



TENNESSEE  
VALLEY  
AUTHORITY



# Stronger *Together*

FY 2021 Annual Report



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## GUIDE TO USING TVA'S ANNUAL REPORT AND FORM 10-K

This Annual Report is intended to provide highlighted information of interest about TVA's business and operations during its fiscal year ended September 30, 2021. This Annual Report should be read in conjunction with TVA's Form 10-K Annual Report for the year ended September 30, 2021 filed with the Securities and Exchange Commission. The Form 10-K provides additional financial, operational and descriptive information, including TVA's financial statements. The Form 10-K also provides important information about various material risks to which TVA is exposed in the course of its operations, which are important to consider before investing in any TVA securities. The 2021 TVA Annual Report and Form 10-K do not contain all information about TVA securities that is important for making investment decisions. Please refer to the appropriate Offering Circular, and any relevant supplements, for detailed information about TVA securities. TVA's Form 10-K can be found at [www.tva.com/investors](http://www.tva.com/investors).

### Forward-looking statements and certain factors that may affect our business

We have included in this letter and 2021 Annual Report "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934 relating to our operations, results of operations and other matters that are based on our current expectations, estimates, assumptions and projections. Words such as "will," "plan," "believe" and similar expressions are used to identify these forward-looking statements. These statements are not guarantees of future performance and involve risks, uncertainties and assumptions that are difficult to predict. Forward-looking statements are based upon assumptions as to future events that may not prove to be accurate. Actual outcomes and results may differ materially from what is described or forecast in these forward-looking statements. Risks, uncertainties and other factors that might cause such differences, some of which could be material, include, but are not limited to, the factors discussed in our Form 10-K and Quarterly Reports on Form 10-Q under the sections entitled "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations." Our forward-looking statements speak only as of the date of this letter and the 2021 Annual Report or as of the date they are made, and we undertake no obligation to update them.



Our partnerships make us...

**Stronger  
Together**



# Stronger Together with You



## Dear Fellow Stakeholders,

**The strength of TVA is its people, committed—each and every day—to improving the quality of life for communities and people we are privileged to serve.**

Our long-standing mission of service drives and inspires us daily to pursue new ideas and innovative solutions that improve our service to you.

By any measure, 2021 was a challenging year. Our nation, our communities and our company were tested in ways we could not have imagined. The global coronavirus pandemic has affected us all.

Despite this challenge, by coming together—marshalling the forces of our team—we continued to deliver for the communities and people of this region. Working in partnership with our 153 local power companies, the public power model demonstrated resilience...delivering low-cost, reliable energy, jobs and environmental stewardship to approximately 10 million people across this region.

### MISSION OF SERVICE

Nearly nine decades ago, TVA was created on a clear mission to benefit the public good. While the challenges are different today, they are no less critical to the lives of those we serve.

Every day, we deliver on our mission—focused on:

- **Energy:** low-cost, reliable and clean
- **Environmental Stewardship:** protecting and preserving public lands and water; clean air and water
- **Economic Development:** attracting investment and creating jobs

**Today, TVA has one of the nation's largest, most diverse and clean generation portfolios. We are a leader in carbon reduction, but we aren't satisfied.**

### DEVELOPING THE ENERGY SYSTEM OF THE FUTURE

One of the hallmarks of TVA has always been innovation. It's been a part of our DNA since day one, as we built dams to control flooding and produced electricity and transmission infrastructure to bring the first electric lights to rural communities and farms.

Today, TVA has one of the nation's largest, most diverse and clean generation portfolios. We are a leader in carbon reduction, but we aren't satisfied.

Last May, we announced TVA's decarbonization plan to increase our carbon reduction from the current 63 percent in mass carbon emissions from 2005 to 2020, to 70 percent by 2030 and a path to reaching 80 percent by 2035—all using existing technology and without impacting reliability or costs.

We are optimizing our nuclear fleet, adding significant renewable energy and evaluating the impact of retiring the balance of our coal-fired fleet by 2035. We expect to add 10,000 megawatts of solar energy by 2035, representing more than a 15-fold increase from today's operating solar.

We aspire to achieve net-zero carbon emissions by 2050. To achieve this, we are focused on the continued development of emerging technologies at a commercial scale and cost that will enable their deployment. These

include advanced nuclear, long-duration energy storage, carbon-capture technologies and alternative fuels like hydrogen, with an eye on commercial-scale production at a cost that enables their deployment.

### CONTINUED INVESTMENT IN RELIABLE, RESILIENT ENERGY

Reliable energy is the first thing families and businesses demand. It's what people expect and deserve. TVA has delivered energy with 99.999 percent reliability for 22 consecutive years, putting our performance in the top decile among the nation's largest utilities.

The strength and resilience of our system was demonstrated during record freezing temperatures last February and record high temperatures last July and August. Through systematic planning, preparation and investment, we delivered reliable energy during the highest power demand we've experienced in nearly a decade.

We continue to enhance reliability and resiliency with estimated capital investments of nearly \$1.5 billion in transmission improvements over the next three years. This includes a \$289 million investment in a new System Operations Center and \$90 million in a new Energy Management System.





## COMMITMENT TO STABLE, LOW-COST ENERGY

We've worked to sustain lower operating and maintenance costs since 2013, improving both productivity and efficiency. These savings are passed on to you in terms of lower energy costs.

Today, about 80 percent of the nation pays more for energy than customers served by TVA. Our industrial rates are lower than more than 95 percent of the nation.

Through financial strength and resilience, we were able to provide ongoing assistance to our customers and communities during the pandemic.

## DELIVERING JOBS, CAPITAL INVESTMENT ACROSS THE REGION

We are committed to attracting and retaining jobs and capital investment across the region. Over the past five years, TVA has worked with our partners to deliver over \$45.9 billion in investment and approximately 350,000 jobs to the region.


For 16 consecutive years, Site Selection magazine has selected TVA as one of the nation's top economic development organizations.

In September, Ford Motor Company and SK Innovation announced plans to locate their new electric vehicle and battery plant in Stanton, Tennessee. Plans for the company's largest, most advanced and efficient auto production facility include creating nearly 6,000 jobs and investing \$5.6 billion to build its next-generation F-150 Lightning electric vehicle on the nearly 6-square-mile site.

The project represents the largest investment in TVA Economic Development history and establishes our region as one of the nation's hottest for electric vehicle and battery manufacturing. With the Ford announcement, electric vehicle and battery manufacturing accounts for \$13.8 billion in investment and more than 10,500 new jobs during the past 10 years.


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# Our Values




### Safety

We are committed to the safety and well-being of each TVA employee and the communities we serve.




### Service

We are proud to serve in the communities in which we live, work and play.



### Integrity

We are honest and straightforward.



### Inclusion

We strive to treat everyone with dignity and respect by welcoming each person's individuality so we can all reach our full potential.

## LIVING OUR VALUES

While business results are important, it's how those results are achieved that matters. TVA's Core Values—Safety, Service, Integrity and Inclusion—are fundamental principles that guide our actions, behaviors and decisions as a company. These are more than just words—they are a standard we hold ourselves accountable to each and every day.

Last year, we purposefully added Inclusion to our Core Values. Almost nine decades ago, TVA was created as a force for good...to lift up a struggling region. TVA was built for the people...all the people.

Today, we carry on this mission—serving the people of this region regardless of race, gender, religion, sexual orientation or socio-economic background.

When it comes to treating others with fairness, dignity and respect, we—the employees of TVA—will set the example...not just in our company, but in the communities where we live and work.

## EXCELLING AT THE FUNDAMENTALS

One of the hallmarks of successful organizations has always been an ability to shift, adapt and change with the marketplace. This agility, combined with a commitment to excel at the fundamentals, helps organizations not only weather change but to thrive in it.

At TVA, we continue to tangibly demonstrate that we are up to the task. I am privileged and honored to lead such a dedicated, passionate group of employees.



