



Highlights of [GAO-06-810](#), a report to the Chairman, Subcommittee on Water Resources and Environment, Committee on Transportation and Infrastructure, House of Representatives

## Why GAO Did This Study

Competition in the electricity industry is expected to intensify, and restructuring legislation may dramatically change the way electric utilities do business in the future. To be competitive, the Tennessee Valley Authority (TVA) needs to reduce fixed costs and increase its flexibility in order to meet market prices for power. TVA plans to reduce its financing obligations, which include statutory debt and other financing arrangements, by \$7.1 billion by the end of fiscal year 2015. GAO was asked to (1) describe how TVA plans to meet its goal for reducing financing obligations, (2) assess the reasonableness of TVA's approach in developing its plan, (3) identify key factors that could impact TVA's ability to successfully carry out its plan, and (4) identify how TVA's plans for meeting the growing demand for power in the Tennessee Valley may impact its ability to reduce financing obligations. To fulfill these objectives, GAO interviewed TVA officials and others, and reviewed budget submissions, financial projections, and other documentation supporting the plan.

## What GAO Recommends

GAO makes two recommendations to help TVA (1) augment its data sources for estimates of key input variables in its cash flow model, and (2) better illustrate the range of outcomes of the model. In comments on a draft of this report, TVA agreed with these recommendations.

[www.gao.gov/cgi-bin/getrpt?GAO-06-810](http://www.gao.gov/cgi-bin/getrpt?GAO-06-810).

To view the full product, including the scope and methodology, click on the link above. For more information, contact Robert E. Martin at (202) 512-6131 or [martinr@gao.gov](mailto:martinr@gao.gov).

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# TENNESSEE VALLEY AUTHORITY

## Plans to Reduce Debt While Meeting Demand for Power

### What GAO Found

TVA plans to reduce its financing obligations by about \$7.1 billion from fiscal years 2004 through 2015 by increasing revenue, controlling the growth of its operating expenses, and limiting capital expenditures. TVA's financing obligations include statutory debt, which it plans to reduce by \$6.7 billion, and alternative financing obligations such as energy prepayments, which it plans to reduce by \$0.4 billion.

Overall, GAO's review found TVA's approach to developing its plan to reduce financing obligations reasonable. TVA performed detailed competitive analyses and modeled different market scenarios to estimate its future competitive environment, then used its internal budget process to project annual cash flows and refine its goal with a cash-based accounting model. Many of the variables used in the models were based on recognized data sources. Augmenting these sources with prices from options markets could provide more accurate estimates in volatile markets. TVA also made fixed assumptions about actions it would take, such as building new power generation, and events, such as the advent of new environmental regulations. While these assumptions are reasonable, they carry uncertainty that is not reflected in the model. Modeling them as variables might better reflect that uncertainty and provide broader information for planning purposes.

GAO identified several key factors that could impact TVA's ability to successfully carry out its plan. Factors such as the timing of electricity industry restructuring, potential increases in interest rates, and costs associated with meeting potential new environmental requirements, are key factors that are difficult for TVA to control. TVA has more control over other key factors, such as its decisions on whether or not to construct new power generating facilities before 2015 and to limit operating and maintenance expenses, but these are also affected by outside forces and contain an element of uncertainty. Future rate increases and a fuel-cost adjustment clause are factors that should help cover any unforeseen costs, capital expenditures, or revenue shortfalls.

TVA's plan includes the capital expenditures it believes will be needed to expand capacity of existing generating facilities to meet the growing demand for power in its service area through 2015; however, any new or unplanned expenditures prior to 2015 could lessen TVA's ability to achieve the \$7.1 billion goal. By 2015, TVA has estimated that it will need more baseload generation to meet growth in demand. TVA officials are considering a number of options to meet this projected increase in demand for power, including partnering with outside parties to build new generation. TVA's current projections assume that it will not invest in any new generation through 2015 other than restarting Browns Ferry Nuclear Plant Unit 1; however, any new or unplanned capital expenditures could use cash otherwise intended to be used to reduce financing obligations.