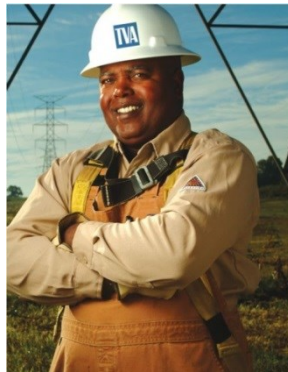


FY 2025 Budget Proposal & Management Agenda and FY 2023 Annual Performance Report



For the Fiscal Year Ending
September 30, 2025

Submitted to Congress
March 2024



Table of Contents

INTRODUCTION	4
BUDGET OVERVIEW	14
BUSINESS PLAN	18
MANAGEMENT INITIATIVES	23
OVERSIGHT AND GOVERNANCE	27
STRATEGIC PRIORITIES, STRATEGIC OBJECTIVES, AND PERFORMANCE GOALS	32
OTHER INFORMATION	54
APPENDIX A	55
APPENDIX B	56

Introduction

TVA'S MISSION	5
STRATEGIC COMMITMENTS	5
STRATEGIC PRIORITIES	5
POWER PROGRAM	7
TRANSMISSION SYSTEM.....	8
INTEGRATED RESOURCE PLAN	9
DECARBONIZATION PLANS.....	9
RENEWABLE ENERGY AND EMERGING TECHNOLOGIES	11
TECHNOLOGY INNOVATION.....	11
DESIGNING AND IMPLEMENTING ENERGY PROGRAMS AND SERVICES	12
SUSTAINABILITY	12
NATURAL RESOURCE STEWARDSHIP	13
TENNESSEE RIVER SYSTEM.....	13
ECONOMIC DEVELOPMENT	13
COMMITMENT TO THE FUTURE	13

TVA’s Mission

The Tennessee Valley Authority (“TVA”) was built for the people, created by Congress in 1933 and charged with a unique mission of service – to improve the quality of life in a seven-state region through the integrated management of the region’s resources. As it helped lift the Tennessee Valley region out of the Great Depression, TVA built dams for flood control, provided low-cost power and navigation for commercial shipping, restored depleted lands, and raised the standard of living across the region. As times have changed, TVA has changed with them by updating and refining its work to accomplish its mission of providing affordable energy, economic development, environmental stewardship, integrated river system management, and technological innovation. While TVA’s mission has remained constant since its inception, the environment in which TVA operates continues to evolve. The business and economic environment has become more challenging while the demand for power has increased due to population growth, continued economic development, and growth in electrification across the region. TVA continues to focus on efforts designed to bring sustainable prosperity to the Tennessee Valley, including the development of electric vehicle manufacturing and infrastructure and carbon-free technologies. This forward-thinking approach allows TVA to embrace new technologies which help serve ratepayers at a low cost while improving the quality of life for Valley residents and businesses.

Strategic Commitments

TVA’s commitment to service has been demonstrated throughout its history and continues to this day. As part of TVA’s ongoing commitments, the organization must continue to focus on serving the Valley in a manner which satisfies the ongoing challenges of providing clean, reliable energy at the lowest feasible rate.

Projecting these challenges into the future, on May 6, 2021, the TVA Board of Directors (“Board” or “TVA Board”) approved a resolution endorsing TVA’s Strategic Intent and Guiding Principles, which outlines TVA’s intent to align its people, operational, and innovation efforts to business strategies that provide reliable, resilient, affordable, and clean energy to the region. Included in this resolution are the following ongoing commitments:

- TVA is committed to being a leader in carbon-free energy
- TVA is committed to continued investments in our increasingly clean, diverse energy portfolio
- TVA is committed to being a leader in innovation and decarbonization solutions
- TVA is committed to serving the Valley communities
- TVA is committed to inclusion with diversity
- TVA is committed to financial strength and stability

For additional details regarding TVA’s strategic commitments, please see the complete Strategic Intent and Guiding Principles document, a copy of which is available on TVA’s website. (A link is available on page 54 of this document.)

Strategic Priorities

To continue its mission of service, TVA adopted strategic priorities in the fourth quarter of fiscal year (“FY”) 2020 that set the stage for strategic planning and performance measures in FY 2021 and beyond. The strategic priorities of People Advantage, Operational Excellence, Financial Strength, Powerful Partnerships, and Igniting Innovation highlight TVA’s commitment to its mission of service and response to the evolving business and economic environment.



People Advantage



Operational Excellence



Financial Strength



Powerful Partnerships



Igniting Innovation

TVA FY 2025 Budget Proposal & Management Agenda and FY 2023 Annual Performance Report

People Advantage

One of TVA's primary strengths is its diverse and talented workforce. Creating a culture that emphasizes safety, diversity, and inclusion is vital to maximize the potential of TVA's workforce and serve the people of the Tennessee Valley region. TVA's objective is to amplify the energy, passion, and creativity within each TVA employee.

In calendar year ("CY") 2020, to further demonstrate TVA's commitment to build and expand upon its relationship with employees, the organization extended its project labor agreements with the Building and Trade Unions by 10 years, through CY 2031. Typical extensions are five years, and this historic 10-year extension further strengthens TVA's partnership with the Building and Trade Unions. Additionally, in FY 2023, TVA achieved national recognition as a top 10 employer for veterans with the Military Friendly® Employer designation, a recognition TVA has achieved for the eighth consecutive year. Veterans represent nearly 20% of TVA's workforce, and TVA actively recruits veterans to help serve the Valley. Also, in FY 2022, TVA became the first federal agency to receive the Ethisphere® Compliance Leader Verification™ designation, which recognizes TVA's best-in-class ethics and compliance program.

Moreover, to strengthen TVA's commitment to equity, inclusion, and diversity, TVA created an enterprise Inclusion with Diversity Council in FY 2021 that is designed to advise, champion, and oversee all inclusion and diversity strategies and actions across TVA while promoting fairness and impartiality across the organization. This council reports directly to TVA's leadership team, demonstrating a commitment to achieve TVA's goals involving equity, inclusion, and diversity. In FY 2023, TVA published its annual Diversity, Equity, Inclusion, and Accessibility ("DEIA") Report and the report is available on TVA's website ([TVA's DEIA Report](#)). TVA continues to work to provide an environment that values the safety of all employees, while encouraging both creativity and passion to better serve the Valley.

Operational Excellence

TVA's operational objectives include building on TVA's best-in-class reputation for reliable service and competitively priced power. Increasing load growth coupled with extreme weather events have the ability to strain power system assets, reinforcing the need for TVA to maintain a reliable asset portfolio which can serve the Valley's energy needs across seasons.

In FY 2019, to further improve TVA's operational performance, TVA established an objective to achieve top quartile performance with respect to its nuclear fleet performance by the end of FY 2022. This objective was achieved in November 2021, almost a year earlier than targeted, and TVA further maintains an objective to lead the nation with respect to nuclear fleet performance by the end of FY 2025. Moreover, in FY 2023, all seven of TVA's nuclear units were recognized with exemplary performance levels compared to industry peers. Focusing on operational excellence will allow TVA to continue to reliably serve the Valley's energy needs, operate in a manner with increasingly less carbon emissions, and mitigate operational risks for the people of the Tennessee Valley.

In order to satisfy the Valley's increasing energy demand and accelerate the organization's decarbonization efforts, TVA is actively making additional investments in its fleet. These additional investments include plans for expanded renewable energy and gas generation, while also investing in the development of new technologies that can accelerate longer-term decarbonization aspirations.

Financial Strength

TVA's financial strength is a vital element of its performance as it allows the organization to continue to invest in the future and maintain appropriate debt levels, while fulfilling the TVA Act mandate of keeping energy rates as low as feasible.

Continued load growth and the asset transition to accelerate decarbonization are creating debt pressures, while inflationary and supply chain challenges continue to persist creating further financial challenges. TVA anticipates that debt will increase in the coming years as it adds additional generating capacity and continues to decarbonize its existing asset portfolio. The TVA Board approved a 4.5% base rate increase for FY 2024 to fund operational needs, and additional rate actions may be necessary to ensure TVA's ability to continue to provide reliable and cleaner energy. These cost pressures are not unique to TVA, and TVA's retail rates ranked in the top quartile amongst utility peers as of September 2023. TVA remains committed to an appropriate balance between rates and debt in order to maintain financial stability while providing affordable, reliable and increasingly clean energy.

Powerful Partnerships

TVA's priority of creating powerful partnerships includes promoting progress through the shared success of TVA's customers and stakeholders. TVA actively seeks to build relationships as a community leader and partner that is trusted by those whom TVA serves. TVA has consistently partnered with our stakeholders across the region to promote the region as an attractive area for both economic investment and job creation. Additionally, TVA is actively seeking to build on its relationships with the local power companies ("LPCs") TVA serves. As of September 30, 2023,

TVA FY 2025 Budget Proposal & Management Agenda and FY 2023 Annual Performance Report

147 of the 153 LPCs TVA serves had signed long-term partnership contracts with TVA, further strengthening the relationship between TVA and our communities.

TVA is also partnering with the University of Tennessee's Baker School of Public Policy and Public Affairs and with diverse stakeholders from across our region to conduct a Valley Pathways Study, focused on building a competitive and clean economy for the Tennessee Valley. More detailed information regarding this study is available on TVA's website ([Valley Pathways Study](#)).

Additionally, TVA has formed a Federal Funding Office to govern the agency's federal funding strategy and better position TVA for Inflation Reduction Act and Bipartisan Infrastructure Law funding. As part of this initiative, TVA is working with our partners to help facilitate access to these funding opportunities which can benefit customers across the Valley seeking financial assistance for clean energy and infrastructure investments. More information regarding TVA's guidance regarding federal funding is available on its website ([Federal Funding Opportunities](#)).

Igniting Innovation

Pursuing innovative solutions to further advance the organization's capabilities is another priority TVA is deploying to better serve our region. This includes promoting and encouraging new and creative ideas that may help with respect to improving system reliability, reducing carbon emissions, and lowering costs as TVA seeks to capitalize on new technologies in an industry that is constantly evolving.

As part of this initiative, TVA has formed a New Nuclear Program which provides a systematic roadmap for TVA's exploration of advanced nuclear technology and promotes the use of clean energy for the region. In FY 2023, to further support the development of new nuclear technologies, TVA announced a collaboration agreement with GE Hitachi Nuclear Energy ("GEH"), Ontario Power Generation, and BWRX TCA sp. z.o.o. to advance the global deployment of a new, innovative small modular reactor design. The objective of this agreement is to develop a first-of-its-kind small modular reactor design that can be deployed across multiple regions to further new nuclear decarbonization technologies.

Power Program

TVA operates the nation's largest public power system and supplies power in most of Tennessee, northern Alabama, northeastern Mississippi, and southwestern Kentucky and in portions of northern Georgia, western North Carolina, and southwestern Virginia to a population of approximately 10 million people. In 1959, Congress passed an amendment to the TVA Act that required TVA's power program to be self-financing from power revenues and proceeds from power program financings. While TVA's power program did not directly receive appropriated funds after it became self-financing, TVA continued to receive appropriations for certain multipurpose and other non-power, mission-related activities as well as for its stewardship activities through 1999. TVA has not received any appropriations from Congress for any activities since that time, and now funds stewardship program activities primarily with power revenues, with the remainder funded with user fees and other forms of revenues derived in connection with those activities.

Prior to 1959, TVA had received total power system appropriations of approximately \$1.4 billion ("Power Program Appropriation Investment"). The 1959 amendment to the TVA Act also required TVA, beginning in 1961, to make annual payments to the U.S. Treasury from net power proceeds as a repayment of and as a return on the Power Program Appropriation Investment. With the 2014 payment, TVA fulfilled its requirement under the 1959 amendment to repay \$1.0 billion of the Power Program Appropriation Investment. As of September 2023, TVA has repaid \$1.2 billion, including repayments made prior to 1959, along with interest of \$2.6 billion, for total payments of \$3.8 billion. The TVA Act requires TVA to continue making payments to the U.S. Treasury as a return on the remaining \$258 million of the Power Program Appropriation Investment. The amount of the return on the Power Program Appropriation Investment is based on the Power Program Appropriation Investment balance at the beginning of each fiscal year and the computed average interest rate payable by the U.S. Treasury on its total marketable public obligations at the same date.

TVA now funds all its operations primarily from the sale of electricity and power system financings. TVA's power system financings consist primarily of the sale of debt securities and secondarily of alternative forms of financing, such as lease arrangements.

TVA is primarily a wholesaler of energy. It sells electricity to LPC customers which then resell power to their customers at retail rates. TVA's LPCs consist of (1) municipalities and other local government entities ("municipalities") and (2) customer-owned entities ("cooperatives"). These municipalities and cooperatives operate public power electric systems whose primary purpose is not to make a profit but to supply electricity to the general public or the cooperative's members. TVA also sells power directly to certain end-use customers, primarily large commercial and industrial loads and federal agencies, including military installations, with loads larger than 5,000 kilowatts ("kW"). In addition, power in excess of the needs of the TVA system may, where consistent with the

TVA FY 2025 Budget Proposal & Management Agenda and FY 2023 Annual Performance Report

provisions of the TVA Act, be sold under exchange power arrangements with certain electric systems. In FY 2025, TVA expects sales of approximately 167 billion kilowatt-hours (“kWh”) of electricity. Power generating facilities operated by TVA as of September 30, 2023, included 29 conventional hydroelectric sites, one pumped-storage hydroelectric site, four coal-fired sites, three nuclear sites, 17 natural gas and/or oil-fired sites, one diesel generator site, and nine operating solar installations.

As of September 30, 2023, TVA’s nuclear units had a combined summer net capability of 8,232 megawatts (“MW”). These nuclear units generated 50 percent of the power from TVA-operated facilities, which excludes purchased power, during FY 2023. TVA’s system also includes 104 combustion turbine power blocks powered by natural gas and/or oil with a total summer net capability of 12,638 MW. These generators can be quickly started and are vital for meeting peak electricity demands. These generators provided 25 percent of the power from TVA-operated facilities in FY 2023. TVA’s four coal-fired sites accounted for 5,815 MW of summer net capability at September 30, 2023, and generated about 15 percent of the power from TVA-operated facilities in FY 2023. TVA-owned hydroelectric units had a combined summer net capability of 5,439 MW as of September 30, 2023 and generated about 10 percent of the power from TVA-operated facilities in FY 2023.

Transmission System

TVA’s transmission system is a critical link in moving electricity throughout the eastern United States. Since FY 2000, TVA has operated with 99.999 percent reliability in delivering electricity to its customers. The TVA transmission system is one of the largest in North America, delivering approximately 157 billion kWh of electricity to TVA customers in FY 2023.

TVA’s transmission system has 69 interconnections with 13 neighboring electric systems and consisted primarily of the following assets as of September 30, 2023:

- Approximately 2,500 circuit miles of 500 kilovolt, 11,900 circuit miles of 161 kilovolt, and 1,900 circuit miles of other voltage transmission lines, and 5,113 miles of fiber;
- 573 transmission substations, power switchyards, and switching stations; and
- 1,355 customer connection points (customer, generation, and interconnection).

TVA continues to invest in transmission assets to strengthen system reliability and incorporate new technology that provides a clearer picture of grid conditions over a wider area at any given time.

Additionally, a new system operations center was approved for \$332 million. The new secured facility is being built to accommodate a new energy management system and to adapt to new regulatory requirements. The facility is expected to be constructed by the end of CY 2024 and fully operational in CY 2026.

A new energy management system has also been approved by the TVA Board. As the current energy management system is nearing the end of its life cycle, this project will replace the existing analog system with a digital system which will also network the new control center with existing locations to enable better remote visibility and control. The system is expected to be complete in CY 2027 at an expected cost of \$108 million.

TVA is also working on various projects with the University of Tennessee and other universities, the Electric Power Research Institute (“EPRI”), the U.S. Department of Energy (“DOE”), the Eastern Interconnection Planning Collaborative, and others to help enable a dynamic, reliable, resilient, and multidirectional grid. Additionally, TVA is working in partnership with LPCs to modernize their distribution systems by developing a shared vision and roadmap for transforming the Tennessee Valley’s transmission and distribution systems into an integrated regional grid. As part of this objective, and through the organization’s recently formed Federal Funding Project Management Office, TVA is partnering with LPCs to explore federal funding opportunities that can contribute to LPC grid modernization improvements. Potential improvement opportunities to be considered under this initiative include those which have the ability to enhance the resilience of the electric infrastructure against disruptive events, improve the flexibility of the grid, promote clean energy and transportation technologies, and enable low-income and disadvantaged communities to deploy or benefit from zero-emission technologies.

These initiatives support TVA’s decarbonization efforts while helping ensure TVA continues to deliver reliable power at the lowest feasible rate. Investments in a modernized grid will help enable enhanced monitoring and control of TVA’s transmission and generation portfolio.

Integrated Resource Plan

TVA's Integrated Resource Plan ("IRP") is a stakeholder informed long-term plan that provides direction on how TVA can best meet future demand for power. It shapes how TVA will provide low-cost, clean, and reliable electricity, support environmental stewardship, and foster economic development in the Tennessee Valley in the future.

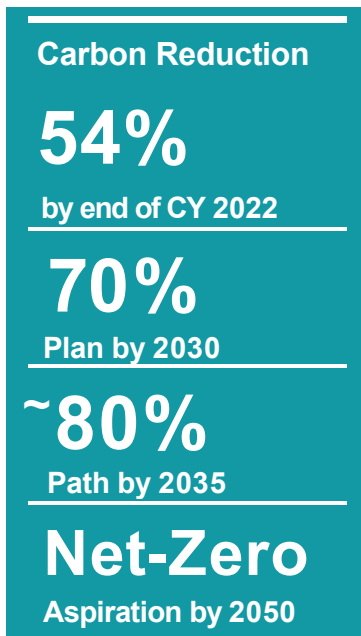
TVA is now in the process of developing its next IRP, which will provide TVA direction on how to best meet future electricity demands from now through 2050. The IRP process includes extensive engagement from the public and stakeholders and is expected to be complete in CY 2024. More information regarding TVA's upcoming IRP is available on its website ([TVA IRP Update](#)).

