

# CHAPTER 1

## 1. PURPOSE OF AND NEED FOR ACTION

### 1.1. Proposed Action: Improve Power Supply

Tennessee Valley Authority's (TVA) proposed action is to interconnect Calpine's new Morgan Energy Center generating plant to TVA's transmission system by 2005.

### 1.2. Need

In accordance with the provisions of the Federal Power Act, Section 210, TVA and other facilities used for the transmission of electric energy in interstate commerce are required upon application to interconnect power production facilities proposed by cogenerators, small power producers, and independent power providers under arrangements that provide safe and reliable operation of their facilities on the transmission system and that do not unfairly shift the cost of interconnection and operation to TVA and its customers. Calpine, an independent power provider, has applied to interconnect its new Morgan Energy Center to the TVA transmission system. This application requires TVA to connect the generation to TVA's transmission system. TVA performed an interconnection system impact study (ISIS) that evaluated only the impacts of interconnecting Calpine's Morgan Energy Center to the TVA transmission system. This study did not address the ability of the TVA transmission system to transfer power from the facility to any specified load either on the TVA system or off system.

### 1.3. Objectives of Calpine's Morgan Energy Center Interconnect Project

To meet Calpine's request of interconnecting its new Morgan Energy Center generating plant to TVA's transmission system, TVA proposes to build a new transmission line from Calpine's Morgan Energy Center generating plant to an existing substation named General Motors (GM) and perform upgrades at this substation. Objectives of this project are to comply with the Federal Power Act by fulfilling Calpine's interconnection request.

### 1.4. Decisions That Must Be Made

TVA must decide the best alternative for interconnecting Calpine's Morgan Energy Center generating plant with TVA's transmission system. This is described in detail in Section 2.2.

Other specific decisions involve:

- Timing of the interconnection.
- The best route for the transmission line.
- What mitigation and/or monitoring measures to implement to meet TVA standards and minimize resource damage.

TVA must also determine if the selected alternative would or would not be a major Federal action significantly affecting the human environment. If TVA determines that it would not significantly affect the quality of the human environment, then TVA can prepare and sign a Finding of No Significant Impact, and the project can proceed.

If TVA determines that the selected alternative would significantly affect the quality of the human environment, then an Environmental Impact Statement and a Record of Decision must be prepared and signed before Calpine's Morgan Energy Center Interconnection Project could proceed.

