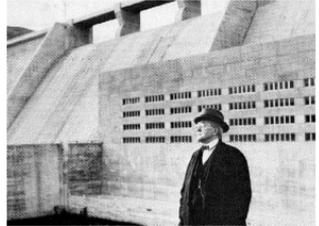


Value to the Nation

In 2000, the American Public Works Association (APWA) named TVA one of the top 10 outstanding public-works projects in the United States during the 20th century. John Calvert, assistant director of public works for Oak Ridge, Tennessee, and president of the Tennessee Chapter of the APWA, wrote in his report nominating TVA that it "forever changed and improved the environment and economic standards in the entire [Tennessee Valley] region, and throughout the United States."



Senator George Norris at Norris Dam

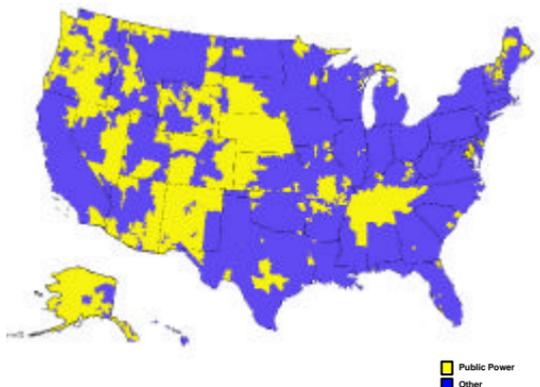
Today, TVA serves as a wholly owned federal corporation that continues to provide many benefits to the nation – at no cost to taxpayers. TVA supports the national energy policy by acting as a yardstick for price, efficiency, and reliability, and it plays a role in providing for the national defense, supporting research, and managing the nation's fifth largest river system.

TVA and Public Power Benefit the Nation

Public power provides more than 25 percent of the nation's electricity, serving about 74 million people. Public power is broadly defined here as municipally owned utilities, cooperatively owned utilities, state authorities and federally owned utilities. Reliable supplies of electricity are critical not only to economic growth but also to human health and safety. TVA and other public-power entities help ensure that access to such a precious commodity is protected in the marketplace. Even areas not served by public power benefit because the presence of public-power in regional and national energy markets helps to keep power rates lower. The regional and local commitment of public power also provides a model for reliability and service.

While meeting the challenges of efficiency and cost-effectiveness, TVA, along with other public power providers, can consider long-term objectives and goals since they are not driven by near-term financial performance.

Areas Served by Public Power



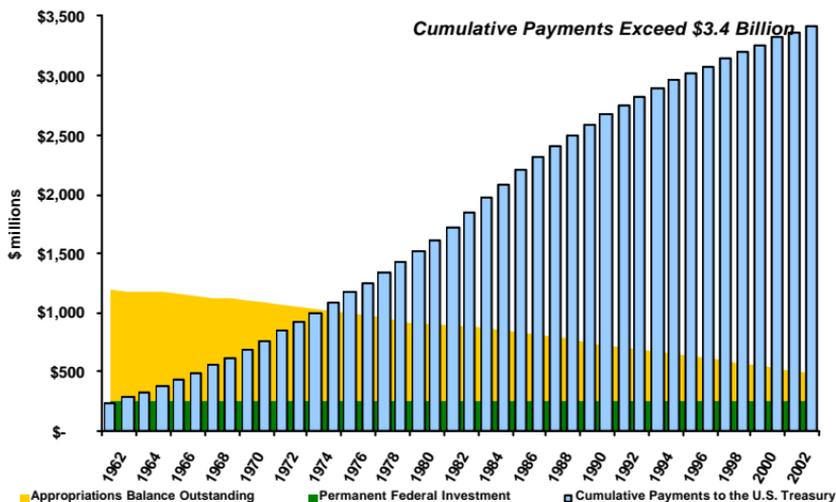
TVA Provides an Economic Benefit to the Federal Government

TVA receives no congressional appropriations, and TVA's public notes, bonds and other financings are not obligations of or guaranteed by the United States of America. In fact, the government's ownership of TVA directly and indirectly benefits the federal government through direct payments and tax revenues paid by investors.