Jeff Lyash  
President & CEO  
TENNESSEE VALLEY AUTHORITY



# Together with... Our People

## Inclusion is at the Heart of Who we are at TVA

**In 1933, TVA was created as a force for good—to make life better for communities and people across the Tennessee Valley.**

Inclusion is at the heart of who we are at TVA. We have purposefully added Inclusion to our Core Values. These fundamental values—Safety, Integrity, Inclusion and Service—define how we should interact with our customers, communities and—most importantly—each other.

The strength of TVA is its people. Our strength lies in our collective power. And a large part of that strength stems from the diverse knowledge, experiences and perspectives that each individual brings to the table.

At TVA, we are building a culture that truly values inclusion with diversity. Inclusion is a sense of belonging—valuing all voices. It is intentionally creating an environment where all individuals can thrive and fully contribute to our success.

Diversity is what makes us unique. It's about respecting and appreciating our individual differences—and belonging. Everywhere we go and in everything we do, we define our company's culture and character...not just within our company, but in the communities where we live and work.

Inclusion with diversity leads to better discussions, decisions and outcomes for the communities and people we are privileged to serve. We are committed to a TVA that truly values inclusion with diversity, that treats people with respect and dignity and where everyone can do their best work and be their best self every day.

TVA was built for the people...all the people.

## Built for ALL the People

**What does it mean to feel “included”?**

That is a question TVA is asking both its own employees and our neighbors in communities we serve across the seven-state region.

Terry Roberts, a TVA consultant in Strategic Operations Solutions in Chattanooga, has a unique perspective on what inclusion means. She describes herself as a “third-culture kid.” Her mom was born and raised in South Korea. Her parents moved to Germany where she and her sister were born. When she was five, her family moved to the U.S.

She remembers standing with her mother who was being sworn in as a U.S. citizen at a federal courthouse. She remembers holding the little U.S. flag they gave her and celebrating with an all-American McDonald's Happy Meal.

She also distinctly remembers feeling different from all her friends at many mealtimes that followed. At her young age, food became a symbol of all the differences she couldn't yet understand or articulate.

Kids at her school had the “typical” sack lunch of a sandwich and chips—while she had the more traditional Asian protein with vegetables, fruit and rice. She noticed no one was offering to trade. At dinnertime at friends' houses, there were casseroles—a dish young Terry had never had. Dinners at the Roberts' house were seafood with soup, rice and vegetables.

Those subtle differences may not have registered with many on the outside, but they left a mark inside of Terry. She was a

**Terry Roberts**  
TVA Strategic Operations  
Solutions Consultant

MORE THAN

**10,000**

employees are the backbone of the workforce

APPROXIMATELY

**18%**

of the workforce are Veterans

APPROXIMATELY

**60%**

of employees are represented by unions

**17**

unions represent TVA employees and contractors

*“Isn't it ironic that as a kid I didn't want to be different, but now as an adult, I want to stand out and be recognized for who I am.”*





RECEIVED 2021

## Diversity Impact Award

Top 10 Diversity Action Award

— Association of ERGs & Councils



third-culture kid who wanted to be like everyone around her and with friends who didn't really want her to be different.

"It wasn't until I was an adult that I realized that I had hidden and ignored an entire part of me and dishonored those roots from which I came," Roberts says. "I've realized that I can belong without being erased. That I can hold onto the life I had at home that nourished me so well and still matter to those around me."

How do we help people feel included at TVA? We seek to embrace Terry's wisdom by collaborating, communicating and recognizing that diversity is what we all have in common. We aim to celebrate inclusion and listen to people's individual stories. And, at every level, we strive to have open and honest conversations, including sponsoring a wide variety of TVA Employee Resource Groups for those who have not always found a seat at the table.

Most of all, we are reaching out across the Valley to help ensure we are Built for ALL the People—to ensure we are a company that serves approximately 10 million people in the Valley equitably and inclusively.

## Supporting Our Veterans

**TVA is consistently voted a Top 10 Military Friendly® Employer and has also received the Guard and Reserve's highest honor: the Freedom Award.**

Kevin Baker has lived through 125 combat missions, lost his best friend in a suicide tanker collision and performed an emergency tracheostomy on a fellow soldier. He has 24 years of military service and continues to serve as a drill sergeant in the Reserve.

He is an operations maintenance coordinator and proud member of our TVA team. And when he was activated and deployed for a full year during 2012-2013, Kevin was able to keep his health insurance and never miss a paycheck. Our military benefits structure ensures employees are paid the difference between military base pay and their TVA salary when called to active duty.

Kevin says benefits are important, but the support network TVA provides for veterans and active-duty reservists is what really matters. He struggles with post-traumatic stress disorder (PTSD) and serves as the Veteran Services liaison at Shawnee Fossil Plant. The role allows him to help other veterans by surrounding them with a support network of comrades who understand. He says former soldiers who suffer from PTSD are most vulnerable when feeling alone, but by working at TVA, veterans know they can lean on their work family.

RECEIVED 2021

## Military Friendly®

Top 10 Employer



*"My 'off' days don't come often anymore, but when they do, they hit hard. We have to have our work family to make it."*

**-Kevin Baker,**  
Coal Operations Maintenance Coordinator





*“I take pride in knowing that my family has helped TVA and TVA has helped my family. The two have never been separate, and I’m grateful that I can continue serving the Tennessee Valley as part of my family’s legacy.”*

– Shannon Anderson,  
TVA Transmission Project Manager

## Generations of TVA Service

Fourth-generation employee Shannon Anderson is part of a “TVA-proud family.” Her great-grandfather worked to build TVA dams, while her grandmother and dad worked at TVA nuclear plants Browns Ferry and Watts Bar. Now, she herself is part of the TVA tradition, working in Transmission.

“Growing up, grandma told me stories about great-granddad helping to build TVA’s dams and fossil plants like Gallatin and Widows Creek,” Anderson says “She worked in TVA construction also and put herself through nursing school—all while being a single mother of four—so she could later work at the health stations at Allen and Gallatin plants.”

After college, Anderson followed her family’s TVA footsteps to Sequoyah Nuclear Plant, where she met her husband. Now as a Transmission project manager, she is celebrating 20 years at TVA and continues to share her family’s legacy with her son—whom she hopes will also become part of the TVA family.

“We bring home TVA hats for him all the time, and he’s fascinated by it all,” she says. “I love being able to share our family’s experience with him, and he says he also wants to be a part of our legacy someday.”

FORBES AMERICA’S

**Best Large Employers**

#2 in Utility Industry  
Top 25% Overall

**Best-In-State Employers**

3<sup>rd</sup> consecutive year  
Top 5 in Tennessee

## Investing in the Energy Workforce of Tomorrow

Investing in a successful pipeline of talented energy industry workers across the Valley is as important to TVA as designing the next-generation systems they will one day operate. That’s why we actively support college, university and trade apprenticeship programs that help to ensure graduates receive the skills and competencies they need to succeed.

At Chattanooga State Community College, two TVA Partnership programs—Nuclear Power Engineering Technology and Radiation Protection—are specifically designed to address the needs of today’s nuclear power industry. In addition to classroom instruction, laboratory exercises, observations at nuclear facilities, and student mentoring, eligible students may have unique internship opportunities at TVA during the course of their studies.

For those preferring to work in the building-related trades, TVA supports North America’s Building Trades Unions’ Apprenticeship Readiness Program. This eight-week course is designed to help a diverse array of job seekers land high-paying employment in the trades.

And in universities all across the Valley, students participating in TVA’s Power Operations Intern & Co-op Program gain valuable real-life experience related to their fields of study by working at TVA.

“The students immerse themselves in our plants and processes so they can learn, grow and thrive,” says Chuck Spearman, regional engineering director of TVA Power Operations.

Jonathan Wellman, a Co-op student majoring in mechanical engineering at Mississippi State University, has worked on turbines and generators at TVA’s Gallatin and Kingston fossil plants.

“TVA’s given me the opportunity to gain real-world exposure to power generation through supporting their plant outages,” says Wellman. “I really appreciate how they’ve invested in me.”

Spearman says that investment goes both ways. “TVA gets a lot out of this program as well. It’s refreshing to bring in new talent with fresh perspectives and the latest training in engineering best practices.”