In an ever-changing world, TVA will continue to serve the people of the Tennessee Valley by providing affordable, reliable, and clean power in an environmentally responsible manner while promoting economic development across the region.

Decarbonization Plans

TVA is an industry leader in developing innovative and cost-effective technologies that are designed to help decarbonize the economy and achieve aspirations of a net-zero carbon energy future. Based on TVA's progress in diversifying the power system and the status of the organization's existing power system assets, TVA is working to achieve significant carbon reductions in the decades to come without compromising the low rates and high reliability that sustain the customers and communities of the Valley.

Given TVA's expectations for the pace of transformational innovation and cost competitive technological advances, TVA intends to follow the trajectory below as the organization aspires to achieve net-zero carbon emissions by FY 2050:



- Delivered 54% reduction in mass carbon emissions from CY 2005 levels by the end of CY 2022, including the retirement of 8,600 megawatts of coal generation and the addition of 1,600 megawatts of carbon-free nuclear generation.
- Executing a plan to 70% reduction in carbon emissions by FY 2030, including expansion of renewable capacity, further reducing TVA's reliance on coal as additional plants approach end-of-life, and investing in TVA's carbon-free nuclear and hydroelectric fleet.
- Developing a path to ~80% reduction by FY 2035, primarily by leveraging existing, cost-effective technologies, expanding TVA's renewable portfolio to include up to an additional 10,000 megawatts of solar by FY 2035, evaluating coal plants as they reach end-of life, and investing in research and development of technologies such as small modular reactors, longer-duration storage, and carbon capture.
- Aspiration to net-zero emissions by FY 2050, which would require the development of new, cost-effective technologies such as affordable, scalable nuclear technologies.

TVA currently expects to add up to 10,000 megawatts of solar energy by FY 2035, as stated above, while also evaluating the retirement of all remaining coal-fired units by FY 2035 to help preserve TVA's position as a leader in carbon reduction and to contribute to the decarbonization efforts of the Administration. To support this plan, and TVA's decarbonization efforts, TVA issued a carbon-free request for proposals ("RFP") in July 2022 for up to 5,000 megawatts of carbon-free and renewable energy projects. This RFP includes a broad range of potential generation sources, including nuclear, green gas, solar, storage, and wind, among others. TVA's plans include making selections for the carbon-free RFP in the first-half of FY 2024. In December 2023, TVA signed four power purchase agreements totaling over 600 MW of solar generation and 20 MW of battery storage capacity from the carbon-free RFP that are expected to come online by the end of CY 2028.

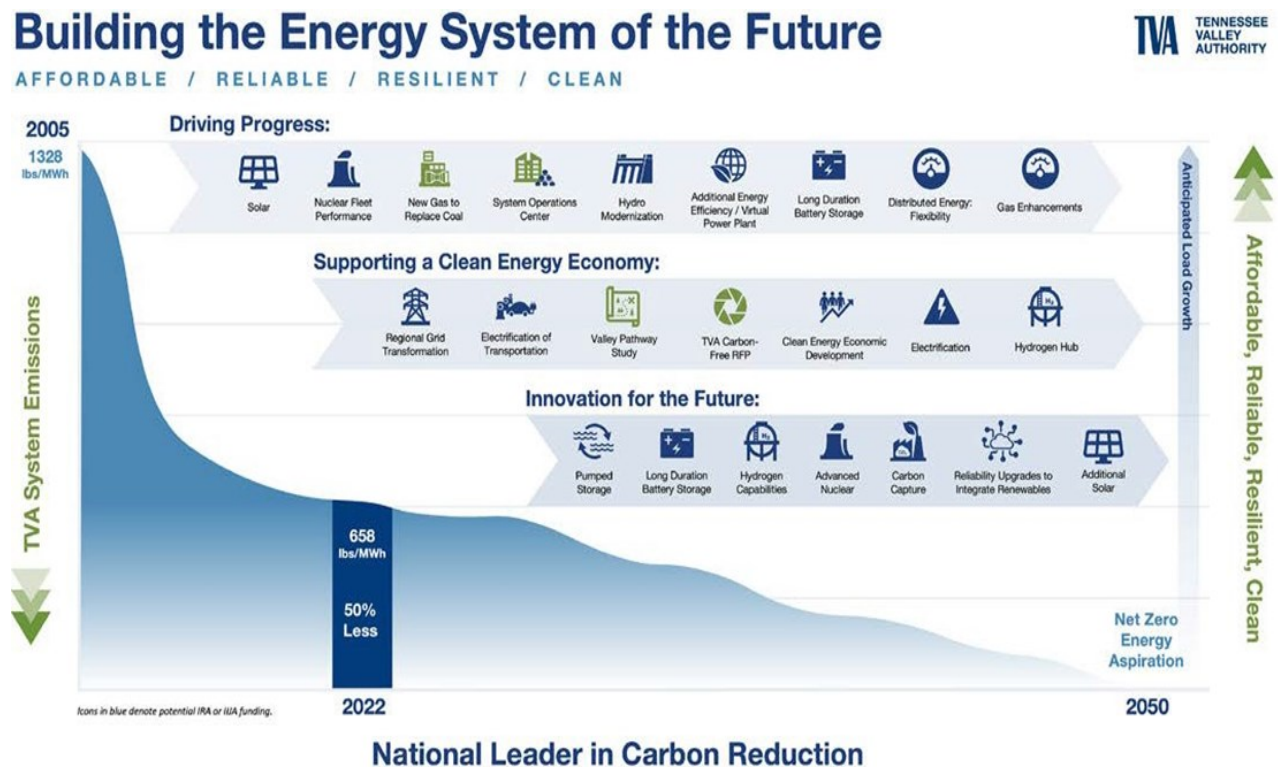
TVA's current planning assumptions include the adoption of new natural gas technologies to enable solar expansion, support additional coal retirements, and meet growing electricity demand while helping to maintain both system

TVA FY 2025 Budget Proposal & Management Agenda and FY 2023 Annual Performance Report

reliability and resiliency. TVA is committed to working with its partners in the Tennessee Valley and elsewhere to accelerate the clean energy economy in keeping with TVA's mission of service.

Additionally, to aid in the continued progress of TVA's renewable efforts, in November 2022 TVA's Board voted to approve the nation's first-of-its-kind pilot program which will determine if closed coal ash sites are suitable for the development of utility-scale solar projects. Pending environmental reviews and regulatory approval, the \$216 million pilot project will explore an innovative approach to repurpose a closed coal ash site at the Shawnee Fossil Plant ("Shawnee") to determine if the site may be a suitable option to develop a new utility-scale solar facility. This pilot project expands TVA's efforts to make its seven-state region a leader in decarbonization by continuing innovation efforts in new nuclear, renewable energy, electric vehicles, energy storage, and other developments.

The chart below represents TVA's decarbonization journey, outlining achievements to date and the plans of the organization going forward.



As TVA works to achieve the aspiration for net-zero carbon, the organization acknowledges that reaching this goal will rely on the successful development and deployment of new technologies. TVA is investing in research and development with peers to achieve utility scale deployment of these new technologies. TVA supports EPRI's low-carbon resource initiative designed to advance and deploy decarbonization technologies within the next decade. In alignment with these goals, TVA is committed to investing in the future of nuclear including advanced nuclear technologies, such as small modular reactors. TVA is also implementing a Hydro Life Extension Program with a focus on improving the availability and flexibility of its hydroelectric fleet.

Further, in August 2022, the Inflation Reduction Act was signed into law, which makes certain tax-exempt entities, including TVA, eligible in some circumstances for a direct-pay option for certain tax credits. These are tax credits that encourage investment in clean energy, and TVA is currently evaluating and seeking potential funding opportunities.

In continued support of the development of new carbon-free technologies, in December 2019, TVA became the first utility in the nation to successfully obtain approval for an early site permit from the Nuclear Regulatory Commission ("NRC") to potentially construct and operate small modular reactors at TVA's Clinch River Nuclear Site. In FY 2023, TVA signed a technical collaboration agreement with international peers and developers in the energy industry to help advance the development of this innovative technology and achieve deep carbon reductions. TVA has taken these significant steps because we believe advanced nuclear technologies will play a critical role in our region and

TVA FY 2025 Budget Proposal & Management Agenda and FY 2023 Annual Performance Report

our nation's drive toward a clean energy future and our energy security – focusing on reliability, affordability, resiliency and sustainability. However, bringing a domestic first-of-a-kind SMR technology online is inherently expensive and comes with unique costs.

To advance the promise of new nuclear, an SMR must be successfully licensed, constructed, and operationalized in the United States, and the right partnerships need to be in place to quickly capitalize on the opportunity to deploy additional units. While decisions and investment in power generation assets require TVA Board approval and completion of legal and environmental reviews, TVA is well-positioned to serve as the first mover. However, any first utility mover will require significant federal investment in the first units to offset first-of-a-kind costs and decrease uncertainties and risks to help enable fast followers.

TVA continues to be a leader in decarbonization while maintaining the objective of providing safe, reliable, and affordable power for our LPCs and the communities TVA serves, consistent with a primary objective of the TVA Act to keep rates as low as feasible and the statutory directive to use least-cost planning principles for the TVA system.

Renewable Energy and Emerging Technologies

TVA's renewable energy portfolio includes both TVA-owned assets and renewable energy purchases. TVA owns nine operating solar installations with a total net summer capability of approximately 1 MW. Power purchase agreements for committed and operating renewable energy – solar, wind, and biomass – have a combined capacity greater than 4,100 MW. TVA tracks its renewable energy commitments and claims, in part, through the management of renewable energy certificates ("RECs"). TVA offers Green Programs in partnership with LPCs, which makes it easy for end-use consumers to purchase RECs for their personal sustainability goals. The RECs, which each represent 1 megawatt hour ("MWh") of renewable energy generation, are principally associated with wind, solar, biomass, and low-impact hydroelectric. TVA continues to evaluate ways to adjust to customer preferences and requirements for cleaner and greener energy, including the acquisition of RECs from renewable purchased power that can be sold to customers to meet their needs.

Consumer desire for energy choice, among other things, is driving the expectation for flexible options in the electric industry. TVA and LPCs are working together to leverage the strengths of the Tennessee Valley public power model to provide distributed energy solutions that are economical, sustainable, and flexible. TVA will focus on the safety and reliability impacts of these resources as they are interconnected to the grid and will aim to ensure that the pricing of electricity remains as low as feasible. Additional regulatory considerations and analysis may be required as the distributed energy resources ("DER") market, technologies, and programs evolve. TVA will continue working to develop pricing and regulatory structures with a deliberate and thoughtful analysis of each current and future program offering. This requires strong partnerships with LPCs to reinforce local control, provide customers choices, and provide end-use consumers the flexibility they desire.

The development of new energy management systems and energy storage technologies present opportunities for more sophisticated and integrated operation of the entire grid. The advent of electric vehicles and small-scale renewable generation has hastened the development of energy storage technologies that have the potential to mitigate the intermittent supply issues associated with many renewable generation options. Implementation of these technologies in conjunction with two-way communication to the site creates the potential for more efficient usage of other DER on the grid.

On-site energy management technologies and the proliferation of companies interested in providing services to support and aggregate the impacts of such systems provide another DER opportunity. Such systems can afford the consumer benefits through reduced consumption, increased comfort, detailed energy use data, and savings from time-sensitive rate structures. TVA and LPCs must consider the integration of the impacts from changes in energy usage patterns resulting from the operation of such systems. Demand response systems that take advantage of the increasing sophistication in communication to homes, businesses, and distribution system assets also afford the opportunity for more granular control of system demand.

Technology Innovation

TVA makes annual investments in science and technology innovation, assisting the agency in meeting business and operational challenges. TVA addresses gaps in energy storage, electrification (decarbonization), advanced clean generation, and grid integration and modernization by focusing on the following transformative initiatives: Advanced Nuclear Solutions, Storage Integration, Electric Vehicle Evolution, Connected Communities, Regional Grid Transformation, Future Grid Performance, and Decarbonization Options. TVA also continues to support the optimization of its generation and delivery assets by focusing on emerging and technological advances, grid edge technologies, and DER. TVA's goal is to determine how technologies can be used to improve/sustain reliability, reduce costs, lower emissions to the environment, and position TVA for a sustainable future.

TVA FY 2025 Budget Proposal & Management Agenda and FY 2023 Annual Performance Report

TVA seeks to leverage research and development activities and investments through partnerships with LPCs, EPRI, DOE, which includes the Oak Ridge National Laboratory and other national labs, research consortiums, peer utilities, universities, and vendors, and through participation in professional societies.

Designing and Implementing Energy Programs and Services

TVA partners with LPCs, businesses, and consumers to develop and deliver energy programs and services that make life better for the people of the Valley. These demand management programs and services are typically offered in partnership with LPCs and are designed to offset load growth and peak demand spikes while improving energy equity for underserved communities and reducing the Tennessee Valley's carbon footprint. These offerings also help TVA and the LPCs position themselves as the trusted energy advisors, innovators, and energy providers of choice as the utility industry enters an era of greater competition amid remarkable economic and population growth in the region.

Current TVA EnergyRight® programmatic areas include:

- **Demand Response** – Demand Response is anticipated to provide more than 2,200 MW of economical capacity from 2024-2028 while lowering effective rates for participating customers. This amount is forward-looking and subject to various uncertainties. This sustainable resource provides flexibility to lower TVA's peak demand when called upon and offsets the need for additional generation. Participants also gain valuable insight into their energy usage.
- **Energy Efficiency** – Through energy efficiency programs, services, and advice, TVA helps consumers lower their energy costs, meet sustainability goals, and improve productivity, health, and comfort while positioning LPCs and TVA as trusted energy providers. TVA is planning to invest \$1.5 billion in energy efficiency upgrades and demand response programs over the next four years (through FY 2027), with TVA ultimately seeking to offset 30% of new load growth over the next decade.
- **Electrification** – TVA promotes smart electric technologies, like electric vehicles, efficient space heating, and industrial processes, to improve productivity and sustainability while generating efficient load and revenue. TVA has partnered with LPCs and others to support the electrification of transportation in the Valley through a multi-year EV initiative, including the launch of the Fast Charge network.

As more consumers and businesses demand cleaner energy, the utility industry is evolving to meet those needs. As TVA seeks to obtain greater amounts of its power supply from clean resources, TVA EnergyRight® programs are expected to contribute to carbon emission reductions by more than 1.4 million tons over the next five years. More information regarding TVA's EnergyRight® programs are available at <https://energyright.com>.

Energy efficiency and demand response programs offer tangible benefits to businesses and residents of the Valley, including lower bills, improved comfort and health, and a smaller carbon footprint. Through investments in these resources, TVA demonstrates our commitment to local communities, the environment, economic development, and our power system's reliability.

Sustainability

Part of TVA's mission, sustainability has been a focus of TVA from its start. Although challenges to this mission are continuing to evolve, TVA remains committed to delivering on its mission. Sustainability for TVA means ensuring its ability to provide the region with affordable and reliable energy, a healthy environment, and a prosperous economy – now and for future generations. Sustainable performance also prepares TVA for the changing regulatory landscape.

To support the organization's mission, TVA's sustainability work is focused in four areas:

- **Economic Impact:** Partnering to build the region's clean energy economy and providing affordable, reliable, resilient and clean energy
- **Environment:** Stewarding the region's natural resources, including protection of the biodiversity that makes the region unique, and being a transformational leader in the fight against climate change
- **Social:** Making life better for communities throughout the region and championing inclusion for its employees and the people TVA serves
- **Governance:** Driving progress through accountability and transparency

Sustainability is incorporated into the work performed at TVA to protect the miles of reservoir shoreline, keep electricity rates as low as feasible, reinforce TVA's commitment to a safe workplace while preserving public safety, support TVA's economic development efforts throughout the region, and pursue continuous improvement in environmental performance including carbon emissions reduction. TVA manages many programs that support its

TVA FY 2025 Budget Proposal & Management Agenda and FY 2023 Annual Performance Report

sustainability focus, including technology innovation, environmental stewardship and compliance, and a growing renewable energy portfolio.

TVA issued its FY 2022 Sustainability Report on May 10, 2023, and this report is publicly available on the organization's website ([TVA Sustainability Report](#)). This comprehensive Sustainability Report aligns with global reporting standards and documents TVA's progress in sustainability-related actions.

Natural Resource Stewardship

TVA's natural resource stewardship efforts make life in the Valley better, including through the integrated management of the Tennessee River System and its public lands, including approximately 11,000 miles of shoreline, 650,000 surface acres of reservoir water, and 293,000 acres of reservoir lands.

Additional guidance for carrying out many of TVA's essential stewardship responsibilities is provided in TVA's Natural Resource Plan ("NRP"). Building on TVA's natural resource stewardship strategy, the NRP provides a flexible approach for long-term planning that will help TVA remain well-equipped to prioritize funding plans, create efficiencies in business planning and stewardship project implementation, and align with TVA's mission. Detailed information regarding TVA's NRP is available on the organization's website ([TVA Natural Resource Plan](#)).

Moreover, in November 2021, the TVA Board approved a Biodiversity Policy that publicly commits to integrating biodiversity conservation into TVA's operations. The Biodiversity Policy further builds on the TVA record of environmental stewardship by acknowledging the critical role of natural systems in achieving its mission of improving the quality of life in the region. The policy commits to seeking conservation opportunities within capital projects and improving current operational practices to help minimize impacts, reduce costs, and enhance biodiversity.

Tennessee River System

The Tennessee River System is made up of approximately 42,000 miles of rivers, streams, and tributaries, including the 652-mile-long Tennessee River, and 49 dams and 14 navigation locks. It is 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 integrated management of the river system supports recreation, public and industrial water supply needs, aquatic habitat protection, flood risk reduction, hydroelectric power production, and cooling water for TVA's generation units. The watersheds of the Tennessee River and its 16 tributaries encompass more than 41,000 square miles across 125 counties in portions of seven states.

