

Tennessee Valley Authority

Budget Proposal and Management Agenda



For the Fiscal Year Ending
September 30, 2012

Submitted to Congress
February 2011



Table of Contents

Introduction ii

Budget Overview (with financial statements) 1

Budget Highlights and Hard Spots 4

Current Management Initiatives..... 7

Oversight, Governance and Financial Performance 9

TVA’s Mission and Results 18

 Low-Cost Power and Reliability 18

 Environmental Stewardship and River Management 25

 Economic Development and Technological Innovation 27

Government Performance and Results Act (GPRA) Annual Performance Plan 29

Appendix 43

Introduction

TVA's Vision and Mission

The Tennessee Valley Authority (TVA) serves the nation and over nine million people of the Tennessee Valley region which covers parts of seven states; Tennessee, Alabama, Virginia, North Carolina, Georgia, Mississippi, and Kentucky in the five major areas of TVA's mission — low-cost power, environmental stewardship, river management, technological innovation, and economic development. For TVA to continue to achieve its mission in today's changing economic and regulatory climate, it must lead with a continued focus on key critical issues while acting on new initiatives. As such, at its August 2010 meeting the TVA Board of Directors adopted a renewed strategic vision (which is currently under review by the Administration):

To be one of the Nation's leading providers of low-cost and cleaner energy by 2020.

TVA plans to accomplish this vision by being:

- **The Nation's leader in improving air quality;**
- **The Nation's leader in increased nuclear production; and**
- **The Southeast's leader in increased energy efficiency.**

While maintaining a focus on our core business through:

- **Keeping electricity rates low for the Tennessee Valley region**
- **Maintaining high reliability; and**
- **Being responsible stewards of the Tennessee Valley land and waterways.**

To be the Nation's leader in improving air quality, TVA will plan to

- Significantly increase production from low emission electricity generators; and
- Reduce SO₂, NO_x, mercury, particulate, and CO₂ emissions from TVA plants.

To be the Nation's leader in increased nuclear production, TVA will plan to

- Lead the nation in delivery of new nuclear capacity; and
- Demonstrate the first small modular reactor in the U.S.

To be the Southeast's leader in increased energy efficiency, TVA will plan to

- Help consumers and business use energy more efficiently and save money; and
- Reduce peak power usage with demand management tools including time-of-use pricing; and
- Minimize transmission losses and optimize plant efficiency.

Power Program

A corporation of the federal government, TVA operates like a business. TVA is self-funded from the sale of electricity and financings that provide capital for the power program. Additionally, through fiscal year (FY) 2012, TVA expects to have returned to the U.S. Treasury approximately \$3.6 billion, including interest, on the government's original \$1.4 billion appropriation investment in TVA's power program.

TVA provides power through local power distributors and sells power directly to large industries and government entities. As the nation's largest public power system, TVA is committed to meeting the region's growing needs for reliable, affordable, and environmentally-sound energy. The TVA system includes 3 nuclear sites, 11 coal-fired sites, 29 conventional hydroelectric sites, 11 combustion turbine sites, 2 diesel generator sites, and 1 pumped storage hydroelectric site. TVA's renewable energy program, Green Power Switch®, includes 14 solar sites, 1 wind-energy site, 1 digester gas site, and 1 biomass cofiring site. In FY 2012, TVA expects sales to approach 170 billion kilowatt-hours of electricity.

As of September 30, 2010, the coal-fired generating facilities of TVA's Fossil Power Group have 14,573 megawatts (MW) of net summer capability. They have been the backbone of the power system since the 1950s when TVA first began using coal to make electricity. The eleven coal-fired plants generated about 51 percent of the electricity TVA produced for its customers in FY 2010. TVA's fossil system also includes 94 generators powered by combustion turbines with a total net summer capability of 7,358 MW. These generators can be quickly started and are vital for meeting peak electricity demands.

TVA operates six nuclear units at three sites with a combined net summer capability of 6,632 MW. These units generated over 53 billion kilowatt-hours in FY 2010, or 36 percent of TVA's power.

In FY 2010, about 9 percent of TVA's generation was from hydroelectric power and overall about 45 percent of TVA's generation was from clean energy sources that TVA defines as low or zero carbon emitting resources including hydro, renewables, nuclear and demand reduction. TVA is striving to have low and zero carbon emission sources comprise at least 50 percent of its generation portfolio by FY 2020.

Transmission System

The 2,465 miles of 500kV lines in TVA's approximately 15,940-mile transmission system are a critical link for the movement of electricity throughout the eastern United States. TVA continues to invest in transmission assets to strengthen system reliability as well as leverage new technology to provide a clearer picture of grid conditions over a wider area at any given time.

Natural Resource Stewardship

TVA has direct stewardship responsibility for approximately 11,000 miles of shoreline, 293,000 acres of public land, and almost 650,000 reservoir surface acres available for recreation, water supply, and industrial access. TVA primarily funds resource stewardship services from power receipts. User fees are also used but to a much smaller extent (e.g., TVA campgrounds). In accordance with its 2008 Environmental Policy, TVA is preparing a Natural Resource Plan (NRP) to set direction for management of these resources for the next 10 to 20 years. The 652-mile-long Tennessee River, the 42,000 miles of streams and tributaries, and the 49 dams and 14 navigation locks are a vital part of the nation's inland waterway system, transporting more than 50 million tons of cargo annually. In addition to supporting commercial navigation, TVA's management of the river system includes recreation water supply needs, protecting aquatic habitat, reducing flood risk, producing hydro power, and providing cooling water for TVA's fossil and nuclear plants. Encompassing over 41,000 square miles, the Tennessee River and its 12 tributary watersheds touch 125 counties in portions of seven states.

Economic Development

TVA promotes sustainable economic development by assisting states, communities, and distributor customers in recruiting and retaining targeted businesses and industries that provide high economic impact, while balancing TVA's anticipated future system needs. By providing technical and community development related services to TVA's various stakeholders, TVA's economic development activities strive to help create and retain quality, high-paying jobs and increase the capital investment in the business community to the benefit of the community and the region.

Technology Innovation

TVA is committed to the advancement of knowledge and innovation in the electric utility industry and works in partnership with the Electric Power Research Institute, Oak Ridge National Laboratory, universities, and others to promote the goals of low cost power and clean energy. This year, three signature technologies have been identified for special emphasis of research focus and direction. These are: small modular nuclear reactors, electric vehicle transportation infrastructure, and smart grid technologies. The goal is to identify ways TVA can take a leadership role in demonstrating how these technologies can effectively be used to reduce costs and lower emissions in the service territory.

Budget Overview

Power Program

TVA's power program is entirely self-financing and does not receive any federal appropriations. The power program budget is, however, included in the Unified Budget of the United States Government. TVA is experiencing significant levels of uncertainty relative to the weather, the economy and other factors. TVA's financial information includes estimates which are affected by these changing conditions.

TVA projects revenue to exceed \$12 billion in FY 2012, which includes the estimated impacts of the fuel cost adjustment (FCA). The FCA is a formula under which rates are periodically adjusted to reflect the changing costs of fuel, purchased power, and emission allowances. In FY 2012, TVA projects to invest \$2.6 billion in capital projects for the power system, including \$219 million for clean air projects and \$289 million for transmission system projects. TVA's debt and debt-like obligations increased by \$636 million in FY 2010, and are projected to increase by \$891 million in FY 2011, and \$962 million in FY 2012.

TVA power sales have increased an average of one percent annually during the past decade. To keep pace with this growth, TVA added approximately 8,500 MWs of generating capacity during this period. This growth included both owned generation and purchased power agreements. At the beginning of FY11, TVA added another 955 MWs from Lagoon Creek combined-cycle plant and wind-generated purchased power contracts. TVA has concurrently upgraded its transmission system to maintain reliability and added new customer delivery points to serve this load.

TVA will continue to explore the full range of options available to meet the growing demand. Between FY 2006 and FY 2008, the TVA Board authorized the purchase of three combustion-turbine generating plants and one combined-cycle plant, executed a 15 year operating lease on a second combined-cycle plant and approved construction of two more combined-cycle plants. The first constructed combined-cycle plant in west Tennessee, Lagoon Creek, began commercial operation with a generating capacity of 550 MW in September 2010. The second combined-cycle plant, John Sevier, is anticipated for operation in FY 2012. It is expected to be an 880 MW facility located in northeastern Tennessee. This facility should provide TVA with the flexibility to meet future power needs in the Tennessee Valley while maintaining transmission reliability in the eastern part of its service area. Including the FY 2010 and FY 2012 plants, the actions add 1,813 MW of winter peaking capacity and 3,354 MW of intermediate winter capacity to the TVA system. Additionally, Browns Ferry Nuclear Plant Unit 1 returned to service in May of 2007 and currently supplies additional generating capacity of approximately 1,150 MW with an eventual expected supply of 1,280 MW. On August 1, 2007, the TVA Board approved completing the construction of Watts Bar Unit 2, a nuclear facility. When completed, Watts Bar Unit 2 is expected to provide 1,150 MW of capacity. In August 2010, the TVA Board approved \$248 million to further develop an option to complete the 1,260 MW Bellefonte Unit 1 nuclear reactor. TVA expects to make a decision on construction of Bellefonte Unit 1 in 2011.

TVA's FY 2012 annual gross interest expense is expected to be \$555 million lower than in FY 1997. Annual gross interest expense that once consumed 35 percent of TVA's revenue has been reduced to only 13 percent in FY 2010 and is expected to be between 12 and 13 percent in FY 2011 and FY 2012.

Water and Land Stewardship

TVA continues to meet its obligation to operate and maintain its system of dams, reservoirs, and adjacent lands. Based on the provisions in the Energy and Water Development Appropriations Act of 1998, TVA funds its traditional essential water and land stewardship activities with power revenues, user fees, and sources other than appropriations. No appropriations have been received by TVA for Water and Land Stewardship since FY 1999, and none are requested for FY 2012. Long-term TVA funding levels for these activities are expected to stay about the same. FY 2012 funding of this program is estimated at \$90 million. TVA is preparing a strategic Natural Resource Plan (NRP) and corresponding Environmental Impact Statement, to determine TVA's long-term strategy for complying with its Environmental Policy of 2008. This plan will help identify appropriate levels of future resources.

Budget Details

TVA Operating Budget (millions of dollars)

| | FY 2010 Actual | FY 2011 Estimate | FY 2012 Estimate |
|---------------------------------|-------------------|---------------------|---------------------|
| Revenue | \$ 10,874 | \$11,846 | \$12,115 |
| Operating Expenses | | | |
| Fuel & Purchased Power | (3,219) | (4,344) | (4,384) |
| Operating, Maintenance, & Other | (3,232) | (3,437) | (3,478) |
| Depreciation & Amortization | (1,724) | (1,762) | (1,827) |
| Tax Equivalents* | (457) | (567) | (662) |
| Total Operating Expenses | <u>(8,632)</u> | <u>(10,110)</u> | <u>(10,351)</u> |
| Operating Income | 2,242 | 1,736 | 1,764 |
| Other Income | 24 | 17 | 18 |
| Interest Expense | <u>(1,294)</u> | <u>(1,301)</u> | <u>(1,312)</u> |
| Net Income | <u>\$ 972</u> | <u>\$ 452</u> | <u>\$ 470</u> |

*Tax equivalents are based on the prior year's base revenue and current year FCA revenue.

Note 1: Included budget estimates are subject to change by the TVA Board. The TVA Board approved the FY 2011 budget August 20, 2010.

Note 2: The above budget information includes estimates with significant uncertainty relative to the weather, the economy, fuel prices, etc. which are subject to changing conditions.

(continued)

Capital Budget & Cash Flow*(millions of dollars)*

| | FY 2010 Actual | FY 2011 Estimate | FY 2012 Estimate |
|--|----------------------------|-----------------------------|-----------------------------|
| Operating Activities | | | |
| Net Income | \$ 972 | \$ 452 | \$ 470 |
| Items not requiring cash | <u>929</u> | <u>1,608</u> | <u>1,849</u> |
| Total Cash Provided from Operating Activities | 1,901 | 2,060 | 2,319 |
| Cash Used in Capital Budget | | | |
| Capital Projects | | | |
| Nuclear | (242) | (234) | (279) |
| Fossil | (223) | (344) | (304) |
| Hydro | (55) | (73) | (33) |
| Transmission | (56) | (81) | (84) |
| Other Capital | <u>(54)</u> | <u>(117)</u> | <u>(149)</u> |
| Subtotal | (630) | (849) | (849) |
| Clean Air | (58) | (100) | (219) |
| Ash Remediation | (103) | (141) | (107) |
| Watts Bar Unit 2 | (690) | (635) | (440) |
| Capacity Expansion | <u>(531)</u> | <u>(781)</u> | <u>(1,025)</u> |
| Total Capital Projects | (2,012) | (2,506) | (2,640) |
| Other Sources (Requirements) | <u>(653)</u> | <u>(581)</u> | <u>(782)</u> |
| Total Cash Used in Capital Budget | (2,665) | (3,087) | (3,422) |
| Cash Payments to U.S. Treasury | <u>(29)</u> | <u>(41)</u> | <u>(42)</u> |
| Net Cash Available for Statutory Debt Reduction/ (Increase) | <u>\$ (793)</u> | <u>\$(1,068)</u> | <u>\$(1,145)</u> |
| Reduction/ (Increase) in Debt and Debt-Like Obligations | <u>\$ (636)</u> | <u>\$(891)</u> | <u>\$(962)</u> |

Note 1: Included budget estimates are subject to change by the TVA Board. The TVA Board approved the FY 2011 budget August 20, 2010.

Note 2: The above budget information include estimates with significant uncertainty relative to the weather, the economy, fuel prices, etc. which are subject to changing conditions

Budget Highlights and Hard Spots

TVA is governed by the TVA Board of Directors (TVA Board) which is responsible for approving an annual budget. The information included in this document is based on the FY 2011 annual budget which was approved by the TVA Board in August 2010. The following challenges were considered in preparing the FY 2011 annual budget:

Kingston Ash Spill

TVA continues cleanup and recovery efforts related to the ash spill at the Kingston Fossil Plant (Kingston) in conjunction with federal and state agencies. TVA completed the removal of time-critical ash from the Emory River during the third quarter of 2010. Removal of the remaining ash is considered to be non-time-critical. Once the removal actions are completed, TVA will be required to assess the site and determine whether any additional actions may be needed at Kingston or the surrounding impacted area. This assessment and any additional activities found to be necessary are considered remedial actions.

TVA has recorded an estimate in the amount of \$1.1 billion for the cost of cleanup related to this event. Costs incurred since the event through September 20, 2010, totaled \$600 million. Due to actions of the TVA Board in August 2009, the cleanup cost estimate is classified as a regulatory asset and will be charged to expense as it is collected in rates over 15 years, beginning October 1, 2009. As work progresses and more information is available, TVA will review its estimates and revise them as appropriate. Any estimate changes also will be deferred and charged to expense prospectively as they are collected in future rates.

During 2010, TVA increased the estimate for the cost of cleanup related to this event by \$192 million. The change in estimate was due to increased scope of work to be performed at the site as defined in the Engineering Evaluation Cost Analysis (EE/CA) work order plan which was prepared in accordance with the Environmental Protection Agency's (EPA) Guidance on Conducting Non-Time-Critical Removal Actions under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). In May 2010, the EPA approved TVA's ash disposal plan, which clarified the amount of ash to be removed from the site and the final design and closure of the dredge cell and ash ponds on site.

As work continues to progress and more information is available, TVA will review its estimates and revise them as appropriate. TVA currently estimates the recovery process will be substantially completed in 2014 although monitoring may continue to a future date. Costs incurred since the event through September 30, 2010, totaled \$600 million with a remaining estimated liability of \$525 million.