RECOGNIZED BY NEWSWEEK

**Top 100 Most Loved Workplaces®**

*“TVA’s given me the opportunity to gain real-world exposure to power generation through supporting their plant outages. I really appreciate how they’ve invested in me.”*

– Jonathan Wellman,  
Mississippi State University Co-op Student



**Top Utility**  
in Economic Development  
16 consecutive years  
by Site Selection magazine

# Together with... Our Communities



## We are Building a Clean Energy Economy

**As businesses, industries and government organizations are setting carbon-free energy goals, they need partners who can provide low-cost, reliable and clean energy.**

TVA is a regional leader in carbon reduction, but we can do more. We're committed to increasing our carbon reduction while maintaining our commitment to delivering reliable, low-cost energy. TVA is partnering with local power companies to expand our region's clean energy economy of the future—one that creates jobs and new investment to grow our Valley economy, while helping organizations meet their performance and environmental goals.

TVA is an industry leader in developing innovative technologies that will help decarbonize our economy. We aspire to achieve net-zero carbon emissions by 2050 and make substantial progress by 2035 by establishing decarbonization milestones, renewable energy expansion, and power grid modernization and pursuing innovative technologies. We've also created nationally recognized programs like Green Invest and provided local power companies the flexibility to generate up to 5 percent of their own energy to help meet consumer demand for new renewables.

Strong partnerships are creating the innovative, clean energy solutions that help our communities and our region continue to grow and thrive.

## Nation's Largest Public Power System

partnering with **153** local power companies that supply electricity to approximately **10** million people across seven Southeastern states and **57** directly served customers, including 50 industrial customers and 7 military and federal installations

## Electric Vehicle Production Moves to Forefront of Valley Economic Growth

**The electric vehicles of the future will largely be built across our seven-state territory.**

That is more than an aspirational statement; it's a headline being driven by significant investments that are creating the jobs of the future and long-term economic growth for our region. These investments in EV production facilities and battery manufacturing plants represent thousands of new jobs and billions in capital across the region.

Valley workers will manufacture the cars, batteries and parts that drive the electrification of the automotive industry in the decades ahead. Today, the region leads the Southeast in electric vehicle manufacturing and is number three nationally.

"We are proud to be driving the innovative technologies that will help decarbonize our economy," says TVA President and CEO Jeff Lyash. "Part of TVA's mission is to bring good jobs and capital investment to the region. With an industry like electric vehicles, it's not just about the manufacturing plants themselves, but also the people who work there."

"There is a ripple effect across communities as we attract businesses in the supply chain who make parts—creating more new jobs. When you have

### Jeannette Mills

TVA Executive Vice President and  
Chief External Relations Officer

**"These projects prove that positioning our region as an innovative leader in electrification is a winning strategy."**





POWERFUL  
PARTNERSHIPS



APPROXIMATELY

**80,900 Jobs**

**Over \$8.8 Billion  
Capital Investment**

across our seven-state territory through  
economic development in FY 2021 alone

thousands of new jobs, you typically create a wave of retail and housing growth that follows in the surrounding cities and towns.”

One of the largest new EV projects is the announcement from Ford Motor Company that it will bring \$5.6 billion in capital investment—the largest in TVA’s and the state of Tennessee’s history—and nearly 6,000 jobs to a new electric vehicle manufacturing plant in Haywood County, Tennessee.

“Ford Motor Company’s selection of one of TVA’s Certified Megasites is a shining example of partnership in action,” says Lyash. Ford’s announcement more than doubles the number of EV jobs across the Tennessee region.

There are also big plans from General Motors that, in combined announcements by GM and LG Energy Solution, point to approximately \$4 billion in investments in Spring Hill, Tennessee.

In late 2020, GM announced its intention to invest \$1.7 billion in its Spring Hill assembly plant, making it the company’s third electric vehicle manufacturing site. The plant will build the all-new Cadillac LYRIQ electric vehicle, helping retain 4,200 local jobs.

GM and LG Energy Solution announced later in 2021 a joint investment of \$2.3 billion to build a new Ultium Cells electric vehicle battery manufacturing plant to supply GM’s Spring Hill facility. The Ultium facility will create 1,300 new long-term manufacturing jobs in Maury County.

“This investment is significant not only to Maury County and Tennessee but to North America as Ultium Cells will be at the forefront of EV technology innovation and production,” says Maury County Mayor Andy Ogles. “This partnership not only continues our legacy as a leader in manufacturing and job growth, but once again positions Tennessee at the epicenter of innovation.”

With the recent announcement from Ford, the electric vehicle manufacturing and transportation sector has been responsible for approximately \$13.8 billion in new capital investment in the Valley and more than 10,500 new jobs during the past 10 years.

“We’ve seen significant growth in economic development that supports electrification of the economy—from car manufacturers making electric vehicles to EV battery manufacturing,” says TVA Executive Vice President and Chief External Relations Officer Jeannette Mills. “We believe TVA’s low-cost, reliable and clean energy is a tremendous draw for these world-class businesses. This demand is a testament to the competitive value that our public power model delivers.”

## Solving Local Challenges During COVID

**Across the Valley, the COVID pandemic created new challenges for community service organizations. In Murfreesboro, Tennessee, the question for Special Kids Therapy & Nursing Center was how to ensure a safe, clean environment for children with special needs as many therapies and play time take place on the floor.**

“The children we care for are already medically fragile and unable to attend typical daycare or school, so maintaining a clean environment, especially during a pandemic, was paramount,” says Special Kids Director of Development Stephanie Folkmann.

When the organization determined an auto scrubber tool would be one of the best ways to keep its facility clean, it was no small consideration. “At more than \$5,000, it’s an expensive item,” recalls Folkmann. “But we knew it could provide a much deeper clean than a mop and bucket, and it would allow our staff to sanitize their floors daily with less need from outside contractors.”

It was exactly the type of challenge TVA’s Community Care Fund was created to solve. Thanks in part to a combined contribution from Middle Tennessee Electric and TVA, the scrubber became a reality for Special Kids and the families they serve.

The concept of the fund is simple: local power companies donate to nonprofits in their area meeting frontline needs and TVA matches those donations. Gifts may be large or small—what matters is who they help.

For Dee Echols in Clay County, Mississippi, the challenge was meeting growing operational needs for the volunteer-run Project Homestead Food Pantry, which now serves nearly 700 families monthly. “What began as a closet in a local government building is now about 500 square feet of coolers, freezers and shelving,” says Echols.

When the pantry’s donated residential coolers were “on their last leg,” a contribution from West Point Water & Light and TVA provided two new commercial models.

More than 600 Valley organizations have been strengthened by Community Care Fund partnerships in less than two years—lifting those who need it the most.

TVA has provided over \$4 million in Community Care Funds since fiscal year 2020, with an additional \$5 million available from TVA. Including matching funds from LPCs, the Community Care Fund has contributed nearly \$9 million to address hardships created by the COVID-19 pandemic.

NEARLY

**\$9 Million**

provided through the Community Care Fund by TVA and LPC matching since FY 2020

MORE THAN

**600 Valley Organizations**

strengthened by the Community Care Fund partnerships

NEARLY

**\$3 Million**

donated to organizations across the Valley in addition to the Community Care Fund

OVER

**1 Million Meals**

distributed through Feeding America partnership in FY 2021





*“Green Invest is making our iconic whiskey even greener.”*

**-Melvin Keebler,**  
Jack Daniel's Vice President and Assistant General Manager

## Solar Energy Distills World's Best-Selling Whiskey

**TVA has the cleanest power system in the Southeast as a percentage of total generation. Our Green Invest program supplies renewable power from new large scale solar projects to meet the diverse needs of a variety of companies and organizations, including auto manufacturers, data centers, city governments and customers like Vanderbilt and Jack Daniel's.**

From large corporations to individual residents, TVA is working with our local power company partners to meet customer demand for renewable energy with our TVA Green programs. Through Green Invest alone, TVA has committed to nearly \$3 billion in solar investments to bring more than 2,000 megawatts of utility-scale solar to the Valley since 2018.