TVA Is a Source of Cash for the Government

Congress made the TVA power program self-financing in 1959. TVA has repaid a portion of the government's original investment, plus an additional return payment each year since. These payments have totaled more than \$3.4 billion, through 2002, on the government's original \$1.4 billion investment.

Power Program Appropriations Repayment:
Cumulative Principal & Dividend-Like Return Payments to the U.S. Treasury



The principal and interest on TVA's bonds, notes, and other financings are payable solely from net power proceeds of the TVA power system.

Value to the Nation

Additionally, TVA's bonds, notes, and other financings provide streams of interest payments that generate income tax revenue. Interest on TVA's bonds is taxed at the federal level but is generally exempt from state and local taxation. An investor-owned utility (IOU), which is financed primarily with common or preferred stock, might or might not generate the same level of federally taxable dividends. The dollars that the federal government potentially receives from income tax on the interest payments from TVA's outstanding bonds and notes, combined with TVA's payments to the government on its original investment in TVA's power system, equate to about seven percent of TVA's total revenue.

Comparison of Ultimate Federal Revenue
(\$ millions)

Federally Taxable Revenue Streams	TVA			All IOUs	
	2002	2001	2000	2001	2000
Total Revenue	\$ 6,835	\$ 6,999	\$ 6,762	\$ 567,800	\$ 458,139
Net Interest Expense	\$ 1,429	\$ 1,633	\$ 1,736	\$ 22,966	\$ 21,172
Common & Preferred Dividends	-	-	-	13,200	13,514
<i>Total:</i>	\$ 1,429	\$ 1,633	\$ 1,736	\$ 36,166	\$ 34,686
<i>Assumed Individual Tax Rate</i>	28%	28%	28%	28%	28%
Effective Federal Tax Revenue	\$ 400	\$ 457	\$ 486	\$ 10,126	\$ 9,712
Corporate Income Taxes Expensed	-	-	-	13,044	8,421
Return to U.S. Treasury	50	55	54	-	-
<i>Ultimate Federal Revenue:</i>	\$ 450	\$ 512	\$ 540	\$ 23,170	\$ 18,133
Percent of Total Revenue:	7%	7%	8%	4%	4%

Source: EEI 2001 Financial Review Plus Preview of 2002 & TVA Annual Report 2002

TVA Helps the Federal Government Avoid Certain Costs

Since 1999, TVA has been completely self-funded, financing its reservoir stewardship programs from its power-system revenues. TVA helps the nation by carrying out federal functions including land management and river stewardship programs that are funded from tax dollars in other parts of the country. In 2002, the cost of providing these services was about \$80 million.

TVA Serves the Nation in Managing Its Natural Resources

Since its founding in 1933, TVA has served the nation and the electric-power industry as a living laboratory for innovation and improvement. TVA's work in energy, the environment, and resource management is recognized around the world. TVA's integrated river and power system maximizes the value to the region from its water resources. TVA serves through its role in managing natural resources in the Tennessee Valley and through its environmental stewardship. TVA does this by acting as a steward of the nation's fifth-largest river system, investing capital to help improve the nation's air quality, and providing a "living laboratory" for national demonstration and research – all at no cost to the federal government.

The Tennessee River system is a major transportation artery, linking the Tennessee Valley's industries to world markets. Among other benefits, TVA's integrated river-system management enables the use of 800 miles of commercially navigable waterways. Companies save about \$450 million each year on the cost of goods shipped by barge, compared with shipping by other, more expensive means of transportation. In 2002 alone, TVA's navigation channels and locks carried an estimated 50 million short-tons of cargo, with ports in 18 states depending on the river system for shipping.

TVA's management of the river system has also helped to avert billions of dollars in flood damage. Over the years, operation of the Tennessee River reservoir system and its dams has helped prevent more than \$5 billion in flood damages in the Tennessee Valley and on the Ohio and Mississippi rivers. TVA's flood-control operations averted an estimated \$90 million in damages to the Valley in 2002 alone.