Because of the uncertainty at this time of the final costs to complete the work prescribed by the ash disposal plan, a range of reasonable estimates has been developed by cost category and either the known amounts, most likely scenarios, or low end of the range for each category has been accumulated and evaluated to determine the total estimate. The range of estimated costs varies from approximately \$1.1 billion to approximately \$1.2 billion.

Weather Extremes

The TVA service area experienced a colder than normal winter and a hotter than normal summer in 2010. This weather was a primary reason for TVA selling 6 percent more electricity in 2010 than in 2009. TVA met the increased demand by using some of its higher-cost facilities and by buying more power in the market.

The hot summer, however, also resulted in TVA having to curtail the use of some of its generating facilities. The summer heat increased the temperatures of the water in the Cumberland and Tennessee Rivers. There were 68 days during the summer when TVA had to curtail generation at some of its coal-fired units because of water temperature. TVA estimates the amount of generation lost was about 540 GWh. Similarly, there were 56 days during the summer when TVA had to curtail generation at some of its nuclear units, primarily Browns Ferry, because of water temperature. TVA estimates the amount of lost nuclear generation at nearly 1,000 GWh.

The increased purchased power and fuel-related costs associated with the cold winter, the hot summer, and the curtailment of generation because of water temperature issues were reflected in TVA's rates through the FCA.

To better address the water temperature issues at Browns Ferry, TVA has initiated a project to construct a new cooling tower, to upgrade four of the existing cooling towers, and to improve the support systems for the plant's cooling towers. The project is expected to be completed in three phases. TVA anticipates having a new cooling tower constructed before the summer of 2011 and having the improved support systems and upgrades in place by the summer of 2013.

Coal Combustion Product Facilities

TVA retained an independent third-party engineering firm to perform a multi-phased evaluation of the overall stability and safety of all existing embankments associated with TVA's wet Coal Combustion Product (CCP) facilities. The first phase of the evaluation, which is finished, involved a detailed inspection of all wet CCP facilities, detailed documentation reviews, and a determination of any immediate actions necessary to reduce risks. The second phase of the program, which is also complete, included geotechnical explorations, material testing, stability analyses, and studies. The study showed that none of TVA's other coal-fired plants showed the same set of conditions that existed at Kingston at the time of the spill and that the ongoing remediation work being done at the plants should bring all of them within industry standards in terms of stability. The third phase of the program, which is implementation of recommended actions, is ongoing. This phase includes risk mitigation steps such as performance monitoring, designing and completing repairs, developing planning documents, obtaining permits, and generally implementing the lessons learned from the Kingston ash spill at TVA's other CCP facilities. As a part of this effort, an ongoing dam oversight program has been undertaken, and TVA employees have received additional training in dam safety and monitoring.

TVA is converting its wet fly ash, bottom ash, and gypsum facilities to dry collection facilities and remediating or eliminating the CCP facilities that were classified as "high" risk during the preliminary reassessment. The classifications, such as "high," do not measure the structural integrity of the facility or the possibility of whether a failure could occur. Rather, they are designed to identify where loss of life or significant economic or environmental damage could occur in the event of a failure. The expected cost of the CCP work is between \$1.5 billion and \$2.0 billion, and the work is expected to take between eight and 10 years to complete.

Coal Fleet Evaluation

TVA is evaluating all coal-fired units in terms of original designs, economics and efficiency, overall performance, cost to operate and the cost to bring them into compliance with current and anticipated environmental regulations. These coal-fired units produce approximately 15,000 MW of generation. About 6,800 MW would require advanced environmental controls in the future, and these associated units are being evaluated to determine whether to idle them, install controls or replace them with alternative generation. In September 2010, TVA idled Unit 5 at Widows Creek. In October 2010, TVA idled Widows Creek Unit 2 and Unit 10 at Shawnee Fossil Plant. These units account for approximately 350 MW of capacity. TVA may make decisions about other units in the near future.

Capital Investment

TVA also faces large capital requirements to maintain its power system infrastructure and invest in new power assets, including cleaner energy sources. TVA believes it is likely that laws or regulations will come into effect in the near future that will require electric utilities to reduce greenhouse gas (GHG) emissions or obtain emission allowance permits under a cap and trade program, and obtain a specified portion of their power supply from renewable resources. Due to the age, lower capacity, and lower efficiency of TVA's older coal-fired units, it may not be economical to continue to operate some plants in the future, particularly if new environmental laws or regulations are passed. TVA is also planning to end the wet storage of fly ash and gypsum at its coal-fired plants, an effort that will involve significant investment.

Renewable and Clean Energy

In accordance with TVA's 2008 Environmental Policy, TVA is working toward obtaining additional power supply from clean or renewable sources by 2020. TVA defines its clean energy portfolio as energy that has a zero or near-zero carbon dioxide emission rate, including nuclear and renewable energy production that is sustainable and often naturally replenished.

TVA has entered into seven contracts for the purchase of up to 1,581 MW of renewable wind energy. The wind resources are located in North Dakota, South Dakota, Illinois, Kansas, and Iowa. TVA began receiving 300 MW of the wind energy in May 2010 and an additional 115 MW in October 2010. The remaining wind resources are under construction with expected deliveries beginning in FY 2012. These deliveries are subject to applicable environmental requirements and firm transmission paths being secured.

Wholesale Rate Structure Changes

Over the last several months, TVA has been discussing with its distributor customers and directly served customers a move from TVA's current rate structure to a new wholesale rate structure, which includes seasonal and time-of-use rates. TVA anticipates that the initial implementation of the rate change will begin in April 2011. The purpose of a transition to seasonal and time-of-use rate structures is to more closely align TVA's revenue recovery with its costs that vary by season and time of day. The new wholesale rates are designed to be revenue neutral to TVA, so this change in structure will not materially impact TVA's annual revenue recovery. There will, however, be some seasonal structural changes that may impact the timing of the revenue recovery between seasons.

Pension Fund

On September 24, 2009, TVA contributed \$1.0 billion to TVA's pension plan, the Tennessee Valley Authority Retirement System (TVARS), for FY 2010 through FY 2013. As of September 30, 2010, TVA's pension plan had assets of \$6.8 billion compared with liabilities of \$10.4 billion for a net underfunded status of \$3.6 billion. The plan currently has approximately 23,000 retirees receiving benefits in excess of approximately \$600 million per year. TVA's proposed budget assumes that annual contributions continue in 2011 and 2012 consistent with recognized pension expense.

Debt Ceiling

The TVA Act specifies that TVA's Bonds may not exceed \$30.0 billion outstanding at one time. As of September 30, 2010, TVA had \$23.7 billion of Bonds outstanding. Increased future capital expenditures along with a restrictive debt ceiling may pose a challenge to TVA's ability to maintain low and competitive power rates.

Congressional Approval of Federal Salary Freeze

Although TVA salaries are not funded in the Budget or by taxpayer dollars and TVA has been entirely self-financed for 11 years and no longer receives direct federal payments, TVA reviewed the language and intent of the legislative freeze on federal employees' base rates of pay that was proposed by President Obama and approved by Congress in December 2010 and applied the principles to its executives, managers, specialists, and excluded employees. This freeze is in effect for calendar years 2011 and 2012 and will include TVA senior executives at the level of vice president and above. TVA also carefully considered how it could best support the spirit in which the President and Congress approved the freeze. Accordingly, in a manner consistent with the guidance issued for implementing the freeze, TVA is also extending these restrictions to the base pay of its managers, specialists, and excluded employees for the duration of the freeze. The freeze does not affect TVA employees in represented positions, meaning employees in positions covered by collective bargaining units. While TVA's role in the salary freeze does not reduce federal spending because it is funded through its own revenues, it is an important action that demonstrates TVA's commitment to the nation's fiscal strength.

Current Management Initiatives

Organizational Effectiveness

In August 2009, TVA launched the Organizational Effectiveness Initiative (OEI) to strengthen the organizational capabilities to deliver on TVA's mission and strategy and to improve organizational performance by focusing on five workstreams: organizational structure, governance and accountability, operating policies and procedures, skill sets, and rewards and recognition. The five OEI workstreams are in various stages of completion. The organizational structure workstream was completed in November 2010 with the following accomplishments: better organizational alignment to TVA's mission, improved management spans of control, clearly defined and documented structure, and formal guidelines to manage changes going forward. The governance and accountability workstream is in the final phase of implementation with the following accomplishments: new management council structure, Office of the CEO role and organization created, and demonstrated improvements in presentation materials needed to support decision making. The operating policies and procedures workstream was completed in December 2010 with the following accomplishments: establishment of ownership and governance for policies and procedures, created/reviewed almost 1,000 policies and procedures, and implemented a standardized procedure website. The skill sets workstream was completed with the following accomplishments: development of a workforce planning model and development of a Talent Management organization. The rewards and recognition workstream was completed with the following accomplishments: revised performance review process that is now linked to TVA's succession planning tool and a revised talent review process leading to transparency of information and open discussion of candidates. Organizational health activities are expected to continue in FY 2011.

Integrated Resource Plan

On June 15, 2009, TVA began the preparation of a new Integrated Resource Plan (IRP) titled *TVA's Environmental and Energy Future*. The purpose of the IRP is to analyze alternative ways of addressing the Tennessee Valley's electricity needs for the next 20 years. The IRP builds on the energy resource portfolio that resulted from TVA's 1995 IRP. The alternative portfolios developed for this effort are being evaluated using several criteria including capital and fuel costs, reliability, possible environmental impacts including climate change, compliance with existing and anticipated future regulations, and other factors. The process has included significant public input in multiple venues including ongoing work with a stakeholder review group. Draft results were issued for public comment in September 2010 and comments were accepted on the draft until early November. A final IRP report that incorporates revisions to the draft results is expected to be completed in the spring of 2011.

Natural Resource Plan

On June 15, 2009, TVA announced the preparation of the NRP. The NRP is a 10 to 20-year strategic plan for the management of the natural resources entrusted to the stewardship of TVA. The plan will establish a strong vision that includes key behaviors to be modeled and operating philosophies to tie administrative processes and procedures together for consistent and effective implementation. It will leverage the value of the public lands entrusted to TVA as part of TVA's overall environmental footprint. Some of the nation's most sensitive resources are located within the Tennessee Valley, including threatened and endangered species and archeological resources.

Cyber Security

TVA has an established Enterprise Information Security Program to assure compliance with industry requirements and best practices. This program has established security standards, training and metrics that assign clear accountability for all security activities throughout TVA. Security controls have been integrated into business processes, enabling timely, coordinated, effective and efficient execution of the program across TVA. To assure sustainability of the agency-wide program, a security management process is being implemented with the goal of being strategic, systematic, repeatable and effective in achieving cyber security goals.

The budgeting of the Enterprise Information Security Program is centralized to improve accountability, visibility and trending. The Information Technology organization incorporates the budgeting and planning of program components into the business planning process and maintains an integrated five-year security strategic plan covering all security functions.

Governance for the program is provided by an Enterprise Security Oversight Committee comprised of TVA executives. This helps to assure that the cyber security program is aligned with business strategy and supports the objectives of the enterprise. TVA uses a full spectrum defense security model in an effort to prevent, detect, respond to and recover from threats against its systems. TVA plans to modify and upgrade its protections as technology advances and threat environments and business requirements change. TVA currently plans to spend approximately \$40 million in cyber security updates through 2013, based on continuous risk assessment performed by the agency.

New Nuclear Generation

TVA is developing options for completing a new nuclear unit at its Bellefonte site. One option being considered is completing Bellefonte Unit 1. This option has been selected as the preferred technology choice for the next nuclear capacity addition and a next phase of development has been authorized. This next phase is comprised of one year of project funding to work primarily on preliminary engineering, licensing framework development, and procurement of long lead components. The NRC has reinstated the construction permits on Units 1 and 2 and has placed them in "Deferred" status. Further reviews by TVA, approval by the TVA Board, and notice to the NRC are required before construction can resume. The NRC's authority to reissue the permits has been challenged in an administrative proceeding, and in a lawsuit filed in the U.S District of Columbia Circuit Court of Appeals.

A second option being developed is the construction of a new nuclear unit at the Bellefonte site. The unit would have a Westinghouse Advanced Passive 1000 reactor. TVA submitted in October 2007 a Combined Construction and Operation License Application (COLA) to the NRC. Contentions have been filed with respect to the Bellefonte Units 3 and 4 COLA.

Oversight, Governance and Financial Performance

Oversight and Governance

In December 2004, the President signed the Consolidated Appropriations Act, 2005, which, among other things, amended the Securities Exchange Act of 1934 by adding a new section 37. Section 37 of this act requires TVA, a non-accelerated filer under Securities and Exchange Commission (SEC) rules, to file financial reports with the SEC. In December 2006, TVA filed its first Annual Report on Form 10-K with the SEC and now files Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, and Current Reports on Form 8-K with the SEC. As an SEC filer:

- The management reporting requirements of Section 404 of the Sarbanes Oxley Act became effective for TVA for FY 2008, and
- As a non-accelerated filer, the auditor reporting requirements of Section 404b of the Sarbanes Oxley Act are not applicable. However, TVA implemented the auditor reporting requirements of Section 404b in FY 2009.

TVA Oversight – A Different Mission with Different Oversight

TVA is a government-owned corporation and federal agency, and its mission is fundamentally different than that of publicly traded companies. TVA is governed by the TVA Board. The TVA Board, when at full strength, has nine part-time members, two of whom may reside outside the TVA service area. TVA Board members are appointed by the President of the United States with the advice and consent of the U.S. Senate. The TVA Board's responsibilities include formulating broad goals, objectives, and policies for TVA and approving plans for their implementation; reviewing and approving annual budgets; setting and overseeing rates; and establishing a compensation plan for employees.

Chief Executive Officer – The Chief Executive Officer (CEO) is responsible for managing and providing governance for all aspects of TVA's mission and values. The CEO is appointed by and reports directly to the TVA Board.

Audit Committee – The TVA Board established the Audit, Risk, and Regulation Committee. The committee is responsible for, among other things, recommending an external auditor to the TVA Board, overseeing the auditor's work, reviewing reports of the auditor and Inspector General, and other activities.

Independent Auditor – An independent auditor audits TVA's financial statements in accordance with standards of the Public Company Accounting Oversight Board (United States) and with *Government Auditing Standards* issued by the Comptroller General of the United States. The auditor also provides an opinion on whether those statements are presented in conformity with U.S. Generally Accepted Accounting Principles (GAAP).

Independent Inspector General – An independent Office of Inspector General (OIG) conducts ongoing audits of TVA's operational and financial matters in accordance with Government Auditing Standards, which incorporate the American Institute of Certified Public Accountants (AICPA) Generally Accepted Auditing Standards. OIG has about 105 employees, including more than 50 auditors. TVA's Inspector General is appointed by the President of the United States. The OIG provides semiannual reports to Congress on the results of its audit and investigative work.

As required by the Inspector General Reform Act of 2008 (Pub. L. No. 110-409), the TVA OIG made an aggregate budget request of \$21.7 million for FY 2012, which includes \$107,000 for OIG training and \$55,000 in support of the Council of the Inspectors General on Integrity and Efficiency. TVA's FY 2012 budget assumes OIG activities at the level requested. TVA received no additional comments from the OIG with respect to the budget proposal.

The TVA OIG conducts an annual audit of the work of TVA's independent auditor to help ensure compliance with generally accepted government auditing standards. Additionally, a peer review audit of the OIG is conducted every three years by another federal Inspector General's office.

