

OPEN HOUSE

RUTHERFORD, WILLIAMSON, AND DAVIDSON COUNTIES, TENNESSEE PROPOSED POWER SYSTEM IMPROVEMENTS

**Tuesday, April 11, 2006
2:00 to 8:00 p.m., CDT**

TENNESSEE VALLEY AUTHORITY



TENNESSEE VALLEY AUTHORITY SITING AND ENVIRONMENTAL DESIGN

Thank you for attending our Open House about proposed power system improvements in Rutherford, Williamson, and Davidson Counties. We are here to gather information during the planning stages of a transmission line construction project. Your comments are important to us, and we will consider them while planning this project.

Contained in this handout are a description, schedule of the project, survey/comment form, and map. As you enter the room, you will notice displays of the proposed project. TVA representatives are located at the displays to discuss the project with you. These representatives can be identified by a name tag they are wearing. Please take the time to discuss the project with them. They represent all aspects of this project and will provide answers if known or direct you to a representative who can help you with your question or concern.

We want to know what issues you think should be considered as we make plans. If you have comments, you may complete the attached comment form and leave it with the representative at the "Welcome" table. If you do not wish to leave your comments at this time, or if you later think of something you wish you had told us, you may mail your comments to Steve Pitt, Siting Engineer with Mesa, Inc., in care of TVA at 1101 Market Street (MR 4G), Chattanooga, Tennessee 37402-2801, fax them to 423-751-4098, call Mr. Pitt toll-free at 1-800-355-6372, or send an e-mail to newtransline@tva.com. You may visit our website at www.tva.com/power/projects.

Refreshments are also available - please help yourself to some cookies and soft drinks or coffee. Thank you again for attending and participating in our open house.

Tennessee Valley Authority
Rutherford, Williamson, and Davidson Counties Transmission System
Improvement Project

Project Need

The population in Murfreesboro, Franklin and the surrounding area has been growing at a rate of 4.3 percent per year since 1990. The population has reached 350,000 and is projected to approach 500,000 by 2015. With a population of 202,000, Rutherford County is currently the fifth largest county in Tennessee and had the highest increase in population of any county in Tennessee between 2000 and 2003. Williamson County is currently the seventh largest county in Tennessee and had the second highest increase in population between 2000 and 2003.

While population has been growing at 4.3 percent per year, the total area electrical load has been growing by 3.5 percent per year. This is equivalent to 32.7 MW per year, reaching a peak of 1,083 MW in the summer of 2003.

The load is growing primarily in an area bounded by I-24 to the east, I-65 to the west, Nashville to the north and I-840 to the south, with spillover outside this area at Franklin and Murfreesboro. More development will likely occur between Murfreesboro and Franklin due to the completion of the southwestern portion I-840 and the expansion of Highway 96.

Load flow studies show three of the four 500/161-kV transformers serving the area will overload by 2011. Pinhook and Davidson #2 will exceed their capacity in 2010. Wilson Substation will exceed its capacity in 2011.

In addition, several 161-kV transmission lines in the area will exceed their thermal ratings (overload), beginning in summer 2007. It is estimated that 12 161-kV transmission lines will overload as much as 130 percent in 2010. The problem is lack of transmission capacity for power flowing into three areas: Murfreesboro, the Franklin/Brentwood area, and into south Nashville. Load flow studies show the solution for this project needs to be in-service by June 1, 2010.

Project Description

As mentioned above, load flow studies show transformers at three 500-kV substations in middle Tennessee, along with several 161-kV transmission lines in the area, will exceed their capacity by 2010.

A number of options for correcting the problem have been considered, and the options were narrowed to three alternatives that technically meet the power supply needs of the system.

Solutions for the lack of transmission capacity include resagging or reconductoring existing lines and stringing new lines on vacant double-circuit poles.

Project Description (continued)

The three technically viable alternatives that were evaluated included:

- ∞ Expansion of the Pinhook Substation and upgrades to about 134 miles of existing lines
- ∞ A new substation in Williamson County and upgrades to about 126 miles of existing lines
- ∞ A new substation in Rutherford County and construction of about 50 miles of new lines.

Based on an evaluation of advantages and disadvantages, particularly the overall costs and ability to meet the in-service date, TVA eliminated the Brentwood and Pin Hook alternatives. Efforts are now focused on the Rutherford alternative solution:

- ∞ Construct a new 500-kV substation in Rutherford County. There are numerous undeveloped areas large enough to site a 500-kV substation in Rutherford County.
- ∞ New transmission line connections include:
 - 27 miles of new 500-kV line on new and existing TVA-owned right-of-way from the Maury 500-kV Substation to Rutherford
 - 7 miles of new 161-kV line on new and vacant existing TVA-owned right-of-way from Rutherford to Almadale
 - 13 miles of double-circuit 161-kV line on new right-of-way from Rutherford to Christiana
 - 2.5 miles of 161-kV line on new right-of-way from Rutherford to the Murfreesboro-Triune-E. Franklin Transmission Line

Project Schedule

Open House in Eagleville, Tennessee	April 11, 2006
Determine preferred route for field studies	Late spring 2006
Complete field survey work	Summer 2006
Open House for comments on Draft EIS	Spring 2007
Final EIS available – announce selected site and route	Summer 2007
Begin easement and property purchase	Fall 2007
Begin Construction	Winter 2007-2008
Project Complete	Spring 2010

Dates are estimates. Unexpected issues may result in the need to adjust the schedule.