Economic Development

Since its creation in 1933, TVA has promoted the development of the Tennessee Valley region. Economic development is a core component of the mission of TVA, along with energy production and environmental stewardship. TVA works with LPCs, regional, state and local agencies, and communities to showcase the advantages available to businesses locating or expanding in TVA's service area. TVA's primary economic development goals are to recruit major business operations to the Tennessee Valley, encourage the location and expansion of companies that create good paying jobs, and prepare communities in the Tennessee Valley for economic growth. TVA seeks to meet these goals through a combination of initiatives and partnerships designed to provide program support, technical services, industry expertise, financial assistance, and site-selection assistance to new and existing businesses. TVA's economic development efforts helped recruit or expand nearly 160 companies into the TVA service area during FY 2023. These companies announced anticipated capital investments of over \$9 billion and the expected creation of over 12,000 new jobs and retention of over 46,000 existing jobs in the Valley.

Commitment to the Future

TVA is a leader in public power, a model built on trust and partnerships with the people TVA serves. This model continues to deliver reliable electricity for approximately 10 million people at the lowest feasible rates. It enables effective, integrated resource management and environmental stewardship in parts of seven southeastern states. TVA promotes alliances with others that help attract and retain jobs and investments that support economic development in the Tennessee Valley. TVA recognizes that the environment in which TVA operates continues to evolve. TVA is more flexible in its planning, is more nimble in its execution, and is also working to respond more quickly than ever to continually changing market conditions. TVA remains committed to providing safe, clean, reliable energy at rates as low as feasible. TVA is proud to honor this commitment.

Budget Overview

ASSET PORTFOLIO.....	15
STEWARDSHIP FUNDING	15
TVA OPERATING BUDGET	16
CAPITAL BUDGET & CASH FLOW	17

TVA FY 2025 Budget Proposal & Management Agenda and FY 2023 Annual Performance Report

Asset Portfolio

TVA is actively investing in its power system in order to maintain system reliability and support environmental stewardship efforts, all while balancing the need to keep energy rates as low as feasible. This requires the continuous review of capital investments in order to meet necessary operational needs. TVA funds asset investments through power revenues, the issuance of bonds up to a limit set by Congress, and alternative financings including lease financings.

TVA must continuously evaluate all generating assets to ensure an optimal energy portfolio that provides safe, clean, and reliable power while maintaining flexibility and fiscal responsibility for the people of the Tennessee Valley. Based on results of assessments presented to the TVA Board in 2019, the retirement of Bull Run Fossil Plant ("Bull Run") by December 2023 was approved, and as of September 30, 2023, the facility was retired. Moreover, in January 2023, TVA issued its Record of Decision to retire the two coal-fired units at Cumberland Fossil Plant ("Cumberland") by the end of CY 2026 and CY 2028, respectively. Additionally, environmental reviews and the public input process evaluating the potential retirement of all units at the Kingston Fossil Plant ("Kingston") are underway.

As TVA continues to evaluate the impact of retiring its coal-fired fleet by 2035 while accelerating the growth of renewables, it also continues to evaluate adding flexible lower carbon-emitting gas plants as a strategy to maintain reliability and accommodate increasing load growth on TVA's system. During 2019, the TVA Board approved an expansion of peaking gas replacement capacity at two combustion turbine ("CT") gas facilities, contingent on the successful completion of environmental reviews. In 2021, environmental reviews under the National Environmental Policy Act ("NEPA") and other applicable laws were complete, and TVA received air permits for CT gas builds at its Paradise and Colbert facilities. Commercial plant operations began on Colbert CT Units 9-11 on July 25, 2023, with a total summer net capability of 681 MW. Additionally, pre-commercial plant operations began on Paradise CT Units 5-7 in the first quarter of FY 2024, and all three new units were placed in service in December 2023, with an expected summer net capability of 681 MW. TVA is also replacing generation for one unit at its Cumberland fossil site with a 1,450 MW combined cycle plant that is expected to be operational by the end of CY 2026, when the first coal unit is scheduled to be retired. The second coal unit at the Cumberland site is scheduled to be retired by the end of CY 2028, with replacement generation options still being evaluated.

In addition, a 500 MW aeroderivative CT project at TVA's Johnsonville site has been approved. In 2022, environmental reviews under NEPA and other applicable laws were completed, and TVA received the air permits for the Johnsonville facility. TVA anticipates the Johnsonville aeroderivative CT project to enter commercial operations by the end of CY 2024. TVA is also exploring a 200 MW aeroderivative CT project at TVA's Allen site and a 500 MW simple cycle CT project at TVA's Caledonia site contingent on the successful completion of appropriate environmental reviews.

Moreover, at its August 2023 Board meeting, the Board approved an early phase study for potential new generation in Cheatham County, TN, and is exploring new generation to be constructed in Kingston, TN. As part of the approvals, each project is contingent on the completion of appropriate environmental reviews and will include public comment periods. Potential new generation options at each site are being evaluated.

In support of TVA's innovative decarbonization initiatives, TVA is currently exploring the development of a first-of-its-kind utility-scale solar project at its Shawnee Plant, contingent on successfully completing environmental reviews under NEPA and other applicable laws and obtaining the necessary state permits. The project would utilize TVA-owned land, deploying a solar cap system on the closed coal combustion residual ("CCR") facility at the site. As of September 30, 2023, TVA had spent \$49 million on the 99 MW project and expects to spend an additional \$167 million. This pilot project will explore an innovative approach to repurpose a closed coal ash site to determine if it may be a suitable option to develop a new utility-scale solar facility.

Stewardship Funding

In the 1998 Energy and Water Development Appropriations Act, Congress directed TVA to fund essential stewardship activities related to its management of the Tennessee River system and nonpower or stewardship properties with power revenues in the event that there were insufficient appropriations or other available funds to pay for such activities in any fiscal year. Congress has not provided any federal appropriations to TVA to fund stewardship activities since 1999. Consequently, during FY 2000, TVA began paying for essential stewardship activities primarily with power revenues, and the remainder is funded with user fees and other forms of revenues derived in connection with those activities. The activities related to stewardship properties do not meet the criteria of an operating segment under accounting principles generally accepted in the United States of America ("GAAP"). Accordingly, these assets and properties are included as part of the power program, TVA's only operating segment. TVA has not received federal appropriations for stewardship activities since 1999, and none are requested for FY 2025.

TVA Operating Budget
(Millions of dollars)

	2023	2024	2025
	Actual	Estimate	Estimate
Revenue	\$ 12,054	\$ 12,533	\$ 13,367
Operating Expenses			
Fuel & Purchased Power	4,182	4,028	4,411
Operating, Maintenance, & Other	3,372	3,584	3,733
Depreciation & Amortization	2,213	2,261	2,298
Tax Equivalents	<u>593</u>	<u>577</u>	<u>628</u>
Total Operating Expenses	10,360	10,450	11,070
Operating Income	1,694	2,083	2,297
Other Income / (Expense)	61	12	11
Other Net Periodic Benefit Cost	(199)	(104)	(51)
Interest Expense, net	<u>1,056</u>	<u>1,117</u>	<u>1,266</u>
Net Income	\$ 500	\$ 874	\$ 991

Capital Budget & Cash Flow
(Millions of dollars)

	2023	2024	2025
	Actual	Estimate	Estimate
Cash flows from operating activities			
Net income	\$ 500	\$ 874	\$ 991
Items affecting operating activities	<u>2,372</u>	<u>1,745</u>	<u>1,946</u>
Net cash provided by operating activities	2,872	2,619	2,937
Cash Used in Capital Budget			
Capital Projects			
Nuclear	(311)	(327)	(324)
Power Operations	(298)	(299)	(386)
River Operations	(76)	(85)	(124)
Transmission	(195)	(208)	(210)
Other Base Capital	<u>(185)</u>	<u>(515)</u>	<u>(387)</u>
Total Base Capital	(1,065)	(1,434)	(1,431)
Ash Remediation & Other	(25)	(42)	(36)
Clean Air	(93)	(72)	(243)
Wastewater Treatment	<u>(78)</u>	<u>(33)</u>	<u>(6)</u>
Total Environmental Costs	(196)	(147)	(285)
Gas Plant Expansion Builds	(753)	(1,560)	(2,208)
Transmission and Other	(622)	(486)	(572)
Hydro, Solar, and Battery	(114)	(151)	(901)
Nuclear Uprates and License Renewal	<u>(21)</u>	<u>(31)</u>	<u>(194)</u>
Total Capacity Expansion	(1,510)	(2,228)	(3,875)
Nuclear Fuel Capital	(273)	(263)	(259)
Other Investing Activities	<u>50</u>	<u>(96)</u>	<u>151</u>
Net cash used in investing activities	(2,994)	(4,168)	(5,699)
Borrowings (net of redemptions)	223	1,669	2,883
Other financing activities	<u>(100)</u>	<u>(120)</u>	<u>(121)</u>
Net cash provided by financing activities	123	1,549	2,762
Net change in cash and cash equivalents	1	-	-
Cash and cash equivalents at beginning of year*	500	501	501
Cash and cash equivalents at end of year*	501	501	501
Cash Payments to U.S. Treasury**	(5)	(10)	(10)
Increase/(Reduction) in Total Debt and Debt-Like Obligations	\$ 189	\$ 1,633	2,845

* Beginning and ending cash equivalents exclude restricted cash

** For federal reporting purposes Payments to U.S. Treasury are not considered

Business Plan

BORROWING LIMIT	19
TVA RETIREMENT SYSTEM	19
COAL-FIRED FLEET EVALUATION	20
COAL COMBUSTION RESIDUAL FACILITIES.....	21
RATE STRUCTURE AND PANDEMIC CREDITS.....	22
PAYMENTS IN LIEU OF TAXES	22

TVA FY 2025 Budget Proposal & Management Agenda and FY 2023 Annual Performance Report

TVA is governed by the nine-member TVA Board of Directors, which is responsible for approving an annual budget. The information included in this document is based on TVA's FY 2024 annual budget, which was approved by the TVA Board in August 2023. The following were considered in preparing the budget.

Borrowing Limit

TVA works to fulfill its mission of supplying low-cost and reliable energy, providing environmental stewardship, and stimulating economic development while effectively managing debt and living within its means. In achieving its mission while following sound financial principles, TVA generally uses financing to fund capital investments for new generation capacity and environmental controls. TVA's use of debt allows it to spread the costs of capital investments over the lifetime of those investments, rather than charging existing customers the entire costs of these investments upfront. In addition, bonds and notes are generally the lowest-cost form of financing available to TVA, making them the most fiscally-responsible choice for our ratepayers.

TVA has the authority per the TVA Act to issue bonds, notes, and other evidence of indebtedness up to a \$30 billion limit, sometimes referred to as TVA's statutory debt limit. TVA's \$30 billion limit on bonds and notes has not been raised since 1979, but TVA's business and operations have continued to grow along with the power needs of the Tennessee Valley. Since 1979, TVA has increased its total assets from \$13 billion to \$51 billion as of September 30, 2023. With growing power demand across the TVA service territory, there will be a need for additional investment in assets in the near-term. Other public power entities with statutory debt limits have experienced similar changes to their systems and needs. For example, Bonneville Power Administration (BPA), a large federal power marketer, recently received a \$10 billion increase to its borrowing authority with the U.S. Treasury.

It is important to note that TVA borrows in the public capital markets, and TVA's bonds are not guaranteed by the federal government. TVA's bonds and notes do not count against U.S. Treasury borrowing limits and new bonds would not burden the U.S. Treasury's borrowing needs.

TVA serves a critical role in the nation's infrastructure. This includes managing the Tennessee River system and functioning as the largest public power provider in the U.S., supplying power to 10 million people, businesses, and industries in the seven-state Tennessee Valley region. TVA is also the third largest operator of nuclear power plants in the U.S., performs an important role in supporting national defense, and executes a crucial part in maintaining the reliability of the eastern power grid.

Despite TVA's large size and scope, financial comparisons show that TVA does not use more financing to fund its power system investments than public or private peer utilities. In fact, TVA's debt levels are low in comparison to other public power utilities. Since 2018, TVA's debt/equity ratio has been at or near top quartile among public utility peers. As compared to investor-owned utilities, TVA compares favorably as well, with the lowest debt to capacity and debt to sales ratios as compared to regional peer holding companies.

TVA's balance of total financing obligations ("TFOs"), which include statutory debt and other financing obligations, increased by \$0.2 billion in FY 2023. This increase follows an FY 2022 reduction of \$0.2 billion, and has allowed TVA to sustain its lowest debt levels in over 30 years. As of September 30, 2023, TVA had \$19.5 billion of bonds and notes outstanding. See Appendix B for a calculation of TFOs utilizing financial statement line items reported in accordance with Generally Accepted Accounting Principles.

TVA's strong financial health enables access to low-cost debt financing for future investments in the power system. TVA is committed to its statutory mission to provide power rates as low as feasible, in part, through its use of the statutory debt authority, but it is also bounded by that same debt limit. As the Tennessee Valley region continues to experience load growth due to in-migration, on-shoring of domestic manufacturing, and electrification, extensive new capital investments in generating capacity will be necessary.

TVA Retirement System

The TVA Retirement System ("TVARS") was established by the TVA Board in 1939 to provide retirement benefits for TVA employees. TVARS is a separate legal entity from TVA and is governed by its own board of directors consisting of seven members ("TVARS Board"): three elected by and from active employees who are members of TVARS, three appointed by TVA, and a seventh who is selected by the other six and is a TVA retiree. TVARS administers a defined benefit (pension) plan and a 401(k) plan, both of which are tax-qualified retirement plans under Section 401(a) of the Internal Revenue Code.

As of September 30, 2023, the pension plan had assets of \$8.1 billion compared with liabilities of \$10.1 billion, with an 81% funding ratio and a \$1.9 billion unfunded liability. The pension plan currently pays out over \$750 million per year in retirement benefits to approximately 22,000 retirees and beneficiaries. As of September 30, 2023, the 401(k) plan had assets of \$3.8 billion.

TVA FY 2025 Budget Proposal & Management Agenda and FY 2023 Annual Performance Report

TVA is committed to funding the retirement benefits for current and future retirees and beneficiaries under the pension plan, and as evidence of this commitment, has worked with the TVARS Board in recent years to implement changes to improve the long-term health of the plan, including the following:

- Closing the pension plan to new employees – employees who were hired first on or after July 1, 2014, receive retirement benefits under the 401(k) plan only;
- Shifting future benefit accruals for most current employees from the pension plan to the 401(k) plan based on the employees' hire date, years of service, and individual elections;
- Increasing non-elective and matching contributions to employees' 401(k) plan accounts to offset reduced accruals in the pension plan; and
- Committing to increased annual contributions to the pension plan of at least \$300 million for a period of 20 years (from FY 2017 through FY 2036) or until the plan is fully funded, whichever occurs first.

TVARS assets reached an all-time high as a result of investment gains from equity markets following the shutdown of economies from the COVID-19 pandemic. TVA worked with TVARS and their investment and actuarial consultants to model the TVARS assets and liabilities and alternative asset allocation policies in light of the then-current state of the markets, the forward-looking capital market assumptions, TVA's annual contribution commitment, and the goal for the pension plan to be fully funded. As a result of this work, in FY 2021, TVA and the TVARS Board adopted a new asset allocation policy and de-risking strategy that provides greater stability in TVARS' asset value and reduces TVARS' funded status volatility while working toward the goal of fully-funded liabilities.

All retirement benefit payments continue to be made by TVARS to retirees and beneficiaries, and with the recent changes to the plans, TVA's long-term annual contributions to fund benefits, and the new TVARS asset allocation policy and investment de-risking strategy, the pension plan remains on-track to achieve 100% funded status by FY 2036.

Coal-Fired Fleet Evaluation

TVA began constructing its coal-fired plants in the 1940s, and its coal-fired units were placed in service between 1951 and 1973. Coal-fired units are in either active or retired status. TVA considers a unit to be in an active state when the unit is generating, available for service, or temporarily unavailable due to equipment failures, inspections, or repairs. All other coal-fired units are considered retired, and TVA retired its Bull Run Fossil Plant facility as of September 30, 2023. As of December 31, 2023, TVA had four remaining coal-fired plants consisting of 24 active units. These active units accounted for 5,815 MW of summer net capability at December 31, 2023. TVA is currently evaluating the impact of retiring all remaining coal-fired units by FY 2035. Evaluation of coal plant retirements will include environmental reviews, public input, and Board approval and will also consider alternatives for replacement capacity as needed to support a low-cost, reliable, flexible, and increasingly clean power system.

In line with this approach, in FY 2022, TVA made available and received public input on a draft Environmental Impact Statement ("EIS") to assess the impacts associated with the potential retirement of its Cumberland coal-fired units and the construction and operation of facilities to replace part of that generation. The final EIS was published in December 2022, and TVA documented its final decision with the Record of Decision on January 10, 2023. TVA plans to retire the two coal-fired units at Cumberland and replace generation for one unit with a 1,450 MW combined cycle plant that is expected to be operational by the end of CY 2026 when the first coal unit is scheduled to be retired. The second unit is scheduled to be retired by the end of CY 2028. In May 2023, TVA published the notice of intent to conduct an EIS to study potential environmental impacts associated with the proposed construction and operation of facilities to replace part of that generation.

Additionally, TVA is currently in the process of completing an environmental review for the potential retirement of its Kingston Plant. The draft EIS for Kingston was made available for public comment in 2023. As part of the EIS process, TVA also sends both draft and final EIS documents to the Environmental Protection Agency ("EPA") for review and comment, and the EPA publishes notices of their availability in the Federal Register.

