



TENNESSEE  
VALLEY  
AUTHORITY



# The Energy to Lead

FY 2023 ANNUAL REPORT





# Contents

Letter from TVA President and CEO Jeff Lyash.....	2
People Advantage .....	6
Powerful Partnerships.....	18
Operational Excellence .....	34
Igniting Innovation .....	50
Financial Strength.....	62
Leadership .....	68

#### 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 Sept. 30, 2023. This Annual Report should be read in conjunction with TVA's Form 10-K Annual Report for the year ended Sept. 30, 2023, 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 2023 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 may be found at [www.tva.com/investors](http://www.tva.com/investors).

#### STATEMENT/FACTORS THAT MAY AFFECT OUR BUSINESS

We have included in this letter and 2023 TVA Annual Report forward-looking statements 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 forecasted 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 "Forward-Looking Information," "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 2023 Annual Report or as of the date they are made, and we undertake no obligation to update them.



## Unlocking opportunities together

Together, we are shaping the energy system of the future – a system that supports the growth of a world-changing transportation manufacturing hub. That fuels careers and allows families to build better lives. That empowers people to grow deep roots here.



We live and work in one of the fastest-growing regions in the nation. As our population expands, it ushers in a rich diversity of new perspectives and new talent that will help shape our communities and our workforce.

In tandem, our region's economy is growing through the expansion of existing companies and the rise of new industries. This means new jobs in a broader variety of fields and trades.

The path ahead is indeed set by opportunities.

Opportunities to help lead and shape our seven-state region into the epicenter of next-generation industries, from electric vehicle manufacturing to advanced nuclear energy.

Opportunities to expand and transform the energy that powers our lives, ensuring increasingly cleaner solutions for a sustainable future.

Opportunities for our next generation of leaders and thinkers to apply new technologies, skills and advanced education toward an innovative future.

The key to unlocking these existing and yet-to-be-imagined opportunities? Energy.

Energy is the one thing that correlates most with our quality of life and standard of living.

Energy that remains among the most affordable in the nation.

Energy that remains historically reliable and resilient against increasingly extreme conditions.

Energy that's better for our planet, while supporting new industry.

Amid opportunity, of course, we'll face challenges.

We need more energy to meet the demands of a growing population.

We need a clear, predictable and low-risk plan to transform energy sources of the past to flexible, cleaner and low- to no-carbon electric generation.

We need ongoing investments in innovations that will carry us from the steps of cleaner energy to net-zero, carbon-free energy.

Ultimately, we must ensure our energy system is positioned to deliver powerfully on these opportunities.

To make this transition, we are investing in new assets and integrating renewables and innovative energy production.

Our opportunities cannot be realized by one entity alone. It cannot be realized through a single energy resource. We can do this only in partnership with our customers, local power companies, industries, community and elected leaders.

We must work together to secure a clean, diverse energy future.

To guide our steps, we remain committed to our mission of serving approximately 10 million people and countless communities.





At the August 2023 Business Plan Rollout in Chattanooga, Chris Jones, President and CEO of Middle Tennessee Electric, and TVA's Enterprise Leadership Team discuss upcoming opportunities and challenges.

**TVA SERVICE AREA**

APPROXIMATELY

**10 million**  
people

**153**  
local power companies

NEARLY

**80,000**  
square miles in seven states

**Seven-state region  
growing three times  
faster than the  
national average**

For the past 90 years, TVA's mission of service has been all about unlocking opportunities that will build a stronger future for our region. That commitment continues today.

Together, we are shaping the energy system of the future – a system that supports the growth of a world-changing transportation manufacturing hub. That fuels careers and allows families to build better lives. That empowers people to grow deep roots here.

Your work with TVA nourishes abundant opportunities to innovate in energy, economic development and environmental stewardship.

Thank you for your partnership as we build a brighter future for all.

— Jeff Lyash

**Core values create opportunities**

At TVA, we deliver affordable, reliable, resilient and clean energy ... and so much more for our region. We believe our core values help create greater opportunities for individuals and families, community partnerships, our environment and regional economic growth.



**Safety**

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



**Inclusion**

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



**Integrity**

We are honest and straightforward.



**Service**

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

# Legacy of service

## TVA celebrates anniversary with largest day of service

As the sun rose on May 18, thousands of TVA employees and retirees arrived at nonprofit organizations to serve the communities in which they live, work and play.

The day marked the 90th anniversary of President Franklin D. Roosevelt signing legislation that created TVA. At its foundation, TVA's mission is to benefit the public good.

Team members celebrated the 90th anniversary by honoring TVA's long-standing mission of service with the largest Day of Service in its history.

More than 2,000 employees and 125 retirees fanned out to volunteer at more than 150 service opportunities that served all the counties in TVA's seven-state service area.

Together, they cleaned trails and streams, planted trees and removed invasive species, packaged and delivered meals at food banks and cleaned up storm-ravaged communities. In all, they logged nearly 10,000 service hours.

Employees unable to leave duty stations hosted food drives and other donation events.

"TVA has been serving this region for 90 years and to see so much volunteerism on this one day, on our 90th birthday, is tremendously moving," TVA historian Pat Ezzell said. "It was a truly emotional experience."

### PEOPLE POWER

APPROXIMATELY

**10,900**  
employees

NEARLY

**19,000**  
retirees

APPROXIMATELY

**17%**  
of workforce are  
Veterans

**99%**  
of contract workers  
are represented by  
17 unions

**58%**  
of annual employees  
are represented by  
11 different union  
agreements

**17**  
unions represent  
TVA employees and  
contractors

*Lenice Winston, assistant manager to TVA's Vice President and Chief of Staff, volunteers with Trina Galiman, TVA Public and Community Engagement consultant, at Second Harvest Food Bank of East Tennessee during TVA's 90th anniversary Day of Service.*



## 90TH ANNIVERSARY DAY OF SERVICE

# 2,125

employees and retirees

# 150

service opportunities

# 10,000

service hours

Touching each of the counties in TVA's region



Jeff Lyash, TVA President and CEO, spoke about the significant milestone.

"The strength of TVA has always been its people," he said. "A legacy of passion and dedication to improving the quality of life in this region. A commitment to service is at the heart of our story, and at the heart of who we are at TVA."

The Day of Service kicked off yearlong grassroots activities.

The Great TVA Traveling Roadshow appeared at events such as the W.C. Handy Music Festival in Alabama, Tennessee State Fair, Prairie Arts Festival in



This page, Top: Kelly Young, safety support manager for TVA's decommissioning program, volunteers at Tennessee Baptist Children's Home in Chattanooga. Bottom: Volunteers at Overton Park Conservancy in Memphis during TVA's 90th anniversary Day of Service.

Opposite page, Top: TVA team members from the Council of Native Americans Employee Resource Group helped plant river cane at Fort Loudoun State Historic Park during TVA's 90th anniversary Day of Service. Bottom: TVA historian Pat Ezzell and TVA senior social media specialist Ashley Walker tour Wilson Dam with hydro technician Randy Gargis.

Mississippi and Bowling Green International in Kentucky. Attendees and TVA employees reminisced and shared excitement about the future.