Congressional Oversight – Congress provides formal oversight of TVA through two committees, the U.S. House of Representatives Transportation and Infrastructure Committee and the U.S. Senate Environment and Public Works Committee. The audit arm of Congress, the Government Accountability Office (GAO), also conducts audits of various TVA activities and programs, generally at the request of members of Congress.

Executive Branch – TVA routinely submits budget information to the Office of Management and Budget (OMB), and TVA's budget is included in the consolidated budget of the U.S. Government. Additionally, TVA's financial results are included in the federal government's financial statements, which are coordinated with the U.S. Treasury and are subject to audit by the GAO.

The TVA Act – TVA’s congressional charter, the TVA Act of 1933, as amended, defines the range of TVA’s business activities. TVA is also subject to the Government Performance and Results Act (GPRA), which requires that a strategic plan and annual performance reports be submitted to Congress.

Other Regulatory Oversight – In aspects of its operations, TVA is subject to regulations issued by other governmental agencies, including the Environmental Protection Agency, state environmental agencies, the SEC, and the NRC. TVA also complies with applicable regulations of other federal agencies, such as the Department of Labor’s Occupational Safety and Health Administration. While TVA is generally not subject to regulations issued by the Federal Energy Regulatory Commission (FERC), FERC has some regulatory authority over TVA activities. Other organizations with major influence on TVA and others in the electric utility industry include the North American Electric Reliability Council and the industry based Institute of Nuclear Power Operations.

Accounting and Financial Reporting

TVA’s financial transactions are subject to audit by the Comptroller General under various statutes. Further, TVA’s financial statements are annually audited by independent auditors. TVA also submits financial information to OMB, the U.S. Treasury, Energy Information Agency, NRC, and others, in accordance with applicable regulatory and statutory requirements. As required by the TVA Act, TVA maintains its accounting records in accordance with the FERC’s Uniform System of Accounts for Public Utilities. In addition, TVA presents its financial statements and related disclosures in conformity with GAAP promulgated by the Financial Accounting Standards Board.

Monthly Reporting Process

Internal financial performance reporting is done on a monthly basis at all levels within the enterprise and on a weekly basis within some business units. The monthly financial performance reports contain analysis for the income statement, cash flow statement and statement of capital expenditures. The reports also include a balance sheet analysis detailing significant changes during the reporting period. TVA also performs agency-wide financial forecasts on a monthly basis in order to anticipate and respond to events that may have a significant impact on financial performance during the year.

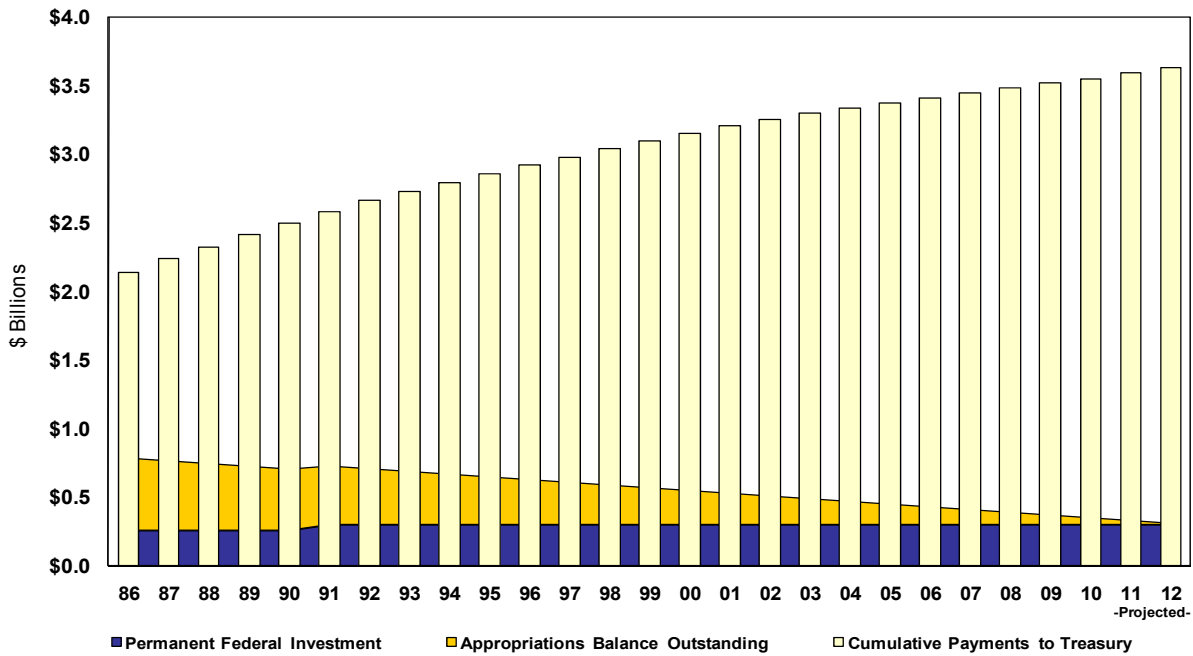
Enterprise Risk Management

TVA has a designated Enterprise Risk Management organization within its Financial Services organization, responsible for coordinating risk assessment efforts at TVA organizations, facilitating enterprise risk discussions at all levels of the organization, and developing and improving risk governance structure and risk assessment processes and methodologies.

Enterprise Risk Management at TVA is an ongoing and evolving process to protect the value of the enterprise and realize opportunities for stakeholders by promoting the efficient and effective management of risk across TVA. TVA is committed to the management of risk using an enterprise-wide approach. The TVA Enterprise Risk Management Policy provides overarching guidance on all risk management activities within TVA, including but not limited to personnel safety, operational contingency, risk control and financial hedging.

TVA has cataloged major short-term and long-term enterprise level risks across the organization. TVA will further integrate risk management practices into all aspects of the business as Enterprise Risk Management continues to evolve in a manner best suited to support TVA’s mission.

Power Program Appropriation Repayment



Financing the Business

For more than 40 years, TVA’s power program has provided a positive cash flow to taxpayers by repaying the government’s appropriation investment in the TVA power program along with a yearly return on the outstanding appropriation investment. Through FY 2012, these payments are expected to total an estimated \$3.6 billion on the federal government’s investment of \$1.4 billion. Under the TVA Act, the government will retain permanent equity in TVA.

TVA uses a debt service coverage (DSC) methodology for calculating its revenue requirement. The DSC methodology provides for recovery of normal operating costs, debt service (i.e., both annual principal and interest payments), and other required costs (e.g., decommissioning and pension contributions) necessary to maintain TVA’s credit quality. TVA also uses a cost of service methodology. Many of these costs, such as fuel and purchased power expense, and nuclear security measures, experience fluctuations that are largely beyond the control of TVA.

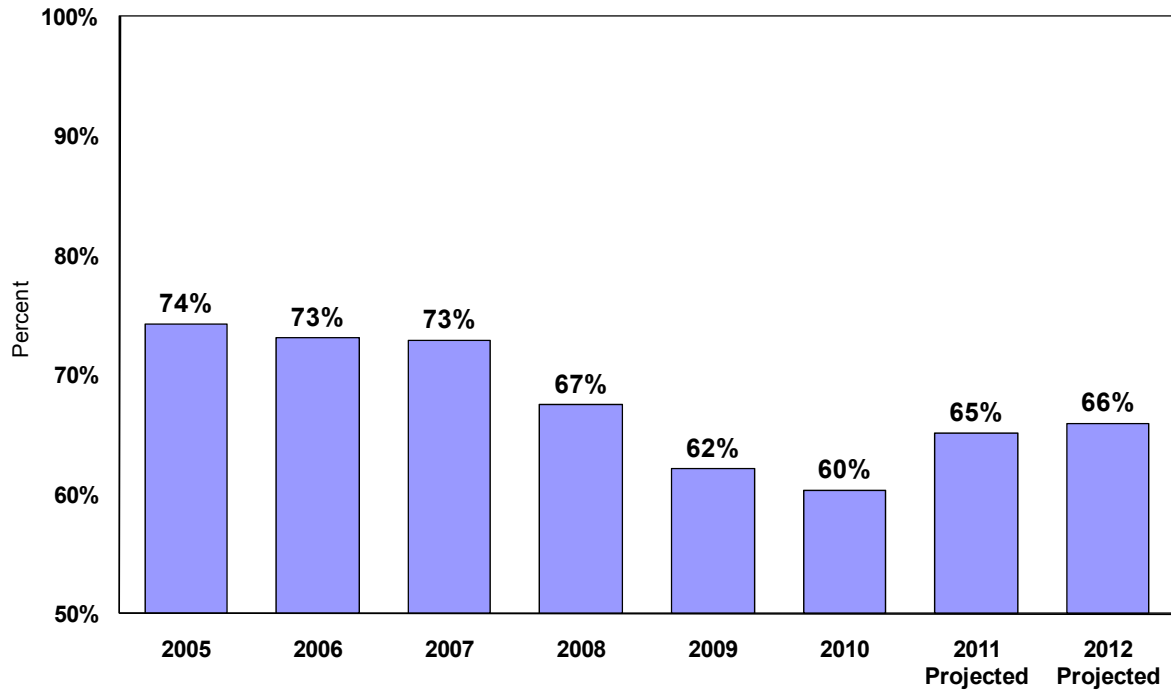
Financial Health

TVA’s financial information includes estimates with significant uncertainty relative to the weather, the economy, fuel prices, etc. which are subject to changing conditions. TVA is self-funded from the sale of electricity and financings that provide capital for the power program. Unlike investor-owned utilities that issue stock, TVA’s sources of capital are more limited. Maintaining TVA’s high credit rating is a key component of TVA’s financial strategy. This strategy is centered on applying sound decision criteria to new investments and improving cash return on total assets for the purpose of debt payment, asset investment and investments to improve environmental performance. TVA plans to continue to make decisions necessary to further its sound financial performance. TVA’s liquidity is enhanced by several factors. The TVA Board has the ability to adjust rates on a quarterly basis, if needed. Additionally, the fundamentals of TVA’s business and high credit rating allow ready access to capital markets when needed, while TVA’s discount-note program provides TVA the short-term capital it needs to fund daily operations. TVA’s financial guiding principles are to:

- Retire debt over the useful life of assets;
- Only issue new debt for new assets;
- Use regulatory accounting treatment for specific unusual events;
- Rate increases as necessary to fund operational spending;
- Evaluate rate actions to avoid significant rate volatility; and
- Implement rate actions to maintain financial flexibility.

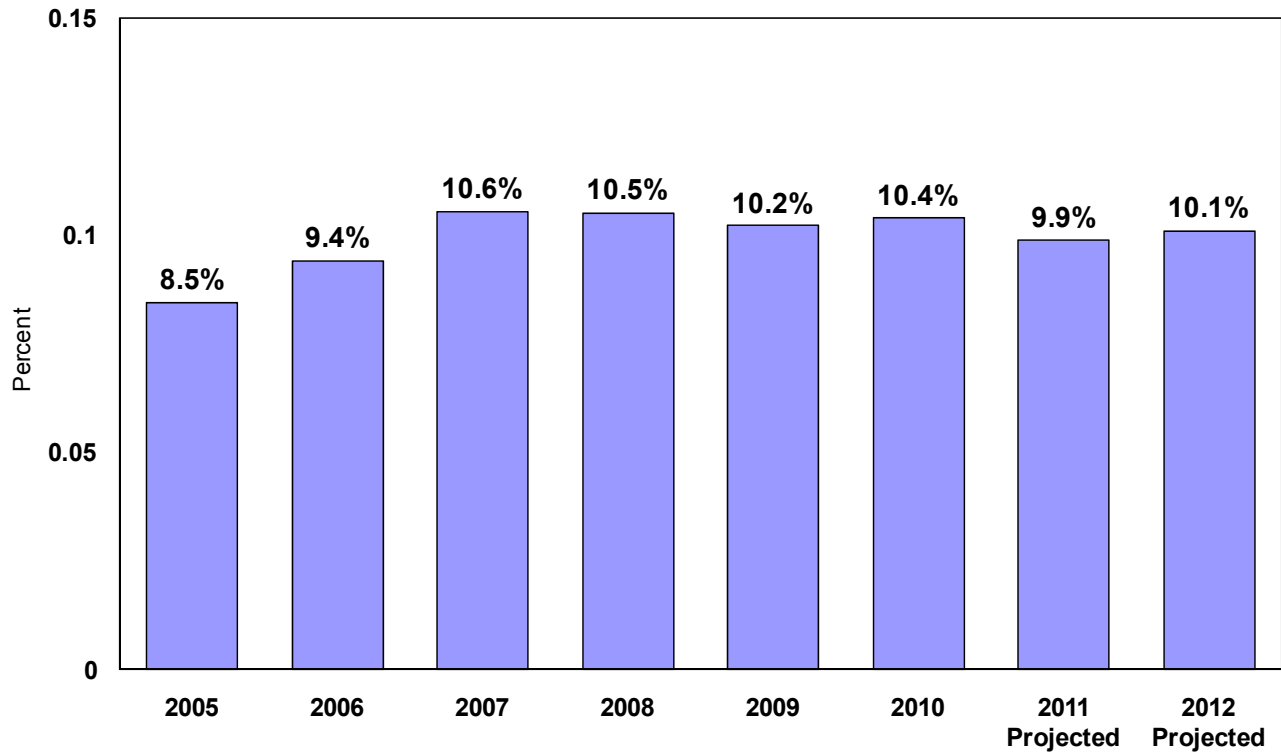
These actions will allow TVA to maintain a balance of financing obligations that is manageable and commensurate with its level of assets. TVA will track its financial health by measuring Total Debt and Debt-Like Obligations as a percent of Total Assets.

Total Debt and Debt-Like Obligations / Total Assets %



In addition to sound criteria for new investments, improving non-fuel Operating and Maintenance expenses is a central component of TVA's operations strategy and a key aspect of achieving cash return on assets. The measure of this goal will be a ratio of Earnings before Taxes, Interest, and Depreciation and Amortization (EBITDA) to Total Assets. See Appendix for a reconciliation of EBITDA, which is a non-GAAP measure, to the most directly comparable GAAP measure.

