

**Written Testimony of
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and Environment
U.S. House Committee on Transportation and Infrastructure
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Our Mission of Service: Improve Quality of Life

Thank you Chairman Rouzer, Ranking Member Napolitano, and members of the subcommittee for allowing me to represent the more than 10,000 employees and 20,000 contract partners who deliver on the Tennessee Valley Authority's mission of service every day. I am Jeff Lyash, President and Chief Executive Officer of TVA.

TVA was established 90 years ago, as part of the New Deal, to improve the quality of life for the citizens of the Tennessee Valley region by providing energy, economic development, and environmental stewardship. TVA met that mission of service through river management and flood control, harnessing the power of water to electrify rural areas and bring in new industries and opportunity.

Today, TVA remains focused on the large-scale challenges that our nation and region face: meeting rising energy demand, growing American manufacturing and our economy, reducing energy burden on American families, mitigating climate change, and addressing growing cybersecurity threats.

Given these challenges and the scale of TVA's operations today, our mission will be critical in the decades ahead. We are actively investing in the next generation of technologies to ensure that we maintain our nation's energy security while expanding our asset portfolio to include additional affordable, reliable, and clean resources for the future. It is an honor to share how we are serving the people of the Tennessee Valley region, and the entire nation, today, and our efforts to do so in the future.

In terms of energy, TVA is the nation's largest public power provider and the third-largest overall power producer. Our service territory is one of the fastest growing in the nation – covering portions of seven states in the Tennessee Valley geographic area. We supply electricity for more than 10 million people – and that population is growing at six times the national average.

TVA partners with 153 local power companies and 58 directly served customers to support the communities and people of the region. Our customers include seven military and federal installations.

We are proud of our mission to support national security by producing tritium to support the nation's nuclear defense program.

We operate one of the nation's most diverse, cleanest generation portfolios, including nuclear, hydro, and solar. We also operate one of the nation's largest transmission systems.

TVA has an impressive history of 90 years of service, and we are well-positioned to continue to be a leader in energy, environmental stewardship, and economic development for decades to come. Today, I will focus on that future and the ways in which TVA is serving the Tennessee Valley region and the entire nation.

Maintaining Affordability and Fiscal Discipline

TVA operates through revenues primarily from our electric power generation system. The TVA power system has been self-funded since 1959. We are not part of the regular appropriations process. We have a statutory least cost planning mandate, and we work hard to maintain the lowest rates feasible for our customers while investing in the reliability and resiliency of our system.

In 2014, TVA fulfilled a requirement to repay \$1 billion of early government investment. Beyond that \$1 billion repayment, we continue to pay the U.S. Treasury a return on the government's remaining permanent investment in TVA. This totaled \$4 million to \$6 million annually from 2020 to 2022. We also return 5% of power revenues to states and counties as tax equivalent payments – totaling \$5.3 billion in the past 10 years.

TVA currently has approximately \$12.5 billion in annual revenues and an asset base of more than \$51 billion. For nearly a decade now, we have followed a disciplined financial plan to reduce TVA's debt. TVA's total financing obligations are at the lowest level in more than 30 years. Pursuant to the TVA Act, TVA debt is not guaranteed by the United States and does not count against the U.S. Treasury's debt limit.

We have reduced our total financial obligations by \$7 billion from \$27.5 billion in Fiscal Year (FY) 2013 to \$20.3 billion in FY 2022. We accomplished this while making ongoing annual investments of billions of dollars in TVA system assets and upgrades.

Because of TVA's economic development mission, we must operate as efficiently and effectively as the best investor-owned utilities to remain competitive in attracting new businesses.

Through our public power model, we are one of the nation's lowest cost power producers. Our residential retail rate is 25th lowest among the top 100 utilities in the nation as of February 2023. Our industrial rate is 7th lowest among the top 100 utilities. TVA base electric rates have remained stable for four consecutive years. Additionally, we provided \$1.2 billion in pandemic and long-term partner credits to our customers through quarter two of FY 2023.

We are also addressing energy burden through our energy efficiency programs, such as home and industrial energy efficiency audits, Home Uplift energy upgrades, School Uplift energy upgrades, and creating a network of regional weatherization contractors to assist homeowners.

TVA's low rates and our historically high reliability are energizing new jobs and investment across the region. TVA helped our service territory create or retain nearly 350,000 jobs and attract almost \$48 billion in projected capital investment in the past five years. One of the major reasons industries and businesses choose the Tennessee Valley region is because of the affordable, reliable, resilient, and clean energy TVA provides.

TVA economic development partnerships have resulted in several of the largest projects in the history of our region, including the recent Ford BlueOval City campus in west Tennessee (\$5.6 billion investment); General Motors Co. and LG Energy Solution in Spring Hill, Tennessee (\$2.3 billion investment); and First Solar in north Alabama (\$1.1 billion investment). Our region is rapidly becoming the electric vehicle and battery production center of the United States. We are partnering with our communities to create or keep advanced manufacturing jobs in the United States. TVA energy also powers tech hubs for Amazon, Facebook, Google, and others.