### **1.5. Public Involvement**

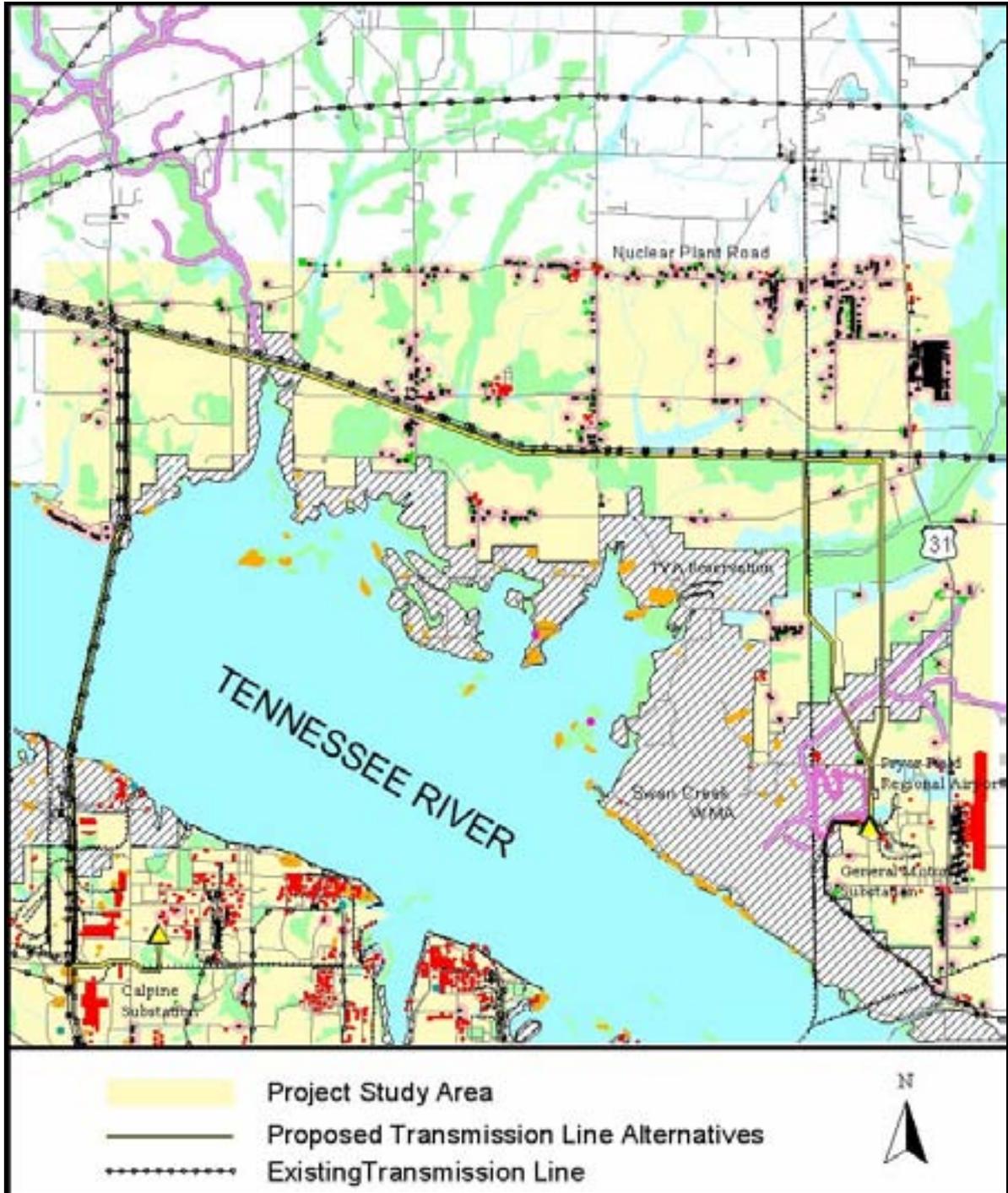
The following Federal, state, and local agencies and other organizations have been contacted to date concerning this project by TVA in addition to internal reviews by a network of designated environmental specialists.

- United States Army Corp of Engineers
- United States Fish and Wildlife Service
- United States National Park Service
- United States Senators and Representatives from the study area
- Alabama Department of Agriculture and Industry
- Alabama Department of Conservation and Natural Resources
- Alabama Department of Economic and Community Development
- Alabama Department of Environmental Management
- Alabama Department of Transportation
- Alabama Historical Commission

This proposal was reviewed for consistency with Executive Order (EO) 11988 (Floodplain Management), EO 11990 (Protection of Wetlands), Farmland Protection Policy Act, National Historic Preservation Act, Endangered Species Act, Section 404 of the Clean Water Act, and EO 12372 (Intergovernmental Review). Correspondence received related to this coordination is contained in Appendix I.

TVA held one open house on March 28, 2002, at Calhoun Community College in Decatur, Alabama. One route was presented for the portion of the transmission line on existing right-of-way and two potential routes for the portion of the transmission line on new right-of-way. These alternatives are described in Section 2.4.3 of this document as Routes 1 and 2 (Figure 1-1).

Twenty-six public officials and 100 potentially affected property owners within these routes were specifically invited, and newspaper advertisements invited any interested public as well. TVA issued a news release to local news outlets. Total attending the meeting was 15. During the 30-day public comment period following the open house, TVA accepted public comments on potential transmission line routes and other issues. A toll-free phone number and FAX number were made available to facilitate comments. Comments and information were collected at the open house and during the month-long comment period. Most comments were opposed to Route 2 because of the potential impacts to agricultural operations and both industrial and residential development.



**Figure 1-1. Calpine's Morgan Energy Center – General Motors Substation 161-kilovolt (kV) Transmission Line - Route Alternatives and Study Area**

### **1.6. Necessary Permits or Licenses**

Permits would be required from the state of Alabama and U.S. Army Corps of Engineers (USACE) for the transmission line construction. A permit would also be required for burning trees and other combustible materials removed during transmission line construction. The storm water permit has been prepared and submitted to the state of Alabama. The erosion and sedimentation control plans included in the storm water permit would be coordinated with other appropriate state and local authorities. The Section 404 Nationwide permit #12-Utility Line Crossing request was submitted to the USACE. The USACE has issued the permit for the project (Appendix I).