of the recommendation of the CREs described below.

Given that the CSC and Congestion Zones are the same as for 2004 (with the addition of the West to North CSC going both directions in 2005), most of the recommended 2005 CREs remain the same. A list of the qualified CREs recommended for Board approval are shown in Attachment A, with the new CREs shown highlighted. For a detailed description of the transmission elements that were studied for consideration as CREs, please see the descriptions posted with the TAC November 4, 2004, materials at [http://www.ercot.com/calendar/2004calendar/AttachNov04/TAC11042004\\_Attach.htm](http://www.ercot.com/calendar/2004calendar/AttachNov04/TAC11042004_Attach.htm).

The description of the transmission elements studied can be found under the WMS Report.

**Key Factors Influencing Issue:**

The Board has the responsibility of approving CRE designations.

**Alternatives:**

(1) Approve TAC's recommendation regarding CREs as recommended by TAC; (2) Reject TAC's recommendation and remand to TAC with instructions.

**Conclusion/Recommendation:**

TAC and ERCOT Staff recommend that the Board approve the CREs as recommended by TAC.