Building the Energy System of the Future to Enable the New Industrial Age

TVA's commitment is to provide our seven-state region with energy security – the affordable, reliable, resilient, and clean energy that communities and customers across the region expect and deserve. We are focused on energy expansion and innovation as we meet today's needs, while also preparing for the future. We appreciate that the Inflation Reduction Act included direct pay tax incentive provisions for public power providers and TVA to help ensure parity across the electric utility system and create opportunities for all consumers.

Population, economic, and industrial growth, and expanded electrification are creating sustained regional load growth. We anticipate needing at least 50-100% more energy than we currently produce by 2050 if the region sees strong electrification and continued economic growth.

TVA is currently working to expand and upgrade our energy system to meet anticipated future power load and transmission demands in the face of ongoing economic growth

and increasing electrification. This includes currently building more than 3,800 megawatts of combustion turbine and combined cycle natural gas generation, new solar and energy storage.

We are also working to make our system more robust and resilient against cyber threats, climate change, and more intense and frequent extreme weather events. Since Winter Storm Elliott in 2022, we have taken more than 250 actions to harden assets to resist extreme weather. TVA is also investing \$2.8 billion in transmission system improvements, including our new state-of-the-art Primary Systems Operations Center in Meigs County, Tennessee. This \$300 million center will use smart technologies to help manage the flow of electricity across the 80,000-square-mile area we serve, around the clock, minute-by-minute.

TVA's energy will be increasingly carbon-free in the future. TVA already is a national leader in carbon reduction, operating the cleanest energy system in the Southeast. Currently, more than half of TVA-produced energy is carbon-free. And our goal is to reach net-zero by 2050.

TVA is dramatically expanding our solar generation, actively working toward 10,000 new megawatts. We are currently implementing projects from the industry's largest clean energy request for proposal.

We have an industry leading nuclear fleet and have a path to extend the lifetime of those units.

TVA is actively investing in energy innovation. We have a global leadership position in advanced nuclear generation through a partnership with Ontario Power Generation, Synthos Green Energy, and GE Hitachi Nuclear Energy to develop a standard small modular reactor design that can be deployed by TVA, nationally and internationally to further a secure and low-carbon energy future. This partnership defrays the costs of development and deployment of small modular reactors from any one organization, allowing us to go further, faster in developing this clean energy technology.

TVA holds the nation's first Nuclear Regulatory Commission (NRC)-issued early site permit for small modular reactors at our Clinch River site near Oak Ridge, Tennessee. While we are continuing site work at Clinch River, we are also beginning evaluation of additional small modular reactor locations across our region.

To diversify our carbon-free energy innovation investments, TVA is a partner in a Southeast Hydrogen Hub coalition of five major Southeast utility companies. This partnership has submitted a full application for Department of Energy funding to develop a regional ecosystem to deploy green hydrogen as a carbon-reduction solution for customers and communities.

We have invested in advanced grid-scale energy storage through our first TVA battery storage facility in Vonore, Tennessee, expected to be operational later this year.

TVA has also partnered with the Department of Energy's Water Power Technologies Office to evaluate and demonstrate different approaches for operating our hydropower units to meet our electric grid's changing needs.

TVA will be on the leading edge of technology advancements, and we will share best practices and lessons learned from our energy innovations, benefiting the entire energy industry. We are partnering to leverage federal expertise such as Oak Ridge National Laboratory, as well as other renowned resources such as the Electric Power Research Institute (EPRI), and the University of Tennessee and other academic institutions.

We will continue to pursue partnerships and opportunities that will advance energy innovation and security that benefit all Americans and serve the people of the Tennessee Valley region. Our new nuclear innovations are also a strategic advantage to our allies as we collaborate internationally.

Stewarding our Natural Resources

At our roots, TVA is one of the nation's vital river management and flood control agencies. We manage one of the country's largest river systems – the 652-mile Tennessee River and its tributaries. We operate a system of 49 dams and reservoirs. Through our management, we have prevented nearly \$10 billion in flood damage to communities across the Tennessee Valley during our history. Additionally, we have helped avert approximately \$778 million in additional flood damage to downstream lower Ohio River and Mississippi River basin communities by working in partnership with the U.S. Army Corps of Engineers during extreme events.

TVA's system of dams and reservoirs makes us one of the largest stewards of public lands and waters in the eastern United States. Our dam system provides recreation and tourism opportunities for numerous cities, towns, and counties that count on this estimated \$11.9 billion annual revenue stream.

TVA also protects the unique biodiversity of our region and enhances waterways, natural resources, and cultural resources through our expansive stewardship programs. TVA's Biodiversity Policy states that TVA will protect biodiversity through its stewardship of public lands, management of the Tennessee River system, local and regional partnerships, and integration of species and habitat conservation in project planning. In FY 2022, TVA completed 120 biodiversity projects and initiatives comprised of on-the-ground conservation, monitoring and research, and education and outreach.

Conclusion

One of the enduring legacies of TVA's 90 years of service is that we continually seek to increase the value we deliver to those we serve. TVA was built to tackle energy challenges, create and share innovation, and be a catalyst for growth. We are uniquely

positioned to lead in meeting our country's expanding energy needs and industrial growth.

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