TVA also offered Built for the People dam tours to give people a view into the inner workings of some of the hydroelectric facilities that helped electrify and unify the region during TVA's early years. Seven dams opened their doors to 24 tour groups.

Pat & Ashley's Excellent Adventure also debuted on social media with historian Pat Ezzell and social media specialist Ashley Walker taking viewers on an epic road trip to TVA facilities, landmarks and attractions.

Community leaders, local power companies and state and federal leaders celebrated alongside TVA. Included among the well-wishes was a message from the White House.

President Joe Biden wrote about how the TVA Act restored hope, opportunity and dignity to an area hard hit by the Great Depression, floods that swept away homes, and a lack of electricity that kept so many in the dark.

"The hard-working Americans who worked for the TVA tamed the Tennessee Valley's tough terrain and harnessed natural resources to bring power and prosperity to the region, lifting everyone up, keeping them safe, and giving them an opportunity to thrive," he wrote. "TVA is proof that there is nothing our nation cannot do when we do it together."

**"The strength of TVA has always been its people. A legacy of passion and dedication to improving the quality of life in this region... A commitment to service is at the heart of our story, and at the heart of who we are at TVA."**

— Jeff Lyash, TVA President and CEO





# Making a difference

## Campaign highlights how prospective employees can Do Good Here

Ask TVA employee Shana Woods what she enjoys most about her job, and she's quick to say she loves helping people.

"I'm a bridge builder," she said.

As an Energy Services consultant for TVA in west Tennessee, Woods works closely with local power company partners on residential, business and industry initiatives.

Currently, in partnership with a local technical school, she is helping establish a training house in Memphis where the school will teach students techniques for weatherizing homes.

Woods is a prime example of what employees like about working for TVA: They are advancing TVA's mission of making life better for people in the region.

TVA is harnessing that sentiment through its Do Good Here recruitment campaign, which helps attract prospective employees by highlighting the unique ways

TVA services the region and the long-lasting careers employees have with TVA.

"Our Do Good Here talent recruitment campaign ties directly to our mission of service," Amanda Johns, vice president of Talent, said. "At TVA, we are fortunate to have fulfilling careers and the opportunity to make life better for others in our region."

Do Good Here began as an effort to help build an internship pipeline, mainly focused on college students. Since then, the campaign has broadened to focus on attracting future employees throughout all stages of their careers.

In west Tennessee, Woods places emphasis on education and communication with customers.

"A lot of people here don't know who TVA is and what we do," she said. "That's an opportunity for us to show up in a positive way, in the community and with customers, because we are making a difference."



TVA employee Shana Woods, left, considers herself a bridge builder through her work in the community. TVA team members attend job fairs to help prospective employees learn how they can Do Good Here.



Angela Sims, TVA director of Diversity & Inclusion

# 'Building our collective strength'

## Inclusion with Diversity takes center stage

With an eye on strengthening its Inclusion with Diversity efforts over the past year, TVA has strategically focused on structure.

To that end, it has:

- Established representation goals aimed at increasing the number of women and people of color in leadership to match the available workforce by 2033
- Incorporated performance goals focused on both inclusion and diversity for every leader and non-represented employee
- Increased the depth of its dashboard that measures Inclusion with Diversity core metrics and provides employees access to the results

"We are strengthening our work by enhancing consistency and standardization across the enterprise," Angela Sims, director of Diversity and Inclusion, said. "The bottom line is that we want every employee to feel respected and valued for who they are, and we want our customers and the communities and people we serve to feel the same way."

## Employer Awards

Fair360 recognized TVA in two areas in 2023:

**Top Companies for Utilities Award**  
Ranked No. 3

**2023 Top Regional Companies**  
Ranked No. 12

## Top 10 Military Friendly® Employer Awards

Recognized in four areas in 2023:

**2023 Military Friendly® Employers**  
Ranked No. 4

**2023 Military Spouse Friendly® Employers**  
Ranked No. 7

**2023 Military Friendly® Supplier Diversity Program**  
Ranked No. 1

**2023 Designated as a Military Friendly® Brand**

## VETS Indexes

5-Star Employer in 2023

## Forbes America's Best-in-State Employers for 2023

Ranked No. 8 in Tennessee

## Leading Disability Employer

by the National Organization on Disability



## ‘Providing the opportunity’

### Supplier Diversity program helps businesses and entire region



Ranjana Savant

When Ranjana Savant and her husband, Chandrashekhar, founded their small structural engineering business in Madison, Alabama, in 1988, they had no idea how successful it would become.

Although Chandrashekhar, sadly, passed away in 1994, Ranjana continued as president and CEO of Mesa Associates, which today is a large, minority-owned and woman-owned

business with more than 850 employees and 18 offices in the U.S.

The Mesa team began working for TVA in 1990 in the area of structural engineering. Over the years, the company has grown into a full-service provider for TVA, offering engineering services for the transmission grid and fossil fuel, hydropower and nuclear plants.

“By TVA giving Mesa a chance and providing the opportunity, we were able to capitalize on it,” Savant said. “Mesa has grown to serve nine of the top 10 investor-owned utilities on an annual basis. The addition of these clients over the years can all be attributed to our relationship with TVA.”

TVA’s Supplier Diversity program offers numerous initiatives, including its yearly Supplier Diversity Summit and the Ready Now program, which prepares small, diverse suppliers for prospective work with TVA.

These efforts and others benefit the region and its businesses.

“TVA’s Supplier Diversity program improves our performance while also supporting our community,” Laura Campbell, vice president of Supply Chain, said. “It brings improved value to our stakeholders and it delivers on our mission to enhance economic development opportunities in the region.”

In FY 2023, TVA spent \$522 million with diverse businesses and \$1.2 billion with small businesses.

“TVA was our first utility client and remains our largest utility client,” Savant said. “We are forever indebted to TVA for our success and wish all diverse suppliers the same success that TVA has afforded to us. We will continue to pay it forward.”

#### HISTORIC UNION AGREEMENT

As the demand for skilled, high-quality labor within the region increases, strong relationships between TVA and its union partners are more important than ever.

About 58% of annual represented employees and close to 99% of contract workers are represented by 17 labor unions.

In FY 2023, TVA reached a historic agreement with the Labor Council for Annual Employees to further widen the hiring pool by ensuring that external diverse candidates are considered alongside union referrals for externally posted Trades and Labor jobs.



TVA provided funding for Trees Knoxville to plant trees at city bus stops. This is in addition to the continual efforts of TVA employees who plant trees around the region as part of TVA’s environmental stewardship mission.

## Environmental Justice creates canopy of caring

For people accustomed to seeing mature trees in their communities, it might be second nature to enjoy the trees’ beauty without considering all their other benefits.

But let’s talk about trees. They reduce exposure to weather extremes, purify air, reduce stormwater runoff and provide wildlife habitat. And not all communities have trees.

TVA is providing funding to Trees Knoxville’s Shade While You Wait program, which plans to plant trees at bus stops most in need of tree canopies to shade commuters.

TVA’s partnership with Trees Knoxville is just one example of its focus on environmental justice efforts that align with U.S. presidential executive orders to address disproportionate health, environmental, economic and climate impacts on disadvantaged communities.

