Date: July 8, 2008
To: Board of Directors
From: Bill Bojorquez, Vice President, System Planning
Subject: AEPSC Presidio Area Reliability Improvements Project

Issue for the ERCOT Board of Directors

ERCOT Board of Director Meeting Date: July 15, 2008
Agenda Item No.: 13

Issue:
Whether the ERCOT Board should endorse the American Electric Power Service Corporation (AEPSC) Presidio Area Reliability Improvements Project.

Background/History:
The town of Presidio receives electric service via an approximately 60-mile 69-kV line that is radially connected from the Alamito Creek station. This 69-kV line was originally constructed in 1948 and has recently experienced a large number of outages due to lightning strikes and the deteriorating conditions of the line. In addition, the pre-contingency and post-contingency voltage at Presidio does not meet ERCOT planning criteria in 2009 (see Attachment A).

AEPSC has proposed the Presidio Area Reliability Improvement Project (Project) to mitigate these problems as follows:

- Install a second 138/69-kV autotransformer at Alamito Creek Substation in 2008 – necessary to meet NERC criteria under maintenance conditions during load periods when maintenance is normally performed.
- Install a 4.8 MW NaS battery at Presidio Substation in 2009 – short term solution that allows area voltages to meet NERC/ERCOT pre and post-contingency voltage limits as soon as possible and serves most area load when 69-kV line in not available. The installation of the battery allows the rebuild of the 69 kV line to be delayed for two years.
- Construct a new Alamito Creek-Presidio 69-kV line (built for 138-kV service) in 2012 – can not be completed until the end of 2010 and provides long term solution and capacity for expansion. The NaS battery can only provide adequate voltage support until 2012.

Greater detail on these improvements can be found in Attachment B. AEPSC has estimated the cost of the project to be $67 million.

Key Factors Influencing Issue:
1. 2009 Summer Peak pre and post-contingency voltage at Presidio does not meet NERC/ERCOT voltage limits.
2. The number of outages has been high (247) from 2001 to 2006, with nine long-term outages averaging 6.8 hours apiece.

3. Numerous (81) poor voltage quality events from July 8 to September 8, 2007 with 8 events recorded in a single day. 4. PURA §38.005 (relating to Electric Service Reliability Measures) states that rural areas and small communities should not be neglected with regard to system reliability. 5. ERCOT has a postage stamp rate in which all customers pay for and should receive comparable, reliable transmission service.
Alternatives: 1. Endorse the need for the Project as recommended by ERCOT staff and supported by the Regional Planning Group. 2. Remand to ERCOT staff with instructions.
Conclusion/Recommendation: ERCOT staff respectfully recommends that the Board endorse the need for the Project.

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

WHEREAS, the American Electric Power Service Corporation (AEPSC) Presidio Area Reliability Improvement Project (Project) is required for reliability reasons, and

WHEREAS, Electric Reliability Council of Texas, Inc. (ERCOT) staff and the Regional Planning Group both endorse the need for the Project,

THEREFORE, BE IT RESOLVED that the Board of Directors (Board) of ERCOT hereby endorses the need for the Project.

CORPORATE SECRETARY'S CERTIFICATE

I, Michael G. Grable, Corporate Secretary of ERCOT, do hereby certify that, at its meeting convened on July 15, 2008, the ERCOT Board of Directors passes a motion approving the above resolution by _____.

IN WITNESS WHEREOF, I have hereunto set my hand this ____ day of _____, 2008.

_____
Michael G. Grable
Corporate Secretary