

**Written Testimony of
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Chairman Gibbs, Ranking Member Bishop, and members of the committee. Thank you for this opportunity to discuss the operations and fiscal year 2012 budget of the Tennessee Valley Authority. On behalf of TVA, I appreciate the oversight and support provided by this committee and members of Congress.

In these times of economic challenge for our nation, affordable, reliable and cleaner energy is more important than ever. As the nation's largest public power provider, TVA recognizes the unique role it plays in helping sustain the economic vitality of the nation and a high quality of life for our citizens while providing leadership to our nation's electric power industry.

As you know, TVA was established by Congress to serve a unique and comprehensive mission that encompasses five key areas:

- Affordable and reliable electricity
- Environmental stewardship
- Integrated river system management
- Economic and agricultural development, and
- Technological innovation

These areas are the bedrock of TVA's longstanding partnership with the people of the Tennessee Valley region. Even in today's fast-changing world, TVA's comprehensive mission of service is as relevant as ever as TVA focuses on the issues that are critical to our nation's long-term energy security. This is why in 2010 the TVA Board of Directors adopted a renewed strategic vision for TVA.

Simply put, this vision, which is currently under review by the Administration, is for TVA to be one of the nation's leading providers of low-cost and cleaner energy by 2020.

In my testimony today, I will provide details of this renewed vision and the proposed TVA budget that will support it in fiscal year 2012.

Let me begin with a brief review of TVA's operations.

About TVA

TVA is a corporation of the United States government that sells electricity to 155 local distributors that, in turn, serve 9 million residents and 650,000 businesses and industries in the Tennessee Valley region. This region covers most of Tennessee and parts of Alabama, Georgia, Kentucky, Mississippi, North Carolina and Virginia. TVA also provides power directly to 56 large industrial customers and federal installations.

TVA is entirely self-financing from the sale of electricity, the issuance of bonds and other financings that provide capital for the power program. TVA Bonds are not obligations of the United States, and the United States does not guarantee the payments of principal or interest on Bonds. And for nearly half a century, TVA has provided a positive cash flow to the U.S. Treasury, by paying back taxpayers' original investment in the TVA power program, as appropriated by Congress, along with a yearly return on that investment. Through fiscal year 2012, these payments are expected to total \$3.6 billion on the original investment of \$1.4 billion. Under the TVA Act, the United States government will retain permanent equity in TVA.

The TVA power system includes three nuclear power plants, 11 coal-fired plants, 29 hydroelectric dams, 11 combustion-turbine sites, a pumped-storage facility and numerous renewable energy resources based on solar, wind, landfill gas and biomass technologies.

With nearly 16,000 miles of transmission line, the TVA power system is one of the nation's largest and most reliable, providing service not only to TVA customers but serving also as a critical link in the power grid that serves most of eastern North America. In fiscal year 2010, for the 11th year in a row, the TVA transmission system delivered power to TVA customers with 99.999 percent reliability. TVA works hard to maintain this reliability, which is among the best in the industry, and TVA is installing digital technologies that will enable it to monitor and manage transmission activity more precisely.

Besides being a vital source of affordable and reliable electric power, TVA also is responsible for protecting the natural resources of the Tennessee Valley region and managing the Tennessee River system and its tributaries. This system includes 652 miles of main river channel, 42,000 miles of streams and tributaries, and 41,000 square miles of watershed in 125 counties of the southeastern United States.

TVA's hydroelectric dams are an important and economical source of power for TVA customers. TVA operates these facilities, and 20 other non-power dams, as an integrated unit to provide wide-ranging benefits that include not only power generation but also navigation, flood control, habitat protection, land management, water quality and water supply. This integrated system of resource management pioneered by TVA is recognized around the world as a model for how people and government can work together to protect the environment and preserve water quality.

TVA also works together with local governments and economic development agencies to increase capital investment and attract and retain better-paying jobs in the Tennessee Valley region. For five consecutive years, *Site Selection* magazine has ranked TVA among the nation's top 10 utilities for economic development.