Trees Knoxville and TVA will work closely with city departments as well as community organizations to identify the bus stops, handle the appropriate logistics and implement the tree plantings and ongoing care.

In the past year, TVA has bolstered its Environmental Justice program by strengthening its structure, creating an Environmental Justice speakers team and developing training that brings consistency to TVA’s Environmental Justice efforts. It also continues to expand its work with outreach programs such as Home Uplift, School Uplift and Connected Communities.

TVA’s Environmental Justice program has developed a framework that is helping the agency better identify disadvantaged communities and their needs. TVA also established a broader Environmental Justice regulatory and policy team for enterprise-wide perspective.

“Everything we do should be through the lens of considering those less fortunate,” Janice Horn, senior program manager of Environmental Justice, said. “We are here to serve all the people of the region and to improve their quality of life.”





## ‘I learned so much’

### ACTNow program connects residents to computer resources

After Martha Boyd’s computer died five years ago, she wasn’t in a position to buy a new one. She used her phone to look things up and keep in touch with family and friends, but her phone had limitations.

Today, the Columbus, Mississippi, resident uses a new Google Chrome laptop and maneuvers around it like a pro, thanks to ACTNow – a TVA-funded program designed to help bridge the digital divide that prevents people in low-income communities from accessing critical information and services online.

“I love my computer, and I learned so much in the class,” said Boyd, who participated in the first series of ACTNow classes and is now a volunteer at others. “I keep my budget on there now, and I use it to look things up and to send emails.”

TVA provided \$262,000 in funding to ACTNow through its Connected Communities initiative, which partners with communities to provide equitable access to technology, development of technical job skills and energy and environmental justice.

In 2023, TVA donated about \$2 million toward Connected Communities projects.

Almost all of the 240 computers purchased for ACTNow have been given to participants, who received eight hours of computer and internet training.

Recipients use their computers in a variety of ways, including financial management, telehealth appointments, employment applications, helping children with homework and searching for information. Older participants are excited to learn basic key functions, web browsing and online safety.

“The funding made available by TVA is greatly appreciated,” said Debra Taylor, executive director



Debra Taylor, left, executive director of Columbus Housing Authority, and Angela Verdell, general manager of Columbus Light & Water, congratulate Martha Boyd on completing the ACTNow computer class.

of Columbus Housing Authority, which provides the computers and organizes the classes. “We see confidence and self-sufficiency levels being increased, knowledge acquired, opportunities gained and individuals being able to utilize the program-issued computers and internet whenever and wherever they want without having to find public places to do so.”

The program is spearheaded by Jacklyn Weir, resident opportunity and self-sufficiency coordinator, who is also the catalyst behind the program’s success.

Columbus Light & Water, the local power company that initiated the ACTNow grant application with TVA, provides in-kind contributions through training, learning materials and program promotion.

The company’s team members have been happy to collaborate with TVA and community organizations toward a common goal, said Angela Verdell, general manager of Columbus Light & Water.

“Connecting people to resources creates strong communities,” Verdell said. “It has been a great experience helping to coordinate this program. Seeing the positive impact of ACTNow makes us more determined to seek out new opportunities to share with our community.”

## ‘Truly humbled’

### Stephen Craven named Federal Engineer of the Year

As TVA began updating its transmission communications system in 2020, TVA engineer Stephen Craven had an “aha!” moment.

“I realized there was a way to do things better,” said Craven, a Transmission & Power Supply electrical engineer responsible for cybersecurity for TVA substations and power system communications.

That led Craven to develop an architecture that makes critical communications between electrical substations faster, safer and more secure. His architecture has become TVA’s standard.

In 2023, the National Society of Professional Engineers named Craven the Federal Engineer of the Year. He also received TVA’s Ike Zeringue Engineer of the Year award for his cybersecurity solutions that enhance grid security.

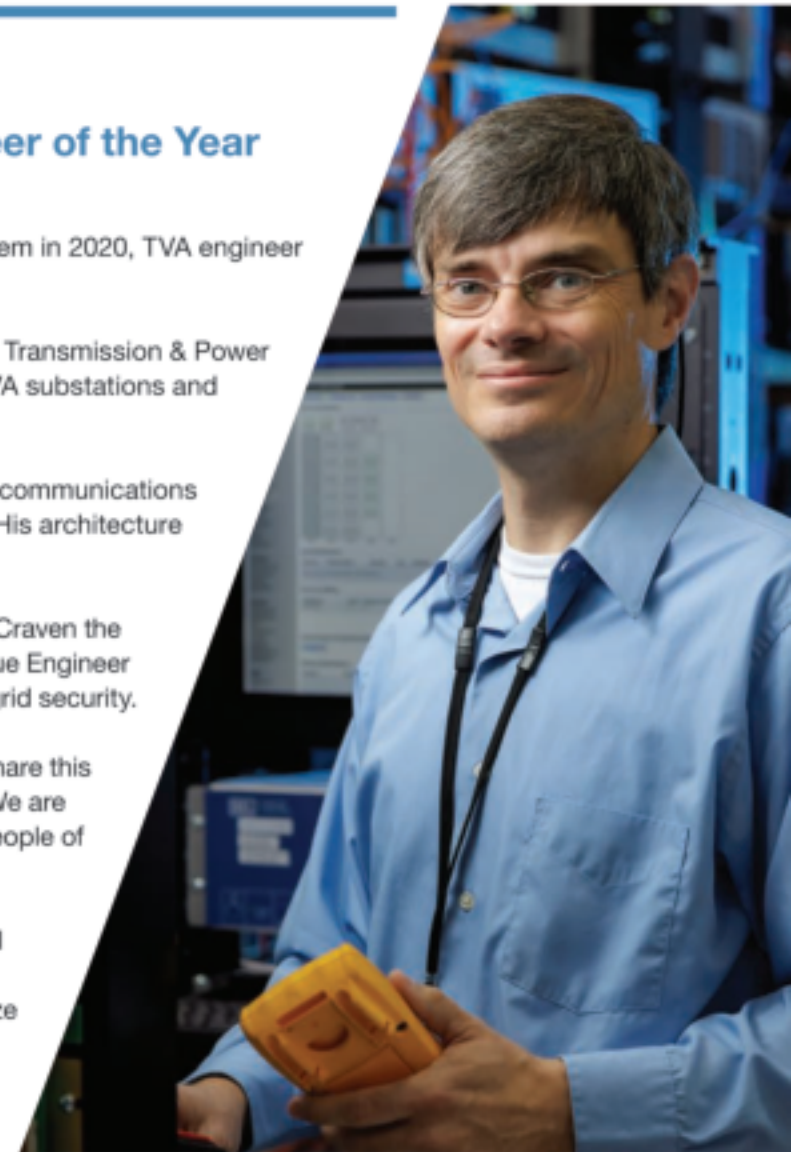
“I am truly humbled by these honors,” Craven said. “I want to share this recognition with the excellent TVA engineers I work with daily. We are united in our desire to provide reliable, low-cost power to the people of the region.”

He was invited to share this work with the Institute of Electrical and Electronics Engineers standards committee so that other utilities might benefit from this new approach to help modernize the nation’s power grid, improving resiliency while remaining safe from cybersecurity threats.