TVA was also called upon to restrict water flow into the Ohio River on three separate occasions of flooding in the Ohio and Mississippi river valleys during the year, helping to avert an additional \$14 million in damage. By preventing flood damage in the region, TVA helps the nation as a whole by preserving federal disaster relief funds for use elsewhere, saving taxpayers this potential burden.



The Office of Management & Budget (OMB), through its P.A.R.T. evaluation, recently gave its highest rating to TVA's stewardship program. OMB stated that "TVA's integrated river-management system is recognized as an efficient and effective way to manage the entire watershed" and that "TVA makes an important contribution to the well-being of the people it serves." Only six percent of all federal programs received this rating.

TVA Supports the National Energy Policy

TVA benefits the nation by supporting the National Energy Policy (NEP). The NEP was developed to promote dependable, affordable, and environmentally sound production and distribution of energy in the future. As a federal agency and the nation's largest public-power provider, TVA is well-positioned to help achieve many of its recommendations. TVA does this in various ways:

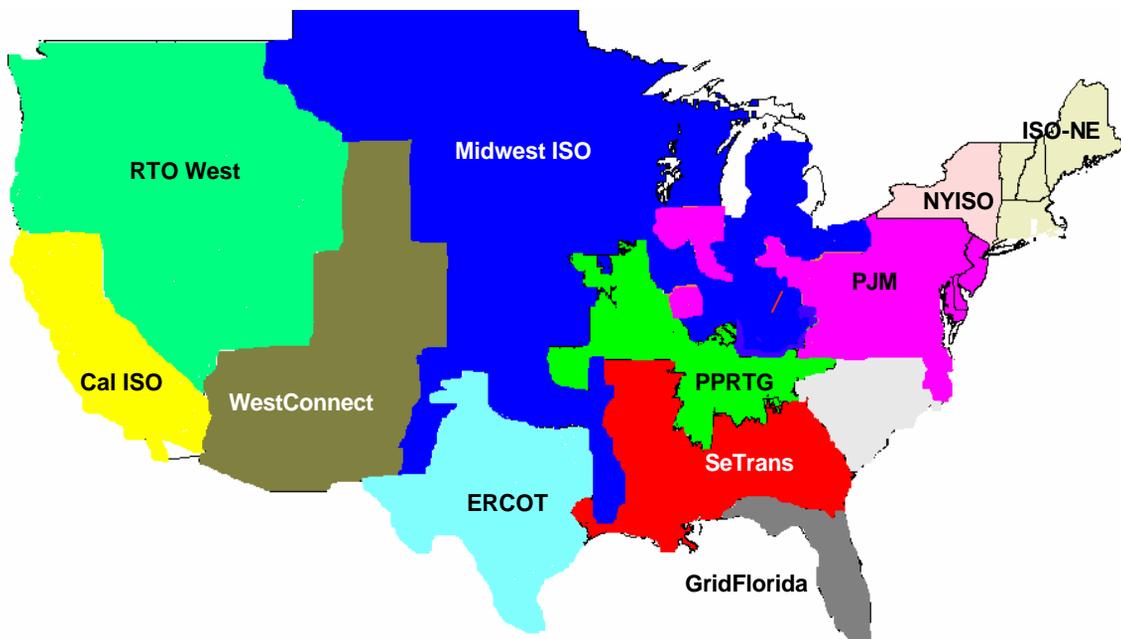
- TVA has installed pollution-control equipment for sulfur-dioxide (SO₂) emissions reductions and is among the first to install commercial-sized Selective Catalytic Reduction (SCR) systems or similar controls for nitrogen oxides (NO_x) emissions control on generating units burning high-sulfur coal.
- By 2010, TVA expects to have reduced its SO₂ emissions by 85 percent from 1977 levels, and by 2005 TVA NO_x emissions are expected to be reduced by 75 percent from 1995 levels during the summer ozone season. Additional reductions are projected through 2012.
- TVA has prevented the emission of more than 120 million tons of carbon dioxide (CO₂) into the environment since 1995 by diversifying its fuel sources, increasing the capacity and efficiency of some of its hydro plants, and by using biomass for fuel at its fossil plants.
- TVA is working with DOE, the Electric Power Research Institute (EPRI), EPA, and other utilities to find ways for SO₂ and NO_x pollution-control-equipment to remove mercury. TVA has also committed to a significant research effort to better understand the sources and effects of mercury. As part of the METAALICUS project, TVA is helping to build understanding of the source and effects of mercury.
- Through internal projects and participation in an industry research consortium (EPRI), TVA has invested more than \$5 million in energy-efficiency research during the past five years.
- Just one year after the launch of TVA's Green Power Switch[®] program, more than 3,200 residential customers and more than 150 business customers were participating. The program allows consumers to pay for blocks of "green power" that help to fund the costs associated with renewable energy development. Green Power Switch[®] includes wind, solar, and landfill-methane energy, and the program continues to expand as supply is made available. TVA built the first commercial wind-power turbines in the Southeast and has recently signed a 20-year power agreement to add another 27 megawatts of wind energy to the original site at Buffalo Mountain, Tennessee.
- TVA completed its 14th solar power installation in the Valley in 2002, bringing TVA's total solar capacity to more than 235 kilowatts. Another 15-kilowatts of solar capacity are projected to be installed in 2003.
- When TVA's Browns Ferry Nuclear Unit 1 (BFN1) is brought back on-line in 2007, it will add more than 1,200 megawatts of clean, economical energy to TVA's generation portfolio, and it will support the NEP's objectives concerning clean-air and the expansion of nuclear energy.