TVA partners with local communities to recruit and retain a wide range of sustainable businesses, from automobile manufacturers to data centers. TVA's Megasite Program has been a notable success in certifying nine large properties as suitable for heavy industrial development in the TVA service area. Five of these sites have been sold to companies whose projects will create almost 6,000 direct jobs and require capital investments of more than \$5.5 billion. In fiscal year 2010, these projects and others helped recruit or retain more than 41,000 jobs and helped attract \$4.3 billion in capital investment for the Tennessee Valley region.

TVA works closely with public and private research institutions and other government agencies to advance technological innovation throughout the electric utility industry. TVA partners with

Electric Power Research Institute, Oak Ridge National Laboratory, the University of Tennessee and others on ways to produce electricity more efficiently and use energy more wisely.

Governance and Oversight

TVA is governed by a part-time nine-member board of directors appointed by the President with the advice and consent of the U.S. Senate. Two directors may reside outside the TVA service area. The board sets the long-term policies and objectives of TVA and delegates responsibility for their implementation to a seasoned management team led by a chief executive officer. The Board also reviews and approves TVA's rates and budgets.

TVA financial statements are independently audited by Ernst & Young in accordance with standards set by the Comptroller General of the United States and the Public Company Accounting Oversight Board. The auditor also provides opinions on whether TVA financial statements conform to the generally accepted accounting principles, or GAAP, maintained by the Federal Accounting Standards Advisory Board.

TVA files annual reports with the Securities and Exchange Commission on Form 10-K. These reports include audited financial statements and opinion letters along with comparative financial information. TVA also files with the SEC its Quarterly Reports on Form 10-Q and Current Reports on Form 8-K.

An independent Office of Inspector General also audits TVA's operations and financial matters. TVA's Inspector General is appointed by the President and reports twice a year to Congress on the results of its audit and investigative work.

Proposed Budget for Fiscal Year 2012

As stated earlier, the TVA power program is entirely self-financing and does not receive federal appropriations. TVA's power budget is, however, included in the Unified Budget of the United States Government.

The TVA board approves an annual budget for TVA each summer. These budgets include estimates that reflect significant levels of uncertainty due to weather, the economy and other factors that weigh heavily on energy providers. TVA's fiscal year 2012 budget projects revenue in excess of \$12.1 billion. This includes the estimated impacts of fuel cost adjustments that reflect the changing costs of fuel, purchased power and emission allowances.

The fiscal year 2012 budget projects operating expenses of \$10.3 billion. Almost 40 percent, or \$4.4 billion, of these expenses will be for coal, natural gas and other generating fuels, along with power purchased from other generators.

TVA must continually make prudent, long-term investments that keep pace with expected growth in energy demand, maintain system reliability and protect the environment. In fiscal year 2012, TVA projects it will invest \$2.6 billion in capital projects. This includes \$440 million to complete Watts Bar Unit 2, \$219 million for clean air improvements and \$289 million for transmission system projects.

TVA funds a significant portion of its capital projects through bond sales to private investors. In recent years, TVA has been successful in reducing the cost of its borrowings. TVA reduced the

percentage of its revenue consumed by gross interest expense from 35 percent to 13 percent over this 13-year period. Gross interest expense is forecast to range from 12 percent to 13 percent of revenue in fiscal years 2011 and 2012.

To bring a new level of discipline to TVA's decision making and ensure continued financial health, the TVA Board has established a set of sound financial guiding principles. 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.

While TVA's gross interest expense in fiscal year 2012 is expected to be \$555 million lower than in fiscal year 1997, total outstanding debt and debt-like obligations are projected to increase this year and next, reaching \$26.9 billion in fiscal year 2012. These increases are necessary to fund capacity expansions and clean air projects.