“We are proud of our team’s ability to deliver innovative solutions to solve complex challenges like our nation’s energy security issues,” said Jeff Lyash, TVA President and CEO. “Stephen’s work is critical to protecting our power grid as our nation transitions to a clean energy economy.”

Craven is a third-generation TVA employee.

“There is a sense of accomplishment when you find a way to improve the resiliency of a communications system, because your work is truly benefiting people,” Craven said. “I have found that to be extremely rewarding.”



**“I want to share this recognition with the excellent TVA engineers I work with daily. We are united in our desire to provide reliable, low-cost power to the people of the region.”**

— Stephen Craven, TVA electrical engineer



## ‘Help them get outdoors’

### TVA and partners excite students about the beauty around them

TVA serves a seven-state region that is recognized worldwide for its biodiversity.

As part of its mission, TVA offers innovative environmental programs that educate and excite students about the natural wonders around them.

“Our goal is to help them get outdoors and experience the beauty of this area,” Suzanne Fisher, senior program manager of TVA Natural Resources, said.

In June 2023, TVA collaborated with Discover Life in America to host a BioBlitz event at Loyston Point at Norris Lake in east Tennessee. The two-day event encouraged children and others to venture into nature.

To ensure all residents can take advantage of public lands, TVA is working to bridge the gap between historically marginalized communities and the outdoors.

This year, it provided funding to Bridge Chattanooga, which organizes outdoor adventures for students from a middle school and high school in the Chattanooga area.

TVA also helped fund Lookout Mountain Conservancy’s work with the Intern and Leadership Program at The Howard School in Chattanooga. The program enables 20 high schoolers and six college students to work at a 50-acre park on Saturdays and during school vacations or summer breaks.

“Our resources, our rivers, our recreational opportunities – they are abundant and world-class,” Fisher said. “We want to engage students so they can experience everything our region has to offer.”

*A two-day BioBlitz at Norris Lake in east Tennessee gave children and adults the exciting opportunity to identify various plant, animal and fungus species.*



**“Our resources, our rivers, our recreational opportunities – they are abundant and world-class. We want to engage students so they can experience everything our region has to offer.”**

— Suzanne Fisher, senior program manager of TVA Natural Resources





**TVA provided nearly \$11 million in community support**

## ‘A sense of hope’

### Neighbors help neighbors in a time of need

In March 2023, a series of severe storms and tornadoes swept across several states in TVA's seven-state region.

They left immense destruction in Mississippi and Tennessee communities. Houses gone. Trees turned to toothpicks. Steel power poles bent. Lives lost.

Yet, amid that, greater forces emerged.

Resilience. Community. The indomitable power of partnerships.

As custom in the aftermath of severe storm damage, TVA and local power companies rallied quickly to aid those affected.

In Mississippi, the storms began late on March 24 when a tornado left a nearly 60-mile path of debris in the town of Rolling Fork. Another tornado plowed through downtown Amory.

TVA crews arrived at about midnight to perform initial assessments. They worked through the night.

"The density of impact was so great that it was really challenging," Josh Wooten, TVA customer relations manager for the West Region, said.

*Nearly 70 volunteers helped with storm cleanup in Amory, Mississippi, as part of TVA's 90th anniversary Day of Service.*



**“I felt like I was where I was needed – there to help these people.”**

— Carolyn Ward, TVA community relations specialist, West Region



Local power company partners sent transmission crews and Louisville Utilities arrived with a log truck, equipment and wooden poles.

“It’s the strength of the public power model,” Wooten said, recalling Armory Utilities manager Mike King’s sentiments about the support his community received. “Seeing so many people come together so quickly and with such determination is remarkable.”

As TVA crews replaced damaged transmission structures and returned a substation to service, other TVA employees provided food, water and supplies to workers and residents.

Among them was Carolyn Ward, a TVA community relations specialist for the West Region.

“I felt like I was where I was needed – there to help these people,” Ward said.

The spirit of community rose quickly.

“What touched me the most was seeing people come to the center and be so gracious for even the simplest of things, like a case of water or a tarp,” she said.

Then, on March 31, storms hit multiple west Tennessee counties. The city of Covington sustained significant damage.

“Unfortunately, we’re getting very practiced at coming in after a devastating event,” Mark Yates, TVA regional vice president of the West Region, said.

TVA crews identified downed lines and damaged structures and began repairs. They worked closely with local power companies, including Southwest Tennessee EMC and Covington Electric System.

Food, water and supplies were provided to line crews and residents.

By April 1, TVA energy once again flowed to all local power companies.

“I’m proud of our team – the way they rallied and responded quickly to get the power flowing again,” Doug Bailey, TVA vice president of Power System Advancement, said.

TVA also provided \$50,000 for supplies and equipment at two Covington schools the tornadoes had destroyed.

“This is another example of the kindness we have seen from many of our neighbors across west Tennessee,” Covington Electric System manager Tim Sallee said. “TVA

has been a valued partner working behind the scenes before the tornado struck and throughout the recovery efforts.”

Ford Motor Co. provided temporary buildings for students.

“At the end of the day, we’re all serving our communities as best we can and providing the needs that are essential to life,” Wooten said. “I’m proud to be a part of this great effort.”

Yates marveled at the power of these partnerships.

“Through these storms, we’ve had a tremendous opportunity to see how we live our mission,” Yates said. “What it means to make life better for these communities and how we define that in moments where there is loss of life but also a sense of hope as everyone joins together to rebuild.”



## West Kentucky storm recovery continues

TVA and its partners continue to provide much-needed support to western Kentucky communities recovering from the ravages of a December 2021 tornado.

Most recently, TVA allocated \$250,000 for the Living Lands and Water cleanup of Kentucky Lake, which is littered with debris from homes the tornado destroyed. The lake is home to Kentucky Dam, a TVA hydroelectric plant.

Additionally, TVA earmarked \$120,000 to purchase about 400 electric water heaters for homes undergoing repair or construction, all in the service region of local power company partners Mayfield Electric and Western Kentucky Rural Electric Cooperative Corporation.

TVA also provided 20 industrial storage containers to help residents and builders store materials, as well as a business trailer to Mayfield Electric to be used as much-needed space.

The western Kentucky region has battled other severe weather since the tornado.

When floods hit this past summer, TVA provided \$2,000 for supplies and cleanup materials.

And, in keeping with proud traditions, TVA once again co-funded Mayfield’s Fourth of July fireworks display at the community’s “Glory Days” celebration.





## Lifeblood of a legacy

### Supporting farmers through water management

On an early summer morning in North Alabama, Bill Bridgeforth had something on his mind.

Water. Chiefly, an immense appreciation for this life-giving resource.

"Clean water is equally as important as clean air," he said.

The Bridgeforth family has been farming in Alabama since 1877, through five generations. Today, Bridgeforth Farms encompasses 10,000 acres in four counties.

With each passing season, they remain grateful for clean, accessible water.

"TVA water management is vitally important to our farm," Bridgeforth said.

Bridgeforth Farms receives irrigation water from TVA's Wheeler Reservoir and the Tennessee River.



TVA manages the region's water to ensure sustainable supplies for power plants, industrial customers, residents, wildlife and agricultural lands.

Sustainability is critical, requiring planning and foresight to ensure water use aligns with the needs of farmers now and into the future.