Part of supporting the NEP includes the promotion of a fair and effective competitive market for electricity. Serving the consumers in the Tennessee Valley is one of TVA's primary statutory missions. TVA is not subject to the general jurisdiction of the Federal Energy Regulatory Commission (FERC). However, TVA voluntarily makes transmission capacity not needed to serve the region available to others, in accordance with FERC's wholesale open-access policies.

In 2002, TVA and Associated Electric Cooperative, Inc. in Springfield, Missouri, took the initial steps to form the Public Power Regional Transmission Grid (PPRTG). The PPRTG is a mechanism for public-power providers to participate in regional transmission arrangements consistent with FERC Order 2000 while remaining within the framework of their public service missions. The PPRTG would initially operate more than 25,000 miles of transmission lines within a 10-state region and could grow with additional members.

TVA also entered into memoranda of understanding with three other transmission providers, Southern Company, Entergy and the Midwest Independent Transmission System Operator, to establish a framework for developing formal regional coordination agreements that will help provide seamless transmission services through a large portion of the Eastern Interconnection grid. The agreements facilitate creating broader solutions to regional transmission-control issues while preserving public power's unique public-service mission.

The PPRTG in Relation to Existing and Developing RTOs



TVA Helps Protect the Environment

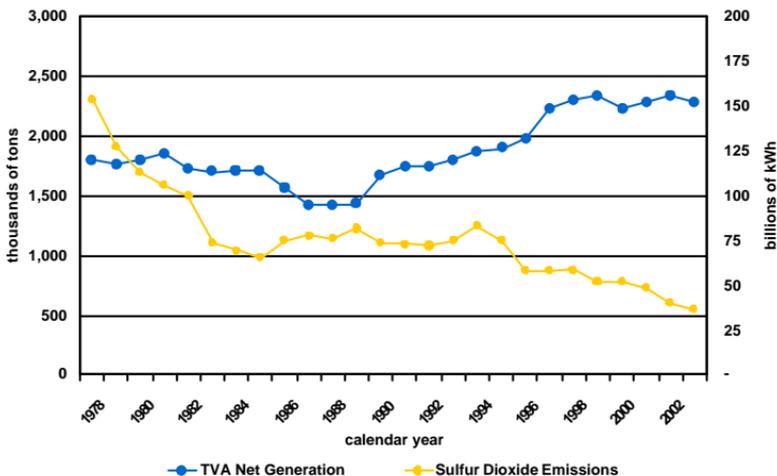
As the NEP emphasizes, the federal government has a “unique role in facilitating energy development while simultaneously protecting the environment and conserving our country’s natural resource legacy.” Because of TVA’s role both as a federal corporation and the largest public-power provider in the nation, TVA is in a strong position to support the NEP.