TVA funds its water and land stewardship activities from power revenues, user fees and other non-appropriated sources. No appropriations have been received by TVA for these activities since fiscal year 1999, and none are requested for fiscal year 2012. TVA will self-fund these activities in fiscal year 2012 at \$90 million, which is about the same level as last year. Appropriate funding levels for future years will be addressed in a Natural Resource Plan and Environmental Impact Statement now being developed. This plan will establish the long-term strategy for implementing the TVA Environmental Policy adopted by the TVA board in 2008.

TVA's Renewed Vision

Congress created TVA to help revive the economy of the Tennessee Valley region through a thoroughly integrated mission of wide-ranging services that has served TVA well for more than three-quarters of a century.

While TVA's mission has not changed, the environment in which TVA does business continues to evolve. Facing challenging economic conditions, tougher new emission standards, the need to modernize its generating fleet and changing customer needs, TVA recognized a need to refine its strategic vision for the future.

In August 2010, the TVA Board adopted a renewed vision, which is currently under review by the Administration, which will help TVA lead the Tennessee Valley region and the nation toward a cleaner and more secure energy future, relying more on nuclear power and energy efficiency and less on coal.

The TVA Board's renewed vision is to be *one of the nation's leading providers of low-cost and cleaner energy by 2020*. More specifically, TVA intends to be:

- The nation's leader in improving air quality
- The nation's leader in increased nuclear production
- The Southeast's leader in increased energy efficiency

Improving air quality

In support of its renewed vision for improving air quality, TVA has invested \$5.3 billion so far to reduce emissions of sulfur dioxide and nitrogen oxide at its coal plants about 90 percent from their peak levels. In 2010, TVA announced plans to idle some of its oldest and least-efficient coal units for which adding emission controls might not be a prudent investment. TVA also is expanding its fleet of cleaner natural-gas fired combustion turbines, as I will discuss later.

Increasing nuclear production

In support of its vision for more nuclear capacity, TVA restarted Browns Ferry Unit 1, the first nuclear unit to be brought online in the United States in this century. TVA is now in the process of completing another nuclear unit at its Watts Bar site in Tennessee and evaluating options for future nuclear generation at its Bellefonte site in North Alabama.

Increasing energy efficiency

In support of its vision for greater energy efficiency, TVA is improving the efficiency of its own facilities and helping customers get more value from their electricity dollars. TVA also is creating rate incentives that will help consumers manage their energy use to take advantage of times when production costs are lower.

Six focus areas

The three priorities of TVA's renewed vision define a new road map for TVA's energy future in which every TVA job and initiative will be linked to six focus areas:

- Low rates
- High reliability
- Responsibility
- Cleaner air
- More nuclear generation
- Greater energy efficiency

TVA's renewed vision is a fundamental part of a comprehensive strategic planning process that includes strategic objectives, scorecards and initiatives – all designed to give TVA employees the clear line-of-sight they need to improve TVA's core business operations.

Organizational effectiveness

This vision is an outgrowth of a comprehensive assessment of TVA's organizational effectiveness undertaken at the direction of the TVA Board to improve TVA's ability to do the right things in the right ways and *do more with less*.

As a result of this assessment, TVA has implemented a new organizational structure with fewer layers of management and better alignment of our leadership around TVA's core mission. This restructured organization will help TVA operate more efficiently by improving internal

communications, aligning business unit functions for optimal performance, and clarifying roles and responsibilities for greater accountability.

TVA is now addressing other areas of organizational effectiveness that include governance and accountability, operating policies and procedures, skill sets and rewards and recognition.

Budget Impacts in Review

Weather

TVA faced several significant challenges during fiscal year 2010 that impacted its operations and finances. The TVA service area experienced a colder than normal winter and a hotter than normal summer in 2010, contributing to a 6 percent increase in power sales from the previous year.

The hot summer, however, resulted in TVA having to curtail the use of some its generating assets because of increased water temperatures in the Cumberland and Tennessee rivers. As the warmer water reduced cooling capacity, TVA had to curtail some coal-fired generation on 68 days last summer and some nuclear units had to reduce generation on 56 days.