TVA's Water Supply Report seeks to predict supply levels 25 years out.

"Water use analyses allow TVA to effectively manage the integrated operation of the TVA river system," Jenny Sharkey, TVA Water Resources engineer, said.

Reuse of the region's water also ensures sustainability. In 2020, about 8.4 billion gallons of water were withdrawn, with about 95% returned for reuse.

"The residents of the Valley region are good stewards of the water," said Gary Springston, TVA Water Supply program manager.

Effective water management undergirds TVA's long-term goals of supporting the environment while strengthening economic development and energy infrastructure.

"The way we operate our integrated river system is for the people of the Valley region," said Amanda Turk, manager of Hydrologic Impacts and Risk Evaluation.

*Bill Bridgeforth and his brother, Gregory Bridgeforth, rely on TVA-managed water resources to help grow cotton, corn, soybeans, wheat, sorghum and canola at their north Alabama farm.*

TVA manages the Tennessee River system for water supply and multiple other public benefits. To date, managing the Tennessee River system has prevented an estimated \$9.7 billion in flood losses across the region.

**\$300 million**

Flood damage costs prevented each year, on average, through flood control operations

**50 million**

tons of goods shipped with TVA navigation operations support per year

**\$12 billion**

in ecotourism and recreation supported by TVA dams and reservoirs

**9%**

of TVA's total energy supply comes from hydroelectric power

**"Water use analyses allow TVA to effectively manage the integrated operation of the TVA river system."**

— Jenny Sharkey, TVA Water Resources engineer



## ‘Steadfast stewards’

### Valley Vision 2035 advances collective vision for public power

The energy industry is ever-evolving and rapidly changing. Amid it all, open communication among power partners will be a key to sustained success.

TVA and its partners are finalizing a collaborative effort of nearly two years – the development of Valley Vision 2035, which advances a collective vision for evolving the region’s public power model.

“We always talk about the success of the TVA public power experiment, now in its 90th year, but we can’t proceed with business as usual and get the same results,” Hunter Hydas, director of Portfolio Risk Management and Analytics at TVA, said. “It requires work, innovation, evolution and collaboration.”

In December 2021, TVA assembled a Valley Vision 2035 Collaboration Group comprised of industry experts and representatives from local power companies, large federal customers, customer associations and TVA.

The team met monthly to understand the industry landscape and identify trends and uncertainties that drive change. They constructed future marketplace scenarios and are translating those findings into potential business models for the future.

The Valley Vision 2035 findings and next steps will be shared with customers, and workstreams will be created to address challenges and opportunities identified by the Collaboration Group.

Valley Vision 2035 provides a unique opportunity for TVA and local power companies to jointly explore the complexities of today’s energy environment, according to Wes Kelley, President and CEO of Huntsville Utilities and a member of the Collaboration Group.

“Valley Vision 2035 allowed us to consider how TVA and the LPCs could or should respond to ensure we remain relevant and steadfast stewards of the energy resources in our growing region,” Kelley said. “While I’ve learned a lot, the answers are not easy. I believe Valley Vision 2035 will provide direction, not a destination.”

Hydas agreed that the results will provide power partners with a clarity of workstreams and a structure for engagement, but not final solutions.

One thing that won’t change? The commitment to serving the people of TVA’s seven-state region.

**“While the public power model might change over time, TVA will always be committed to our mission of providing reliable, low-cost energy, environmental stewardship and economic development.”**

— Hunter Hydas, TVA director of Portfolio Risk Management and Analytics

## ‘Power of partnership’

### Home Uplift recipient breathes easier after upgrades

When Ann Darnall, of Hardin, Kentucky, received a call asking if she wanted to participate in the TVA EnergyRight® Home Uplift program, the 80-year-old felt delighted.

The program provides energy efficiency upgrades such as new HVAC systems, insulation and tighter seals around windows and doors at no cost to homeowners most in need. It helps reduce home energy bills and makes homes safer.

Upgrades to Darnall’s home included the removal of window units and the addition of mini splits, enabling her to separately control heating and cooling in her living room and bedroom. Workers also installed new attic insulation and a new fan in the bathroom.

As a result, she’s saving money and she feels more comfortable in her home.

West Kentucky Rural Electric Cooperative Corporation is her local power company.

“I just love it,” she said. “I’m so thankful to TVA and (West Kentucky Rural Electric Cooperative Corporation) for this opportunity. The air feels cleaner and drier, which is helping with my COPD.”

Across the region, TVA EnergyRight® and its Home Uplift partners – 58 local power companies; charitable donors; and local, state and federal organizations – have provided more than 5,000 homes with energy efficiency upgrades since the program’s inception in 2018.

The Federal Home Loan Bank Affordable Housing Program, West Kentucky Rural Electric Cooperative Corporation, the Purchase Area Development District and EnergyRight funded the upgrades to Darnall’s home.

“TVA cannot do this work alone,” Doug Perry, senior vice president of TVA External Strategy & Communications said, “It’s through the power of partnership that we are making life better for people across the region.”

Looking ahead, the Inflation Reduction Act and other federal legislation may lead to additional funding to expand TVA’s EnergyRight, Home Uplift and School Uplift programs as they continue to improve quality of life in the Valley region.



Melissa Martin, TVA EnergyRight program manager, congratulates Ann Darnall for being the 40<sup>th</sup> recipient of home energy upgrades through TVA’s Home Uplift program in the area served by West Kentucky Rural Electric Cooperative Corporation.

## Home Uplift

Home Uplift is a partnership among TVA, local power companies and other donors.

The program provides energy efficiency upgrades at no cost to homeowners most in need. This results in less use of energy, lower energy bills and homes that are healthier and more comfortable.



## Building a sustainable future

Students benefit from energy efficiency upgrades

Through School Uplift, TVA helps schools improve their facilities, save energy and reduce their energy costs.

The program is expected to produce \$5.8 million in lifetime energy cost savings for 100 participating schools per year.



Monika Beckner, vice president of TVA Energy Services & Programs, at Chattanooga Schools for the Arts and Sciences, a School Uplift program participant.

Mississippi's oldest public school, established in 1821, will soon have new clean energy technology in its hallowed halls.

In partnership with the TVA EnergyRight School Uplift program and Columbus Light & Water, the Franklin Academy in Columbus, Mississippi, earned a \$200,000 School Uplift grant for new LED lighting and high-efficiency HVAC equipment. It also earned a \$10,000 grant for new playground equipment.

The school participated in the third cohort of School Uplift, which provides energy efficiency training and grants that help schools save energy and improve learning environments.

"We want them to be engaged in school and come to school," Shanika McKinney, principal of Franklin Academy, said in a Columbus Dispatch article. "I believe the grant money is going to assist in making this learning environment conducive to achieve at the highest level."

During the 2022-23 school year, Franklin Academy students and teachers together identified ways to reduce the school's energy use by 21% a year. School Uplift provided the grants based on that performance.

Once the new equipment is installed, Franklin Academy will save an estimated \$50,000 a year in energy costs.

In 2023, the School Uplift program awarded \$2.6 million in grants to 64 schools across the region. Since 2021, it has invested \$7.28 million and helped 118 schools save on their energy bills, with each school saving an average of \$13,132 a year.