Coal Combustion Residuals Facilities

TVA has committed to a programmatic approach for the elimination of wet storage of CCR within the TVA service area. Under this program ("CCR Program"), TVA performed stability remediation, completed the conversion of all operational coal-fired plants to dry CCR storage, and is now closing all remaining wet storage facilities. To carry out its CCR Program, TVA is undertaking the following actions:

- **Dry generation and dewatering projects:** TVA has accomplished the conversion from wet to dry handling of CCR materials with the completion of dry generation and/or dewatering projects at Bull Run, Cumberland, Gallatin Fossil Plant ("Gallatin"), Kingston, and Shawnee.
- **Landfills:** TVA has made strategic decisions to build and maintain lined and permitted dry storage facilities on TVA-owned property at some TVA locations, allowing these facilities to operate beyond existing dry storage capacity. Lined and permitted landfills are operational at Bull Run, Gallatin, Kingston, and Shawnee. TVA received the permit for the construction of a new lined landfill at Gallatin, and construction started in 2022. TVA received the permit for a new lined landfill at Cumberland in 2023, and TVA is evaluating the need for construction. Construction of additional lined and dry permitted storage facilities may occur to support future business requirements.
- **CCR Facilities Closures:** TVA is working to close CCR facilities in accordance with federal and state requirements. Closure project schedules and costs are driven by the selected closure methodology (such as closure-in-place or closure-by-removal). Closure initiation dates are driven by environmental regulations. TVA's predominant closure methodology is currently closure-in-place, with exceptions at certain facilities, although the EPA has recently interpreted its CCR Rule in a way that could create significant additional costs with implementing closure. TVA issued an EIS in June 2016 that addresses the closure of CCR impoundments at TVA's coal-fired plants. TVA issued its associated Record of Decision in July 2016. Although the EIS was designed to be programmatic in order to address the mode of impoundment closures, it specifically addressed closure methods at 10 impoundments. TVA subsequently decided to close those impoundments. The method of final closure for each of these facilities will depend on various factors, including approval by appropriate state regulators and applicable closure requirements of state and federal regulations. Additional site-specific NEPA studies will be conducted as other facilities are designated for closure.
- **Groundwater monitoring:** Compliance with the EPA's CCR rule ("CCR Rule") required implementation of a groundwater monitoring program and ongoing analysis. In compliance with the CCR Rule, TVA published the results of the 2022 groundwater testing at its CCR facilities during the second quarter of 2023. Similar to prior years, the tests identified several CCR units with constituents at statistically significant levels above site-specific groundwater protection standards. TVA has completed an assessment of corrective measures ("ACM"), which analyzes the effectiveness of potential corrective actions, and has published ACM reports to its CCR Rule Compliance Data and Information website. Based on the results of the ACM, TVA is required to select a remedy as soon as feasible. TVA has selected remedies for two of its facilities: a groundwater pump and treat system at the East Ash Disposal Area at Allen and monitored natural attenuation at Shawnee. TVA continues to investigate and evaluate remedies for its other facilities and will continue posting semi-annual progress reports on the status of remedy selection until the final remedy is selected. The cost of these final remedies cannot reasonably be predicted until investigations and evaluations are complete and remedial methods are selected.

The final Part A revision to the CCR Rule became effective September 28, 2020. Among other things, the final Part A rule requires unlined CCR surface impoundments to stop receiving CCR and non-CCR waste streams and to initiate closure or retrofit by no later than April 11, 2021. TVA ceased sending CCR and non-CCR waste streams to, and initiated closure of, unlined CCR surface impoundments by the specified deadline.

As of September 30, 2023, TVA had spent approximately \$2.9 billion on its CCR Program. Through 2028, TVA expects to spend an additional \$1.6 billion on the CCR Program. Estimates for these amounts and costs after 2028 may change depending on the final closure method selected for each facility. While the conversion portion of the CCR Program is completed, TVA will continue to undertake CCR closure and storage projects, including building new landfill cells under existing permits and closing existing cells once they reach capacity.

TVA was involved in two lawsuits concerning the CCR facilities at Gallatin. One of these cases was decided in TVA's favor by the Sixth Circuit, and the other case was resolved by the entry of a consent order and agreement in Davidson County Chancery Court that became effective July 24, 2019. Under the consent order, TVA agreed to close the existing ash facility by removal, either to an on-site landfill or to an offsite facility. TVA may also consider options for beneficial reuse of the CCR. TVA submitted the removal plan for approval to the Tennessee Department of Environment and Conservation ("TDEC") and other applicable parties pursuant to the consent order, and the removal

TVA FY 2025 Budget Proposal & Management Agenda and FY 2023 Annual Performance Report

plan was approved on November 7, 2023. In addition, TVA submitted an Environmental Assessment Report ("EAR") to TDEC, and TDEC approved the EAR on June 6, 2023. Furthermore, in January 2024, TVA submitted the Corrective Action/Risk Assessment Plan to TDEC.

In October 2019, TDEC released amendments to its regulations which govern solid waste disposal facilities, including TVA's active CCR facilities covered by a solid waste disposal permit and those which closed pursuant to a TDEC approved closure plan. Such facilities are generally subject to a 30-year post-closure care period during which the owner or operator must undertake certain activities, including monitoring and maintaining the facility. The amendments, among other things, add an additional 50-year period after the end of the post-closure care period, require TVA to submit recommendations as to what activities must be performed during this 50-year period to protect human health and the environment, and require TVA to submit revised closure plans every 10 years.

Rate Structure and Pandemic Credits

At its August 22, 2019 meeting, the TVA Board approved a 20-year long-term partnership agreement ("LTPA") option that better aligns the length of LPC contracts with TVA's long-term commitments. These agreements are automatically extended for an additional year each year after their initial effective date. Participating LPCs will receive benefits including a 3.1 percent wholesale bill credit in exchange for their long-term contractual commitment, which enables TVA to recover its long-term financial obligations over a commensurate period. This offer was made available to all TVA served LPCs. As of September 30, 2023, 147 of the 153 LPCs had signed the 20-year LTPA.

Furthermore, in August 2020, due to challenges incurred from the COVID-19 pandemic, the TVA Board approved a Pandemic Relief Credit that was effective for FY 2021. This 2.5 percent monthly base rate credit, which totaled \$221 million for FY 2021, applied to service provided to TVA's LPCs, their large commercial and industrial customers, and TVA directly served customers through September 2021. In August 2021, the TVA Board approved a similar 2.5 percent monthly base rate credit, the Pandemic Recovery Credit, effective for FY 2022. This credit totaled \$228 million for FY 2022. In November 2021, the TVA Board approved a 1.5 percent monthly base rate credit, which was an extension of the Pandemic Recovery Credit, to be effective for FY 2023. In July 2022, due to favorable financial performance achieved during the fiscal year, this FY 2023 credit was approved at an increased level of 2.5 percent. The Pandemic Recovery Credit was administered in a manner similar to the Pandemic Relief Credit and totaled \$225 million in fiscal year 2023. The Pandemic Relief Credit and the Pandemic Recovery Credit ended on September 30, 2021 and September 30, 2023, respectively.

Payments in Lieu of Taxes

TVA provided nearly \$611 million in tax equivalent payments in FY 2023 to state and local governments where it sells electricity or has power properties. Since 1941, TVA has paid over \$16.3 billion in tax equivalent payments, with payments in the past 10 years totaling over \$5.4 billion.

The TVA Act requires TVA to annually return five percent of its gross proceeds from the sale of power during the previous fiscal year (excluding sales or deliveries to other federal agencies, off-system sales with other utilities, and power used by TVA, with a provision for minimum payments under certain circumstances) in the form of tax equivalent payments. The payments compensate state and local governments that cannot levy property or sales tax on TVA as a federal entity. TVA pays tax equivalent payments to the eight states where it sells electricity or owns generating plants, transmission lines, substations, or other power assets, and directly to 150 county governments where TVA owns power properties that were previously privately owned and operated and subject to ad valorem taxes.

State and local governments distribute the funds according to their own formulas and discretion to support a variety of initiatives, including schools, fire departments, other emergency response agencies, tourism and recreation, and human service organizations.

Management Initiatives

FINANCIAL PLAN	24
CYBERSECURITY.....	24
STEWARDSHIP	24
AIR QUALITY IN THE TENNESSEE VALLEY	25
ECONOMIC DEVELOPMENT	26
TECHNOLOGICAL INNOVATION	26
FUNDING FOR PERSONNEL VETTING AND ARTIFICIAL INTELLIGENCE	26

TVA FY 2025 Budget Proposal & Management Agenda and FY 2023 Annual Performance Report

TVA actively plans for the future to address challenges and enable TVA to achieve the organization's mission. These plans help outline paths to serve the people of Valley while providing sustainable, clean, and affordable energy and supporting economic development efforts for TVA's customers. The following sections detail key management initiatives outlined by TVA's leadership team.

Financial Plan

In August 2019, the TVA Board approved an annual budget that reflected the first year of a new Strategic Financial Plan. This Strategic Financial Plan included key focus areas of: (1) establishing alignment between the length of LPC contracts and TVA's long-term commitments, (2) stabilizing debt, (3) maintaining flat base rates, (4) driving efficiencies into the business, and (5) advancing the public power model.

In recent years, notable changes to the environment in which TVA operates have resulted in a number of operational risks emerging for the organization. Such risks include greater load growth in the Valley than originally anticipated, higher than planned inflationary pressure, and accelerated decarbonization of the asset portfolio. As a result of these pressures, TVA's debt is projected to increase over the decade as the organization continues its asset transformation to a cleaner, more diverse fleet that can accommodate increasing loads on the system. The TVA Board approved a 4.5% base rate increase to be effective for FY 2024 and may consider future rate increases to adapt to these challenges. Following the completion of its next IRP, TVA is planning to update its financial plan. TVA remains committed to providing competitive rates and reliable power for all Valley customers.

Cybersecurity

TVA has an established risk-based Cybersecurity Program designed to ensure alignment with applicable regulations, industry requirements, and best practices. The program includes multi-layer security standards, training, and metrics that assign clear accountability for all cybersecurity activities throughout TVA. Security controls are integrated into business processes, enabling timely, coordinated, effective, and efficient execution of the program across TVA. Cybersecurity management processes are implemented agency-wide with the goal of being systematic, repeatable, and effective in achieving the strategic security goals of the program.

The budget of the Cybersecurity Program is allocated to responsible organizations to improve accountability and provide transparency. Budgeting and planning for the program's components are integrated into the business planning process and are maintained in a three-year cybersecurity strategic plan. The plan will be modified to upgrade TVA's capabilities as technology, threat vectors, and business requirements change.

Securing timely, accurate, and reliable information is critical to the success of the TVA mission and the role it plays as a National Critical Infrastructure Key Resource and Bulk Electric System provider. The Cybersecurity Program objectives are aligned with TVA's business strategy and support the goals of the enterprise. TVA uses a full spectrum defense security model to identify, protect, detect, respond to, and recover from threats against its systems. TVA plans to invest approximately \$180 million to \$200 million in its Cybersecurity Program between FY 2024 and FY 2026 to ensure it meets its mission objectives. Specifically, in FY 2025, TVA is currently projecting to invest approximately \$60 million in its Cybersecurity Program, planned as follows in accordance with the National Institute of Standards and Technology categories:

Category	\$ Million
Identify	\$12
Protect	\$21
Detect	\$18
Respond	\$6
Recover	\$3

Stewardship

TVA serves the people of the Valley through the integrated management of the Tennessee River system and public lands, which include approximately 11,000 miles of shoreline, 650,000 surface acres of reservoir water, and 293,000 acres of reservoir lands.

TVA's Environmental Policy provides objectives for an integrated approach related to providing reliable, affordable, and increasingly clean energy, engaging in proactive stewardship of the Tennessee River system and public lands, and supporting sustainable economic growth. The Environmental Policy also provides direction in several environmental stewardship areas related to reducing environmental impacts on the Valley's natural resources, including reducing carbon intensity and air emissions, minimizing waste, and protecting water resources, biodiversity,

TVA FY 2025 Budget Proposal & Management Agenda and FY 2023 Annual Performance Report

and cultural resources. Further information regarding TVA's Environmental Policy is available at the following link: [TVA Environmental Policy](#).

Air Quality in the Tennessee Valley

From 1970 to 2023, TVA spent approximately \$6.8 billion on controls to reduce emissions from its coal-fired power plants. In addition, TVA has reduced emissions by idling or retiring coal-fired units and relying more on cleaner energy resources, including natural gas, nuclear generation, and renewable sources. TVA currently anticipates spending significant amounts on environmental projects in the future, including investments in new clean energy generation such as renewables to reduce TVA's overall environmental footprint. TVA environmental project expenditures could also result from coal-fired plant decommissioning and from effective ash management modernization. Based on TVA's decisions regarding certain coal-fired units, the amount and timing of expenditures could change.

The Clean Air Act ("CAA") establishes a comprehensive program to protect and improve the nation's air quality and control sources of air pollution. Major CAA programs that affect TVA's power generation activities are described below.

Revised Cross-State Air Pollution Rule. TVA power plants are subject to the EPA's Cross-State Air Pollution Rule ("CSAPR"). CSAPR addresses air pollution from upwind states in the U.S. that affect air quality in downwind states and is focused on NO_x and SO₂. To comply with CSAPR, TVA power plants must obtain one NO_x allowance for every ton of NO_x emitted during the ozone season. Under a revised version of CSAPR (the "CSAPR Update Rule"), the Shawnee facility is subject to reduced ozone-season NO_x allowances and has been required to use most of its allowance inventory. In 2023, TVA monitored forecasted needs and utilized purchased allowances for the Shawnee facility. A longer-term compliance strategy for the facility is being developed that may include installing NO_x control upgrades, incorporating operational changes, and continuing to purchase allowances. When completed, this strategy will help TVA comply with both the CSAPR Update Rule and the Federal Implementation Plan Addressing Regional Ozone Transport for the 2015 Ozone National Ambient Air Quality Standards. TVA has obtained approval from the State of Kentucky for construction of seven selective catalytic reduction systems ("SCRs") at the Shawnee facility. TVA plans to construct SCRs at four units by the end of 2025 and expects to spend \$240 million. TVA is evaluating plans for the remaining three units.

Federal Implementation Plan Addressing Regional Ozone Transport for the 2015 Ozone NAAQS. On March 15, 2023, the EPA issued final regulations known as the "Good Neighbor Plan" to reduce NO_x emissions from power plants and certain industrial facilities. With the Good Neighbor Plan, the EPA issued its Federal Implementation Plan ("FIP") that covers 23 states, including Alabama, Kentucky, and Mississippi, to reduce the interstate transport of NO_x. Under the rule, beginning with the 2023 ozone season, power plants in 22 states, including Alabama, Kentucky, and Mississippi, are required to participate in a NO_x trading program. Over time, the emission budgets will decline based on the level of reductions achievable through phased installation of emissions controls at power plants starting in 2024. The rule also establishes daily emission rates for coal steam electric generating units greater than or equal to 100 MW in the covered states beginning with the 2024 ozone season. To help comply with these regulations, TVA is developing a longer-term compliance strategy for its Shawnee facility that may include installing NO_x control upgrades, incorporating operational changes, and continuing to purchase allowances. During 2023, the EPA issued interim rules to stay the effectiveness of the 2023 FIP requirements for emission sources in several states, including Kentucky, Mississippi, and Alabama. The Good Neighbor Plan itself has been challenged in the District of Columbia Circuit ("D.C. Circuit"), and applications have been filed with the U.S. Supreme Court to stay the plan while its merits are being litigated.

GHG Emissions from Existing Sources. In 2019, the EPA finalized the Affordable Clean Energy ("ACE") rule addressing greenhouse gas ("GHG") emissions from existing fossil fuel-fired units. The ACE rule established guidelines, under Section 111(d) of the CAA, for GHG emissions from existing coal-fired units based on efficiency improvements that can be achieved at those units at reasonable cost. On January 19, 2021, the D.C. Circuit vacated and remanded the ACE rule. On October 29, 2021, the U.S. Supreme Court accepted the request filed by a coalition of states and other parties to review the D.C. Circuit's decision to vacate the ACE rule. On June 30, 2022, the U.S. Supreme Court issued its decision in *West Virginia v. EPA*, in which it restricted the EPA's authority to regulate GHG from existing power plants under Section 111(d). The U.S. Supreme Court concluded that Congress did not grant the EPA authority under the CAA to demand generation-shifting to achieve reduction of GHG emissions, but the court did not hold that the EPA is limited in future rulemakings to just the heat-rate improvements that made up the ACE rule. The judgment of the D.C. Circuit was thus reversed, and the case remanded for further proceedings consistent with the U.S. Supreme Court's opinion. On May 23, 2023, the EPA published in the Federal Register a proposal that would repeal the ACE rule and establish new GHG emission guidelines for both existing fossil fuel-fired steam generating units and existing large, frequently operated stationary combustion turbine units. These proposed GHG emission guidelines, if finalized in their current form, could result in substantial costs to TVA.

TVA FY 2025 Budget Proposal & Management Agenda and FY 2023 Annual Performance Report

GHG Emissions from New Sources. On May 23, 2023, the EPA published in the Federal Register proposed revised new source performance standards ("NSPS") for GHG emissions from new fossil fuel-fired stationary combustion turbine units as well as proposed revised NSPS for GHG emissions from existing fossil fuel-fired steam generating units that undertake large modifications. These proposed NSPS, if finalized in their current form, could result in substantial costs to TVA. In the meantime, the 2015 GHG emission standards for new, modified, and reconstructed electric utility generating units remain in effect.

Emissions from all TVA-owned and operated units (including small combustion turbine units of less than 25 MW) have been reduced from historic peaks. Emissions of NO_x have been reduced by 97 percent below peak 1995 levels and emissions of SO₂ have been reduced by 99 percent below 1977 levels through CY 2022.

Economic Development

TVA's partnerships with its customers and communities have helped create good paying jobs and attract significant capital investments from new and existing companies. TVA conducts these economic development efforts in partnership with private and public organizations, including local, regional, and state agencies. This serves the needs of TVA stakeholders through regional economic development, which contributes to a better quality of life for all Tennessee Valley residents. Further information regarding TVA's economic development efforts and achievements are available on its website ([TVA Economic Development](#)).