These curtailments – and the extreme weather – forced TVA to make greater use of more expensive generation and buy more power from other utilities, resulting in higher fuel-cost adjustments for TVA customers. To better address the water temperature issues, the TVA Board has approved a \$160-million expansion of the cooling towers at Browns Ferry Nuclear Plant.

Kingston ash spill

TVA continues cleanup and recovery efforts related to the Kingston ash spill that occurred in December 2008. In May 2010, TVA completed its cleanup of the Emory River, and the river is now open for public recreation once again.

TVA has recorded an estimated total cost of cleanup in the amount of \$1.1 billion. This amount is being charged to expense and collected in rates over a 15 year period that began in October 2009.

The work plan for the next phase of the cleanup has been approved by the U.S. Environmental Protection Agency with the concurrence of the Tennessee Department of Environment and Conservation and is now being implemented.

As the recovery effort continues and more information becomes available, TVA will review its estimates and make further adjustments if needed.

Coal combustion product and gypsum storage

Following the Kingston event, TVA retained an independent engineering firm to evaluate the safety and stability of ash and gypsum storage facilities at all its coal-burning power plants. TVA intends to convert all its ash and gypsum impoundments to dry storage over the next eight to 10 years at a cost of \$1.5 billion to \$2.0 billion.

TVA also is remediating or eliminating the storage facilities that were classified as high risk. The risk classification does not pertain to the integrity of the facility but rather to the likelihood that a failure could result in loss of life or significant economic and environmental damage.

TVA pension fund

In September 2009, the TVA board approved a \$1 billion contribution to the TVA Retirement System as an advance on TVA contributions through fiscal year 2013. This contribution, along with a temporary change in the plan's cost of living adjustment, improved the plan's funded status.

Despite improved financial markets in fiscal year 2010, however, TVA's pension fund remains underfunded. At the end of fiscal year 2010, the plan had net assets of \$6.8 billion and obligations of \$10.4 billion – a net underfunding of \$3.6 billion. The TVA Retirement System is exploring methods to reduce risk, return to full funding and strengthen governance of the system.

Nuclear decommissioning trust fund

TVA's nuclear decommissioning trust fund, meanwhile, increased in value by \$104 million last year and was 94 percent funded as of September 30, 2010. TVA submitted a funding assurance plan to the Nuclear Regulatory Commission in 2009 to address an anticipated increase in liability over the remaining lives of TVA's nuclear units. The plan ensures that the fund will have enough money available when the nuclear plants are eventually decommissioned.

Meeting Financial and Operational Challenges

Many of the challenges TVA faced in fiscal year 2010 will continue to be challenges in the future. TVA is taking steps to address these challenges and improve its financial flexibility.

Wholesale rate structure

In August 2010, the TVA Board approved a new wholesale rate structure. This structure became an option for large industrial customers in October 2010 and will become effective for all TVA customers in April 2011. This rate structure, and a change to the TVA fuel-cost adjustment formula last October, is designed to more closely align TVA's revenue with costs and encourage energy efficiency. Over the long term, these changes are revenue neutral for TVA, but they will result in seasonal adjustments that affect when revenue is received.

Power demand will continue to grow

In fiscal year 2010, TVA sold 174 billion kilowatt-hours of electricity. TVA expects it will sell 167 billion kilowatt-hours in the current fiscal year and 170 billion kilowatt-hours in fiscal year 2012.

Reduced power demand is mostly a result of lower industrial demand due to the recent economic downturn. Most of TVA's recent sales growth has come from distributors, who serve smaller businesses and industries and residential consumers, and this has somewhat offset lower industrial demand.

TVA power sales have increased an average of 1 percent a year during the past decade. With the population in its service area growing slightly faster than the national average, TVA believes that overall power demand will continue to grow under the most likely scenarios.

During the past decade, TVA added about 8,500 megawatts of capacity, including new generation and purchased power agreements. TVA is making significant investments to further expand its baseload and peaking capacity and make greater use of renewable energy sources.