"Making classrooms healthier and more comfortable for both students and teachers helps give every child the opportunity to succeed," Monika Beckner, vice president of TVA Energy Services & Programs, said. "We are proud of the winning schools' dedication to reducing energy waste and building a sustainable future for us all."



## STEM classroom grant program awarding \$1M in 2023

TVA and the TVA retiree organization Bicentennial Volunteers, Inc. have partnered to contribute \$1 million toward science, technology, engineering and math learning projects in K-12 classrooms and schools in the region in 2023.

"TVA remains proud to support educators and students who pursue excellence in STEM subjects," Jeannette Mills, TVA Executive Vice President and Chief External Relations Officer, said. "To build the energy system of the future, our region's future workforce must be prepared to continue innovating for the decades ahead."

Chris Skipworth – a teacher at Todd County Central High School, which received a TVA STEM grant – shows TVA's Trina Gallman how to operate a drone. TVA staff members presented the grant check to the school.

238

STEM grants awarded for the 2022-23 school year

136,000

students enabled to participate in STEM activities



**SHAPING TOMORROW'S ENTREPRENEURS**

TVA contributed \$3 million to the Tennessee Urban League Affiliates in September 2022 to grow statewide business development programs over a three-year period.

TULA is using the money to fund its workforce readiness training centers, information technology programs and executive leadership programs across the state.

TVA has long partnered with TULA, which is affiliated with the National Urban League and works to help African Americans and underserved urban residents secure equity and economic self-reliance. TULA has operations in Chattanooga, Knoxville, Memphis and Nashville.



From left: Allen Clare, vice president of Power Operations Performance Improvement; Carol Eimers, TVA regional vice president, East Region; Candy Johnson, President & CEO of The Urban League of Greater Chattanooga; and Taquiya Thompson, TVA community relations manager, volunteer at the Shoes for School event in Chattanooga.

**‘Exciting partnership’**

**TVA and MLB legend ensure students have a ball with STEM learning**

What do TVA and one of Major League Baseball’s most famous families have in common?

A commitment to helping young people succeed.

In summer 2023, TVA committed \$1.1 million in funding to the Cal Ripken Sr. Foundation. Former MLB players Cal Ripken Jr. and Bill Ripken founded the organization in honor of their father, Cal Ripken Sr., a Hall of Famer who worked for the Baltimore Orioles for 36 years.

The Ripken Foundation’s STEM initiative aims to provide elementary and middle school youth in underserved neighborhoods with the opportunity to participate in STEM activities.

TVA’s contribution has enabled the installation of 27 science, technology, engineering and math centers at youth-serving organizations across TVA’s seven-state service territory. STEM centers will include educational products, technology and furniture, along with ongoing technical support and the creation of new lessons tied to TVA’s history and focus areas.

“This is an exciting partnership for reaching students with STEM-related concepts,” said Althea Jones, senior manager of TVA Stakeholder Relations, “We added TVA curriculum to these centers to excite children about the types of jobs that are available when they grow up.”



**“This is an exciting partnership for reaching students with STEM-related concepts. We added TVA curriculum to these centers to excite children about the types of jobs that are available when they grow up.” – Althea Jones, TVA senior manager of Stakeholder Relations**





Jim Farley, President and CEO of Ford Motor Co., speaks to guests at a BlueOval City event.

## Moving the economy forward

### TVA and partners create the jobs of the future

An important aspect of TVA's mission is to attract capital investments and jobs to its seven-state service area.

TVA's Economic Development team embraces the diverse geography and needs of the region and targets six key markets: aerospace and defense, automotive and mobility technologies, clean technologies, food and industrial technologies, information systems and security and life sciences.

In their decision to locate or expand here, large businesses and industries continue to leverage the value of partnering with TVA.

In the past five years, TVA has helped the region create about \$45.9 billion in projected capital investment, which is expected to create more than 100,000 new jobs and retain more than 235,000 jobs.

Based on FY 2023 performance, in partnership with customers, community organizations and state and local

leaders, TVA is expected to help attract \$9.2 billion in projected capital investments and is also expected to create more than 12,200 jobs and retain 46,100 jobs.

"TVA was created to help improve the quality of life for the people of the Valley," said John Bradley, TVA senior vice president of Economic Development.

This is accomplished, in part, by providing affordable, reliable, clean power and by promoting environmental stewardship and economic development.

"Working with our local power companies and state, regional and local economic development partners to support companies that are creating job opportunities and investment in the region is fundamental to TVA's mission and can affect impactful growth opportunities for the communities we serve," Bradley said.

#### SOME OF THE NEWEST PROJECTS INCLUDE:

- LG Chem is investing \$3.2 billion and projecting 860 jobs at a new facility in Clarksville, Tennessee, for building electric vehicle battery components.
- Steel Dynamics is expanding its operations in Columbus, Mississippi, with a projected capital investment of \$2.5 billion and the planned creation of 1,000 jobs.
- First Solar, the nation's largest solar panel manufacturer, is investing \$1.1 billion and expects to create more than 700 jobs in Huntsville, Alabama.
- Huber Engineered Woods, a leading specialty building products manufacturer, is investing \$418 million and plans to create 158 jobs to establish operations in Shuqualak, Mississippi.
- Handsome Brook Farms, a leading producer of organic eggs from pasture-raised hens, is investing \$31 million and projecting 140 new jobs to establish operations in Morristown, Tennessee.
- Osmundson Mfg. Co., an agritech company and tillage tool producer, is investing \$12.5 million and plans to create 80 jobs as it establishes operations in Mayfield, Kentucky.

MORE THAN

**12,200<sup>1</sup>**

new jobs expected to be created, based on FY 2023 performance

MORE THAN

**46,100<sup>2</sup>**

jobs expected to be retained, based on FY 2023 performance

MORE THAN

**100,000**

Five-year total for new jobs

**\$9.2 billion**

in projected capital investments based on FY 2023 performance

**\$45.9 billion**

Projected capital investments based on performance for the past five years

**18 years**

Consecutively as a Top Utility in Economic Development, according to Site Selection Magazine

<sup>1</sup>"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 (a) full-time and part-time on-site employees at the facility and (b) full-time and part-time work-from-home employees who reside in the TVA service territory and 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.

<sup>2</sup>"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 (a) full-time and part-time on-site employees at the facility and (b) full-time and part-time work-from-home employees who reside in the TVA service territory and 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.



Partners working together installing coconut fiber rolls. Properly installed, these rolls prevent streambank erosion and help establish vegetative buffers. This improves water quality and habitat for aquatic life in the stream.

## Partnerships preserve natural resources

The Paint Rock River in northern Alabama is home to some of the world's rarest fish, mussels and aquatic plants.

TVA and numerous partners – including The Nature Conservancy, U.S. Fish and Wildlife Service, federal and state agencies and others – have improved water quality for these species by restoring riparian buffers and replacing a low-water bridge along the Paint Rock watershed.

The project serves as an example of TVA's important work with partners to protect and preserve the environment across the region.

"The bottom line is that no one agency has the money or resources to do this work alone," Shannon O'Quinn, TVA senior water conservation specialist, said. "TVA is involved in a lot of projects with a lot of different partners. Together, we are more successful in conservation, stewardship and protecting the biodiversity of this region than any one agency or organization could be on their own."