The resulting new solar projects are expected to bring more than 3,800 jobs and economic investment to the Valley communities where they are constructed.

In addition, Green Invest helps attract new business and industries to the region by meeting their renewable energy needs. These companies, like Facebook and Google, also bring new jobs and investments. For example, construction began in the summer of 2020 on a new \$800 million Facebook Data Center in Gallatin, Tennessee, that will be powered by multiple Green Invest solar projects. The data center will provide 100 high-paying permanent jobs and employ about 1,500 people during the three-year construction process.

For Jack Daniel's—whose goal is to preserve the environment with sustainable operational practices—20 megawatts of solar power from a Green Invest agreement in partnership with Duck River EMC will supply nearly three-quarters of the distillery's energy needs. It's the way TVA and our partners are putting a little sunshine in each drop of Tennessee whiskey that flows from Lynchburg.

RANKED IN

**Global Top 100 Green Utilities 2021 Report**  
By Energy Intelligence



*“Together, with a focus on local engagements and local relationships across our seven-state territory, we will continue to carry out TVA's mission to make life better for all the people we serve.”*

**-Dan Pratt,**  
TVA Senior Vice President of Regional Relations

## What Would Improve Lives in Your Community?

**At TVA, we ask ourselves that question every day. Our long-standing mission of service drives and inspires us daily to pursue new ideas and innovative solutions that improve our service to you. We are strengthening partnerships with local power companies, elected officials, economic development leaders and communities across our seven-state territory.**

Through a new regional model implemented this year, TVA is actively bringing stronger relationships and engaging more deeply on specific community needs and issues, while also continuing to focus on larger Valley energy and economic development issues.

Last winter, when a historic cold spell temporarily left families in Memphis without drinking water, TVA employees quickly partnered with a regional supplier and on-the-ground community groups to deliver approximately 245,000 donated bottles of water.

“Community organizations have great insight and networks at the local level; they know the specific needs, and they do the work every day,” says TVA Senior Vice President, Regional Relations, Dan Pratt. “They are a driving force that keeps our communities together. We are privileged to support them in this endeavor and proud to have them as partners.”

TVA's regional teams will be working on similar local partnerships under the direction of Mark Yates in the West, Carol Eimers in the East, Jared Mitchem in the South and Justin Maierhofer in the North.

“There are significant opportunities before us today where we can create greater value by partnering with others than we could through individual efforts,” says TVA's Executive Vice President and Chief External Relations Officer Jeannette Mills. “TVA's aim is to be a strong partner that helps local leaders solve problems and build on the great things happening in our communities.”



# Together with... Our Partners



## We are Delivering Reliability, Resilience and Value

**What does excellence look like from your energy partner?**

Is it 99.999 percent reliability regardless of extreme heat or record cold? Is it knowing you have low, stable energy costs in the years ahead because your provider continually invests in a diverse, robust generation portfolio that protects you from price volatility? Is it ongoing investments in a transmission system that ensure we provide power reliably when and where it's needed? Or is it being a leader in carbon reduction and having a defined path to a clean energy future that doesn't sacrifice reliability and cost stability?

At TVA, we believe the answer is "all of the above"—and more. We are investing in our power grid to make it more robust and resilient. We are investing in our generation portfolio as we move to a cleaner energy portfolio, while ensuring assets are available when they're needed most. And we are strengthening dams that have protected families and communities for decades to withstand even the most extreme natural events.

At TVA, operational excellence means finding more ways to deliver value from the energy assets that serve you.

## TVA's Operational Excellence Delivers Tangible Value Across the Valley

**Operational excellence at TVA is more than just keeping the lights on during an extended Southern deep freeze or multiple weeks of a summer heat wave.**

For us, operational excellence is about combining detailed planning, preparation and execution to provide energy that delivers four dimensions of value—reliability, resiliency, environmental sustainability and low cost.

"I'm proud to work at TVA, because if I look at it, I'm serving my own community," says Albert Patterson, a material handler supporting the TVA natural gas fleet. "It's not coming to work, doing your job and going home. You actually have a purpose. You are serving millions of people."

TVA's natural gas fleet, along with nuclear, coal and hydroelectric assets, kept power flowing during last February's deep freeze, while several surrounding systems suffered blackouts. When summer came, so did multiple weeks of elevated temperatures, where peak demand exceeded 30,000-plus megawatts—the highest summer levels in more than a decade. Again, TVA's people and its power system delivered.

TVA also partners with more than 1,000 businesses across the Valley through Demand Response programs that lower power use up to 1,600 megawatts when these companies voluntarily reduce operations during times of peak demand.

"These events highlight the importance of a diversified, robust generation portfolio and having a reliable, resilient



**Joe Bell**  
TVA Lineman

**Top Quartile  
Utility**  
in renewable  
energy-production  
in the Southeast

ONE OF THE  
**Largest**  
high-voltage  
transmission  
systems  
in North America

**3<sup>rd</sup> Largest**  
electricity generator  
in the nation based on total  
electric generation in 2020

**3<sup>rd</sup> Largest**  
nuclear fleet  
in the United States, providing  
over 40% of TVA energy

*"When you work for TVA, you definitely have a sense of pride and accomplishment. You're proud to tell people you work for TVA."*



transmission system,” says TVA Executive Vice President and Chief Operating Officer Don Moul. “Then you add effective power trading, combined with effective teamwork, communications and coordination with our local power companies and direct served customers. When you put all those elements together, we enjoy a reliable and resilient system.”

We continue to enhance reliability and resiliency of the system with estimated capital investments of nearly \$1.5 billion in transmission improvements over the next three years. This includes a \$289 million investment in a new System Operations Center and \$90 million in a new Energy Management System, which will help proactively prevent challenges. An enhanced fiber optic telecommunications network is also part of that plan, through which we can communicate and control our assets quickly, securely and independent of the Internet.

TVA has been equally committed to operational excellence by making the Valley’s power increasingly carbon-free. TVA already has one of the cleanest energy systems in the Southeast, with 56 percent of our energy supply coming from carbon-free sources in fiscal year 2021.

In 2021, TVA announced our aspirational goal of achieving net-zero carbon emissions by 2050. The plan takes TVA to 70 percent carbon reduction by 2030, with a path for reaching approximately 80 percent by 2035 while maintaining low-cost and reliability. This includes continued evaluations to retire existing coal units and incorporating new flexible, efficient gas units, which also will enable TVA to expand renewable energy sources in the coming decades while keeping the energy supply reliable.

To close the last 20 percent gap to net-zero carbon emissions, TVA is evaluating emerging technologies such as advanced nuclear, long-duration energy storage, carbon-capture technologies and alternative fuels like hydrogen, with an eye on commercial-scale production at a cost that enables their deployment.

## TVA is delivering reliable, resilient and increasingly clean energy, while holding rates below most of the nation.

“I make sure people can keep their lights on,” says Albert Cannon, TVA combustion turbine technician foreman. “There have been times when I’ve had to work a lot of overtime during an outage. My son asked me one time, ‘Daddy, why do you work so much overtime?’ I have to make sure that the equipment I have is ready to go, ready to start and reliable—because I don’t know when they are going to punch that button and need it. There’s a lot of job satisfaction in providing power by working for TVA.”

“As we continue lowering the carbon intensity of electricity without sacrificing reliability or low cost, TVA will continue to protect the Valley’s natural resources for future generations,” says TVA Power Operations Senior Vice President Jacinda Woodward.

TVA’s effective wholesale rates have remained flat for the past eight years—even while we have reduced debt and made significant investments in the power system. Providing energy that is reliable, resilient, clean and low cost is more than just achieving operational excellence at TVA. It aligns with TVA’s mission.