Technological Innovation

The TVA Act specifies that members of the TVA Board shall affirm support for the objectives and missions of TVA, including being a national leader in technological innovation. A key element in achieving this vision is an annual investment in science and technology, positioning TVA to meet future business and operational challenges. TVA's goal is to demonstrate how technologies can be used to improve/sustain reliability, reduce costs, and lower emissions for a sustainable future.

Each year, TVA's research portfolio is updated based on a broad range of operational and industry drivers assessing key technology gaps, performance issues, or other significant challenges addressed through research and development. Core research activities support modernization and optimization of TVA's generation and transmission assets, air and water quality, and distributed/clean energy integration. The current research strategy focuses on components of the power system, including sustainability, generating fleet optimization, grid modernization, cyber security, data analytics, and grid edge engagement. Additional research is focused on grid modernization for distribution systems, electrification, grid edge technologies, and evolving DER applications. TVA's efforts are directed towards demonstrating and validating the performance, reliability, consumer acceptance, and implementation of new technologies in the Tennessee Valley. TVA coordinates activities with EPRI and industry stakeholders on transportation electrification in order to support operational fleet requirements and plug-in EV grid integration and readiness.

Technology evaluations are accomplished through studies and field scale demonstrations to document performance and requirements. TVA delivers or transfers results to the operating organizations and other stakeholders through reporting, technology transfer events, and educational outreach. TVA also serves as a technology advisor for LPCs and directly served customers. Investments in TVA's research portfolio are highly leveraged through partnership and collaboration with LPCs, EPRI, and other stakeholders throughout the Tennessee Valley. TVA is also initiating several transformative initiatives to support the realization of an integrated grid across the Valley. These initiatives include Advanced Nuclear Solutions, Connected Communities, Decarbonization Options, Electric Vehicle ("EV") Evolution, Regional Grid Transformation, Future Grid Performance, and Energy Storage Integration. Through collaborative partnerships, conversations, pilot research, and programs, TVA is working to craft plans of action focused on making life better for the people of the Valley. These transformative initiatives are designed to position the Valley for implementation of solutions at scale.

Funding for Personnel Vetting and Artificial Intelligence

TVA maintains adequate funding in its financial plans to support the vetting of all personnel in alignment with organizational and public safety guidelines. TVA continues to place a priority on both the review and vetting of personnel and will evaluate funding levels as needed in order to maintain a culture of safety while ensuring public trust in the organization. TVA also maintains adequate funding in its plans to support the implementation and guidance of artificial intelligence in a safe and effective manner to enhance operational effectiveness. Funding levels are included in TVA's budget and plans, and will continue to be evaluated as needed.

Oversight and Governance

TVA OVERSIGHT	28
ACCOUNTING AND FINANCIAL REPORTING	29
ENTERPRISE RISK MANAGEMENT	30
FRAUD DISCLOSURE	30
MONTHLY REPORTING PROCESS	30
PENDING GAO AND OIG RECOMMENDATIONS	30

TVA FY 2025 Budget Proposal & Management Agenda and FY 2023 Annual Performance Report

In December 2004, Congress passed legislation to make TVA’s governance structure more like that of other large corporations. The TVA Board changed from three full-time members to nine part-time members who are responsible for providing strategic direction, governance, and oversight. In addition, a full-time Chief Executive Officer (“CEO”) position was established to supervise day-to-day activities. The CEO is appointed by and reports directly to the TVA Board. The December 2004 legislation also amended the Securities Exchange Act of 1934 by adding Section 37. This section requires TVA, as 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(a) of the Sarbanes-Oxley Act became effective for TVA for FY 2008.
- As a non-accelerated filer, the external auditor attestation requirements of Section 404(b) of the Sarbanes-Oxley Act are not applicable. However, TVA implemented the auditor attestation requirements of Section 404(b) in FY 2009 and continues to do so on a voluntary basis.
- The Dodd-Frank Act deferred indefinitely the auditor attestation requirements of Section 404(b) for non-accelerated filers; however, management has chosen to continue to have external auditor attestations.

TVA Oversight

TVA is a government-owned corporation, and its mission of service is fundamentally different from that of publicly traded companies. TVA has oversight similar to other utilities, such as a board of directors, SEC requirements, credit rating agencies, and Sarbanes-Oxley requirements. In addition, TVA has oversight from Congress, the Government Accountability Office (“GAO”), the Office of Management and Budget (“OMB”), the U.S. Treasury, and an independent Office of the Inspector General (“OIG”).

Board of Directors

TVA is governed by the TVA Board. The TVA Board has nine part-time members, at least seven of whom must be legal residents of the TVA service area. The 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, approving plans for their implementation, reviewing and approving annual budgets, setting and overseeing rates, and establishing a compensation plan for employees.

Audit Committee

In December 2023, the TVA Board established the Audit, Risk, and Cybersecurity Committee (the “Committee”). The Committee is responsible for, among other things, recommending an external auditor to the TVA Board, overseeing the auditor’s work, and reviewing reports of the auditor and the OIG.

Independent Inspector General

The 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 Generally Accepted Auditing Standards. The OIG had 103 employees as of September 30, 2023, including more than 50 auditors. TVA’s Inspector General is appointed by the President of the United States and confirmed by the U.S. Senate. The OIG provides semi-annual 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 \$31 million for FY 2025, which includes amounts for OIG training and support of the Council of the Inspectors General on Integrity and Efficiency. TVA’s FY 2025 budget assumes OIG activities at the level requested.

\$ million	FY 2018 Actual	FY 2019 Actual	FY 2020 Actual	FY 2021 Actual	FY 2022 Actual	FY 2023 Actual	FY 2024 OIG Proposed	FY 2025 OIG Proposed
OIG Expenditures	\$24	\$25	\$25	\$25	\$26	\$28	\$30	\$31

TVA FY 2025 Budget Proposal & Management Agenda and FY 2023 Annual Performance Report

Independent Auditor

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

Additionally, 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. 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 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 OMB, and TVA's budget is included in the consolidated budget of the U.S. Government. TVA's financial results also are included in the federal government's financial statements, which are coordinated with the U.S. Treasury and are subject to audit by 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 and the GPRA Modernization Act, which require that a strategic plan and an annual performance report be submitted to Congress.

Other Regulatory Oversight

In aspects of its operations, TVA is subject to regulations issued by other governmental agencies, including the EPA, state environmental agencies, the SEC, and the NRC. While TVA is generally not subject to regulations issued by the Federal Energy Regulatory Commission ("FERC"), this commission 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 Corporation and the industry-based Institute of Nuclear Power Operations.

Accounting and Financial Reporting

On an annual basis, TVA submits a closing package, which is a set of special purpose financial statements and notes that represent TVA's comparative, consolidated, department-level financial statements, to the U.S. Treasury to comply with the requirements of the U.S. Treasury Financial Manual. This provides financial information to the U.S. Treasury and the GAO to use in preparing the Financial Report of the U.S. Government. TVA's independent auditor also provides an opinion on whether the closing package is prepared in accordance with accounting standards and other pronouncements issued by the Federal Accounting Standards Advisory Board. TVA's financial transactions are subject to audit by the Comptroller General under various statutes.

TVA also submits financial information to the OMB, SEC, NRC, U.S. Treasury, Energy Information Administration, 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. These financial statements are annually audited by an independent financial auditor.

Consistent with the Payment Integrity Information Act of 2019, TVA has determined that none of its programs or activities are susceptible to significant improper payments.

Enterprise Risk Management

Enterprise Risk Management (“ERM”) is a strategic business function that provides TVA with a comprehensive risk perspective to more effectively identify and manage risks, capitalize on opportunities, and improve risk management behaviors. ERM is specifically responsible for TVA’s risk governance structure, performing risk assessments and analysis, and facilitating enterprise risk discussions to evaluate risk profiles as an interrelated portfolio in order to support risk-informed decisions for achieving TVA’s strategic and operational objectives. The TVA Board has established an Enterprise Risk Council (“ERC”) to oversee TVA’s management of enterprise risks and establish an appropriate tone for a risk management culture throughout TVA, and the ERM organization, along with other designated subcommittees, carries out the ERC mission at the direction of the ERC and TVA’s Chief Risk Officer.

Fraud Disclosure

The Payment Integrity Information Act of 2019 (the “PII Act”) was enacted in March 2020. Among other things, the legislation is intended to improve federal agency financial and administrative controls and procedures to assess and mitigate fraud risks and to improve federal agencies’ development and use of data analytics for the purpose of identifying, preventing, and responding to fraud, including improper payments.

To help ensure compliance with the PII Act, TVA operates a Fraud Risk Management program (the “Fraud Program”) led by the Enterprise Risk and Assurance organization. In accordance with the guidelines of the PII Act, TVA has adopted the GAO’s Framework for Managing Fraud Risks in Federal Programs to document its Fraud Program. Additionally, TVA has considered both the fraud risk principles in the Standards for Internal Control in the Federal Government and OMB Circular A–123 with respect to the leading practices for managing fraud risk in the development of the Fraud Program.

To establish a commitment to combating fraud, TVA issued an executive policy regarding fraud risk management, establishing TVA’s approach, designating the guiding principles, and outlining the governance structure. Additionally, TVA implemented supporting processes and procedures to define roles and responsibilities within the Fraud Program.

To determine TVA’s fraud risk profile, TVA has included the identification and assessment of fraud risks as a component of its annual risk assessment process. Among other areas, TVA will continue to assess fraud risk related to payroll, beneficiary payments, grants, large contracts, purchase and travel cards, physical asset misappropriation, and information technology and security.

To help mitigate assessed fraud risks, TVA will evaluate its current control activities and consider the need for additional financial and administrative controls based on the fraud risk profile.

In order to improve the Fraud Program, TVA has developed a strategy for monitoring and evaluating its fraud risk management activities. The results of the monitoring activities and evaluations will be utilized to adapt the Fraud Program’s activities and communicate up through the program’s governance structure.

Monthly Reporting Process

Internal financial performance reporting is done on a monthly basis at all levels within the enterprise. 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.

Pending GAO and OIG Recommendations

Periodically, the GAO and OIG may offer recommendations to TVA as part of their standard review process of the organization. TVA actively works with the GAO and OIG to review any potential recommendations in order to better serve the Valley.

The table on the following page lists open recommendations that had been outstanding for at least one year as of September 30, 2023.

TVA FY 2025 Budget Proposal & Management Agenda and FY 2023 Annual Performance Report

Source	Report Number	Report Title	Report Date	Recommendation Status	Estimated Date of Completion
GAO	GAO-17-343	Tennessee Valley Authority: Actions Needed to Better Communicate Debt Reduction Plans and Address Billions in Unfunded Pension Liabilities	3/23/2017	Accepted / Implementing	Closed /Ongoing
OIG	2021-15789	Acquisition and Disposal of Real Property	3/24/2022	Accepted / Implementing	9/30/2024
OIG	2022-17370	2022 Federal Information Security Modernization Act	9/19/2022	Accepted / Implementing	3/29/2024

For additional information regarding the recommendations listed above, and TVA's actions taken to date, please see Appendix A.

Strategic Priorities, Strategic Objectives, and Performance Goals

STRATEGIC PRIORITIES	33
STRATEGIC OBJECTIVES	33
PERFORMANCE GOALS	34

Strategic Priorities

As discussed previously, TVA has established five strategic priorities noted as follows:



**People
Advantage**



**Operational
Excellence**



**Financial
Strength**



**Powerful
Partnerships**



**Igniting
Innovation**

Strategic Objectives

In order to help ensure that TVA accomplishes its strategic goals, TVA is focusing on the following strategic objectives:

- **People Advantage** - Amplifying the energy, passion, and creativity within us all
- **Operational Excellence** - Building on our best-in-class reputation for reliable service and competitively priced power
- **Financial Strength** - Investing in our future, while keeping energy costs as low as possible
- **Powerful Partnerships** - Promoting progress through the shared success of our customers and stakeholders
- **Igniting Innovation** - Pursuing innovative solutions for TVA and our communities

TVA FY 2025 Budget Proposal & Management Agenda and FY 2023 Annual Performance Report

Performance Goals

TVA has formulated key performance goals to support its strategic priorities. The intent of each measure is to align employees to TVA's mission by focusing collective efforts on financial strength, operational excellence, people advantage, powerful partnerships, and igniting innovation. The goals are designed to promote teamwork, encourage high performance behaviors, and motivate TVA employees to achieve goals aligned with TVA's mission and values.

The performance goals include the following:

- Financial Strength
 - Retail Rates
 - Non-Fuel Delivered Cost of Power
 - Operating Cash Flow
 - Net Income
 - Total Financing Obligations

- Operational Excellence
 - CO₂ Emissions Rate
 - Environmental Violations of Significance
 - Load Not Served
 - Coal Equivalent Availability Factor ("EAF") / Coal Equivalent Forced Outage Rate ("EFOR")
 - Nuclear Performance Index
 - Combined Cycle EAF / Combined Cycle EFOR
 - Nuclear Online Reliability Loss Factor

- People Advantage / Powerful Partnerships
 - Serious Injury Incident Rate
 - Capital Investment
 - New and Retained Jobs

- Igniting Innovation
 - Milestone Metrics

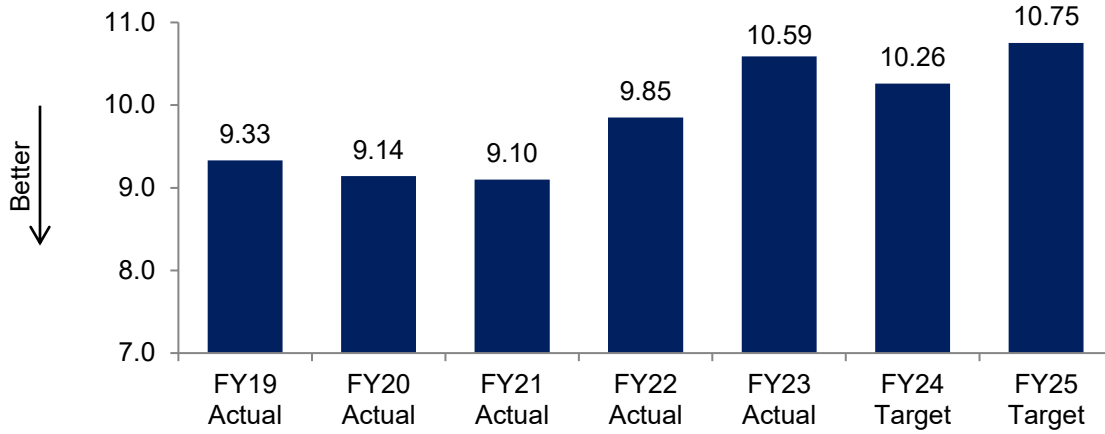
Beginning in FY 2024, TVA will be transitioning from EAF to EFOR as a measurement evaluating Operational Excellence. The EFOR metric measures unit unavailability due to unplanned forced outages and derates, while EAF is a measure of unit availability. This transition is designed to support a focused effort to ensure assets can reliably meet system demand and provides an ability to more specifically measure unit outages.

Additionally, TVA will be reporting the previous "Jobs Created and Retained" metric as "New and Retained Jobs." TVA will report historical data independently for both "New" and "Retained" jobs, while forecasts and projections will be reported as combined.

Each of TVA's performance goals is described in more detail on the following pages.

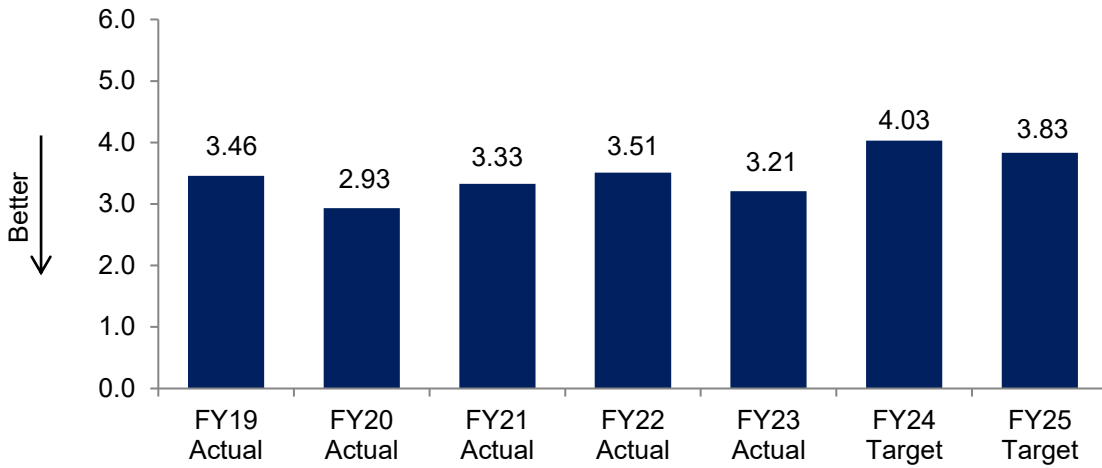
Financial Strength

Retail Rates (cents/kWh) - 12 Month Rolling Avg



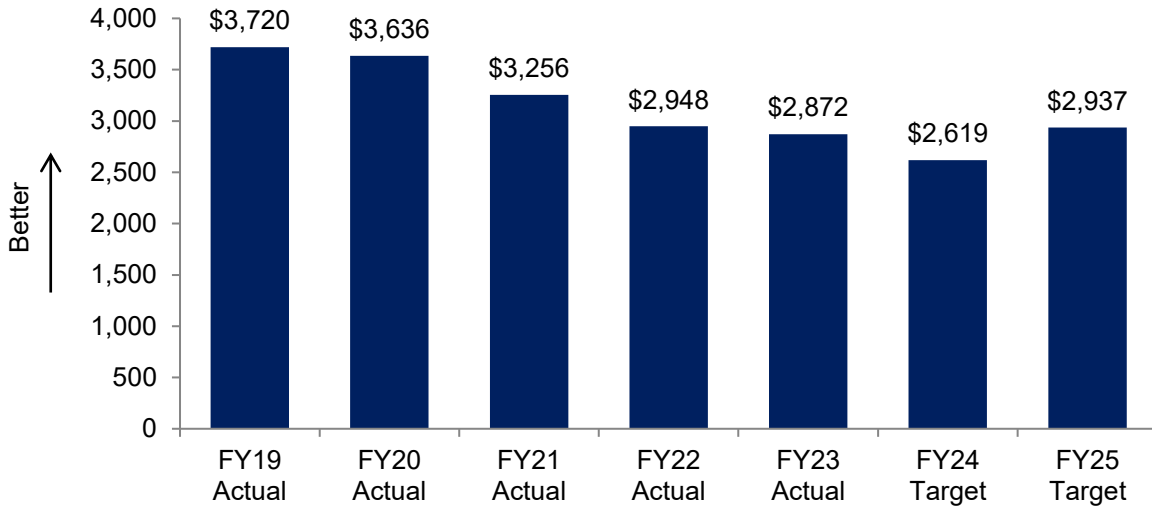
Definition	Average of the previous twelve months' LPC reported retail power revenue and directly served power revenue divided by LPC reported retail power sales and directly served power sales.
Calculation	$(\text{LPC reported retail power revenue} + \text{Directly served power revenue}) / (\text{LPC reported retail power sales} + \text{Directly served power sales})$