**Earnings Before Interest, Taxes, Depreciation,
Amortization (EBITDA)* / Total Assets %**

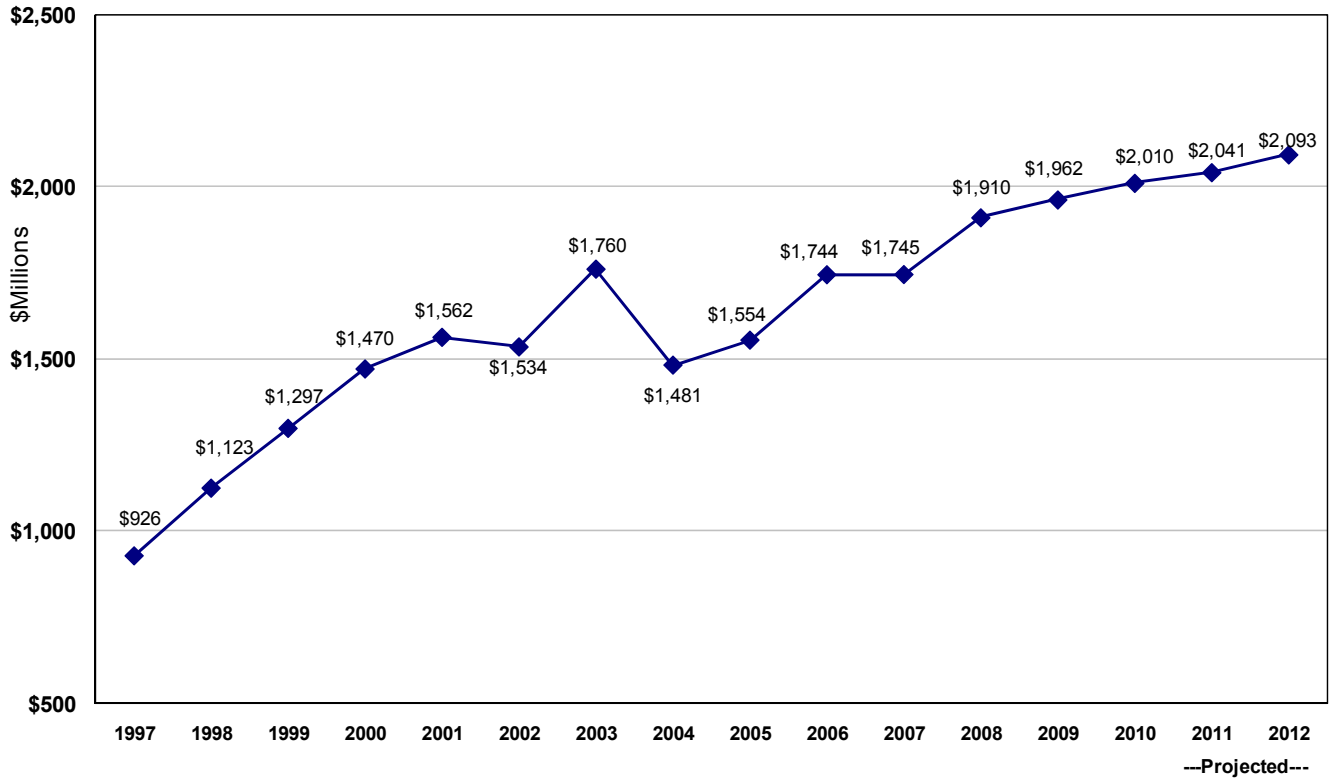


*See Appendix for a reconciliation of EBITDA to the most directly comparable GAAP measure.

Cash Flow from Operations (3-Year Trailing Average)

The amount of cash that TVA generates from its operations during the year – operating cash flow – is one of the best ways to measure TVA’s ability to meet its short-term obligations. Because power revenues and cash flow are greatly affected from year to year by weather and economic conditions, TVA uses a three-year average cash flow to provide a measure of its financial health.

Cash Flow From Operations
3-Year Trailing Average

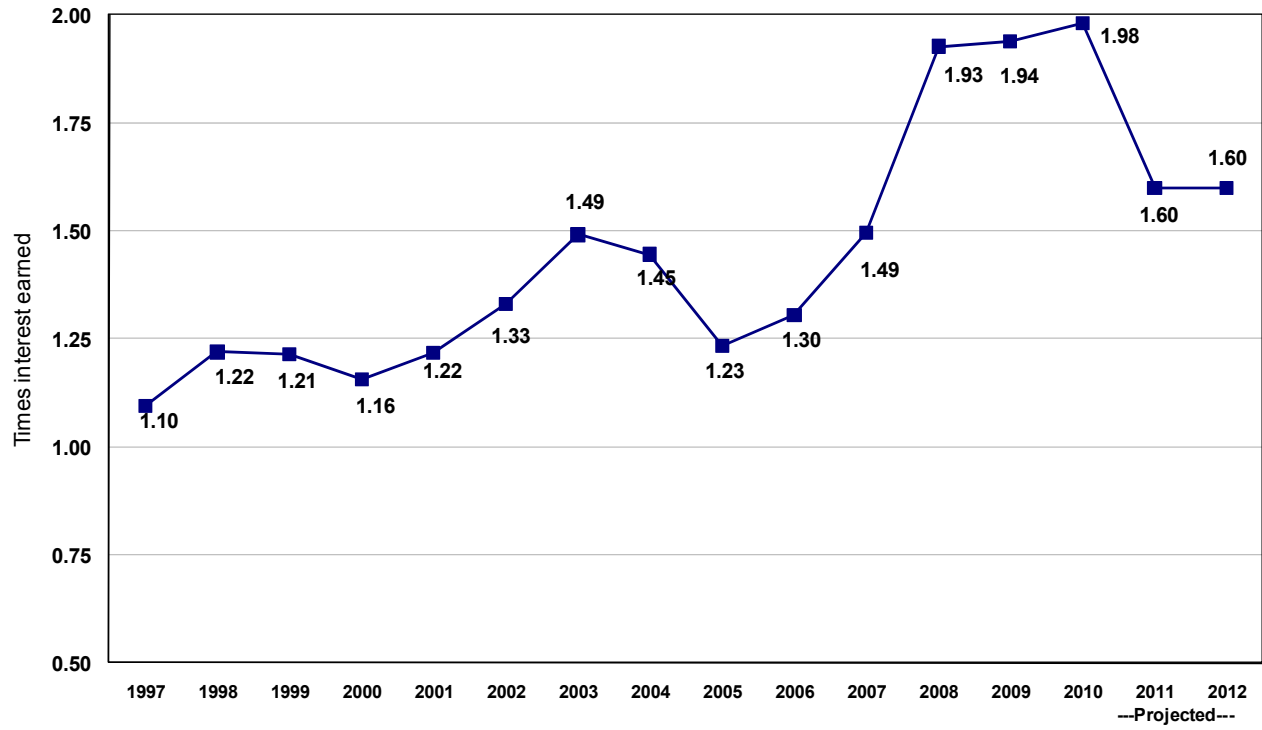


Interest Coverage

TVA's ability to service its statutory debt, measured by the degree to which Earnings Before Interest and Taxes (EBIT) covers interest obligations, has also improved over the past several years.

The significant decrease in interest coverage from FY 2003 to FY 2005 was due to an increase in fuel and purchased power expense due to higher market prices and increased generation. Interest coverage experienced a sharp improvement in FY 2008 due to additional revenue from the FCA. Normal interest coverage trends are expected to return in FY 2011 and FY 2012

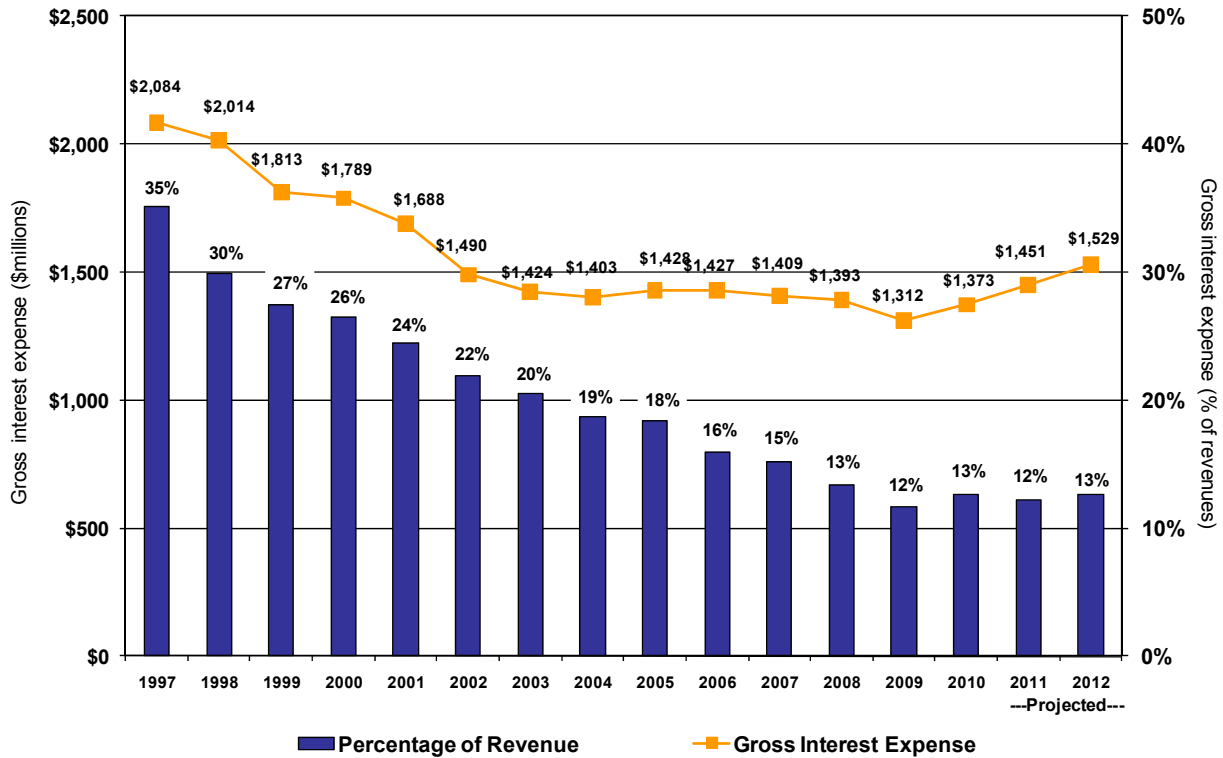
Interest Coverage Ratio



Interest Expense

TVA intends to continue to manage fixed costs including interest expense. Annual interest expense was more than \$2 billion at its peak. This amount has declined 34 percent, to \$1.4 billion in FY 2010. In FY 1997, annual interest expense as a percentage of total revenues was 35 percent. That figure has been reduced to only 13 percent of revenues for FY 2010 and expected to decrease to 12 percent in FY 2011 and return to 13 percent in FY 2012.

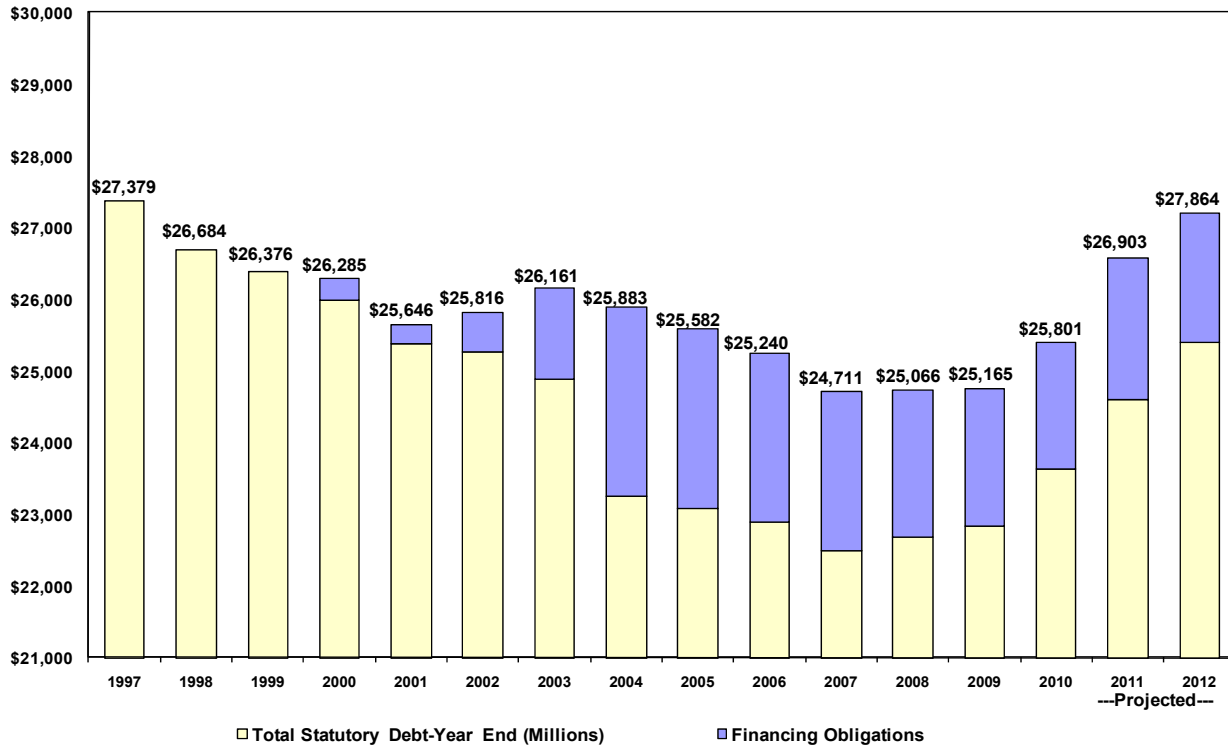
Interest Expense



Financing Obligations

From FY 1997 through FY 2010, TVA has reduced its Total Debt and Debt-Like Obligations, which include both statutory debt and alternative financing mechanisms such as certain lease obligations and prepaid energy obligations, by \$1.6 billion. This includes a net reduction of statutory debt of approximately \$3.8 billion during that same period. Total Debt and Debt-Like Obligations are expected to increase in FY 2011 and FY 2012 to fund capacity expansion, clean air capital, ash remediation, and the Kingston ash spill recovery.

Total Debt and Debt-Like Obligations at Year End
(in millions)



Credit Facilities

The TVA Board has approved TVA entering into a credit facility or facilities not to collectively exceed \$5 billion. Thus far, TVA has entered into three such facilities, which allow TVA to borrow up to \$2.5 billion. They are not intended to be used as a tool to manage daily cash operations or as a primary source of funding. Any outstanding borrowings on the facilities count towards TVA’s statutory debt limitation. TVA has not borrowed any money under the credit facilities, although TVA has arranged for a letter of credit to be issued under one of the credit facilities.

In December 2008, TVA and the U.S. Treasury replaced a \$150 million note with a memorandum of understanding under which the U.S. Treasury provided TVA with a \$150 million credit facility. This credit facility matures in September 30, 2011, and is expected to be renewed. There were no outstanding borrowings under the facility at September 30, 2010.

TVA's Mission and Results

Low-Cost Power and Reliability

Power Sales and Revenue

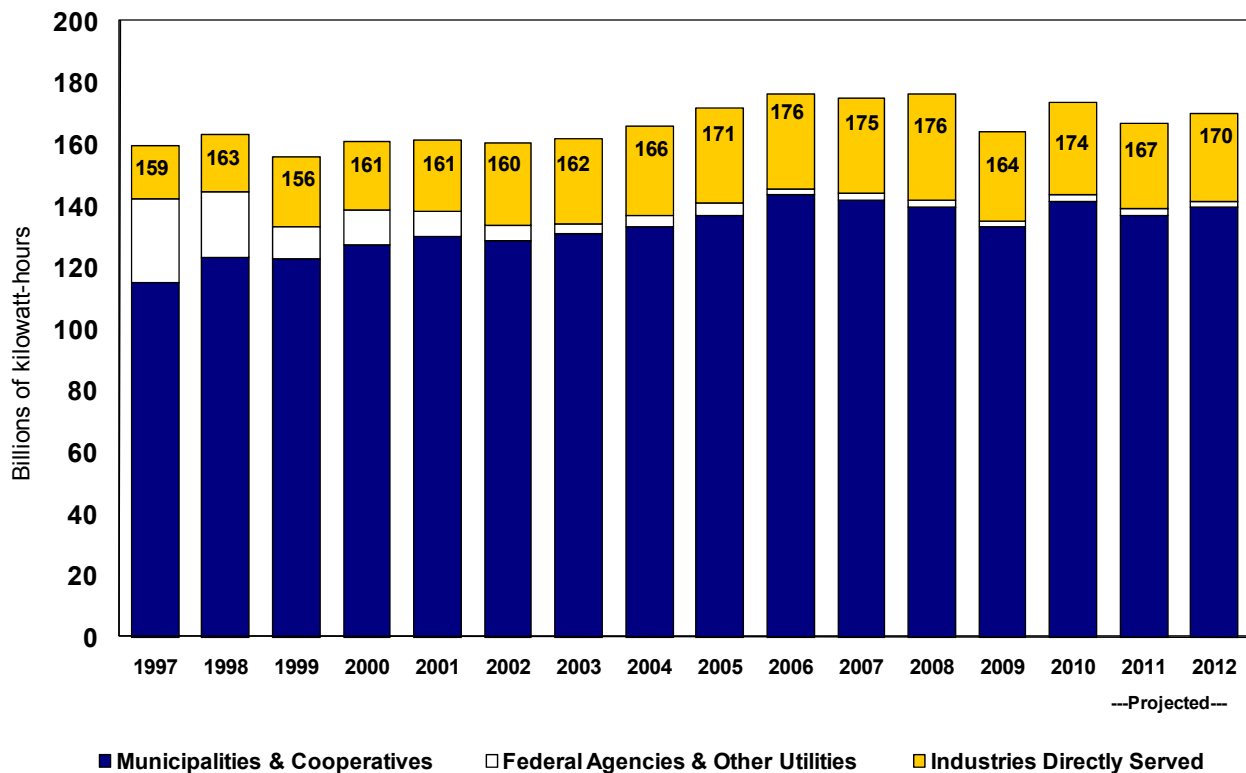
TVA sells electricity to three main customer groups:

Municipalities & Cooperatives: TVA delivers power to wholesale customers, which include municipal utility companies and cooperatives, who resell that power to consumers. The municipal utilities make up the largest block of TVA customers. Cooperatives are customer-owned companies, many of which were formed to bring electricity to the farthest reaches of the Tennessee Valley. These municipal and cooperative distributors represent the majority of TVA's business.