## Carbon Reduction Goals

ACCOMPLISHED

**63%**  
through CY 2020

OUR PLAN

**70%**  
by 2030

OUR PATH

**~80%**  
by 2035

OUR ASPIRATION

**Net-Zero**  
by 2050

## Our Locations



**37,896**  
MW  
Summer Net  
Capacity

**99.999%**  
Reliability  
top-decile industry performance  
consistently delivered to  
customers since 2000

**\$17.1**  
Billion Invested  
in a cleaner and more  
diverse energy generation  
mix since 2013

**10,000**  
MW  
of solar capacity  
expected to be added by 2035





OVER

**40,000**

**Miles**  
of rivers, streams and  
tributaries, including the 652-  
mile Tennessee River Rivers

OVER

**\$9.7**

**Billion**  
in estimated flood damage  
averted in the Tennessee  
Valley and along the Ohio and  
Mississippi Rivers since 1936

OVER

**\$300**

**Million**  
in estimated flood damage  
averted on average each  
year since 1936

APPROXIMATELY

**\$170**

**Million**  
in estimated potential  
flood damage prevented  
in FY 2021



*“TVA is a bedrock local institution;  
we’re fortunate to have their help  
in keeping our region safe, livable  
and resilient in the years to come.”*

**–Tim Kelly,**  
*Chattanooga, Tennessee Mayor*

## TVA Dams Save Lives, Avert Over \$9.7 Billion in Estimated Flood Damages

**TVA uses all 49 of its dams to manage reservoir levels and river flows to balance the competing demands of the Tennessee River system. Our River Management efforts provide flood control, navigation, hydroelectric generation and recreation, while also actively working to maintain water quality and supply.**

Few natural disasters are as devastating to both individual families and entire communities as floods. TVA dams are estimated to save the Tennessee Valley about \$300 million each year by effectively managing rain events to protect downstream communities from deadly floods that pose a risk to life, property and the multi-billion regional economy. Chattanooga Mayor Tim Kelly knows this well, as TVA’s river management efforts have spared Chattanooga the impacts of major flooding during consecutive years of record downpours.

“Three consecutive years of 100-year rain incidents provide compelling evidence that severe flooding and

precipitation are on the rise here as a result of climate change,” says Kelly. “And I hate to think about where Chattanooga would be without TVA’s resources, knowledge and engineering ingenuity, so we can successfully adapt to these climate risks.”

The region set an all-time record in 2020 with approximately 76 inches of rainfall—about double the annual average of the rainy city of Seattle, Washington. The 12-month soaker easily topped the Tennessee Valley’s previous records of nearly 60 inches in 2018 and surpassed the approximately 67-inch floater that wet the books in 2019.

Before TVA dams were built, the untamed Tennessee River decimated Chattanooga in 1917 when the water crested nearly 15 feet above normal flood levels. The historic flood killed one person and left Chattanooga with an estimated \$300,000 in damage—equivalent to approximately \$7 million in today’s dollars.

Since the completion of our first dam, Norris, in 1936, TVA has protected Chattanooga and other communities across our seven-state territory from 85 years of floods and projects that it has averted over \$9.7 billion in flood damages throughout the Tennessee Valley and along the Ohio and Mississippi Rivers.





SAFETY IS IN YOUR HANDS!

Power generated by TVA's seven-unit nuclear fleet provides a strong and steady baseload foundation that complements ongoing efforts to expand solar energy and other forms of renewable and clean energy technologies to further reduce TVA's carbon footprint.

## TVA Invests to Enhance Carbon-free Nuclear Fleet

**TVA made significant investments in its nuclear fleet in fiscal year 2021, upgrading major equipment, improving reliability and helping to ensure the nation's largest public power company will continue to provide safe, low-cost, carbon-free energy for decades to come.**

These investments reflect TVA's commitment to protecting, maintaining and enhancing its nuclear assets. Representing over 40 percent of the net generation portfolio, nuclear energy is a critical component of TVA's strategy and ongoing drive to reduce carbon emissions by about 80 percent by 2035 with a goal of net-zero carbon emissions by 2050. The upgrades also support TVA's goals to improve fleet performance to top-quartile industry standing by 2022 and rank TVA as the nation's top nuclear fleet by 2025.

At Browns Ferry, TVA's first and largest nuclear generating facility located near Athens, Alabama, replacement of all the major components on all three Unit 2 low-pressure turbines was completed

during a spring refueling outage. In what amounts to the largest turbine deck overhaul since original construction, TVA installed new turbine rotors, inner casings, steam piping and instruments.

This upgrade is similar to putting a new engine in a vintage car, and it improves efficiency and reliability while extending service life by decades. It also allows Browns Ferry to better leverage an earlier Extended Power Uprate and generate more than 15 megawatts of additional carbon-free electricity—enough to power 8,000 more homes and businesses.

At Watts Bar in Spring City, Tennessee, an equipment upgrade last fall resulted in an additional 17 megawatts of electricity while using the same amount of fuel.

At Sequoyah, in Soddy-Daisy, Tennessee, an upgrade of the main turbine controls replaced the analog system with a digital system and eliminated single-point vulnerability issues in the process.

These significant investments helped TVA generate more carbon-free, low-cost nuclear power than ever before.

## 2021 SAFETY PERFORMANCE

### Industry top decile

performance in recordable injury rate and top quartile performance in serious injury rate



## Putting Safety First in Everything We Do

**While TVA is working on a multi-year project to enhance the long-term safety of those who live downstream from Pickwick Landing Dam, the daily site focus is protecting each individual making the seismic upgrades to the 113-foot-high and nearly one-and-a-half-mile structure that has held back the Tennessee River since the late 1930s.**

The goal is a five-year project completed without a single safety or environmental incident, and a stronger, secure dam for generations to come.

"As with each TVA project, a culture of safety formed between all of us during the project's planning phases," says TVA Civil Construction Projects and Field Support Jacob Horton. "An atmosphere of open communication and inclusion is vital for our projects, and it's resulted in our success."

"Safety and team development are the same thing to us; they're our primary goals for any TVA project," agrees TVA Civil Construction Projects and Field Support Justin Hays. "They're engrained in everything we do to help ensure quality safety projects for the Valley."



***"At TVA, safety is inclusion. When every employee knows that we care about their personal safety, we are truly able to build a culture of safety for each project."***

**—Kevin Holbrook,**  
Senior Manager, TVA Construction Projects



# Together with... Our Innovators

## We are Investing in Innovative Energy Solutions

**Innovation is the fuel that powers a more efficient, reliable and clean energy future. It involves reducing the costs and carbon intensity of transportation through electrification and promoting the creation of clean transportation-related jobs.**

It drives a transmission system that proactively prevents outages, supports growing renewable generation, and advances power generation, energy storage and other technologies that move us to net-zero carbon emissions; and it is investing in students who will continue to make life better for the people of the Valley for generations to come.

Decades ago, TVA brought the first electric lights to rural communities and remote farms. Today, our customers and communities are counting on that same innovative spirit to deliver the clean, low-cost and reliable energy they expect and deserve. At TVA, we are building the energy system of the future by embracing a diverse portfolio of clean energy sources, advanced technologies and broad electrification in transportation and other sectors of the regional economy.

Can we plug-in instead of pumping gas to power our vehicles? ✓ When the sun shines, can we store solar energy for a rainy day? ✓ Can the next generation of nuclear energy be even more safe and less expensive as it helps eliminate the need for carbon-producing energy sources? ✓ Can we help Valley kids prepare to drive the next generation of innovations by building robots? ✓

At TVA, we are igniting tomorrow's innovations today. ✓

### Signature Transformation Innovation Initiatives

Provide Research & Development to advance technologies and capabilities needed to: fully integrate the energy network, maintain excellence in environmental stewardship, and prepare TVA's operating fleet for the future low-carbon marketplace.



## EV Infrastructure of the Future

**TVA employee Hannah Harper doesn't stop at the pump anymore when she's behind the wheel of her electric SUV. Instead, her trips and travel are conveniently fueled by increasingly carbon-free TVA energy coming from sources like nuclear, hydroelectric or renewable generation.**

"Owning an EV is a lifestyle change, from being able to charge up at home overnight to no longer needing to stop off at the gas station when you're running late," says Harper. "I can be sitting on my couch and check the app on my phone to see how much charge I have."

Besides generating the fuel that powers Harper's trips, TVA is helping lead two efforts dedicated to expanding the EV charging network options across the seven-state region and the broader eastern United States.