Non-Fuel Delivered Cost of Power (cents/kWh)



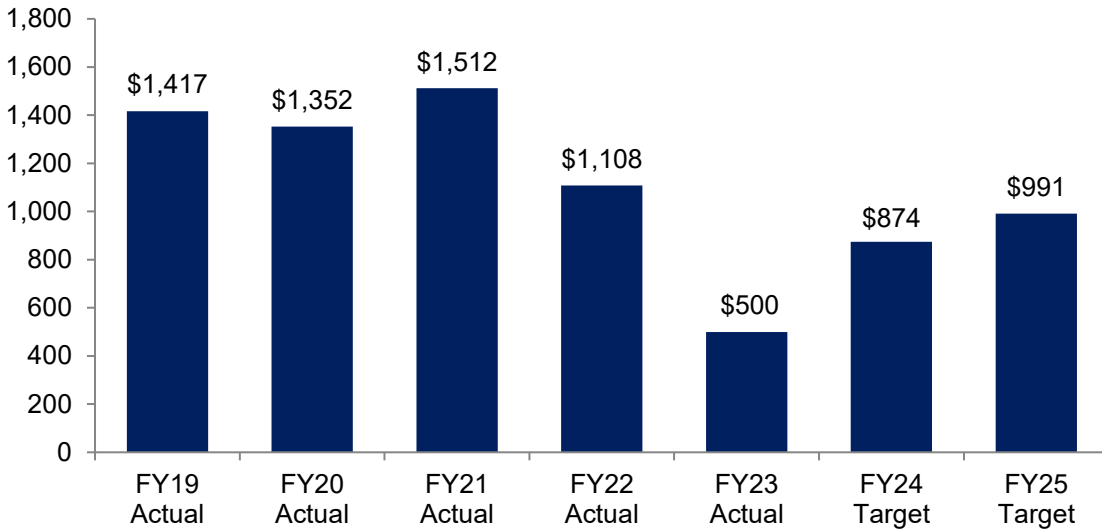
Definition	TVA's Non-Fuel Delivered Cost of Power represents TVA's non-fuel O&M, base capital, interest, and other cash needs divided by budgeted electric sales.
Calculation	$\frac{\text{Non-Fuel O\&M} + \text{Base Capital} + \text{Interest} + \text{Other Cash Needs}}{\text{Budgeted Electric Power Sales}}$ <p>Additional incremental contributions to liabilities approved by the Board of Directors are excluded from the measure.</p>

Operating Cash Flow (\$ Million)



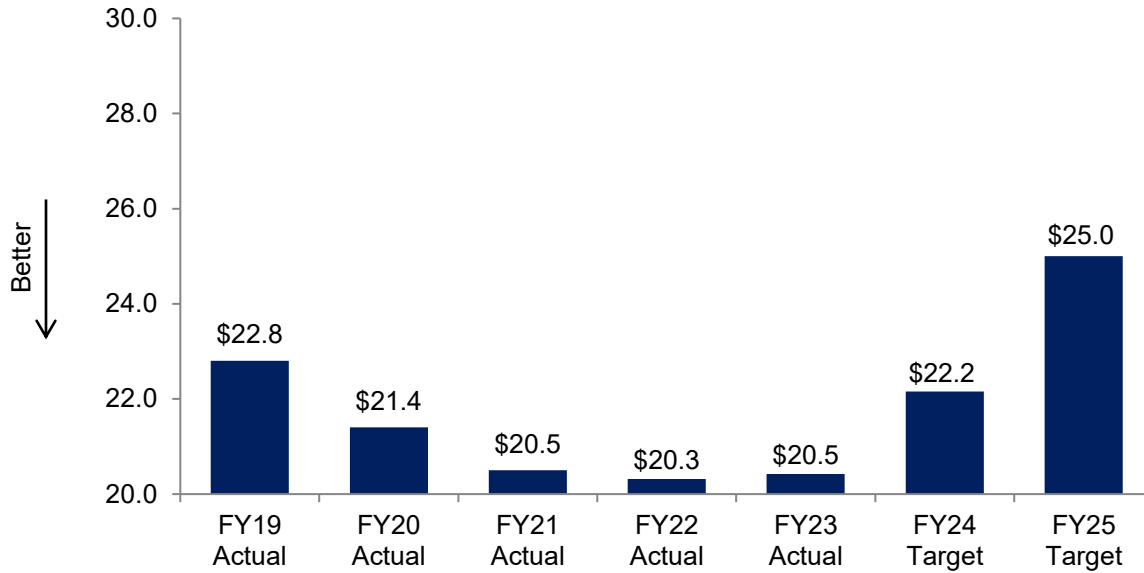
Definition	Operating Cash Flow refers to the amount of cash generated from power production and other mission-related activities and is generally defined as Operating Revenues received less cash payments made for Operating Expenses. This amount can be found on the Consolidated Statement of Cash Flows under Cash Flows from Operating Activities.
Calculation	Net income + Non-cash expenses + Impact of changes in working capital and other deferred operating items

Net Income (\$ Million)



Definition	Net Income is an entity's net earnings derived by adjusting revenues for the cost of doing business, including cost of sales, depreciation, interest, taxes, and other expenses. This amount is shown on the bottom line of the Consolidated Statement of Operations.
Calculation	Operating Revenues – Operating Expenses + Other Income/(Expense) – Net Interest Expense

Total Financing Obligations (\$ Billion)

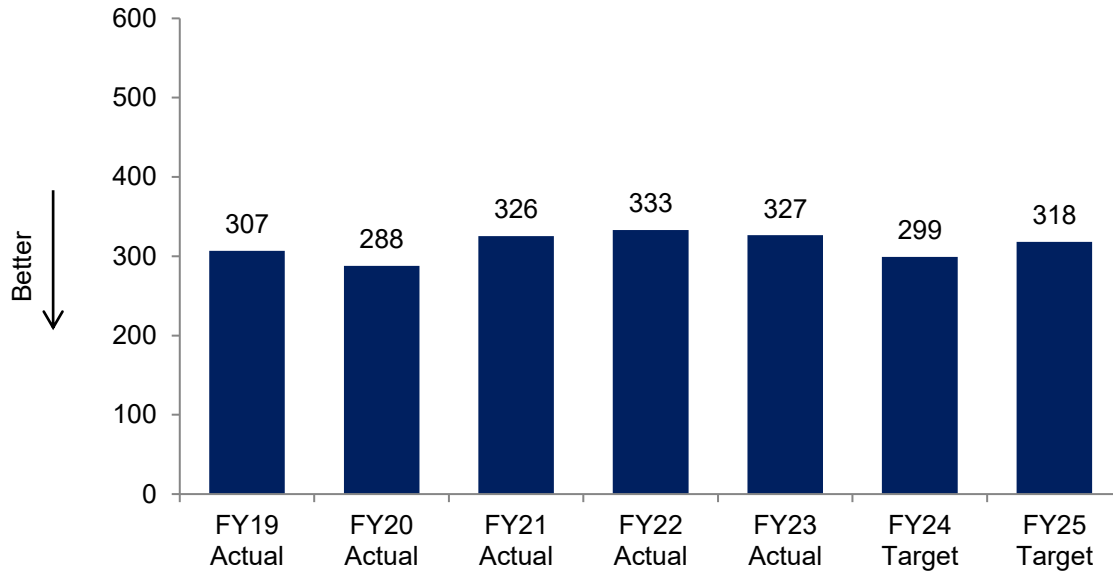


Definition	TFOs include all statutory debt and other financing obligations, as shown on TVA's balance sheet.
Calculation	Long-term Power Bonds + Short-Term Debt + Leaseback Obligations + Energy Prepayment Obligations + Debt of Variable Interest Entities ("VIE") + Membership Interests of VIE Subject to Mandatory Redemption + Notes Payable

* See Appendix B for a calculation of TFOs utilizing financial statement line items reported in accordance with Generally Accepted Accounting Principles.

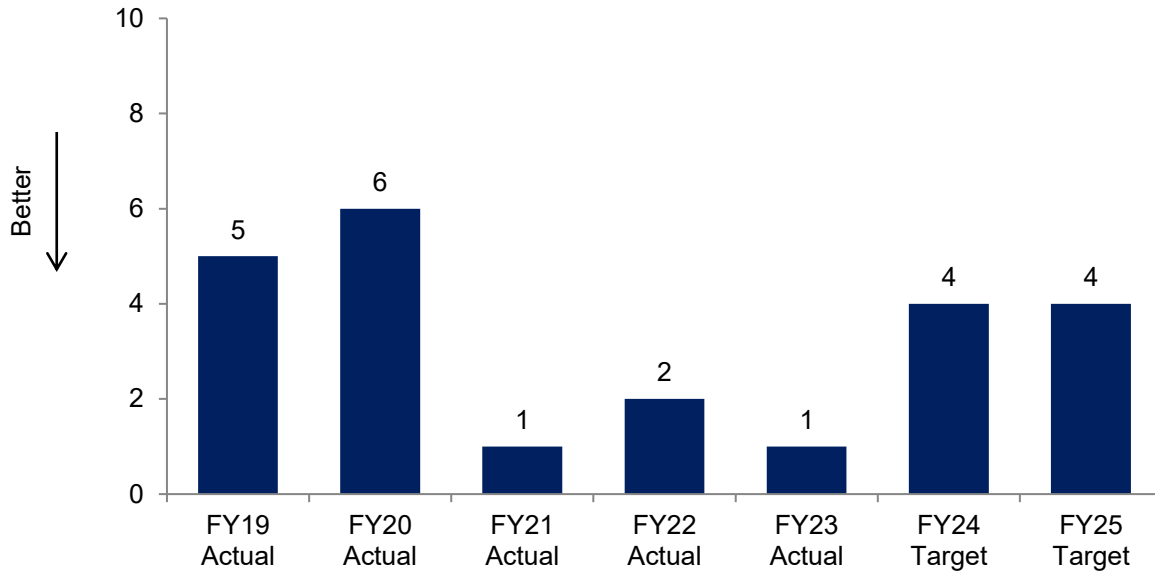
Operational Excellence

CO₂ Emissions Rate (tons/GWh)



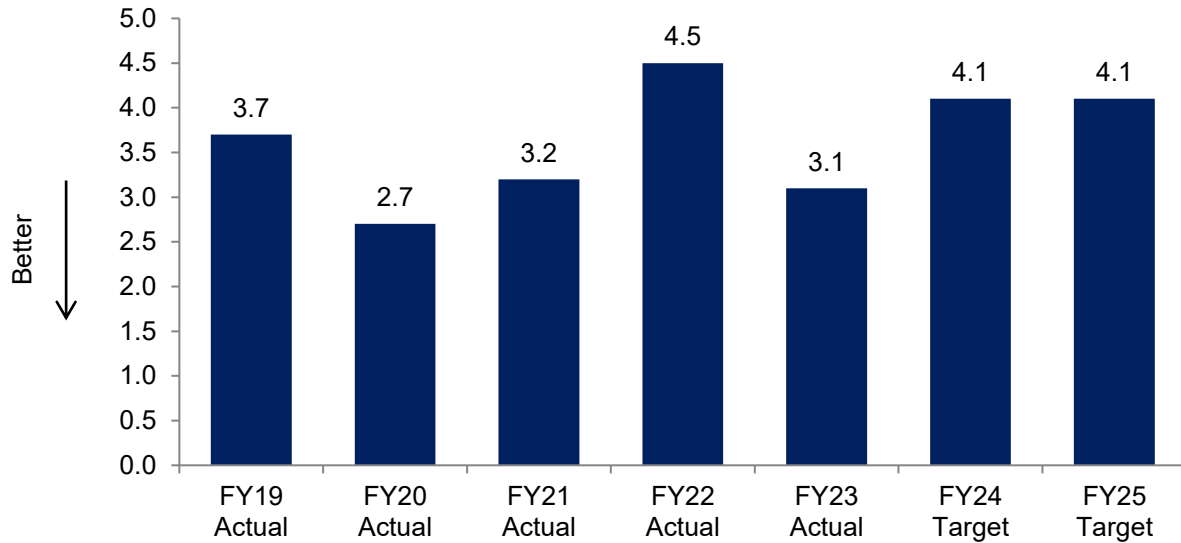
Definition	This measure reflects TVA's commitment to manage greenhouse gas emissions through efficient operation of its diverse generation mix.
Calculation	Tons of CO ₂ emissions / GWh of generation

Environmental Violations of Significance



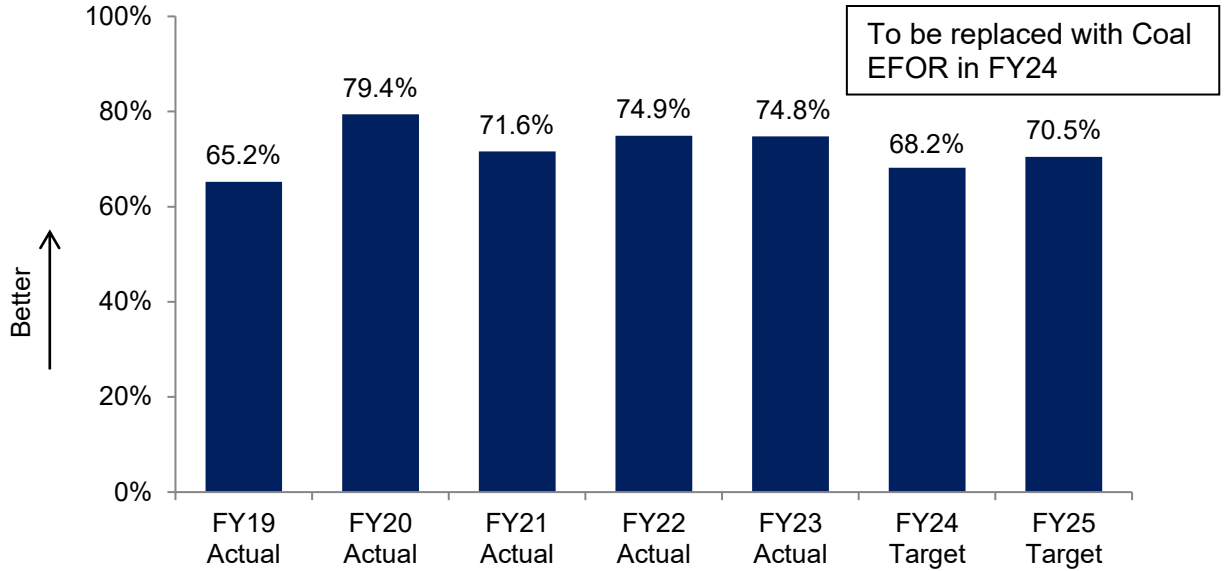
Definition	Environmental Violations of Significance (“EVOS”) is defined as a notice of violation or enforcement order issued by a regulatory agency for any non-compliance, or any non-compliance resulting in a fine or penalty.
Calculation	<p>Number of EVOS (an occurrence will be recorded for each event)</p> <ul style="list-style-type: none"> - Multiple parameters or multiple regulatory violations that result from the same root cause/event are counted once. - Repeat occurrences will always count as separate events where cause evaluations are complete but actions to address have not been completed.