Clean Air – In recent years, TVA has significantly increased capital expenditures that will benefit both the Valley and the nation by helping to reduce emissions from TVA plants. TVA has spent more than \$1 billion in the past eight years alone and expects to spend another one-half billion dollars in 2003.

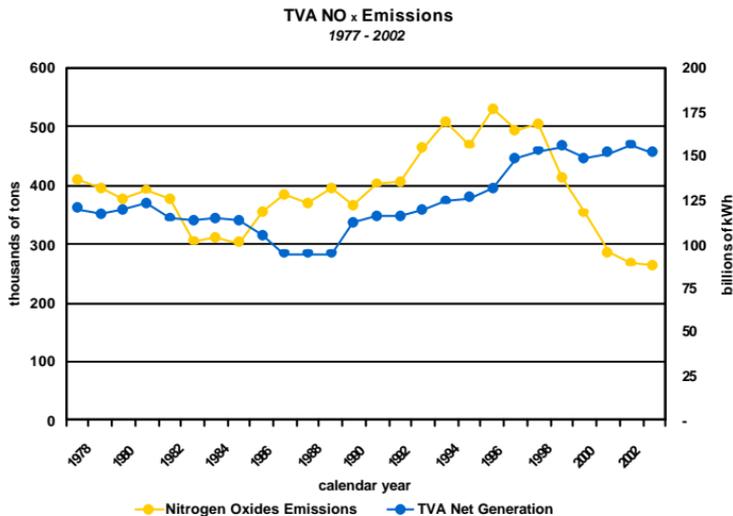
Clean-Air Expenditures								
millions of dollars								
Year	1995	1996	1997	1998	1999	2000	2001	2002
Expenditure	\$139	\$55	\$37	\$60	\$92	\$124	\$200	\$399

TVA has installed six scrubbers at its fossil-fired power plants to help reduce SO₂ emissions. In addition to its six installed scrubbers, TVA plans to install five more at an expected cost of about \$1.3 billion. Operation of the five additional scrubber systems will further reduce TVA’s SO₂ emissions by more than 200,000 tons per year. When the scrubbers are completed, TVA’s SO₂ emissions will be reduced by 85 percent from 1977 levels.

TVA SO₂ Emissions
1977-2002



TVA is in the process of installing SCR systems or similar controls on 25 units to help reduce emissions of NO_x from TVA plants. Four SCR systems are now installed and operable. NO_x emissions from TVA plants during the summer ozone season are projected to be 75 percent below 1995 levels by 2005 when the planned NO_x-reduction-equipment additions are completed. TVA expects to have spent more than \$5 billion in clean-air and environmental initiatives by 2010.



In addition, TVA has been able to reduce, avoid, or sequester over 120 million tons of CO₂ emissions since 1995 by improving the efficiency and capacity of its hydro plants, cofiring biomass with coal at some coal-fired units, increasing the amount of power produced from nuclear sources, increasing forestry projects, and improving the efficiency of TVA's fossil system.

TVA Helps Provide for the National Defense

Since its creation, TVA has assisted the government by providing a reliable source of the power needed to produce the materials needed for national defense. As early as 1935, TVA's Chairman at the time, Arthur Morgan, testified before Congress that "an adequate supply of electric energy comes pretty close to being a matter of national defense."

TVA is participating in the "Megatons to Megawatts" program which converts excess stock of weapons-grade nuclear material into a form that can be used to produce power in commercial reactors. This program helps the United States and the world by enabling a permanent reduction of Russian stockpiles of weapons-usable fissile material, a critical milestone in reducing the global threat of nuclear weapons. The material will be put to productive use as fuel in TVA's commercial reactors.