In February 2021, the Tennessee Department of Environment and Conservation and TVA announced a partnership to develop and fund a Fast Charge Network with fast-charging stations every 50 miles along Tennessee's interstates and major highways in the next five years. We are working to expand this initiative across the Valley's seven-state region.

TVA is also a founding member of the Electric Highway Coalition, an alliance of 14 utility companies that represent 29 states and the District of Columbia, while serving more than 60 million customers. The Electric Highway Coalition is focused on growing EV charging options along major transportation corridors stretching from Maine to Michigan and Florida to Texas to create seamless travel routes for EV drivers.

**Hannah Harper**  
TVA SOX Analyst

***"It's exciting to be part of the future, and projects like the new charging stations are going to continue to make it more and more of a realistic and convenient option for people."***





IGNITING  
INNOVATION

IN THE NEXT FIVE YEARS ABOUT

# 80 New

**fast charging stations**

expected to be added along interstates and major highways of the 7-state service area



*“It’s incredibly satisfying to be doing challenging, innovative work that you know makes life better for the people you serve. Our grid resiliency work is some of the best in the nation.”*

**-Ian Grant**

TVA Electrical Engineer

## Protecting the Electric Grid from the Unexpected

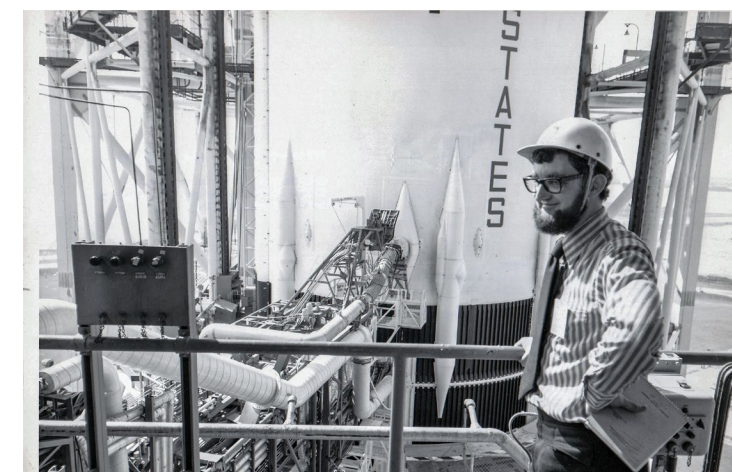
**While most people don’t understand the details of Ian Grant’s uniquely specialized work at TVA, they have a lot riding on his innovations—regardless of where they live.**

Grant is a leading industry subject matter expert on electromagnetic pulse (EMP) and geomagnetic disturbance (GMD), which have the potential to damage significant portions of the nation’s critical infrastructure, including the electrical grid, communications, water and wastewater systems and transportation. With a 50-year career as an electrical engineer that has sent him to more than 100 countries and includes work on the Apollo 16 mission, he’ll tell you his current focus at TVA—system preparedness and grid resiliency—is just as important.

“There’s a lot of uncertainty in today’s world,” says Grant. “Together with other industry leaders, we’re

advancing practical steps to help protect the grid against an unexpected event.”

TVA is focused on making electric grids more robust, resilient and reliable. Thanks to the talent and innovative passion of engineers like Ian Grant, TVA’s 2021 Engineer of the Year, that resiliency is growing.



The expansion of electric charging stations—especially universal fast-charging stations that get drivers back on the road quickly—is music to the Harpers’ ears.

“We sometimes have to stop at one of the only (current) fast-charging stations on the route between Chattanooga and Nashville, where my family lives,” says Harper. “Having more stop-off options available will be huge for us. With a DC fast-charging station, we can be fully charged in under half an hour.”

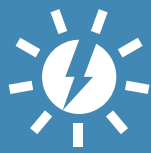
In addition to TVA’s plan to triple the amount of EV fast-charging stations in the Valley, our region is driving the country’s transition to EVs through new vehicle, battery and parts manufacturing facility investments throughout the region. TVA recently announced that it intends to transition approximately half of its fleet vehicles to EVs by 2030.

GOAL OF OVER

# 200,000

**electric vehicles**  
on Valley roads by 2028





IGNITING  
INNOVATION

*“Overall, TVA believes nuclear technology plays a critical role in meeting electricity generation needs and carbon reduction goals in a manner that maintains reliability and keeps rates affordable.”*

**-Jeff Lyash**  
TVA President and CEO

Artistic rendering of Kairos Power's Hermes low-power demonstration reactor facility to be built at East Tennessee Technology Park in Oak Ridge. Image courtesy of Kairos Power.

## TVA Collaborating on Next-Generation Nuclear Technologies

As the nation and world look for the next scalable source of zero-carbon energy to power our future, TVA is applying its expertise across numerous efforts to work on developing the next generation of advanced nuclear reactors.

TVA is engaged in partnerships with Oak Ridge National Laboratory, Kairos Power, the University of Tennessee, the U.S. Department of Energy and GE Hitachi Nuclear Energy—all with the long-term goal of expanding new nuclear reactor design, construction and operation.

“Teamwork is the hallmark of the nuclear industry, and through these partnerships we can share TVA’s safety and innovation insights to advance nuclear technology while gaining experience with licensing for advanced reactors,” says TVA President and CEO Jeff Lyash.

Lyash testified to Congress about the need for new nuclear development and advanced reactor technology to help close the gap between TVA becoming 80 percent carbon-free by 2035 and reaching net-zero carbon emissions by 2050.