Industrial Directly Served Customers: TVA also sells power directly to industrial customers with large or unusual loads.

Federal Agencies and Others: TVA sells power directly to federal agencies. Off-system sales are included in the "Other Utilities" category. TVA is authorized under the TVA Act to sell power under exchange power agreements to certain neighboring utility systems. Sales to these companies typically represent less than 1 percent of TVA's total power sales.

TVA Total Sales



Demand in the TVA Service Territory

In FY 2010, TVA sold 174 billion kilowatt-hours of electricity and is estimated to sell 167 billion kilowatt-hours in FY 2011 and 170 billion kilowatt-hours in FY 2012. Most of TVA's sales growth in the past several years has come from customers who are municipal and cooperative distributors of TVA power, which has offset reduced demand from industrial customers. Demand for electricity in the TVA region grew at approximately two percent annually from FY 1995 through FY 2010. While economic conditions have reduced power demand in recent years, TVA believes power demand will grow under most likely scenarios, and TVA intends to make capital investments in the current year as well as future years. The population of the TVA service region has surpassed 9 million, growing at a rate slightly higher than the national average.

| TVA System Capability | | |
|---|---------------|---------------|
| <i>Summer net capability (MW) at September 30, 2010</i> | | |
| Fossil | 14,573 | 39% |
| Nuclear | 6,632 | 18% |
| Hydro | 5,490 | 15% |
| Combustion Turbine (owned or leased) | 7,358 | 20% |
| Power Purchase Agreements | 3,101 | 8% |
| Other* | 34 | <1% |
| Capacity** | 37,188 | 100% |

* Other includes 19 MW of Contract Renewable Resources, 13 MW of Diesel Generator capacity and 2 MW of Renewable Resources Owned by TVA.

**Includes 440 MW of capacity contracted by TVA from the two-unit Red Hills Generation Plant owned by Choctaw Generation, LP. Hydro capacity represented includes pumped-storage.

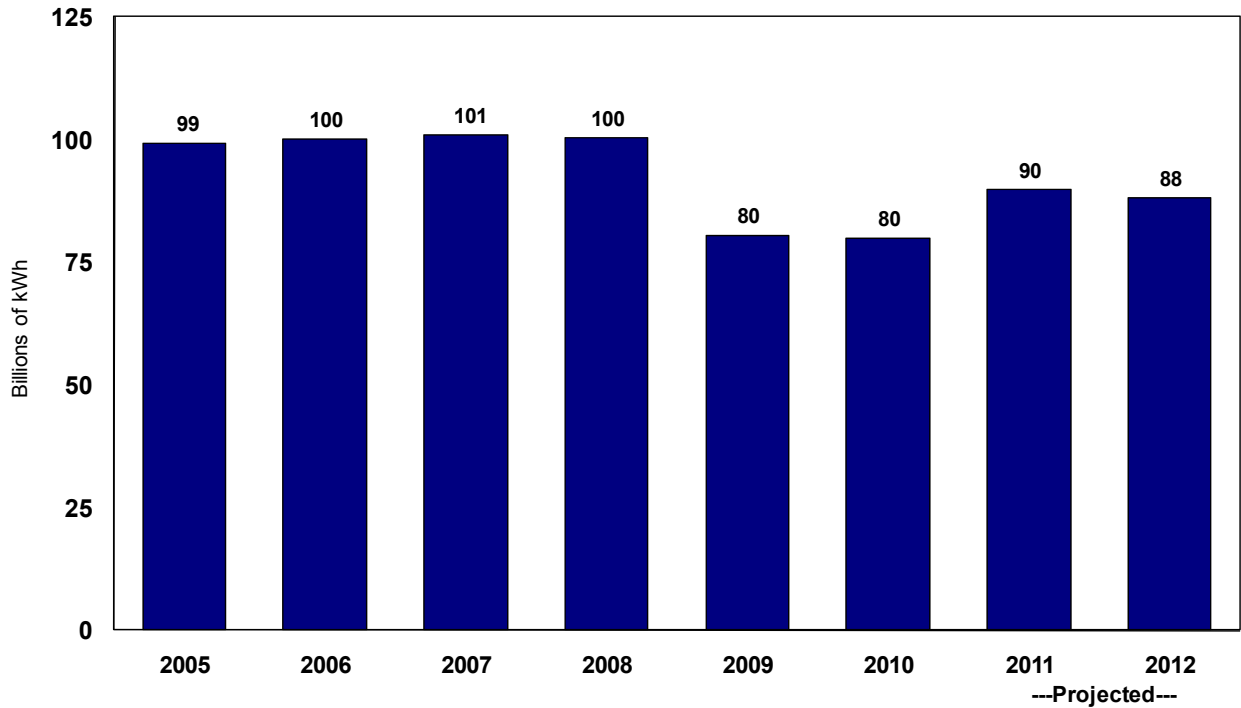
Operational Performance

Fossil Power Highlights

The mainstay of TVA's power production portfolio is its fleet of 11 coal-fired plants, which represent a combined 14,573 MW of net summer capability. TVA's fossil system also includes 88 simple-cycle natural gas-fired combustion turbine units at eight plant sites and six natural gas combined-cycle units. The simple-cycle combustion turbine sites are peaking sites that are designed to start quickly and help meet demand for electricity during peak operating periods.

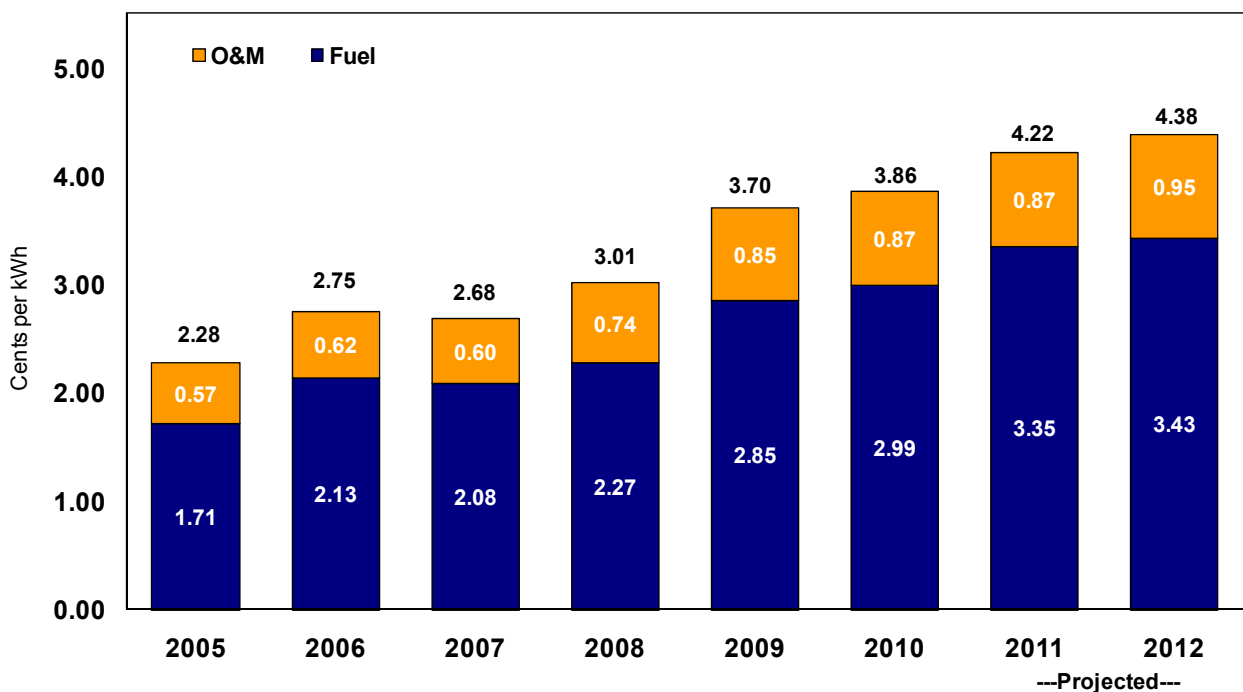
Coal generation for FY 2010 was lower than expected due to increased generation from hydro and other lower-cost resources. Coal generation is projected to return to higher levels in FY 2011 and FY 2012 as energy needs increase, Kingston returns to full service and additional generation is needed to replace nuclear during refueling outages. As new nuclear and gas generation come on line, and coal generation begins to decline significantly, TVA will continue to progress toward its vision of being the Nation's leader in improving air quality.

TVA Fossil Power Generation



Production expense per kilowatt-hour is expected to increase from FY 2010 to FY 2011 due to increased fuel costs and operation and maintenance costs associated with mitigation of known risks and to continue sustainability of performance improvements. In FY 2012, production expense per kilowatt-hour is expected to increase from FY 2011 due to increased fuel costs, expected particulate control costs and the additional costs associated with the start-up of the John Sevier Combined-Cycle Plant.

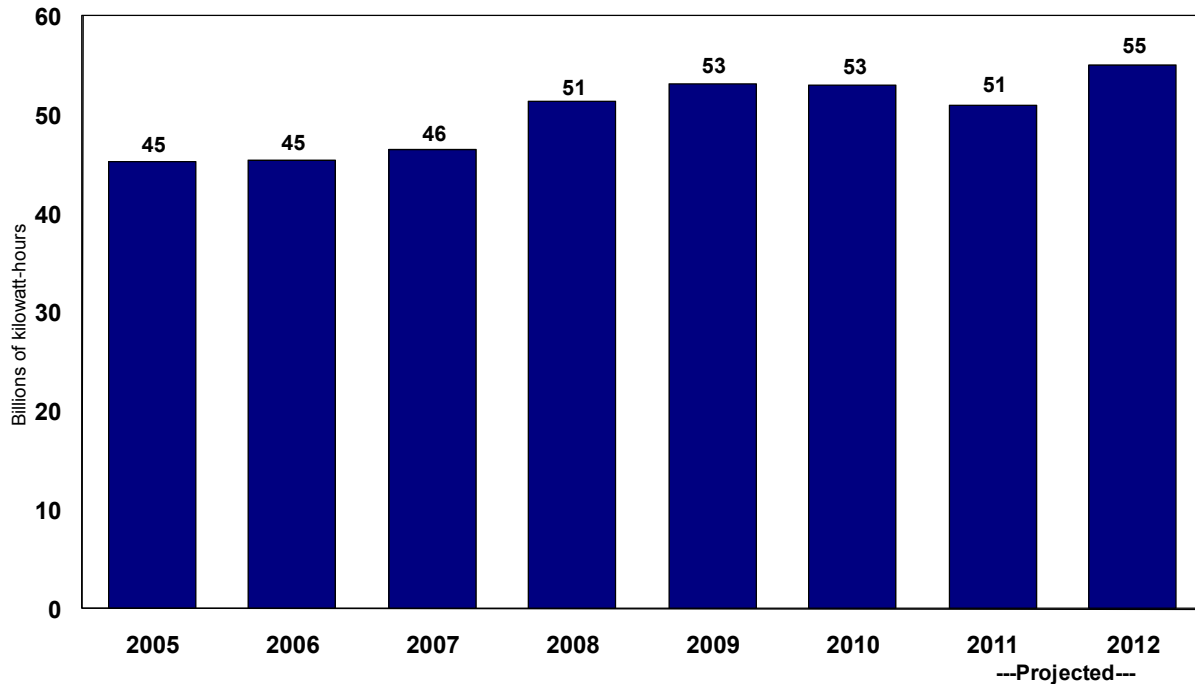
Fossil Power Production Expense



Nuclear Power Group Highlights

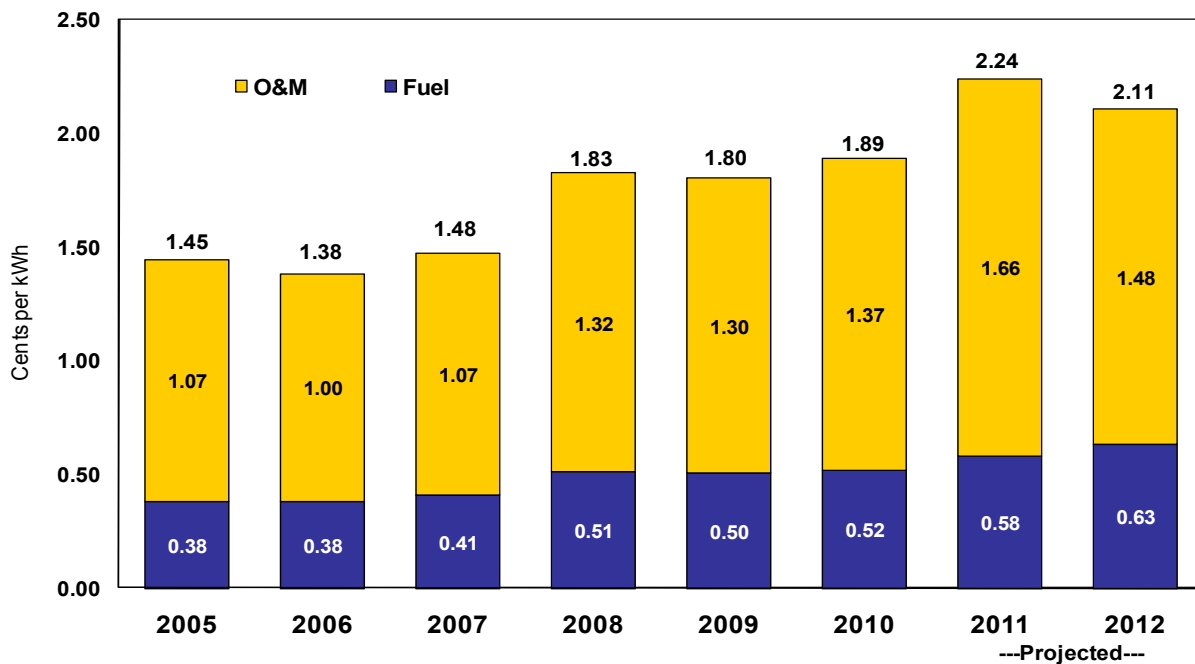
TVA's nuclear operations are critical to meet the region's power needs. In FY 2012, TVA's nuclear units are expected to generate 55 billion kilowatt-hours of electricity, which should represent approximately 32 percent of TVA's total net generation.

