



Date: May 13, 2008
To: ERCOT Board of Directors
From: Bill Bojorquez, Vice President, System Planning
Subject: CenterPoint Energy Rothwood Substation Project

Issue for the ERCOT Board of Directors

ERCOT Board of Director Meeting Date: May 20, 2008

Agenda Item No.: 12

Issue:

Whether to endorse the CenterPoint Energy Rothwood Substation Project.

Background/History:

CenterPoint Energy proposed the Rothwood Substation Project (Project) as one option in their Houston Area Constraint Mitigation Phase II study in early 2007. In August 2007, the ERCOT Board of Directors approved a recommendation for the construction of the CenterPoint Singleton and Zenith switching stations based on economic grounds – higher production cost savings than those from the addition of the Rothwood Substation. However, the Rothwood Project remained viable, and ERCOT and CenterPoint recognized at the time that reliability issues remained to be addressed.

Attachment A to this memorandum is the 2007 Five-Year Plan (completed in early 2008). Beginning on page 10, Attachment A discusses how the Project is needed to serve load that cannot be served, post-contingency in 2010, without overloading two transmission lines. Attachment B to this memorandum is the CenterPoint Energy document submitting the Project to the Regional Planning Group on March 26, 2008.

The Project consists of the looping of one Kuykendahl-King 345-kV circuit and one Tomball-Rayford Tap 138-kV circuit into the new Rothwood Substation. An 800-MVA 345/138 kV autotransformer will be used to tie the 345-kV and 138-kV buses together.

Two options are available to meet the reliability needs of the area, and the Project is part of both options. One option requires it to be built in 2010 and the other option allows it to be delayed until 2013, but requires \$8M of transmission to be built in 2010. The three-year deferral of Rothwood Substation does not offset the \$8 M capital cost of the additional transmission. The Rothwood Substation also relieves an estimated \$2.7M of annual congestion costs on the Tomball Autotransformers.

The cost of this Project is \$23M.

The Regional Planning Group comment period for this Project occurred in April 2008, and no dissenting comments were received.



<p><u>Key Factors Influencing Issue:</u></p> <ol style="list-style-type: none">1. This Project is part of both options to serve the load that cannot be served, post-contingency.2. This Project has the lower capital cost of the two viable options, because \$8M of additional transmission is not needed and the three-year deferral of Rothwood does not offset the total cost.3. This Project provides congestion savings not addressed by the \$8M of additional transmission. <p><u>Alternatives:</u></p> <ol style="list-style-type: none">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. <p><u>Conclusion/Recommendation:</u></p> <p>ERCOT staff respectfully recommends that the Board endorse the need for the Project.</p>



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

WHEREAS, the CenterPoint Energy Rothwood Substation 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) ERCOT hereby endorses the need for the CenterPoint Energy Rothwood Substation Project.

CORPORATE SECRETARY'S CERTIFICATE

I, Michael G. Grable, Corporate Secretary of ERCOT, do hereby certify that, at its May 20, 2008 meeting, the ERCOT Board of Directors passed a motion approving the above Resolution by a vote of _____.

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

Michael G. Grable
Corporate Secretary