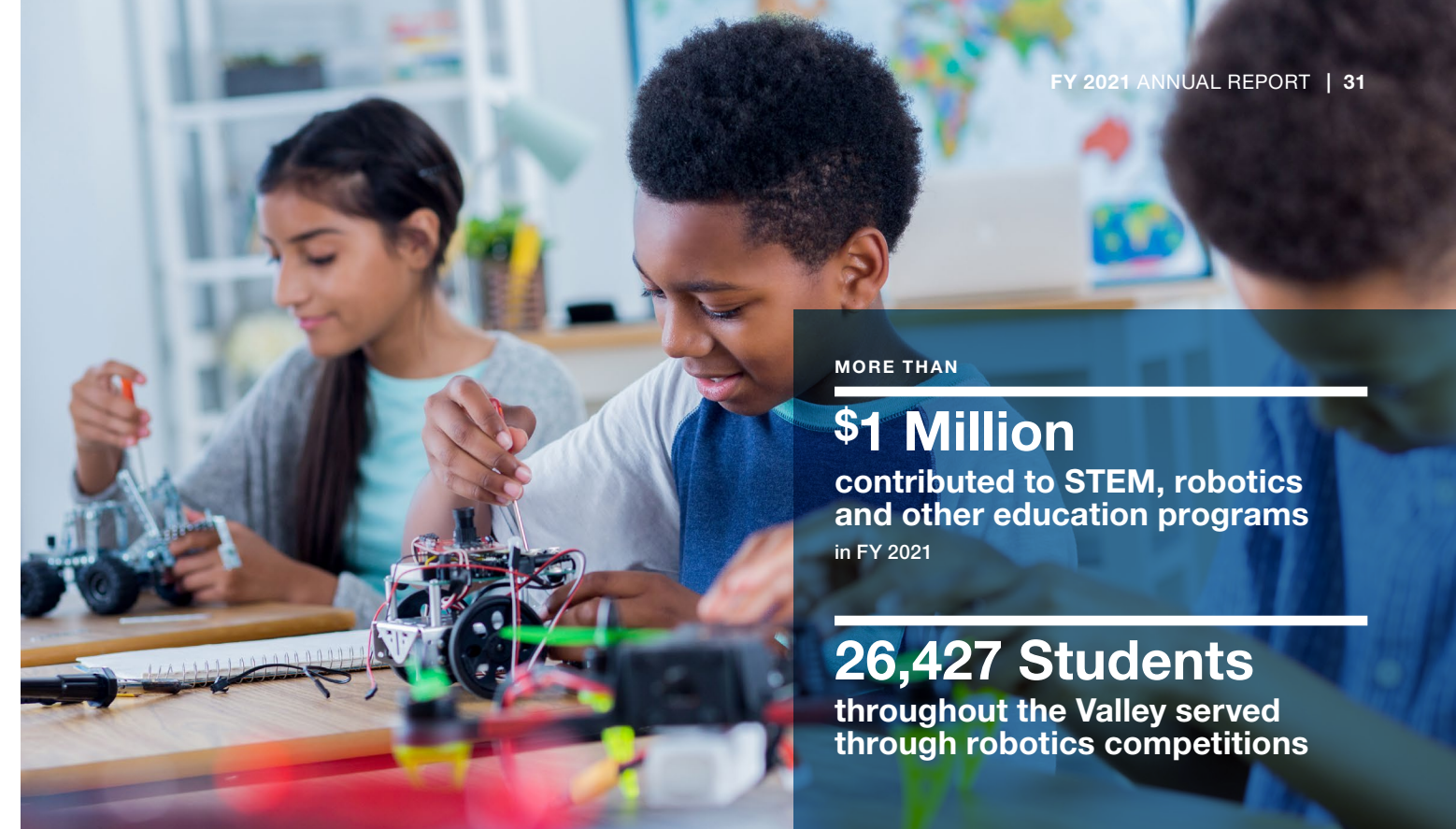
NUCLEAR ENERGY INSTITUTE

## 2021 Top Innovative Practice (TIP) Award

TVA already leads the industry with the first Early Site Permit issued by the U.S. Nuclear Regulatory Commission for small modular reactors/advanced reactors at its Clinch River site near Oak Ridge, Tennessee. In 2021, TVA received a Top Innovative Practice award from the Nuclear Energy Institute for its work in right-sizing emergency planning zones based on the increased safety of new reactor designs, which can be applied to future sites.

TVA nuclear partnerships are providing licensing and strategic support of Kairos Power’s low-power demonstration advanced reactor planned for the Oak Ridge National Laboratory. TVA is also supporting the Department of Energy’s project with GE Hitachi Nuclear Energy on new construction techniques designed to reduce the cost of building future reactors.

“We remain supportive of advanced reactor developers and want them all to be successful in order to provide long-term opportunities and competition in the energy marketplace,” says Lyash.



MORE THAN

**\$1 Million**

contributed to STEM, robotics and other education programs in FY 2021

**26,427 Students**

throughout the Valley served through robotics competitions

*“Robotics done well uses technology to unite people of different gifts and personalities toward a common purpose, which also happens to improve the world.”*

**-Matt Monahan,**  
Chattanooga Christian School, VEX V5 Program Head

## Tomorrow’s Careers Start with Today’s STEM Investments

More than 2.4 million jobs go unfilled each year in the fields of science, technology, engineering and math. By building STEM lesson plans for teachers, providing classroom grants, sponsoring summer camps and helping K-12 children and teenagers build robots, submarine rovers and drones, we are investing in tomorrow’s workforce.

TVA’s STEM resources are available to those of all socioeconomic backgrounds, all locations, all genders and all abilities. We believe STEM is for everyone. Whether you are a teacher or a student who wants to learn, our STEMready website provides the project-based learning modules that TVA knows best: electricity and energy. We have more than 40 project-based learning lessons that make STEM fun, and each of our STEM heroes allows kids to explore the different STEM careers inside TVA. Archaeologist, nuclear reactor operator, power utilization engineer, zoologist, botanist, telecom electrical engineer—just to name a few.

And when teachers need a little extra cash to make those experiments and STEM experiences a reality, TVA often provides up to \$5,000 in grants for classrooms across our seven-state territory. This year, 197 classes received assistance from TVA.

Robotics is one of the best ways to inspire young minds and get them excited about STEM careers. For the last 15 years, TVA has sponsored robotics as a fun way to learn. In fiscal year 2021, TVA supported 163 schools across the Valley in their robotics programs, with 26,427 students participating.

Through its STEM, Robotics and other education programs, TVA contributed more than \$1 million in support of education.





FINANCIAL  
STRENGTH

# Together with... Our Stakeholders

## We are Investing in Your Future

**At TVA, we work hard to deliver strong financial performance. Our financial strength and stability has enabled us to provide one of the most important benefits as the nation's largest public power provider: the ability to invest more resources back into benefiting the people, communities and businesses we serve across the Valley.**

In recent years, we've continuously invested in a cleaner and more diverse power system. Since 2013, TVA has sustained reductions to operating expenses, reduced fuel expenses and lowered debt by almost \$7 billion dollars. Our current debt position coupled with long-term partner commitments has allowed TVA to plan for stable base rates through 2030.

We are returning a 3.1 percent wholesale bill credit annually to our long-term power partners, amounting to \$189 million in fiscal year 2021 alone. In addition, TVA's financial strength has contributed to the creation of a two-year Pandemic Relief/Recovery Credit, which gives customers 2.5 percent back on their monthly wholesale bills.

Rather than pay dividends to stockholders, we believe the strength of the public power model is reinvesting value back into making the Valley a vibrant place to live, play, work and do business.

## Pandemic Credit Serves Local Communities, Customers

**In the midst of the pandemic, TVA saw the need and responded with approving a pandemic relief credit, which gave local power companies, their large commercial and industrial customers, and TVA directly served customers a 2.5 percent credit. This credit provided \$221 million to customers who knew what their communities needed the most in fiscal year 2021.**

Local power companies determined how best to use the credit for the benefit of their customers. For some, the answer was applying that money to either lower or stabilize their own rates during COVID. For others, it was investing in necessary system upgrades that otherwise might have gone unfunded. Still others invested the funds to pay for system growth in locations where the economy continued to expand.

"We applaud TVA's leadership for easing the financial strain this pandemic has put on Tennessee Valley Public Power Association (TVPPA) members by supporting them with the Pandemic Relief Credit," says Doug Peters, TVPPA President and CEO. "We commend TVA for putting decision-making regarding the use of these funds in the hands of local power companies so they can make decisions based on their unique knowledge of their business and community needs."

The 2.5 percent Relief Credit had such a positive impact across the Valley that TVA doubled down in fiscal year 2022 by extending it into the fiscal year ahead. In November 2021, the TVA Board approved a 1.5 percent monthly base rate credit, which is an extension of the Pandemic Recovery Credit, to be effective for fiscal year 2023.

"Our customers are extremely thankful for the Pandemic Relief Credit—now the Pandemic Recovery Credit—and for the Back-to-Business Credit and Community

**Tim Culpepper**

Cullman Electric  
Cooperative CEO

***"The Pandemic Relief Credit allowed us to suspend cutoffs and not charge late fees at a time of serious economic impact. It gave us the ability to maneuver through uncertainty, and most importantly, it kept us from having to increase rates."***

PAST EIGHT YEARS

**Flat, Stable  
and Low**  
effective wholesale  
rates

SUSTAINED

**\$800 Million**  
annual operating  
cost reductions

TOTAL FINANCING OBLIGATIONS

**\$20.5 Billion**  
are the lowest level in  
over 30 years

ENTIRELY

**Self-Funded**  
since 1999





FINANCIAL  
STRENGTH



## \$1 Billion

in credit support was made available to 153 local power companies across seven Southeastern states

## \$221 Million

**Pandemic Relief Credit** provided in 2021 for TVA's LPCs, their large commercial and industrial customers and TVA directly served customers

ADDITIONAL

## \$220 Million

**Pandemic Recovery Credit** forecast for FY 2022

APPROXIMATELY

## \$13 Million

**Back-to-Business Incentives** for large commercial and industrial customers

## TVA Launches Inaugural Green Bond Offering, Sets Interest Rate Record

**In 2021, TVA announced a \$500 million offering of 10-year maturity green bonds—its first offering of a sustainability-focused financial instrument that also set a TVA record for the lowest 10-year interest rate.**

Based on TVA's Sustainable Financing Framework, proceeds from the bond sale are intended to support TVA's capital investment in renewable energy projects, battery storage, development of advanced clean energy technologies and transmission system enhancements. These projects will support implementation of TVA's aspirational goal of net-zero carbon emissions by 2050.