Load Not Served (System Minutes)



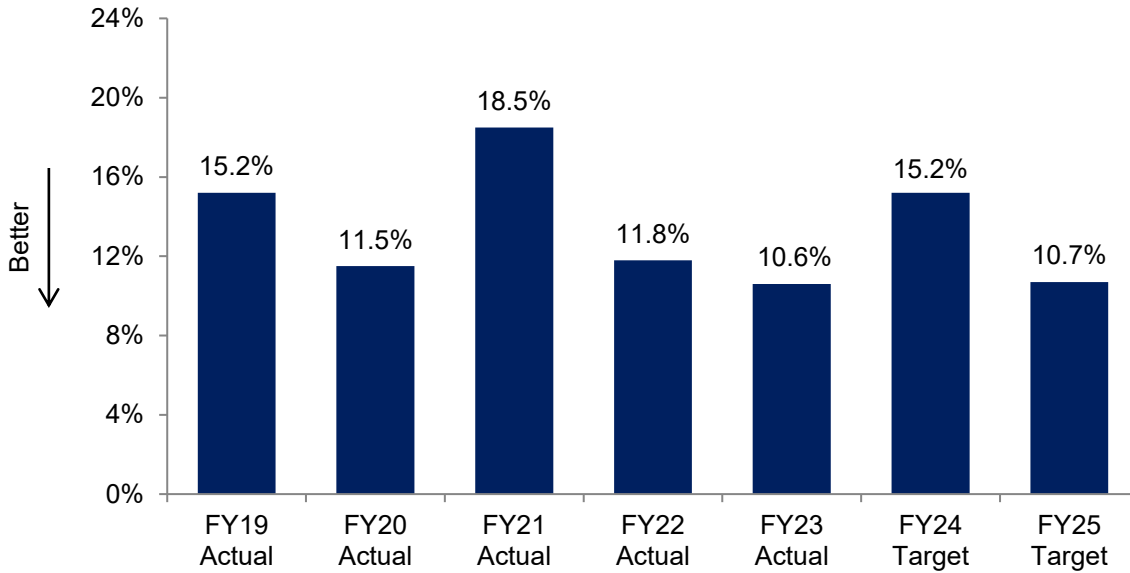
Definition	<p>Load Not Served measures the magnitude and duration of transmission system outages that affect TVA customers.</p> <p>This measure is expressed in system minutes and excludes events during declared major weather storms (defined as a weather-related event that causes an excess of the ten year six-sigma threshold of connection point interruptions, or an excess of 140 MWhs of Load Not Served, during a 24-hour period). The Vice President of Transmission Planning and Projects must approve an event as being a major weather event.</p>
Calculation	Percent of total load not served x Number of minutes in period

Coal Equivalent Availability Factor



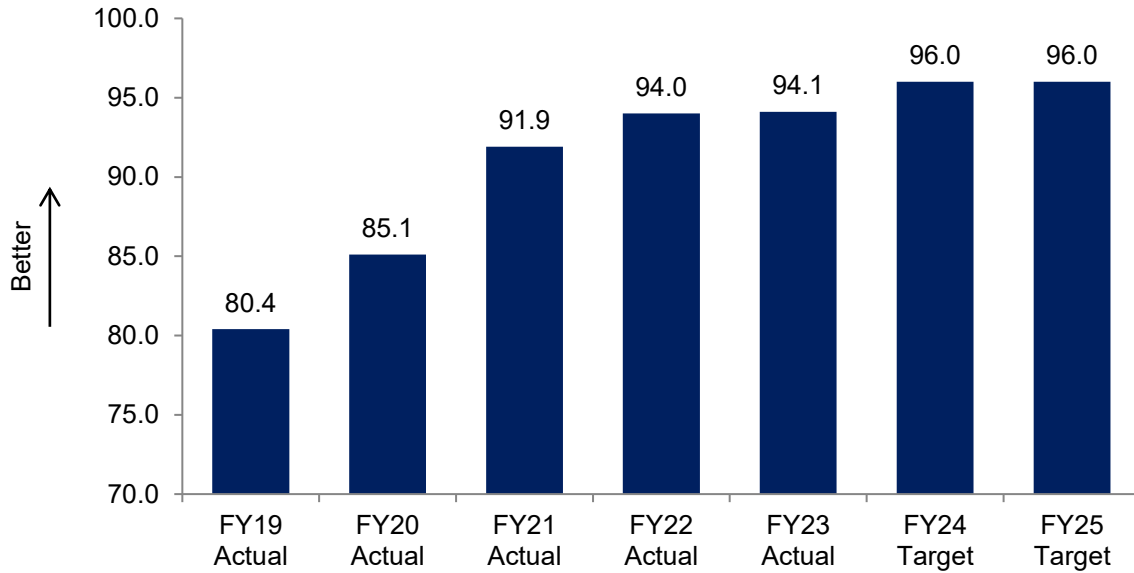
Definition	The Coal Equivalent Availability Factor reflects the percentage of time over a given period that a coal-fired unit was available to generate electricity for TVA. This measure excludes any newly commissioned units until after the first full fiscal year of operation.
Calculation	<p>Weighted Capacity Based Equation: $WEAF = \{ \sum [(AH - EFDH - EMDH - EPDH - ESEDH) \times NMC] / \sum (PH \times NMC) \} \times 100$</p> <p>Where:</p> <ul style="list-style-type: none"> WEAF = Weighted Equivalent Availability Factor NMC = Net Maximum Capacity AH = Available Hours PH = Period Hours ESEDH = Equivalent Seasonal Derated Hours EPDH = Equivalent Planned Derated Hours EFDH = Equivalent Forced Derated Hours EMDH = Equivalent Maintenance Derated Hours

Coal EFOR



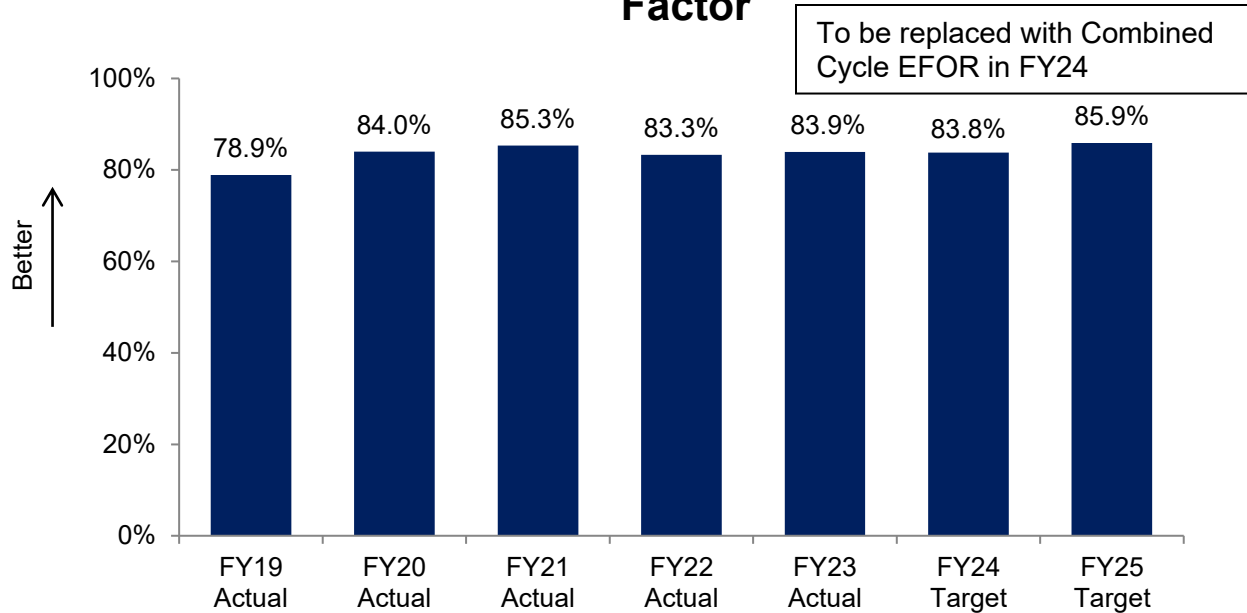
Definition	Coal EFOR measures the generation lost due to forced events as a percentage of time the unit would have been scheduled to run. This measure includes the Cumberland, Gallatin, Kingston, and Shawnee coal plants. This measure excludes events that are classified as “Outside Management Control.”
Calculation	$\frac{((\text{FOH} \times \text{WNDC}) + \text{Forced MWhL})}{((\text{FOH} + \text{SH}) \times \text{WNDC})} \times 100$ <p> FOH = Forced Outage Hours SH = Service Hours WNDC = Winter Net Dependable Capacity Forced MWhL = MWh Losses Due to Forced Derating </p>

Nuclear Performance Index



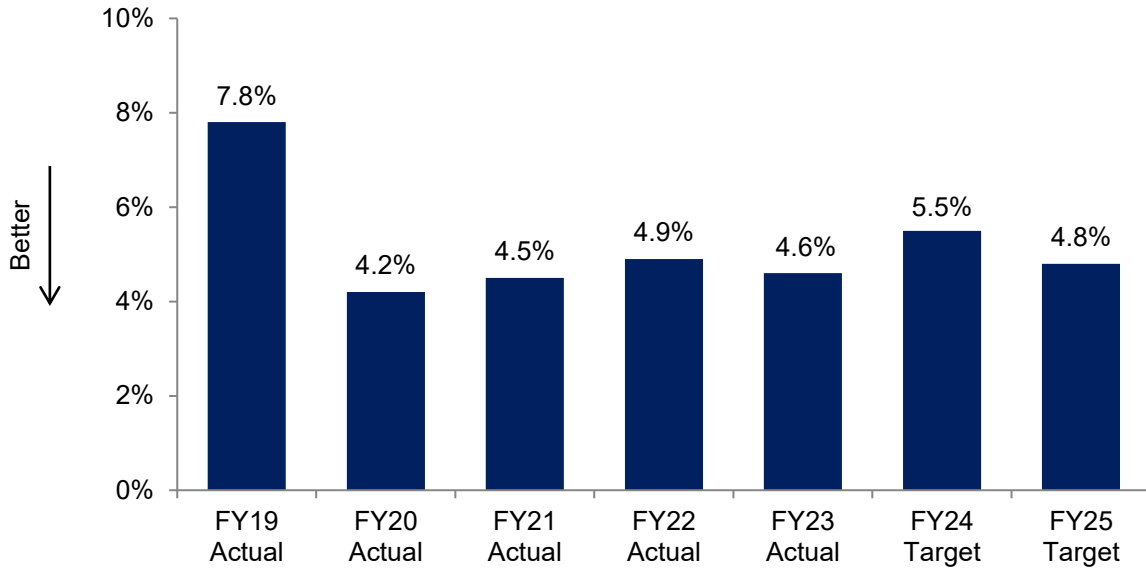
Definition	The Nuclear Performance Index is a weighted combination of the key performance indicators based on standard nuclear industry definitions for station performance. Metrics for FY 2021 and prior are based on the 2020 Index while metrics after FY 2021 are based on the 2025 Index.
Calculation	The Nuclear Performance Index for each unit is calculated using a weighted combination of key performance indicators based on standard nuclear industry definitions, with the maximum obtainable being 100 points. TVA's fleet-level Nuclear Performance Index is a simple average of the performance of each unit.

Combined Cycle Equivalent Availability Factor



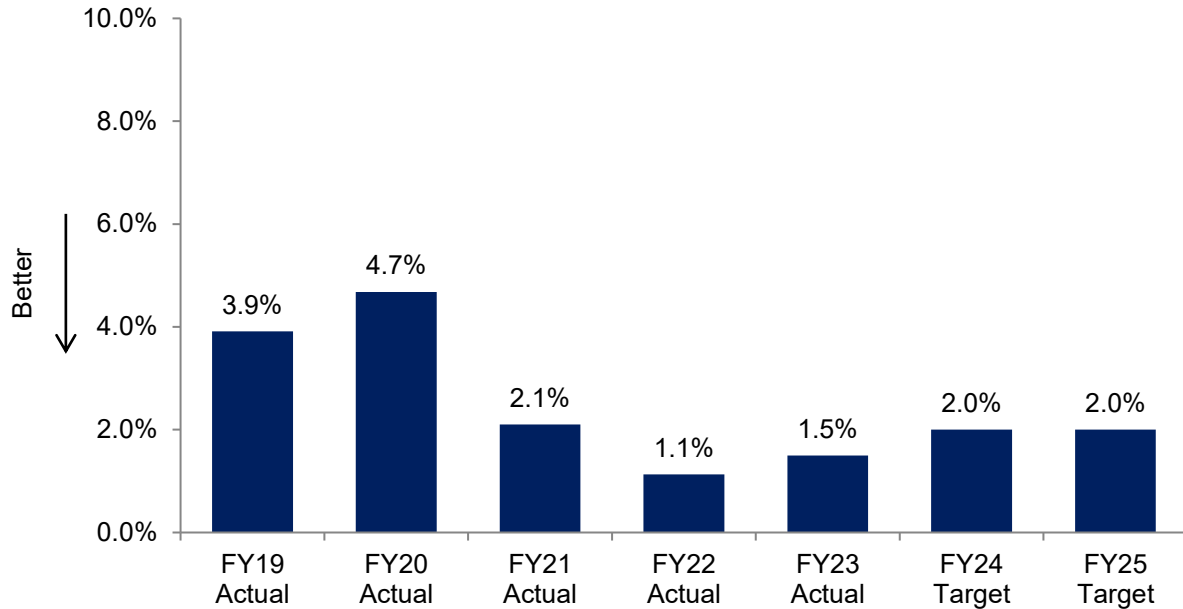
Definition	The Combined Cycle Equivalent Availability Factor reflects the percentage of time over a given period that a natural gas-fired unit was available to generate electricity for TVA-operated combined cycle generating assets. This measure excludes any newly commissioned units until after the first full fiscal year of operation.
Calculation	<p>Weighted Capacity Based Equation: $WEAF = \{ \sum [(AH - EFDH - EMDH - EPDH - ESEDH) \times NMC] / \sum (PH \times NMC) \} \times 100$</p> <p>Where:</p> <ul style="list-style-type: none"> WEAF = Weighted Equivalent Availability Factor NMC = Net Maximum Capacity AH = Available Hours PH = Period Hours ESEDH = Equivalent Seasonal Derated Hours EPDH = Equivalent Planned Derated Hours EFDH = Equivalent Forced Derated Hours EMDH = Equivalent Maintenance Derated Hours

Combined Cycle EFOR



Definition	Combined Cycle EFOR measures the generation lost due to forced events as a percentage of time the unit would have been scheduled to run. This measure includes Caledonia, John Sevier, Lagoon Creek, Magnolia, and Southaven combined cycle plants. This measure excludes events that are classified as “Outside Management Control.”
Calculation	$\frac{((\text{FOH} \times \text{NDC}) + \text{Forced MWhL})}{((\text{FOH} + \text{SH}) \times \text{NDC})} \times 100$ <p>FOH = Forced Outage Hours SH = Service Hours NDC = Net Dependable Capacity Forced MWhL = MWh Losses Due to Forced Derating</p>

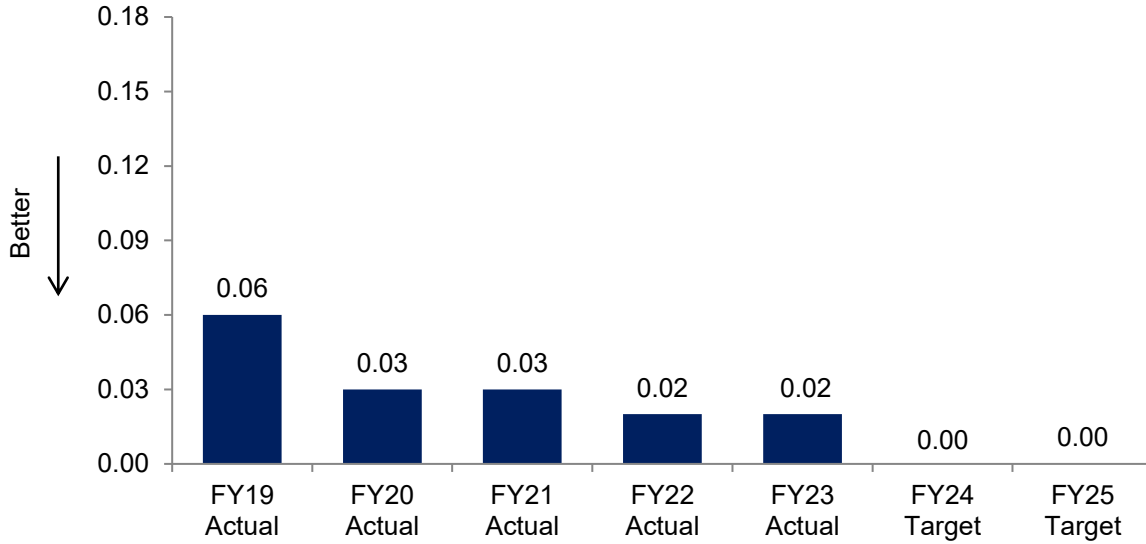
Nuclear Online Reliability Loss Factor



Definition	Nuclear Online Reliability Loss Factor is the 12 month ratio of all generation losses, minus refueling outages and exempt losses, to reference energy generation minus refueling outages and exempt losses in a normal fuel cycle period.
Calculation	$\{[(PEL + UPEL + UPELOE) - (RFOT + SPEL)] / (REG - (RFOT + SPEL))\} * 100$ <p> PEL = Planned energy losses, MW-hr. UPEL = Unplanned Energy Loss (Forced) UPELOE = Unplanned Energy Loss (all Outage Extension) RFOT = Refueling outage duration in hrs. * RUP, MW-hr. (Breaker open to breaker closed, includes any refueling outage extension losses) SPEL = Exempt Reliability Energy Loss; energy losses associated with exempt activities REG = Reference Energy Generation REG (month) = RUP * 24 hours/day * no. days/month RUP = maximum power capability of the unit under reference ambient conditions </p>

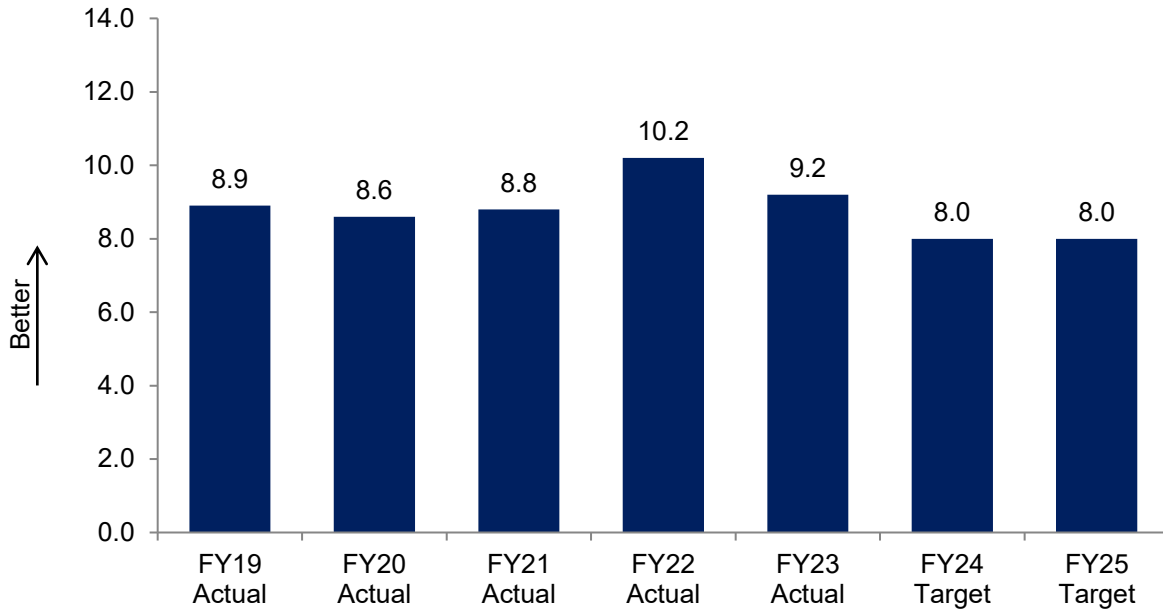
People Advantage / Powerful Partnerships

Serious Injury Incident Rate (SIIR)



Definition	The SIIR is a mathematical calculation used by Edison Electric Institute that quantifies the extent of injury for serious injuries and fatalities from events within the control of the employee and/or the employer.
Calculation	$(\text{Number of cases} \times 200,000) / (\text{number of hours worked during the time period})$ Metric applies to TVA employees and staff augmentation contractors.