TVA Nuclear Generation



TVA's total nuclear production expense on a per-kilowatt-hour basis is expected to increase in FY 2012 due to increasing costs and higher operation and maintenance costs for equipment reliability projects.

Nuclear Power Production Expense

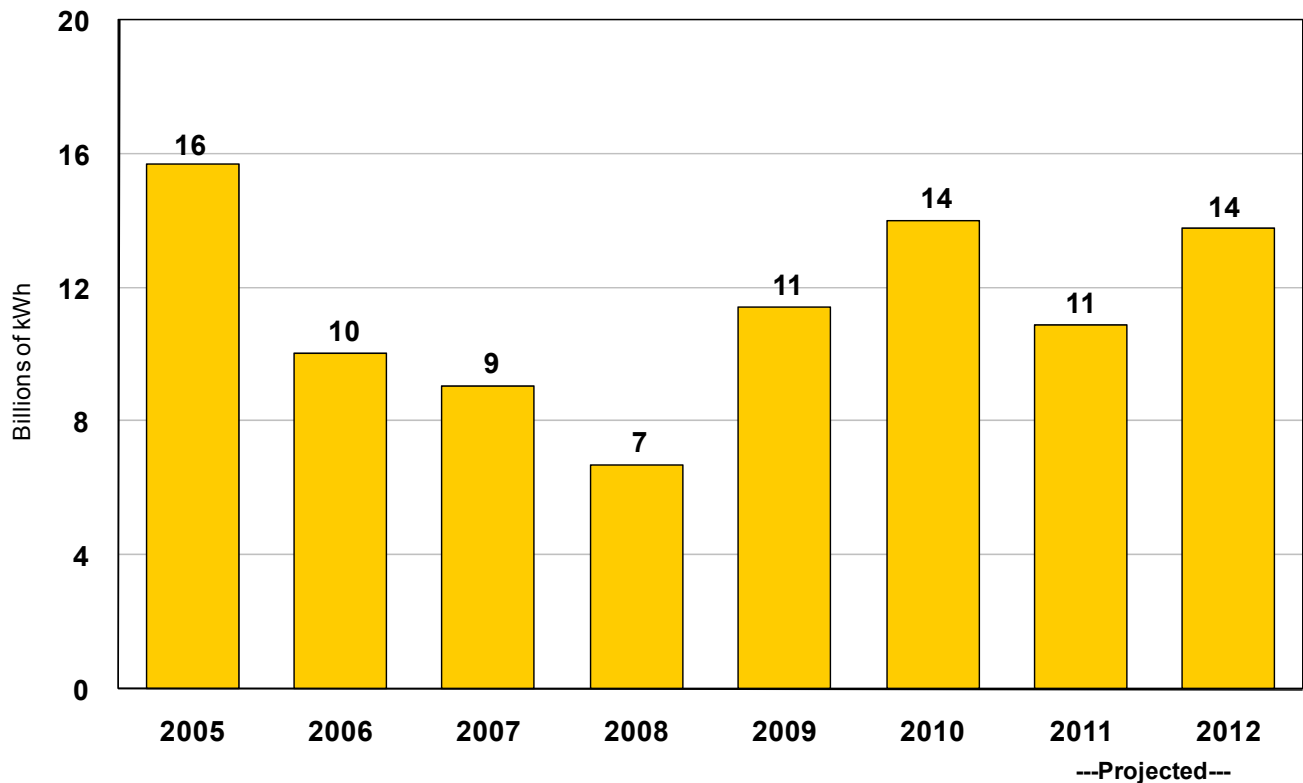


Hydroelectric Power Highlights

In FY 2010, TVA's integrated hydroelectric power system of dams and pumped-storage units generated approximately 14 billion kilowatt-hours of electricity – approximately 9 percent of TVA's total net generation - and in FY 2012 it is estimated to produce approximately 14 billion kilowatt-hours – approximately 8 percent of TVA's total net generation. Generation in FY 2010 increased approximately 23 percent from FY 2009 due to higher rainfall and run-off levels. FY 2011 generation is lower than FY 2010 because of the uncertainty around weather conditions. In FY 2012 generation is expected to return to a normal with normal weather predicted. While hydroelectric power represents a smaller amount of total net generation than other sources, hydroelectric power represents a very important element in TVA's total portfolio.

TVA's hydroelectric facilities have very low operating costs and can be used as base-load, intermediate, or peaking units, depending on water availability and system needs. TVA's Raccoon Mountain pumped-storage facility allows TVA to store electricity in the form of potential energy by using inexpensive off-peak electricity to pump water to a mountain-top reservoir. This water is then used to generate electricity on-peak when power is more expensive or otherwise unavailable.

TVA Hydro-System Net Power Generation



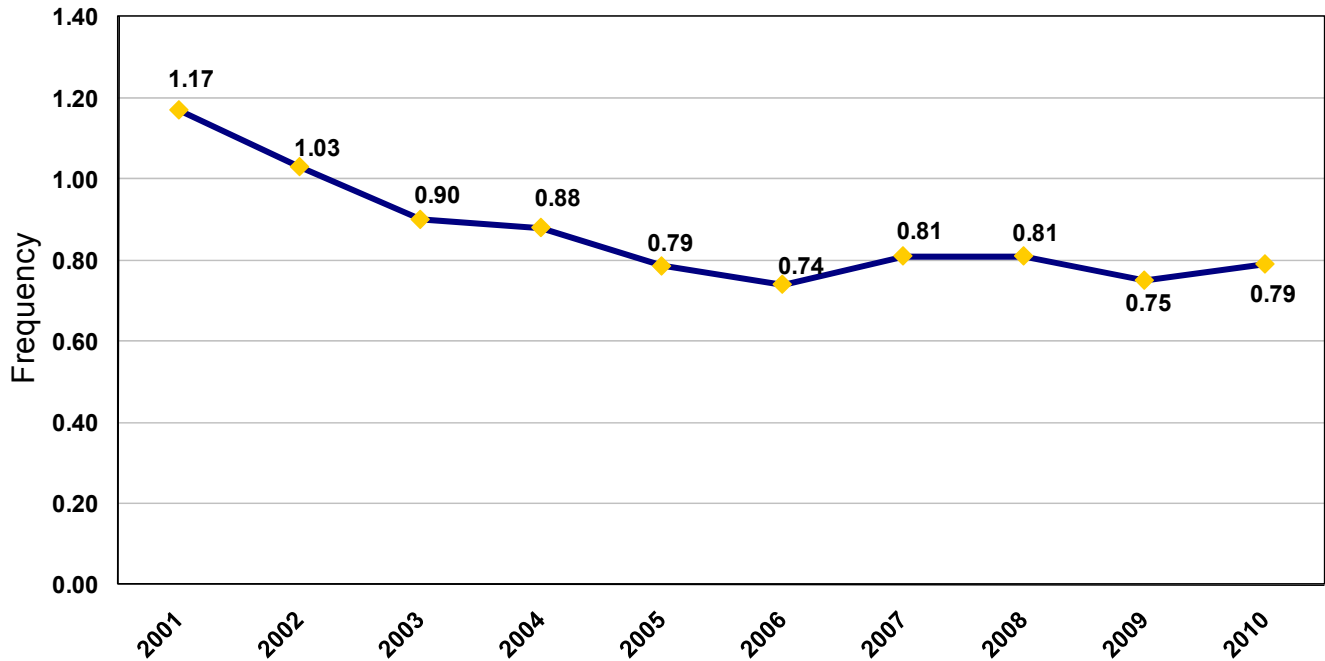
TVA Transmission Highlights

The TVA transmission system, one of the largest in North America, delivered more than 171 billion kilowatt-hours of electricity sales in FY 2010 and over the past 11 years maintained 99.999 percent reliability for delivering electricity to its local power distributors and direct served large industrial and government customers. In FY 2012, the transmission system is expected to deliver nearly 170 billion kilowatt-hours of electricity. This system is comprised of approximately 15,940 circuit miles of transmission lines, including 2,465 miles of extra-high-voltage (500,000 volt) transmission lines, 498 substations, power switchyards and switching stations, 1,240 connection points, and 237,500 right-of-way acres.

The TVA transmission organization offers transmission services, similar to those offered by other transmission operators, in accordance with standards of conduct that separate its transmission functions from TVA’s marketing functions.

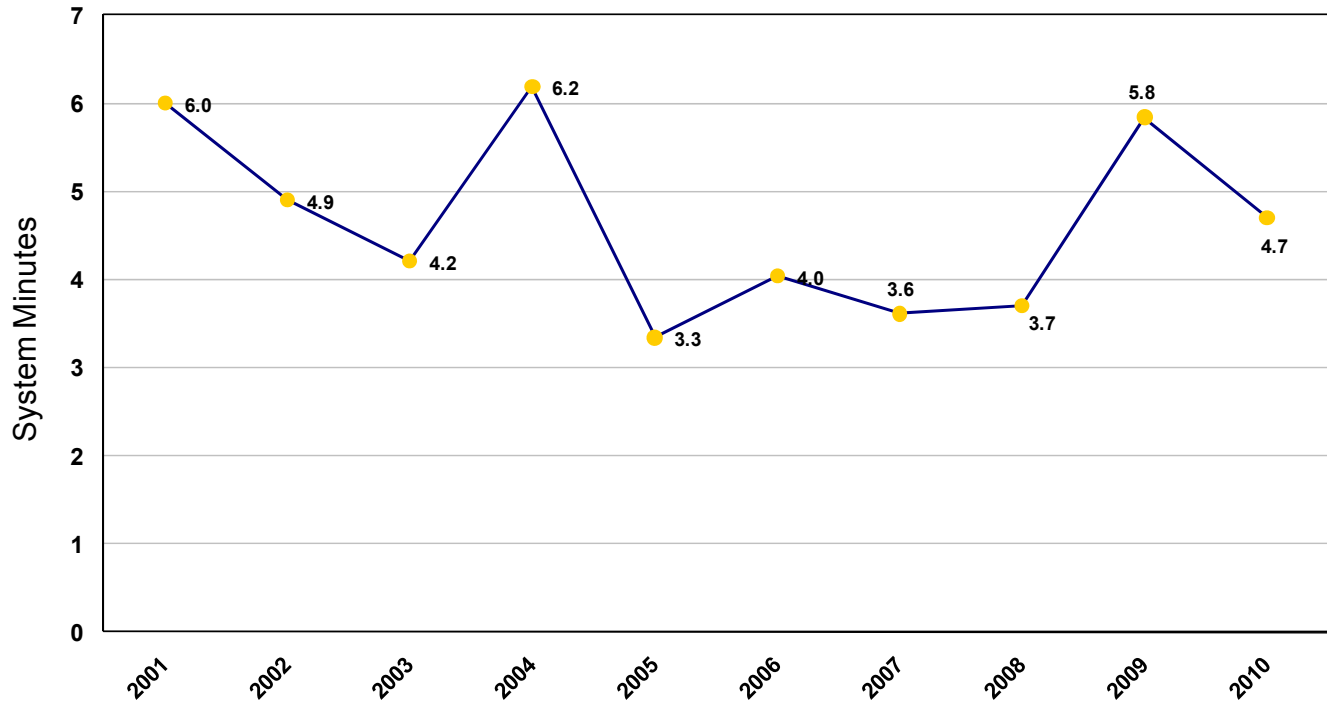
Connection point interruptions are driven primarily by weather, and can be particularly difficult to reduce across large transmission systems such as TVA’s, which has thousands of miles of lines crossing rural areas. However, the impact of lightning strikes on TVA’s transmission system, the single-largest cause of transmission interruptions in the TVA region, has been reduced by approximately 60 percent since FY 1995 by investing annually in lightning mitigation projects.

Connection Point Interruptions



Another measure of reliability is Load Not Served (LNS), which is a measure of the magnitude and duration of interruptions that affect TVA customers. LNS applies to interruptions that exceed one minute and is calculated by multiplying the percentage of total load not served (in megawatt-hours) by the number of minutes in the fiscal year. TVA is taking proactive steps to maintain an improved level of LNS by working on its transmission preventative maintenance program, identifying equipment that is nearing the end of its service life and replacing it before failure, and recovering rapidly from interruptions.

Load Not Served (LNS)



Environmental Stewardship and River Management

TVA manages the Tennessee River system to provide public benefits including navigation, flood control, power production, water supply, and recreation. TVA routinely involves the public in its environmental decision-making. Due to the increasing level and complexity of environmental requirements and expectations, TVA completed a new high-level environmental policy to align with and execute the direction in the TVA Strategic Plan. The Environmental Policy was approved by the TVA Board in 2008 and is intended to identify environmental objectives that will allow TVA to produce cleaner and still-affordable electricity.

In August 2010, TVA reviewed its 2008 Environmental Policy and found that progress has been made on the Environmental Objectives for all six areas of the Policy and that no changes (internal or external) necessitate policy revisions. The Policy remains consistent with stated TVA Board strategy and policy. Environmental impact studies to assess implementation of the policy are underway (e.g., IRP and NRP).

On June 2, 2010, TVA submitted its Strategic Sustainability Performance Plan (SSPP). Implementing TVA's SSPP will demonstrate TVA's environmental leadership in selected target areas including green and efficient buildings and greenhouse gas reduction. Implementation is expected to reduce TVA's costs and risks over the long term and position TVA to become a sustainability leader among utilities.

TVA anticipates future federal legislation and regulations requiring reductions in emissions of greenhouse gases and conventional air pollutants, as well as mandatory increases in power generation from renewable resources. In light of an increasing national focus on renewable and clean energy and in accordance with TVA's 2008 Environmental Policy, TVA is working toward obtaining additional power supply from clean and renewable sources by 2020. TVA's Environmental Policy also aims to stop the growth in volume of greenhouse gas emissions and reduce the rate of emissions by FY 2020.

The TVA Board also has approved guiding principles for an Energy Efficiency and Demand Response Plan and a Renewable and Clean Energy Plan. The Energy Efficiency and Demand Response Plan seeks to slow the current rate of growth in the region's power demand by providing opportunities for residential, business, and industrial consumer groups to use energy more efficiently. The Renewable and Clean Energy Plan strives to add clean energy resources to TVA's generating mix to help reduce carbon emissions. The Plan advises TVA to reduce the carbon intensity of the power generation in a cost-effective manner through the implementation of conservation measures, preferentially reviewing regional renewable and clean energy supply options, and considering technology innovations to address intermittency issues associated with renewable options.

TVA is currently conducting two significant reviews of the options and methods for meeting the objectives outlined within the Policy. The IRP, titled *TVA's Environmental and Energy Future*, is a comprehensive study of alternatives to achieve a sustainable future and meet the electricity needs of the Tennessee Valley over the next 20 years. This will be done by analyzing various combinations of supply-side and demand-side management options. The goals of the Environmental Policy for sustainable land use and natural resources are being considered through a focused NRP. The NRP is studying various ways in which TVA can address future natural resource stewardship needs of the Tennessee Valley. It will evaluate the implementation of TVA's reservoir lands planning, natural resource management, water resources management, and recreation processes and strategies. This will help determine how TVA will manage its recreation and natural resources for the next 10 to 20 years.

River System

TVA has federal jurisdiction for managing the Tennessee River and its tributaries to deliver multiple benefits, including year-round navigation, reduced flood damage, affordable and reliable electricity, recreation opportunities, adequate water supply, improved water quality, and economic growth. TVA has direct stewardship responsibility for about 293,000 acres of public land, approximately 11,000 miles of shoreline, and over 650,000 acres of reservoir water surface available for recreation and other purposes. TVA reservoirs and public lands provide outdoor recreation opportunities for millions of visitors each year.