TVA is also working with the Department of Energy on a program to reprocess surplus, off-specification, highly enriched uranium for use as nuclear-reactor fuel. Without this effort, DOE would have to dispose of the surplus uranium as waste. TVA's partnership with DOE is turning a liability into an asset by reprocessing previously used uranium for use in commercial government-owned reactors.



TVA recently contracted with the U.S. Department of Defense to use some of TVA's reactors to help produce tritium. Tritium is a component used by the military in producing certain weapons – producing tritium is a key element in the U.S. national security strategy to maintain an effective nuclear deterrent. The agreement is a significant milestone in the National Nuclear Security Administration's (NNSA) Stockpile Management Program, since a domestic source of tritium has not been available in over a decade.

TVA Is a "Living Laboratory" for National Demonstration & Research

TVA benefits the nation and power industry by acting as a living laboratory, serving as a national demonstration and research agency. TVA invests in science and technology because it is a smart business strategy for a sustainable enterprise that is geographically rooted with operations dependent on a finite natural-resource supply. Good science is the foundation for public policy and for socially responsible action that proves to be durable over time.

As a federal corporation and public power entity, TVA is in a position to openly contribute the results of investments in science and technology to public policy while it is still under development. TVA's efforts have led to the development and commercial use of technologies that will positively impact the environment. There are many examples of these technologies and how they are now being used:

- TVA led the nation in developing wet-limestone scrubbing for SO₂ control, built and operated a 25-megawatt coal-gasification unit for chemical production, and conducted the nation's first large-scale demonstration of atmospheric-fluidized-bed-combustion technology.
- TVA developed the reciprocating constructed-wetland technology, which uses natural means for significant removal of nitrogen, biochemical oxygen demand, and odor-producing compounds from industrial wastewater. The latest ReCip™ system was constructed near Aliceville, Alabama, and is treating up to 30,000 gallons per day of anaerobic lagoon wastewater from a commercial swine-rearing facility. ReCip™ systems of several different designs have been installed in the continental United States, Hawaii, and Egypt for treating municipal, industrial, and high-strength agricultural wastewater.
- TVA began testing and demonstrating commercial ground-source heat pumps in Valley schools to evaluate efficient heating and cooling technologies. Ground-source heat pumps provide low-cost and efficient operations while also addressing TVA system needs through lower peak loads. Using results from these early demonstrations, TVA's technical assistance and market transformation efforts have resulted in more than 10 million square feet of classrooms that use this technology. TVA's success in this effort provides a national showcase for others considering development of geothermal heat-pump programs.
- TVA worked with the Department of Energy, Department of Agriculture, and other federal agencies in developing the "Biomass Research and Development Act of 2000" and currently holds a seat on the federal Biomass R&D Board established by the passage of that act. TVA has received national recognition for its application of new biomass technologies to existing fossil plants. TVA began testing the incorporation of biomass with coal at fossil-fuel power plants in the 1990s. Tests at TVA plants have successfully demonstrated that cofiring wood wastes and shredded used tires simultaneously with coal reduces NOx, SO₂ and CO₂ emissions.
- TVA has entered into an R&D partnership with American Superconductor's new SuperVAR™ technology to help meet the ever-growing demand for better-quality power delivered more reliably. The company's new high temperature superconductor (HTS) dynamic synchronous condensers increase the transmission capacity of existing power grids by providing a very low-cost option for supporting voltage and mitigating voltage instabilities. TVA is investing in the prototype for this technology and, once it is proven, plans to install several of the devices on the transmission system.

In Closing

Public utilities will set the benchmark for serving the public interest. As a federal corporation that its customers, investors, and the nation count on, TVA is committed to this goal. Going forward, TVA will continue to serve the nation by supporting the national energy policy, acting as a yardstick for efficiency and reliability, playing a role in defending the nation, conducting environmental and industry research, and managing the nation's fifth-largest river system – at no cost to taxpayers.