Capital Investment (\$B)

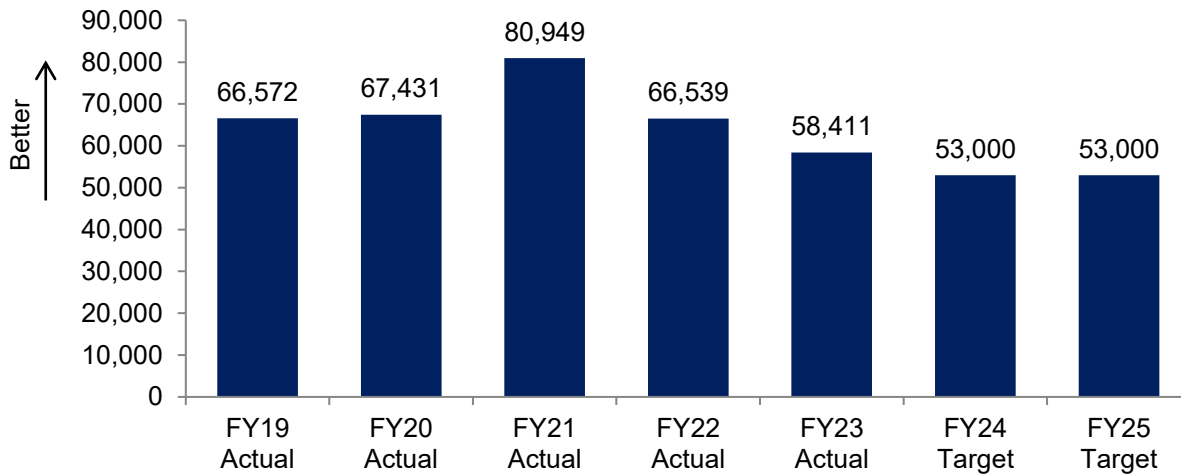


Definition	Capital Investment measures the amount of economic and capital investment in the Tennessee Valley that TVA has played a role in attracting.
Calculation	Amount of capital investment as reported through TVA channels

New and Retained Jobs

Fiscal Year	New Jobs ¹	Retained Jobs ²
2023	12,276	46,135
2022	26,512	40,027
2021	22,599	58,350
2020	19,400	48,031
2019	21,458	45,114

New and Retained Jobs



* FY24 & FY25 Target numbers based on an average of the approved FY24 range

¹ "New jobs" in the TVA fiscal year are newly created, paid positions at a facility of a TVA customer. "Positions" are calculated by adding (1) the number of full-time, on-site employees and/or independent contractors at the facility, (2) the total number of full-time work-from-home employees and independent contractors who reside in the TVA service territory and who spend 100% of their work time on facility-related matters, and (3) the total hours worked on facility-related matters by full-time and part-time on-site employees at the facility and full-time and part-time work-from-home employees (a) who reside in the TVA service territory and (b) who spend less than 100% of their work time on facility-related matters, divided by the number of work hours of such employees based on a 40 hour work week. A "TVA customer" means an entity that purchases power from TVA or a distributor of TVA power. New jobs reported by TVA may include positions created during the current TVA fiscal year and certified projections of anticipated positions to be created within a five-year time frame. New job numbers reported by TVA are certified and provided to TVA by TVA customers.

² "Retained jobs" are paid positions at a facility of a TVA customer that were created prior to the current TVA fiscal year and that continue to be filled in the current TVA fiscal year. "Positions" are calculated by adding (1) the number of full-time, on-site employees and/or independent contractors at the facility, (2) the total number of full-time work-from-home employees and independent contractors who reside in the TVA service territory and who spend 100% of their work time on facility-related matters, and (3) the total hours worked on facility-related matters by full-time and part-time on-site employees at the facility and full-time and part-time work-from-home employees (a) who reside in the TVA service territory and (b) who spend less than 100% of their work time on facility-related matters, divided by the number of work hours of such employees based on a 40 hour work week. A "TVA customer" means an entity that purchases power from TVA or a distributor of TVA power. Retained job numbers reported by TVA are certified and provided to TVA by TVA customers.

Igniting Innovation

TVA's Igniting Innovation priority is designed to measure progress toward milestones and initiatives that provide innovative and advanced solutions to better serve the people of the Tennessee Valley region. At TVA's November 2020 Board meeting, a set of original transformative innovation initiatives was presented. TVA's transformation initiatives continue to evolve, and currently comprise the following:

- **Energy Storage Integration** – Implement a long-term strategy to integrate energy storage for system flexibility and maximizing renewables
- **Electric Vehicle Evolution** – Enable the adoption of electric vehicles in the region to create load growth and benefits for citizens
- **Regional Grid Transformation** – Enable an interconnected, intelligent grid to reliably deliver power as customer values evolve, investing in a state-of-the-art System Operations Center and Energy Management System that enhance security, resiliency, and reliability, and enable innovation
- **Connected Communities** – Expand smart technologies including broadband with communities to manage energy and services
- **Advanced Nuclear Solutions** – Develop a reliable, affordable, flexible, and clean generation option with cost and risk shared
- **Decarbonization Options** – Develop feasible technology pathways to achieve the next phases of carbon reductions and offsets
- **Future Grid Performance** - Ensure a stable and reliable grid as TVA's generation mix evolves

Beginning in 2020, TVA placed a high priority on providing innovation and research which aligns to and supports its transformative initiatives. This research supports both TVA and national strategic interests to reduce carbon emissions and is designed to both catalyze and support TVA's decarbonization initiative.

TVA's electric vehicle initiative is designed to also support economic development in the TVA region by attracting significant jobs and capital investment to the area. Several major auto makers have already invested in major electric vehicle manufacturing operations in the region, and TVA is partnering with the industry, the State of Tennessee and our LPC partners and customers to advance electric vehicles. TVA has plans for fast charging stations every 50 miles along Tennessee interstates and major highways with the intent of helping to put more than 200,000 electric vehicles on Valley roads by 2028, spurring economic development and contributing to a reduction in carbon emissions.

At the forefront of the energy storage initiative is deploying grid-scale battery energy storage technology to optimize the existing TVA generation assets and improve the resiliency of the transmission system. In 2020, TVA launched its first TVA-owned, grid scale, lithium-ion demonstration battery project, and in 2023, TVA began construction near Vonore, Tennessee. The system integration lessons learned from this project will guide future application of battery storage as part of the evolving bulk power system in the region.

Additionally, TVA is committed to investing in the future of nuclear and continues to evaluate the licensing and design of emerging nuclear technologies, such as advanced light water SMRs and advanced non-light water reactors. In December 2019, TVA became the first utility in the nation to successfully obtain approval for an early site permit from the NRC to potentially construct and operate SMRs at its Clinch River Site. TVA has entered into memorandums of understanding and agreements that allow for mutual collaboration to explore advanced reactor designs as a next-generation nuclear technology while leveraging the expertise of federally funded research and development centers, utilities, vendors, and academic institutions. These contractual relationships are important steps in the early stages of evaluation as TVA considers the economic feasibility of advanced nuclear reactors. These contractual relationships are also intended to leverage innovations to improve advanced nuclear designs, streamline licensing pathways, find efficiencies in construction methods, and optimize operating expenses. For example, TVA has entered into a multi-party collaborative arrangement to advance the global development of the GEH BWRX-300 SMR design. Under this agreement, TVA will contribute up to \$88 million for design costs incurred by GEH through 2026. At the time feasibility is determined, TVA will have the right to use the design and may receive additional economic benefits.

In support of continued efforts to promote decarbonization, TVA is in the third year of a coalition of utilities and researchers, led by EPRI and the Gas Technology Institute, whose purpose is to engage, inform, and support global low-carbon resources initiatives to develop the pathways for the advancement of carbon reducing technologies for large scale utility deployment. This is a five-year program and includes research to support creating resource options, such as alternative fuels (hydrogen, ammonia, and methanized derivatives), carbon capture, electrification, and utilization of clean DER as part of the overall low-carbon resource mix. TVA has made progress understanding

TVA FY 2025 Budget Proposal & Management Agenda and FY 2023 Annual Performance Report

regional geology and carbon capture technologies and is evaluating both with an emphasis on the potential for carbon capture in TVA's future. To support this initiative, in August 2023 TVA entered into a memorandum of understanding with TC Energy Development Holdings Inc. to study the development, construction, and operation of carbon capture, utilization, transportation, and sequestration infrastructure at or near TVA's Ackerman and Paradise Combined Cycle Plants.

In addition to these initiatives, TVA has also established 15 Connected Communities pilot projects with stakeholders and has been engaging in advanced buildings research to support the initiative. Connected Communities projects are aimed at addressing today's challenges with community-driven information and technology solutions for a modernized energy system. TVA is currently evaluating the next round of pilot projects. TVA has also established six community partnerships to provide consulting services to test a framework for engaging communities to help set goals, scope projects, and apply for funding. Research will continue to identify best practices, better understand challenges in the Tennessee Valley, and scale up learnings from the projects to broader applications throughout the Tennessee Valley.

TVA and LPCs are engaged in several initiatives related to regional grid transformation. Research includes technologies and applications advancement in intelligent distribution systems. Smart meter technology has the potential to shift usage patterns away from peak demand times which could change costs significantly. Additionally, intelligent transmission systems would give TVA the ability to nearly instantaneously diagnose problems, make corrections, and engage transmission and generation resources quickly so that power would keep flowing. This could promote reduced emissions, lower energy costs, and add greater flexibility to accommodate the new consumer-generated sources under TVA's renewable energy programs. TVA also worked with LPC partners to execute a survey of LPC technology capabilities and plans, and the results are helping shape a realistic path toward TVA's long-term goals.

TVA's Future Grid Performance initiative seeks to address needs to keep the grid reliable and stable as TVA transitions to an energy system that has a greater share of intermittent and inverter-based resources, such as renewables and battery storage, connected to the transmission system.

Making progress toward these initiatives will better position TVA to serve the Valley in providing affordable, reliable and clean energy while supporting new technologies that can improve the quality of life for all people in TVA's seven-state region.

Other Information

Data Validation and Verification

Much of the data contained in this document was derived from TVA's Annual Report on SEC Form 10-K for the year ended September 30, 2023 ("Annual Report"). TVA filed the Annual Report with the SEC, and TVA's CEO and Chief Financial Officer certified the Annual Report in accordance with the requirements of the Sarbanes-Oxley Act. Also, TVA's independent auditor, Ernst & Young LLP, audited the financial statements contained in the Annual Report.

TVA's management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rule 13a-15(f) under the Securities Exchange Act of 1934 and required by Section 404 of the Sarbanes-Oxley Act. TVA's internal control over financial reporting is designed to provide reasonable, but not absolute, assurance regarding the reliability of financial reporting and the preparation of financial statements in accordance with GAAP. Because of the inherent limitations in all control systems, internal controls over financial reporting and systems may not prevent or detect misstatements.

TVA's management, including the CEO, the Chief Financial Officer, and the Controller, evaluated the design and effectiveness of TVA's internal control over financial reporting as of September 30, 2023, based on the framework in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this evaluation, TVA's management concluded that TVA's internal control over financial reporting was effective as of September 30, 2023. Although management's report on the effectiveness of internal control over financial reporting was not required to be subject to attestation by TVA's registered public accounting firm, TVA has chosen to obtain such a report. Ernst & Young LLP issued an attestation report on TVA's internal control over financial reporting as of September 30, 2023.

Lower-Priority Program Activities

TVA has determined that it does not have any lower-priority program activities for purpose of 31 U.S.C. § 1115(b)(10).

Hyperlinks

Hyperlinks to documents discussed in this Performance Plan, as well as other significant documents, are below:

Documents and Reports	Hyperlink
Integrated Resource Plan	https://www.tva.gov/Environment/Environmental-Stewardship/Integrated-Resource-Plan
Natural Resource Plan	https://www.tva.gov/Environment/Environmental-Stewardship/Environmental-Reviews/Natural-Resource-Plan
Annual/Quarterly Reports	https://tva.g4ir.com/financial-information/sec-filings/default.aspx
Annual Performance Report	https://www.tva.gov/About-TVA/Guidelines-and-Reports
Sustainability Report	https://www.tva.com/environment/environmental-stewardship/sustainability/sustainability-report
Strategic Intent & Guiding Principles	https://www.tva.com/about-tva/reports
CCR Rule Compliance Data and Information	https://www.tva.com/environment/environmental-stewardship/coal-combustion-residuals
DEIA Report	https://www.tva.com/careers/diversity-inclusion/diversity-report
Valley Pathways Study	https://www.tva.com/environment/valley-pathways-study
Federal Funding Opportunities	https://www.tva.com/energy/technology-innovation/connected-communities/federal-funding-opportunities
EnergyRight® Programs	https://energyright.com
Environmental Policy	https://www.tva.com/environment/environmental-stewardship/environmental-policy
Economic Development	https://www.tva.com/economic-development

TVA FY 2025 Budget Proposal & Management Agenda and FY 2023 Annual Performance Report

Appendix A

<u>Report Number</u>	<u>GAO Recommendation</u>	<u>TVA Response</u>
GAO-17-343	The TVA Board should ensure that TVA propose, and work with the TVARS Board to adopt, funding rules designed to ensure the plan's full funding.	<p>TVA remains committed to working with the TVARS Board, a separate legal entity from TVA, to ensure a fully-funded retirement system. In addition to the 2016 plan amendments that were approved by the TVARS Board and accepted by TVA that put in place a plan to close the gap between TVARS' assets and obligations over a 20-year period, other recent developments include:</p> <ul style="list-style-type: none"> - In FY 2017, TVA made an additional one-time pension contribution of \$500 million to TVARS. This brought the total FY 2017 contribution to \$800 million versus the required contribution of \$300 million. This additional contribution has improved the confidence of being fully-funded over the original 20-year period. - In June 2018, the TVARS Board approved, and TVA accepted, rule changes that allowed employees with a Cash Balance pension account to stop receiving Cash Balance pension benefits and instead shift their retirement benefits to the 401(k) Plan effective October 1, 2018. This choice provided employees with greater flexibility in future financial planning and the option to choose the retirement benefits that are best for them. - In FY 2021, TVA and the TVARS Board adopted a new asset allocation policy and de-risking strategy that provides greater stability in TVARS' asset value and reduces TVARS' funded status volatility while working toward the goal of fully-funded liabilities.

<u>Report Number</u>	<u>OIG Recommendation</u>	<u>TVA Response</u>
2021-15789	OIG recommends the Senior Vice President, Generation Projects and Fleet Services, in coordination with applicable organizations, review and revise the standard programs and processes and user guides to provide clarification where needed.	TVA is in process of reviewing and revising the Real Property Management 37 series processes and user guides. Documentation of these activities will be provided by the target date.
2022-17370	OIG recommends the Vice President and Chief Information and Digital Officer, Technology and Innovation, improve the hardware asset management processes to include standard data elements/taxonomy that are used to inform what assets can be or cannot be introduced into the network as part of the network authentication process.	As part of the ongoing project, TVA will create processes to maintain a complete and accurate inventory of hardware assets connected to the corporate network (CDM HWAM) by 3/29/2024.

TVA FY 2025 Budget Proposal & Management Agenda and FY 2023 Annual Performance Report

Appendix B

TFOs are a financial measure that is not calculated and presented in accordance with GAAP. TFOs are measured by summing bonds and notes, gross, debt related to variable interest entities (“VIEs”), leaseback obligations, energy prepayment obligations, the membership interests of VIEs subject to mandatory redemption, and notes payable. A calculation of TFOs utilizing financial statement line items reported in accordance with GAAP follows:

TENNESSEE VALLEY AUTHORITY
Unaudited Reconciliation of Total Financing Obligations
at September 30 (dollars in millions)

	2019	2020	2021	2022	2023	2024 Projected	2025 Projected
Total Financing Obligations	\$ 22,818	\$ 21,421	\$ 20,543	\$ 20,336	\$ 20,525	\$ 22,158	\$ 25,003
Energy prepayment obligations	-	-	-	-	-	-	-
Notes payable	(23)	-	-	-	-	-	-
Leaseback obligations	(263)	(223)	(25)	(0)	-	(0)	(0)
Membership interests of VIE subject to mandatory redemption	(28)	(25)	(24)	(20)	(18)	(17)	(16)
Debt of VIE	(1,137)	(1,098)	(1,056)	(1,013)	(975)	(938)	(902)
Bonds and Notes, gross	21,367	20,075	19,438	19,303	19,532	21,203	24,085
Exchange loss (gain)	(191)	(153)	(58)	(150)	-	-	-
Unamortized discounts, premiums, issue costs and other	(139)	(131)	(122)	(132)	(241)	(248)	(255)
Notes payable	23	-	-	-	-	-	-
Debt of variable interest entities	1,137	1,098	1,056	1,013	975	938	902
Total outstanding debt	<u>\$ 22,197</u>	<u>\$ 20,889</u>	<u>\$ 20,314</u>	<u>\$ 20,034</u>	<u>\$ 20,266</u>	<u>\$ 21,894</u>	<u>\$ 24,733</u>