Navigation on the Tennessee River is made possible by the system of dams and locks and provides significant contributions to the regional economy. Construction of a new lock at Chickamauga Dam above Chattanooga is essential to maintaining navigation on the upper Tennessee River. TVA eventually will need to close the existing lock due to safety issues stemming from concrete growth. Concurrently, a new lock project is underway at Kentucky Dam, near Paducah, Kentucky. The U.S. Army Corps of Engineers is responsible for both construction projects.

TVA also manages the river system to provide water for hydro generation and cooling water for TVA nuclear and fossil power plants. Other water supply activities include issuing permits for water intake structures and promoting regional water supply planning and project implementation.

TVA has installed and is upgrading equipment at its dams to help provide the flows and oxygen levels needed for a healthy aquatic community in tail waters (the areas immediately downstream from dams). In managing the watershed, TVA balances water quality protection with other demands for water use, and implements a number of activities such as the Targeted Watershed Initiative Program, Tennessee Valley Clean Marina Initiative, and a Strategic Partnership Initiative. TVA performs year-round monitoring and analysis of the 41,000-square-mile watershed and reports to the people of the region on the health of the river system.

TVA and Air Quality in the Tennessee Valley

The latest annual air-quality trends report issued by the Environmental Protection Agency shows air quality in the nation has steadily improved, with a 54 percent decline in collective emissions (from 1980 to 2008) of the six principal pollutants: sulfur dioxide, nitrogen dioxide, ozone, carbon monoxide, particulate matter, and lead. Data for the Tennessee Valley region has also shown a significant improvement in air quality, and TVA continues reducing emissions from its coal-fired plants while supplying affordable, reliable electric power. Over the past several years, TVA has made notable efforts to enhance its environmental performance and is continuing to make further improvements in air quality. While economic conditions contributed to less fossil generation and somewhat lower emissions in 2009, TVA's record in removing these pollutants remains one of the strongest and most effective in the industry. Since 1995, TVA has reduced its annual NOx emissions by 89 percent by installing various controls, including low-NOx burners and/or combustion controls on 58 of its 59 coal-fired units and installing selective catalytic reduction units, or SCRs, on 21 of the largest units. Through CY 2009, TVA reduced its SO2 emissions by 91 percent from the peak 1977 level by switching to lower-sulfur coals and operating scrubbers on seven larger units. As of September 30, 2010, TVA spent \$5.3 billion on clean air controls at its 11 coal-fired power plants. TVA estimates that spending on emission controls for SO2, NOx, and mercury in the decade beginning in FY 2011 will cost approximately \$4.95 billion.

Economic Development and Technological Innovation

Demonstrating leadership in sustainable economic development in the Tennessee Valley region means helping communities recruit and retain quality jobs and making the region a better place to live and work.

TVA Economic Development's goal is to be a source for economic development information and services across the seven-state Tennessee Valley region. TVA's effective partnerships with its customers and communities have helped produce quality jobs and resulted in significant capital investments in new and existing companies. Economic development efforts are performed in partnership with private and public organizations, including regional and state agencies. TVA helps meet the needs of its stakeholders for regional economic development that results in a better life for Tennessee Valley residents today and into the future. TVA's innovative programs and services combine to create powerful tools for sustainable economic development. These programs and services include the following:

Global Business

Industrial Recruiting Services

TVA works with distributor customers and local, state, and regional economic development organizations to recruit industrial prospects through an integrated package of economic development resources.

Regional Development

TVA assigns a regional development specialist with economic development expertise to serve counties in a specific TVA region to help create, sustain, and foster job growth.

Community Development

Community Preparedness

TVA helps communities increase their competitiveness in attracting investment and creating jobs by delivering training to local community leaders.

Training

TVA helps communities by providing need-specific training to increase the competitiveness of our communities in economic development.

Rural Initiative Strategy

TVA helps rural communities better market their sites and area to prospective companies and site selection consultants.

Consumer Connection

Consumer Connection is an economic development program that links communities with retail business opportunities, expansions, and retentions.

Business Resources

Existing Industry Support

An array of products and services are geared to meet the expansion and retention needs of existing industries. These include financial support, technical services, and industry consulting services.

Economic Development Loan Fund

These funds are designed to stimulate job creation and leverage capital investment in the TVA power service region. The loan funds are open to primary manufacturing companies and other institutions, including TVA customers, communities, and nonprofit economic development corporations.

Special Opportunities Counties (SOC) Loan Fund

This revolving loan fund is available to the region's most economically distressed counties. Loans are made to assist with industrial expansion, job creation, and site/building improvements.

Business Incubation Network

Business incubators provide the support that many companies need to survive the challenging early stages of business start-up. Over the years, TVA has provided financial and technical assistance to help communities establish incubators where clients can share services, equipment, and building space.

Diversity Alliance

TVA helps the Tennessee Valley's high-growth sectors of woman-owned and minority-owned businesses to increase their job creation and capital investment opportunities by providing business tools and opportunities that help grow and sustain these targeted businesses.

Valley Investment Initiative for Existing & New Customers

This economic development incentive program offers financial incentives to existing companies and new companies that contribute to the economic development of the Tennessee Valley region and complement TVA's power system.

Appalachian Regional Commission Project Administration

TVA serves as the lead agency to administer grants for the Appalachian Regional Commission in the Tennessee Valley region.

Research

TVA provides communities with economic and market research that better prepares them for receiving industrial prospect visits, being competitive and taking advantage of opportunities.

Technical Services

TVA offers general engineering design services to help industrial prospects make sound location decisions and to help communities better market and prepare for prospects and growth.

TVA Economic Development's innovative programs and offerings have led to:

- The Megasite Program – a catalog of certified, large industrial properties ready for heavy industrial development. This program has certified nine sites (one site has since dropped from the program) and seen five sold to Severcorr (now Severstal), PACCAR, Toyota, Volkswagen, and Dow Corning/Hemlock Semiconductor. These companies represent almost 6,000 direct jobs and more than \$5.5 billion in capital investment.
- Over 41,000 jobs were recruited and/or retained and companies made \$4.3 billion in capital investment in FY 2010.
- The Data Center Site Assessment program aims to better prepare communities in the TVA service territory to support the attraction of data center projects via a catalogue of sites well-suited to host data centers, collection of key site and community data to support active marketing of these sites to prospects, and maintaining a dialogue between TVA, community economic development organizations, and other stakeholders whose involvement is critical to making these efforts successful.
- The Rural Strategy Initiative works to help rural areas better market sites and their communities to prospective companies and site selection consultants.
- Four of the largest (\$1 billion-plus) industrial economic development announcements in the nation since 2007 have occurred in the TVA service area (Toyota, Volkswagen, Wacker Chemie, and Dow Corning/Hemlock Semiconductor).
- The Valley Investment Initiative (VII) program is offered in conjunction with our local power providers. VII makes financial incentive awards to qualifying existing companies and new companies that are contributing to the economic development of the TVA service area and complement TVA's power system resources.
- *Site Selection* magazine ranking TVA among "Top 10 U.S. Utilities in Economic Development" for five consecutive years. TVA is one of only three utilities to earn this recognition for the past five years.

Tennessee Valley Authority
GPRA Annual Performance Plan
for FY 2012

Submitted
September 2010



Foreword

This document is TVA's GPRA Annual Performance Plan for FY 2012. It contains the specific information that is required by the Government Performance and Results Act. This FY 2012 GPRA Annual Performance Plan builds upon the strategic objectives and critical success factors identified in the TVA Board approved Strategic Plan of May 2007. It describes the metrics that will be used to monitor TVA's performance toward achieving successful implementation of its strategy.

Table of Contents

| <u>Section</u> | <u>Page</u> |
|--|--------------------|
| 1. TVA Mission and Renewed Vision Statement | 33 |
| 2. Strategic Objectives and Critical Success Factors | 34 |
| 3. Program Evaluations - Tracking Progress Against the Goals | |
| 3.1 Corporate Level Metrics | 36 |
| 3.2 The Winning Performance Process | 39 |
| 3.3 TVA's Balanced Scorecard | 40 |
| 4. Strategy Implementation | |
| 4.1 TVA's Mission and Strategic Plan | 40 |
| 4.2 Principles of a Strategy Focused Organization | 40 |
| 4.3 Translating the Strategic Plan into Operational Terms | 41 |
| 4.4 Annual Goals, Long Term Goals and the Strategic Plan | 41 |
| 5. Key factors External to TVA That Could Significantly Affect the Achievement of General Goals | 41 |
| 6. Resources and Skills Needed to Achieve Goals | |
| 6.1 Financial Resources | 42 |
| 6.2 Physical Resources | 42 |
| 6.3 Management and Human Resources | 42 |
| Exhibit 1 - Translating Strategy into Operational Terms | 43 |

1. TVA Mission and Renewed Vision Statement

The mission statement approved in 2007 states that “[t]he mission of TVA is to improve the quality of life in the Tennessee Valley through its work in three key areas: energy, the environment, and economic development. TVA provides reliable, competitively priced power; manages the Tennessee River system and associated lands to meet multiple needs; and partners with communities and states for economic development. For nearly 75 years, TVA’s unique mission has served as the foundation of its business endeavors and provided the context for its business objectives and internal processes.”

Energy

Provide low-cost electric power to the Tennessee Valley region reliably

- TVA supplies reliable, affordable electricity to the Tennessee Valley region. It strives to meet the changing needs of power distributor customers and directly served industrial customers for electricity and related products and services in a dynamic marketplace.

Environment

Act as an environmental steward of the Tennessee Valley region and rivers

- To fulfill its environmental stewardship mission, TVA manages water resources and associated public lands for the benefit of the region and the nation; to reduce flood damage, maintain navigation, support power production and recreational uses, improve water quality and supply, and protect shoreline resources.

Economic Development

Serve as a catalyst for sustainable economic development and technological innovation

- TVA works with its power distributor customers; state, regional, and local economic development organizations; and other federal agencies to build partnerships that help bring jobs and make the economy stronger to benefit the people of the region.
- TVA’s programs and services combine to create powerful tools for sustainable economic development.

TVA’s Renewed Vision

For TVA to continue to achieve its mission in today’s changing economic and regulatory climate, it must lead with a continued focus on key critical issues while acting on new initiatives. As such, the TVA Board of Directors adopted a renewed vision at its August 2010 meeting to be:

One of the Nation’s leading providers of low-cost and cleaner energy by 2020.

TVA plans to accomplish this vision by being:

- **The Nation’s leader in improving air quality;**
- **The Nation’s leader in increased nuclear production; and**
- **The Southeast’s leader in increased energy efficiency.**

2. Strategic Objectives and Critical Success Factors

In its 2007 Strategic Plan, TVA identified five broad strategic objectives on which it will focus as it moves forward, and twenty-four corresponding critical success factors that support those objectives. These strategic objectives, along with their corresponding critical success factors, are as follows:

CUSTOMER: Maintain power reliability, provide competitive rates, and build trust with TVA's customers

Critical Success Factors:

- Strengthen relationships and trust by being responsive to stakeholder needs
- Develop a portfolio of product and pricing structures that more accurately reflect the costs of serving load at different times and levels of use
- Partner with distributors and directly served customers to encourage conservation, promote energy efficiency, and reduce peak demand
- Partner with customers to limit volatility in rates and participate in power supply through shared generation ownership
- Assist states, communities, and distributors in sustaining economic development programs

PEOPLE: Build pride in TVA's performance and reputation

Critical Success Factors:

- Safeguard the health and safety of employees and the public
- Strengthen workforce knowledge and skills and management processes to motivate performance and successfully implement the strategic objectives
- Treat employees, customers, and other stakeholders with integrity and respect
- Communicate clearly and consistently

FINANCIAL: Adhere to a set of sound guiding financial principles to improve TVA's fiscal performance

Critical Success Factors:

- Apply sound economic and financing practices to new investments
- Pay financing obligations before assets are fully depreciated
- Strengthen TVA's balance sheet by improving the ratio of financing obligations to total assets
- Improve TVA's cash return on total assets in order to service debt, preserve existing assets, reinvest in new assets, and improve environmental performance
- Achieve top-quartile performance in non-fuel operation and maintenance (O&M) expenses and then hold increases to be less than unit sales growth

ASSETS: Use TVA's assets to meet market demand and deliver public value

Critical Success Factors:

- Balance TVA's production capabilities and load by adding assets (buy, build or through long-term contracts) and encouraging the use of energy in ways that reduce the need for new generation
- Preserve, maintain, repower or retire existing assets where appropriate
- Manage land and water resources to provide multiple benefits to the region
- Reduce fuel supply risk with a diverse portfolio of generation assets

OPERATIONS: Improve performance to be recognized as an industry leader

Critical Success Factors:

- Deliver reliable electric power generation and transmission products and services
- Benchmark the industry's best performers to develop metrics for top-quartile performance
- Make nuclear safety the overriding priority for each nuclear facility and for each individual associated with it
- Continue to reduce the impacts of TVA's operations on the environment
- Serve as a responsible steward of the Tennessee River system
- Apply science and technological innovation to improve operational performance

3. Program Evaluations - Tracking Progress Against the Goals

3.1 Corporate Level Metrics

The 2007 Strategic Plan outlined the Board of Directors' policy-level direction for TVA over the next decade and highlighted several actions that are needed for successful implementation of the strategy. In support of the strategic objectives and critical success factors outlined in the Strategic Plan, 15 enterprise-wide metrics were in place to monitor TVA's FY 2010 performance toward achieving successful implementation of its strategy (Exhibit 1). These metrics are reviewed and systematically updated annually to maintain alignment with the strategic focus. TVA's enterprise-wide metrics, clearly demonstrate that no one single organizational unit has complete responsibility for implementing strategy.

The TVA-wide performance metrics are as follows:

- (1) **Retail Price (¢ / kWh Sales)** = distributor reported retail power revenue and directly served power revenue divided by distributor reported retail power sales and directly served power sales

Calculation:

$$\frac{\text{Distributor reported power revenue} + \text{Directly Served power revenue}}{\text{Distributor reported sales} + \text{Directly Served power sales}}$$

- (2) **Delivered Cost of Power Excluding FCA Costs (\$ / MWh Sales)** = TVA's total costs in dollars per MWh of power sold to customers

Calculation:

$$\frac{\text{Total Income Statement Expenses (Excluding FCA Costs)} \pm \text{Other Income, net}}{\text{Total Sales Volume (MWh)}}$$

- (3) **FCA Costs (\$ / MWh Sales)** = TVA's FCA expenses per MWh of power sold

Calculation:

$$\frac{\text{FCA Costs}}{\text{Total Sales Volume (MWh)}}$$

- (4) **Economic Health Index (Percent)** = percentage growth of the weighted average wage of jobs created and/or retained as compared to the percentage growth of the weighted average wage of all states in the Southeast

Calculation:

$$\frac{\text{TVA Project Average Wage}}{\text{Southeastern Average Wage}}$$

- (5) **Customer Satisfaction Survey (% Satisfied)** = quarterly measure of distributors' and directly served customers' satisfaction with TVA in a variety of areas including wholesale/retail supplier, performance of local TVA customer service staff, and power quality and reliability of transmission service, pricing, contracts, and power supply mix

Calculation:

$$\left[\left(\sum \text{PD survey questions (\% satisfied)} \right) * \left(1/14 \right) * \left(0.85 \right) \right] + \left[\left(\sum \text{DSI survey questions (\% satisfied)} \right) * \left(1/13 \right) * \left(0.15 \right) \right]$$

- (6) **Connection Point Interruptions (Interruptions / Connection Points)** = tracks interruptions of power, including momentary, at connection points caused by the transmission system

Calculation:

$$\frac{\text{Number of interruptions}}{\text{Number of connection points}}$$

- (7) **Load Not Served (LNS)** = measures the magnitude and duration of transmission system outages that affect TVA customers expressed in system minutes.

