

**Date:** September 13, 2005 **To:** Board of Directors

From: Read Comstock, TAC Chair

**Subject:** 2006 Commercially Significant Constraints and Congestion Zones

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

**ERCOT Board of Director Meeting Date:** September 20, 2005

**Agenda Item No.:** 10b

#### **Issue:**

Designation of Commercially Significant Constraints (CSCs) in the ERCOT transmission system and Transmission Congestion Zones.

#### **Background/History:**

Section 7.2.1 of the ERCOT Protocols, Process for Determining CSCs, states "CSCs and resulting Congestion Zones will be reassessed annually by November 1 of each year." Board approval is required for the annual CSC and Congestion Zone designations.

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. ERCOT manages Zonal Congestion in accordance with Section 7.3. The costs of Zonal Congestion are directly assigned to the QSEs whose schedules cause Zonal Congestion. Section 7.5 provides QSEs a hedging tool, Transmission Congestion Rights (TCRs) that can be used to offset the costs of Zonal Congestion.

The Congestion Management Working Group (CMWG), under the auspices of the WMS and TAC, has been working on this issue. ERCOT Staff provided the underlying analysis using the latest Load Flow data to determine expected operating limits, candidate CSCs, and associated constraints to be used in the designation of CSCs for 2006. After the full evaluation by CMWG and WMS and discussion at the September 8 TAC meeting, TAC recommends retaining the 2005 CSCs for 2006 and the corresponding five Congestion Management Zones (Congestion Zones). ERCOT staff supports this recommendation. The proposed Congestion Zones reflect current transmission topology (incorporating changes in the transmission system and other elements), resulting in 19 buses changing zones in 2006. The most significant change is five buses, representing approximately 100 MW in load, moving from the North to the Northeast zone. No generation unit was assigned to a different zone.



#### 2006 CSCs:

CSC # 1 - West to North - Graham to Parker and Graham to Benbrook

CSC # 2 - South to North – Sandow to Temple double circuit

CSC # 3 - South to Houston - South Texas Project to Dow (Valasco) double circuit

CSC # 4 - North to Houston - Gibbons Creek to O'Brien, Jewett to T.H. Wharton

CSC # 5 - Northeast to North - Farmersville to Royse double circuit

CSC # 6 - North to West – Parker to Graham, Benbrook to Graham

#### 2006 Congestion Zones:

- 1 West 2006
- 2 North 2006
- 3 Houston 2006
- 4 South 2006
- 5 Northeast 2006

**Attachment A** shows the configuration of the Zones in map form. For more details about the CSC designation and related process, information is available on the secure portion of the ERCOT website.

#### **Exemptions**

South Texas Electric Cooperative (STEC) has requested exemptions for three bus placements in the 2006 Zones, pursuant to the process set forth in Protocols Section 7.2.2.2(5). These exemptions are identical to the exemptions approved for the 2005 Congestion Zones:

Move three load buses from the Houston Zone to the South Zone – two 69 kV load buses Franklin's Camp (5566) and Sargent (5564) and one switching station bus on the 138 kV side of the 69/138 kV auto at Franklin's Camp (5568).

These exemptions reflect a small amount of STEC load located in the Houston Zone. ERCOT Staff has determined that the requested exemptions satisfy the criteria in Section 7.2.2.2(5) (no other specific approval is required).

### **Key Factors Influencing Issue:**

The Board has the responsibility of annually approving CSC designations and resulting Congestion Zone boundaries.



### Alternatives:

(1) Approve TAC's recommendation regarding CSCs and Congestion Zones; (2) Reject TAC's recommendation and remand to ERCOT Staff and TAC with instructions.

### **Conclusion/Recommendation:**

ERCOT Staff and TAC recommend that the Board approve the 2006 CSCs and Congestion Zones described above.



### Attachment A