Integrated Resource Plan

In June 2009, TVA began preparing a new Integrated Resource Plan to analyze ways of addressing energy needs in the TVA service area for the next 20 years. This plan will help meet the goals of the TVA Strategic Plan and TVA Environmental Plan previously approved by the TVA board of directors. TVA conducted public information sessions and created a stakeholder review panel to provide specific and continuous guidance as the Integrated Resource Plan and accompanying environmental statement were being developed. TVA issued a final plan just last week and expects the plan to be considered by the TVA Board in mid-April.

Cleaner energy choices

Given its intention to move toward more generation with low or no carbon emission, TVA must consider fuel mix in its decisions about new generating capacity. TVA expects that clean air regulations will eventually require all coal-fired generating units to install air quality controls. This could significantly increase TVA capital expenditures and operating costs.

TVA currently has about 14,000 megawatts of coal-fired generation, about 6,800 megawatts of which is not scrubbed or otherwise controlled. Due to their age, lower capacity and lower efficiency, it may not be economical to install new clean-air controls on all these units.

In 2010, TVA announced plans to idle 1,000 megawatts of capacity at nine of its older coal-fired units during the next five years as it transitions to cleaner, lower carbon sources of energy. TVA began implementing this plan in late 2010 by idling two units at its Widow's Creek Fossil Plant in northeast Alabama and one unit at its Shawnee facility near Paducah, Kentucky.

Gas-fired capacity

In fiscal years 2006 through 2008, the TVA board authorized the purchase of three combustion-turbine plants and one combined-cycle plant. The board also approved a 15-year lease on a second combined-cycled plant and approved construction of two more combined-cycle plants. When all these assets are operational by fiscal year 2012, they will add more than 5,100 megawatts of cleaner gas-fired capacity to the TVA power system.

Nuclear capacity

Increased reliance on nuclear power is a cornerstone of the TVA Board's vision for meeting the operational challenges of the future. TVA's Browns Ferry Nuclear Plant Unit 1 returned to service in May 2007, providing 1,150 megawatts of capacity. TVA expects to increase this unit's capacity to 1,280 megawatts.

In August 2007, the TVA Board approved completing the construction of a second nuclear unit at Watts Bar Nuclear Plant. Construction of Watts Bar Unit 2 is on budget and on schedule.

When commercial operation begins in fiscal year 2012, it will provide TVA with another 1,150 megawatts of clean, carbon-free capacity.

In August 2010, the TVA Board approved \$248 million to further develop an option to complete the 1,260 megawatt Bellefonte Unit 1 reactor. TVA expects to make a decision later this year on whether to proceed with construction of this unit.

Renewable capacity

TVA is taking significant steps to increase its use of renewable power and clean energy to reduce or avoid emissions and improve regional air quality. In 2008, the TVA Board approved plans to buy up to 2,000 megawatts of clean or renewable energy. TVA has since entered into nine contracts for 1,625 megawatts of wind energy from facilities in Illinois, Iowa, Kansas, North Dakota and South Dakota. These agreements will provide enough renewable energy to serve more than 400,000 homes in the TVA service area. This will increase to about 3 percent the amount of generating capacity TVA derives from renewable resources other than hydro.

Conclusion

TVA is taking a long view of the future and positioning itself to answer the challenges and prepare for the opportunities that lie ahead. Though the economy appears to be on the mend, our nation still faces considerable economic uncertainty, even more so with recent developments in the Middle East and the potential effects on world oil prices. These uncertainties challenge us all to do more with less.

TVA is doing its part by supporting the recent pay freeze for federal employees through 2012. Even though 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 this legislation and decided to apply its provisions not only to our senior executives but to all TVA managers, specialists and non-represented employees.

TVA is mindful of the economic challenges that its customers still face, and TVA intends to play a meaningful role in supporting a full and vibrant recovery and a cleaner and more sustainable energy future.

TVA looks forward to working with this committee, Congress, the administration, and all our stakeholders as TVA continues its service to the nation and the people of the Tennessee Valley region.

Thank you.

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