During conservation projects that create vegetative stream buffers and improve aquatic habitat, TVA and its partners teach landowners about stream ecology and the benefits of conservation.

"The work that has been completed in the Paint Rock watershed has been so successful that The Nature Conservancy is using it as a model to complete conservation work in other priority watersheds within the state," said Alana Reynolds, watershed coordinator for the freshwater program at The Nature Conservancy in Alabama.

As TVA and its partners protect and preserve the Tennessee River watershed, one of the richest ecosystems in the world, they also strive to create public access and awareness, Rebecca Hayden, director of TVA Natural Resources, said.

"The more people enjoy and appreciate the natural resources in this region today, the more they will protect them for future generations," Hayden said.

## Building the ark

### National Geographic photographs region's animal life

Somewhere in a cool stream in north Alabama, a spindly crawdad perfects its Instagram pose.

That critter and its stream-mates had their moment in the spotlight this year when TVA and partners teamed to document aquatic species in their native habitats.

Their mission? Add to the thousands of images in National Geographic's Photo Ark, a project that aims to collect images of 20,000 animals worldwide.

The project began in 2006 and inspires people to protect at-risk animals globally.

Teams headed to Shoal Creek and streams in northwest Alabama this past spring to snap pictures of fish, aquatic insects, mussels, snails, crayfish and more. The images will populate the Photo Ark library.

The project helps raise awareness of biodiversity in this region's waters.

"People aren't going to protect something that they won't see," Jon Michael Mollish, TVA fisheries biologist, said. "We want to protect and enhance the Tennessee River and its tributaries. Part of doing that is just by spreading the good word about biodiversity and conservation."



Top: Jon Michael Mollish monitors the health of aquatic life as a TVA fisheries biologist. Bottom: Five slabrock darters from Hurricane Creek in Humphreys County, Tennessee.



## There for you 24/7

As population and job opportunities grow, so too will the need for energy

The Southeastern U.S. is among the fastest-growing regions in the country. Tennessee, in fact, was ranked as the seventh-fastest growing state in the nation in 2022.

Today, approximately 10 million people and 800,000 businesses rely on TVA for energy.

And that will only continue to grow. By 2050, TVA may need to double the amount of electricity it produces, which will include the replacement of generating assets as older power plants are retired.

"There is no one lever to pull that can increase our power supply," Jeff Lyash, TVA President and CEO, said. "Meeting this challenge requires planning and taking the right actions to ensure we continue to provide affordable, reliable, resilient and increasingly clean energy."

TVA is developing the energy system of the future, focusing on sound planning with customers and sound investments.

This will help ensure the people of TVA's seven-state region have a secure energy supply.

TVA's current portfolio of diverse, clean energy sources will continue to expand as the enterprise explores new and innovative technologies, including new nuclear technologies.

---

**\$16.4  
billion**

planned investments from 2024 through 2028 to build additional generation and upgrade the existing power system to ensure the region has affordable, reliable energy and moves toward a net-zero carbon future.

---

**\$3.7  
billion**

planned investments from 2024 through 2028 in transmission system improvements – including the new state-of-the-art Primary System Operations Center – to prepare for growth and increased energy capacity.

---

TVA uses diverse generating sources for higher reliability, lower costs and cleaner energy.



Among the initiatives:

- ▣ TVA has invested \$20.4 billion over the past 10 years to maintain existing assets, build a diverse portfolio of new generation and make transmission system improvements.
- ▣ From 2024 to 2028, TVA plans to invest \$16.4 billion in existing and new generation assets.
- ▣ From 2024 to 2028, TVA plans to invest \$3.7 billion in transmission system improvements, including the new state-of-the-art Primary System Operations Center in Meigs County, Tennessee.
- ▣ In July, TVA reached a milestone when three new units at the Colbert Combustion Turbine site in north Alabama began commercial operation. That project added 681 megawatts of capacity – ahead of schedule and under budget.
- ▣ TVA is working to expand from its current 3,200 megawatts of solar capacity commitments to 10,000 megawatts by 2035. In 2022, TVA issued one of the nation’s largest-ever requests – up to 5,000 megawatts – for proposals for carbon-free energy. The final projects could start to come online as early as 2026.
- ▣ TVA is researching and pursuing innovative technologies such as long-duration energy storage, pumped storage and carbon capture.
- ▣ Under multiple contracts and memoranda of understanding with designers, engineering firms, investors, and other government agencies, TVA is evaluating small modular reactor (SMR) technology and planning for licensing and potential deployment of SMRs at its Clinch River site in Roane County, Tennessee.
- ▣ TVA is refocusing its energy efficiency and demand response initiatives to help families, schools and businesses reduce their energy use. This will also help businesses and industries reduce or shift their energy use during periods of high demand.





To meet growing demand, TVA is adding generation that includes solar, energy storage, combustion turbines and combined cycle natural gas:

**681 MW**

Combustion turbines at Colbert

**681 MW**

Combustion turbines at Paradise

**1,450 MW**

Combined cycle combustion turbines at Cumberland

**500 MW**

Peaking aeroderivative units at Johnsonville

**200 MW**

Solar project, Lawrence County, Alabama

**99 MW**

Solar project at Shawnee site, pending environmental review and receipt of necessary permits

**20 MW**

Battery Energy Storage Project, Vonore, Tennessee

**TVA is working to expand its nearly 3,200 megawatts of solar capacity commitments to 10,000 megawatts by 2035.**

*TVA's Primary System Operations Center is under construction in Meigs County, Tennessee.*



## The heart of the system

TVA's new Primary System Operations Center is a \$332 million investment to deliver affordable, reliable, clean energy to customers around the clock, every day, across the nearly 80,000 square miles TVA serves.

This new center will serve as the heart of the energy system of the future.

About 200 TVA employees will work there to manage the flow of energy across the region, dispatching electricity from generating sites to wherever it needs to go, when it needs to go there, minute by minute.

The state-of-the-art system will help lower costs and avoid outages, ultimately increasing reliability.

The facility's software also offers a key advantage: It will better support the renewable energy sources that come online across TVA's region.

Construction is wrapping up in CY 2024 and systems testing is expected to begin that same year. The center expected to be fully operational in CY 2026.



At Raccoon Mountain, water is pumped to the reservoir on top of the mountain and then used to generate electricity when additional power is needed by the TVA system.

## Investing in our system

### Every megawatt counts as fleet is upgraded

As TVA creates the energy system of the future, its existing generational assets – from combustion turbines to pumped storage to hydropower dams – are critical to the system’s success.

That’s why TVA continues to strategically modernize its existing fleet.

In FY 2023, TVA completed its Colbert Combustion Turbine expansion project in north Alabama, which adds 681 megawatts of natural gas generation – enough dispatchable electricity to power over 400,000 homes.

Combustion turbines are designed to meet peaks in power demand. They enable TVA to add more intermittent energy to the grid, because they can generate power quickly when solar energy is not available.

At Raccoon Mountain Pumped Storage facility near Chattanooga, Tennessee, TVA conducted upgrades that will add 100 megawatts – enough to power 58,500 additional homes.