Calculation:

Percent of total load not served x Number of minutes in period

- (8) **Organizational Health Survey** = measures the organizational health of the employee work force

Calculation:

Measured by the percent favorable responses (agree or strongly agree) on the Survey. Item favorabilities are captured within each respective dimension.

- (9) **Safe Workplace (Injuries / Hours Worked)** = a rate-based measure of employee safety as measured by the number of OSHA recordable injuries resulting in either a fatality, days away from work/lost time, restricted duty / job transfer, medical treatment, loss of consciousness, other significant work-related injury/illness diagnosed by a physician or other licensed health care professional per 200,000 employee-hours worked by both TVA employees and Staff Augmentation contractors

Calculation:

$$\frac{\text{ORIR} \times 200,000}{\text{Number of Hours worked during time period}}$$

NOTE: Hearing loss events are reported as recordable injuries on the OSHA 300 Log, but are excluded from the TVA Winning Performance (see section 3.2) Safe Workplace indicator.

- (10) **Debt-like Obligations / Asset Value (Percent)** = TVA's flexibility in a competitive market place

Calculation:

$$\frac{\text{Statutory debt} + \text{lease obligations} + \text{prepaid energy obligations}}{\text{Total Assets}}$$

(11) **Interest Coverage (Ratio)** = credit quality

Calculation:

$$\frac{\text{Net Income} + \text{Interest Expense} + \text{Taxes}}{\text{Gross Interest Expense}}$$

(12) **Net Cash Flow from Operations less Investing (\$ Millions)** = management's ability to control net cash flow (in millions) during the year by focusing attention on both cash inflows and outflows being balanced throughout the year

Calculation:

$$(\text{Cash Flow from Operations}) + (\text{Investing Cash Flow}) - (\text{Net Cash Flow from Change in FCA Deferral Account})$$

(13) **Reportable Environmental Events (REE's)** = An environmental event at a TVA facility (or elsewhere caused by TVA or TVA contractors) that violates regulatory and /or permit requirements and triggers oral or written notification to, or enforcement action by, a regulatory agency.

Calculation:

Actual number of reportable events.

(14) **Clean Energy Generation** = percent of capacity from energy resources with zero or low emissions of greenhouse gases (GHG), including nuclear, wind, biomass, solar, hydro (including HMOD), and other non-fossil sources such as waste heat.

Calculation:

Clean energy capacity / Total capacity

(15) **Megawatt Demand (MW) Reduction (MW Reduced)** = total incremental MW demand reduction potential from TVA-initiated energy efficiency and demand reduction activities, programs, projects, and pilots

Calculation:

$$[(\text{Individual product kW impacts}) * (\text{FY 11 individual product installations}) / 1000] + [(\text{Individual FY 11 project kW impacts}) / 1000] + (\text{Individual FY 11 pilot kW impacts}) / 1000] + \text{FY 11 Demand Response MW reduction}$$

(16) **Equivalent Availability Factor - Coal, CC, & Nuclear (Percent)** = a ratio of actual available generation from all TVA Coal, Combined-Cycle & Nuclear generating assets in a given period compared to maximum availability

Calculation:

$$\frac{\sum \text{of all Coal, Combined Cycle \& Nuclear units } ((\text{AVH} * \text{NMC}) - \text{MWhL} - \text{SchMWhL}) * 100}{\sum \text{of all Coal, Combined-Cycle \& Nuclear units } (\text{PH} * \text{NMC})}$$

AVH = Available Hours (Includes Economic Load Reduction and Not in Demand Hours)

PH = Period Hours

NMC = Net Maximum Capacity = Winter NDC for Thermal Units

MWhL = MWh Losses due to forced outage or derating

SchMWhL = MWh Losses due to scheduled outages (planned or maintenance) or derating

3.2 The Winning Performance Process

The Winning Performance process keeps TVA focused on the strategic objectives. It identifies the things that must be accomplished to be successful, measures and tracks our performance in these areas, and provides the incentives and feedback to employees to see the direct connection. Employees' involvement in Winning Performance enables them to understand how their day-to-day performance contributes to TVA's performance and success.

TVA's Winning Performance Team Incentive Plan (WPTIP) is a pay-for-performance program similar in structure to incentivized performance-based profit-sharing programs used by private companies. The program is based on the principle that operational and process improvements, reduced costs, and improved revenues can be obtained by applying appropriate management focus and offering appropriate monetary incentives.

Employees can see how their work contributes to the direction set by their Strategic Business Units (SBUs) performance plan and how that contributes to TVA's overall successful implementation of the agency's strategy (Exhibit 1). WPTIP utilizes a balanced scorecard as the primary tool to identify and communicate the focus of the incentives to the workforce. Employees have line-of-sight from their individual performance objectives, developed as a part of the Integrated Performance Management process, to TVA's strategic objectives and critical success factors.

All full time employees are eligible to participate in WPTIP, except those approved by the Board of Directors or delegate(s) to participate in the Executive Annual Incentive Program. WPTIP is a compensation plan (lump sum payment) tied to performance results based on scorecard metrics at the TVA, SBU, and BU levels. The SBUs are Fossil Generation, Nuclear Generation, Development and Construction, Fossil Generation, Development and Construction, Nuclear Generation, Power System Operations, and River Operations.

The TVA corporate metrics represent at least 50 percent of each employee's potential payout. The remaining potential employee payout is tied to the performance of an employee's SBU or BU scorecards, whichever is applicable. Corporate organizations are incented based off the performance of the two TVA corporate metrics, Net Cash Flow and Equivalent Availability Factor. Executives also have performance incentives linked to the same scorecards.

3.3 TVA's Balanced Scorecard

The TVA, SBU, and BU scorecards contain targets at three levels, corresponding to different incentive payouts: Threshold, Target, and Stretch.

The scorecard basis sheets contain the year-to-date actual values of the metrics, as well as historical and future forecasts, where applicable. Adverse trends and improvement plans are discussed during normal reviews with executive management.

Performance is monitored on each of the metrics, and the scorecards are updated to reflect actual results and updated forecasts. These updates are available to employees through their organizations and TVA's intranet.

4. Strategy Implementation

4.1 TVA's Mission and Strategic Plan

The five strategic objectives identified in the TVA Strategic Plan focus on the general steps TVA must take to fulfill its core mission. The outcomes are areas that TVA must focus on to continue fulfilling its mission within the evolving business environment.

4.2 Principles of a Strategy Focused Organization

TVA follows the five Principles of a Strategy Focused Organization¹ to implement its strategy throughout the operations of the organization. The five principles have been successfully used by the public and private sectors and are defined as:

1. Mobilize the organization through visible executive leadership. The TVA Board approves the strategic plan, budgets, and performance targets. Executive leadership endorses the Strategic Plan and takes responsibility for its operational implementation.
2. Translate the strategy into operational terms. A key vehicle for translating TVA's strategy into operational terms is TVA's Business Planning Process. These objectives translate strategy into operational terms by identifying TVA-level strategic objectives and critical success factors.
3. Align the organization around the strategy. TVA achieves strategy alignment by developing a balanced scorecard, which defines measurable corporate-level and ultimate business-unit goals consistent with the strategic plan.
4. Motivate to make strategy everyone's job. Strategic awareness is created by "line of sight" mapping—aligning individual performance goals with critical success factors and by TVA's balanced scorecard which ties incentive compensation to the achievement of goals.
5. Govern to make strategy a continual process. TVA, SBU, and BU scorecards are updated monthly as described in section 3.3.

4.3 Translating the Strategic Plan into Operational Terms

TVA's mission and strategic objectives must be translated into operational terms to align the actions of management and employees. Defining the critical success factors is the first step. Critical success factors define the key factors and capabilities needed to generate sustainable performance consistent with the business themes of the mission and the priorities identified by the Strategic Plan.

Performance goals identify specific, tangible objectives for measuring achievement. TVA develops a strategy in the context of the mission, maps the strategy into operational initiatives, and ultimately develops performance plans for each part of the organization and scorecards for measuring success.

4.4 Annual Goals, Long Term Goals and the Strategic Plan

¹ Robert S. Kaplan and David P. Norton, The Strategy-Focused Organization, Harvard Business School Press, Cambridge, Massachusetts, 2000.

Developing corporate short-term and long-term plans are key to achieving the goals outlined in the Strategic Plan. TVA's Long-Term Plans cover a minimum of five years and maximum of 20 years. These plans include:

- Shorter Term (1-3 Year) Plans
 - Bi-Annual Power Supply Plan
 - TVA Business Plans (3-year outlook with Quarterly reviews)
- Longer Term (5-20 Years) Plans
 - Bi-Annual Long-Term Power Supply Plan (20-year forecast)
 - Long-Range Financial Plans (10 years or more), and associated risk analyses
 - Capital Project Plans (5-year outlook)
 - Enterprise Risk Assessments (5-year outlook)

At a minimum, quarterly briefings are held with the Board of Directors, which include a review of corporate performance. The strategic issues, the scorecard and financial outlook are tracked and reviewed. Annually these reviews include three-year trending and three-year forecast.

5. Key Factors External to TVA that Could Significantly Affect the Achievement of General Goals

Given the long lead times needed to build new generation and transmission facilities, the electricity business is subject to forecast error, and planning under uncertainty is inherent. Normal planning uncertainties include those associated with projections about:

- growth in the regional economy and its impact on electricity demand
- changes in the cost of fuel used to generate electricity
- changes in laws and regulations, particularly those related to environmental compliance, reliability, and security
- technological change
- changes in market interest rates
- change in operating and maintenance cost

In addition to these uncertainties in electric power planning, the electric utility industry continues to evolve in ways that could have wide-ranging impacts on TVA, the way it achieves its mission and its ability to achieve the goals outlined in the Strategic Plan. Given the potential for change in the industry and the high potential for significant forecast error, TVA planning evolves as more information becomes available.

6. Resources and Skills Needed To Achieve Goals

6.1 Financial Resources

The TVA Act gives the TVA Board both the authority and the requirement to set electric rates at a level to cover all power system costs while being responsible to the Act's objective that power be sold at rates as low as feasible. The Energy and Water Development Appropriations Bill of 1998 directed TVA to use power revenues to pay for essential stewardship activities previously funded by federal appropriations.

6.2 Physical Resources

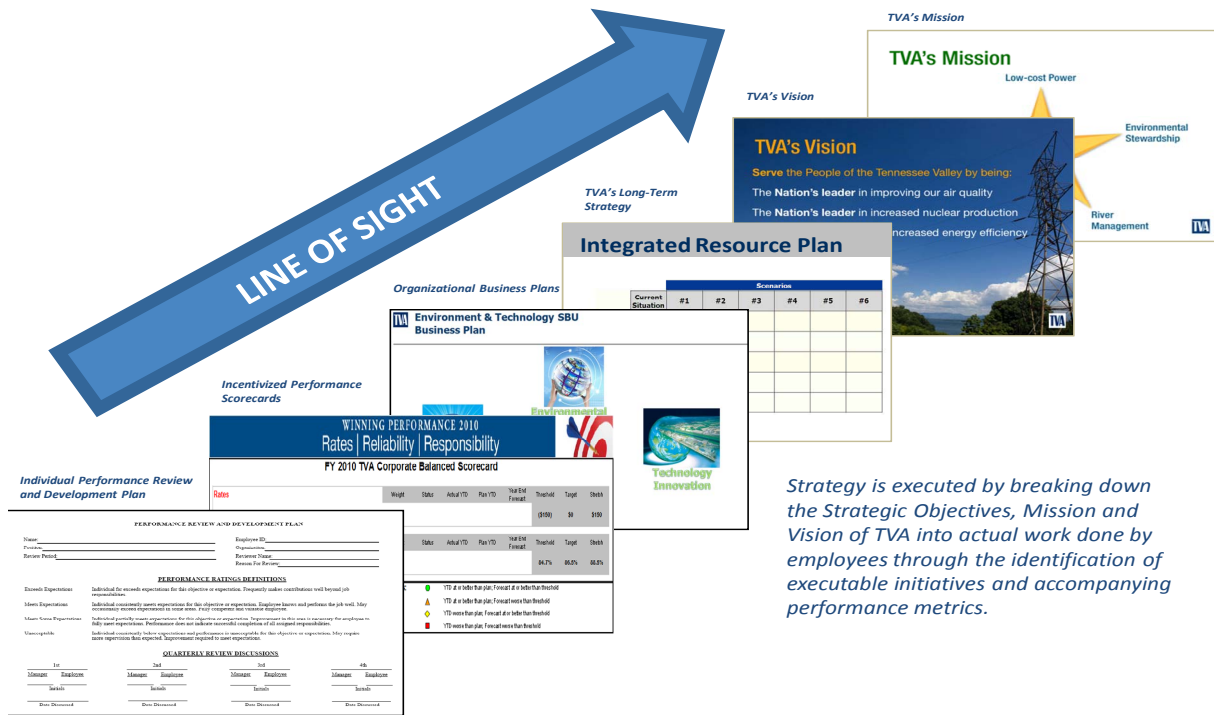
TVA's success in carrying out its mission requires that TVA retain management and operational responsibility for the Tennessee River system and other federal assets crucial to its statutory responsibility.

6.3 Management and Human Resources

TVA will need to maintain its existing skills and processes related to power supply, resource stewardship, and economic development while also developing a number of new processes and skills. Major initiatives include the following:

- Continued efforts across the organization to improve efficiency. The activities involved include not only benchmarking best-in-class performers, but also raising the bar on TVA's own performance related to reliability, forced outage rates, and overall cost.
- Continued training to develop a multi-skilled workforce to improve labor productivity.
- Developing new tools to support the development of products and services, including new methods for determining TVA's cost to provide different types of service and evaluating and quantifying risk.
- Developing new methods for evaluating future investments in generation that reflect the uncertainty in future revenue available to recover those investments.

Exhibit 1. Translating Strategy into Operational Terms



Appendix

EBITDA is a financial measure that, although commonly used, is not calculated and presented in accordance with U.S. generally accepted accounting principles (GAAP). EBITDA represents net income before interest, taxes, depreciation, and amortization. TVA presents EBITDA because it considers EBITDA an important indicator of TVA's fiscal health and performance. EBITDA should be considered in addition to, and not as a substitute for, TVA's other measures of performance that are reported in accordance with GAAP. A reconciliation of net income to EBITDA follows:

TENNESSEE VALLEY AUTHORITY Unaudited Reconciliation of Net Income to EBITDA (in millions)

| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 Projected | 2012 Projected |
|-----------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-------------------|-------------------|
| Net Income | \$ 85 | \$ 113 | \$ 423 | \$ 817 | \$ 726 | \$ 972 | \$ 452 | \$ 470 |
| Add back: | | | | | | | | |
| Interest Expense | 1,312 | 1,264 | 1,232 | 1,376 | 1,272 | 1,294 | 1,301 | 1,312 |
| Tax Equivalents | 365 | 376 | 451 | 491 | 544 | 457 | 567 | 662 |
| Depreciation & Amortization | 1,154 | 1,500 | 1,473 | 1,224 | 1,598 | 1,724 | 1,762 | 1,828 |
| Total EBITDA | <u>\$ 2,916</u> | <u>\$ 3,253</u> | <u>\$ 3,579</u> | <u>\$ 3,908</u> | <u>\$ 4,140</u> | <u>\$ 4,447</u> | <u>\$ 4,082</u> | <u>\$ 4,272</u> |



Tennessee Valley Authority

400 W. Summit Hill Drive

Knoxville, Tennessee 37902

www.tva.com

For alternate formats of this document, call 865-632-6824 and allow five working days for processing.