"TVA's financial position has strengthened over the past decade, and we are continuing our disciplined financial approach as we invest in the energy system of the future," says TVA Chief Financial and Strategy Officer John Thomas. "Low-cost financing for our strategic capital investments will contribute to keeping energy rates as low as feasible even as we make progress toward our net-zero carbon aspirational goal."

With a coupon interest rate of 1.500 percent, the new bond offering set a record for the lowest rate ever achieved by TVA on a 10-year financing. "TVA's first green bond is a milestone for our financing program," says Tammy Wilson, TVA Treasurer and Chief Risk Officer. "The record-setting transaction demonstrates that the financial community is focused on investments in clean energy and is supportive of TVA's sustainability goals."

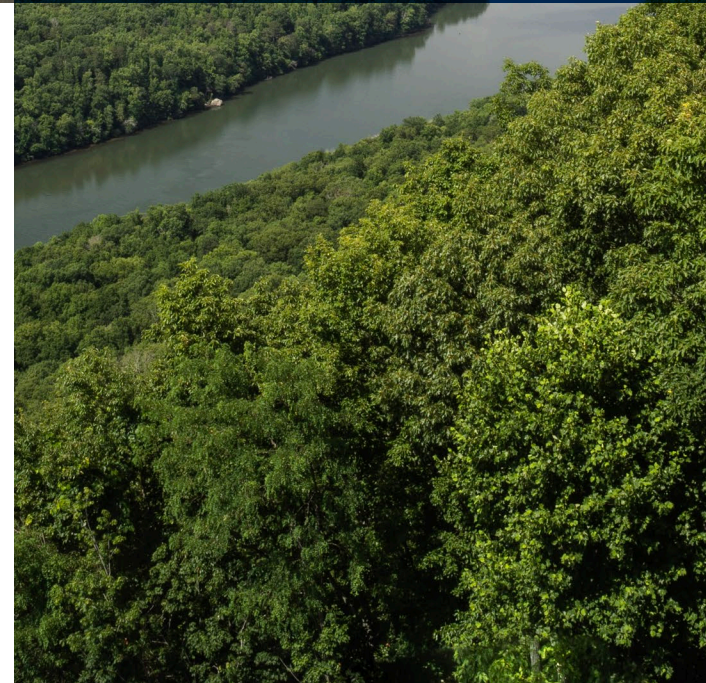
Strong market demand for TVA's green bond offering drew over \$2 billion in orders.



Care Fund," says TVA President and CEO Jeff Lyash. "It's a great example of how public power can be impactful."

The 2.5 percent Pandemic Relief and Pandemic Recovery credits are also helping support more than 600 large commercial and industrial companies, including TVA's directly served customers and those served by our local power companies. The dedication of TVA's employees, who excel at our long-standing mission, are proud to be part of ongoing relief and recovery efforts.

"TVA was created to benefit the public good and has continued to build on that clear objective," says Lyash. "Thanks to the dedication and hard work of our employees, we continue to deliver value to those we serve. Because of our strong operational and financial performance, we have an opportunity and responsibility to use our resources to provide continued support for customers, businesses and communities."







FINANCIAL  
STRENGTH

## Financial Strength and Stability

**TVA's financial strength and stability is a competitive advantage that translates into lower energy costs. We've worked to sustain lower operating and maintenance costs since 2013, improving both productivity and efficiency.**

We have also invested in diversifying our power system with cleaner generation, which has helped us reduce costs and keep rates low, while also leading the industry in reducing carbon.

Residential households in our region pay less for electricity than customers of 80 of the top 100 U.S. utilities. Businesses that generate private sector job growth and bring new industries to our communities get an unbeatable competitive advantage through energy costs lower than more than 95 of the top 100

utilities. Our commitment to maintaining low rates is backed by the stability of long-term contracts with our LPC partners.

Financial strength benefits local communities in other ways. During the COVID-19 pandemic, TVA has provided ongoing support to help customers, businesses and local communities.

TVA also returns 5 percent of power revenues as tax-equivalent payments to the states and counties in our service area, equivalent to nearly \$500 million in fiscal year 2021 and \$5.4 billion in the past 10 years.

What makes all of this possible is a public power company of impressive scale and 88 years of history with a clear focus on operational and financial management. In fiscal year 2021, TVA generated operating revenues of over \$10 billion even after lower effective rates due to the Pandemic Relief Credit. Since 2013, TVA has sustained \$1 billion in annual fuel cost reductions and aligned our

pricing with the need to provide bill stability while maintaining reliability and fairness for our customers.

At the same time, we exceeded our plan for paying down debt below \$21.8 billion three years ahead of schedule in 2020, and this year TVA made continued progress with debt reduction due to strong performance. TVA has now reduced debt almost \$7 billion since 2013. Reducing debt has also helped TVA keep power rates low by reducing annual interest expense.

Financial discipline does not come at the expense of future health—quite the opposite. In 2021, TVA's capital expenditures for capacity expansions, new generation, transmission, nuclear and environmental projects totaled over \$2.5 billion. In fact, over the next three years, TVA is planning to make an additional \$8.6 billion in long-term capital investments to power the region's future.

## Residential Rates

**Lower than 80% of the top 100 U.S. Utilities**

based on June 2021 12-month rolling average from EIA data

## Industrial Rates

**Lower than more than 95% of the top 100 U.S. Utilities**

based on June 2021 12-month rolling average from EIA data

SUSTAINED

## \$1 Billion

**Annual Fuel Cost Reductions since 2013**

## Return 5%

**of Power Revenues to States and Counties**

as tax equivalent payments, totaling nearly \$500 million\* in FY 2021, \$5.4 billion\* in past 10 years and \$15.2 billion\* since 1941

\*Not including the tax equivalent impact associated with fuel cost adjustments

At the Board's direction, TVA underwent an independent evaluation this year conducted by Lazard Frères & Co. Lazard's report found that TVA's performance since 2014 has been strong both when measured against company plans and objectives and compared to the performance of other large utility companies.

According to Lazard, the public power business model is working extremely well, and enables TVA's mission.





## Enterprise Leadership Team

**The strength of TVA is its people, and its senior leadership team is no exception.**

They are an experienced, talented and diverse group of leaders committed to TVA's mission of service through low-cost, reliable energy, economic development and environmental stewardship.

With years of experience serving the Tennessee Valley, our senior leadership oversee all TVA strategy, policy and operations and are responsible for delivering TVA's mission of service through affordable energy, environmental stewardship and economic development. Learn more about their service backgrounds and dedication to our region.

**Don Moul**  
Executive Vice President and  
Chief Operating Officer

**Sue Collins**  
Executive Vice President and Chief  
People & Communications Officer

**David B. Fountain**  
Executive Vice President  
and General Counsel

**Jeff Lyash**  
President & Chief  
Executive Officer

**Jeannette M. Mills**  
Executive Vice President and  
Chief External Relations Officer

**Timothy Rausch**  
Executive Vice President and  
Chief Nuclear Officer

**John M. Thomas III**  
Executive Vice President  
and Chief Financial Officer

## Board of Directors



**William Kilbride**  
*Chair of the Board*  
Chattanooga, TN

**Our board members are nominated by the President of the United States and confirmed by the Senate, and each serves a term of five years.**

The proceedings of their meetings are open to the public. When their terms expire, directors may remain on the board until the end of the current congressional session or until their successors take office, whichever comes first.

As provided by the TVA Act and the TVA Bylaws, the principal responsibilities of the board are to establish broad strategies, goals and objectives; to set long-range plans and policies; and to ensure their implementation by the TVA staff, which is led by the Chief Executive Officer. Directors swear an oath to faithfully and impartially perform the duties of the office.



**Kenneth Allen**  
White Plains, KY



**A.D. Frazier**  
Mineral Bluff, GA



**Beth Harwell**  
Nashville, TN



**Brian Noland**  
Johnson City, TN



**John Ryder**  
Memphis, TN



**Jeff W. Smith**  
Knoxville, TN





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