Raccoon Mountain can produce 1,700 megawatts in a matter of minutes, and then store excess power that can be accessed when energy demand is high.

In FY 2023, TVA completed a nine-year project that added berms upstream and downstream of the south embankment to increase the stability of Pickwick Dam in Hardin County, Tennessee.

TVA also conducted assessments of four of its dams and is evaluating ways to enhance Blue Ridge Dam and Spillway in Georgia, Chatuge Dam Spillway in North Carolina and Cherokee Dam and John Sevier Dam in Tennessee.

“We are aggressively investing in our system, with more than \$20.4 billion in capacity expansion and base capital since 2014,” Jeff Lyash, TVA President and CEO, said. “We plan to continue these investments as we work to bring online about 3,800 megawatts of generation to create an energy system that is affordable, reliable, resilient and clean.”

## Nuclear fleet recognized for industry excellence

All three of TVA’s nuclear plants – Browns Ferry, near Athens, Alabama; Sequoyah, in Soddy-Daisy, Tennessee; and Watts Bar, near Spring City, Tennessee - were recognized in 2023 for exemplary performance.

TVA’s nuclear fleet, the third largest in the nation, safely and reliably generates an average of 8,275 megawatts of electricity each day – enough to power more than 4.8 million homes.

TVA’s goal is to become the top fleet in the nation by 2025.

**“I’m extremely proud of our nuclear fleet and their commitment to excellence and focus on the relentless pursuit to make every day better than the day before.”**

— Tim Rausch, Chief Nuclear Officer





## ‘Taking bold action’

### Leading the way toward a clean energy future

TVA has set an ambitious and comprehensive path to reduce carbon emissions while also offering affordable, reliable power and meeting increased demand for electricity in the region.

“The challenge and opportunity of the energy transition is clear – TVA must meet rapid growth in demand for electricity while quickly reducing the carbon emissions of our generation system,” Rebecca Tolene, TVA’s

Vice President of Environment and Chief Sustainability Officer, said. “Tackling these issues requires bold action, leadership and an integrated approach, which TVA has demonstrated throughout our 90-year history.”

TVA is top quartile among regional peers in clean energy. It has reduced carbon emission rate intensity by 50% since 2005, and aspires to reach net zero by 2050, leveraging new and existing technology.



Left: Clay Forbes, combined cycle operations technician at Allen Combined Cycle Plant. Above: A TVA team member in the control room at Allen Combined Cycle Plant.



Rebecca Tolene, Vice President of Environment and Chief Sustainability Officer

**In FY 2023, 55% of TVA’s power supply was from carbon-free sources such as nuclear, hydroelectric, and solar energy.**

**TVA has reduced its carbon emissions rate 50% against the 2005 baseline year.**

TVA’s carbon reduction efforts include:

- » Working to expand solar to 10,000 megawatts by 2035
- » Partnering to develop new carbon-free technologies
- » Maintaining TVA’s existing low-cost, carbon-free nuclear and hydro fleets
- » Retiring aging coal units
- » Using natural gas as a bridge to bring on more renewables while retiring coal plants
- » Investing in the transmission system to better manage the flow of electricity
- » Leveraging energy efficiency and demand response programs

TVA continues to fund research and development of emerging technologies such as long-duration battery storage; carbon capture, utilization and sequestration; and advanced nuclear technologies.

The enterprise continues to work side by side with its 153 local power company partners across seven states, and it is accelerating the development of its next Integrated Resource Plan to determine the right energy mix for the future.

“All of these actions will help drive us toward a clean energy future while ensuring our region’s energy security,” said Jeff Lyash, TVA president and CEO.



### BUILDING A CLEAN ENERGY ECONOMY

TVA is partnering with the University of Tennessee’s Baker School for Public Policy and Public Affairs to conduct the “Valley Pathways Study on Building a Clean, Competitive Economy.”

The partners are evaluating all sectors of the economy to develop a baseline for carbon emissions. They’ll then identify pathways for each sector to reduce emissions and move the region toward a secure energy future.

“Simply put, this initiative will accelerate a clean energy economy and support the economic competitiveness of the region,” Jeff Lyash, TVA President and CEO, said.



## 'Provides the flexibility needed'



From left: Cumberland Fossil Plant operations manager Bobby Morgan and maintenance manager Chris Adams meet with TVA Chief Operating Officer Don Moul.

**"As our generating mix evolves, we must address our obligations – balancing cost and reliability, and the drive to reduce carbon emissions. Natural gas provides the flexibility needed to reliably integrate renewables onto our power system."**

— Don Moul, TVA Chief Operating Officer

As TVA pursues a clean energy future, it is making decisions about its coal facilities and the possibility of natural gas alternatives being built on those sites.

In January 2023, TVA announced its decision to retire its two-unit Cumberland Fossil Plant in Cumberland City, Tennessee. The first unit is scheduled to be retired by 2026 and replaced by a 1,450-megawatt combined cycle natural gas facility on-site. The second unit is scheduled to be retired by 2028.

The combined cycle natural gas facility, which is expected to replace one of the retiring Cumberland units, will deliver up to a 60% reduction in carbon emissions from the site.

In Roane County, Tennessee, TVA is conducting an environmental review to assess potential impacts of retiring Kingston Fossil Plant and building one of the below options:

- An energy complex that would house 1,500 megawatts of natural gas generation from combined cycle and dual fuel aeroderivative units as well as battery storage and solar.
- Multiple solar and battery storage facilities at locations in eastern Tennessee through power purchase agreements.

TVA sought public input on the Kingston Retirement Draft Environmental Impact Statement in the summer of 2023. It is reviewing the comments submitted and plans to complete the review by the second quarter of 2024.

"As our generating mix evolves, we must address our obligations – balancing cost and reliability, and the drive to reduce carbon emissions," Don Moul, TVA's Chief Operating Officer, said. "Natural gas provides the flexibility needed to reliably integrate renewables onto our power system."



Cumberland Fossil Plant assistant unit operators Jane Trpilit and Ken Dickie.



Cassidy Chandler, combined cycle operation technician at Southaven Combined Cycle Plant.

Jeff Lyash, TVA President and CEO; Bobby Morgan, Cumberland Fossil Plant operations manager; and Martin Lane, Cumberland Fossil Plant assistant manager of power operations.





## 'Extreme conditions'

In December 2022, TVA faced one of its toughest challenges to date: a once-in-a-generation storm that impacted TVA generating facilities and neighboring markets.

As a result of unprecedented conditions caused by Winter Storm Elliott, TVA had to direct local power companies to reduce their load between 5% to 10% for a total of eight hours on the mornings of Dec. 23 and Dec. 24.

TVA immediately implemented emergency operation plans to ensure grid stability, and it proactively initiated an After-Action Technical Team of subject matter experts to conduct a thorough assessment of what happened and why.

As part of this effort, TVA engaged industry experts and customers for input and feedback, incorporated independent oversight and expertise, and committed to share findings and progress as part of TVA's commitment to transparency.

After an intensive review process, TVA published its After-Action Report in May 2023, which identifies specific actions it is taking to help ensure the reliability and resilience of the power grid and to enhance communications with local power companies and stakeholders during severe weather events.

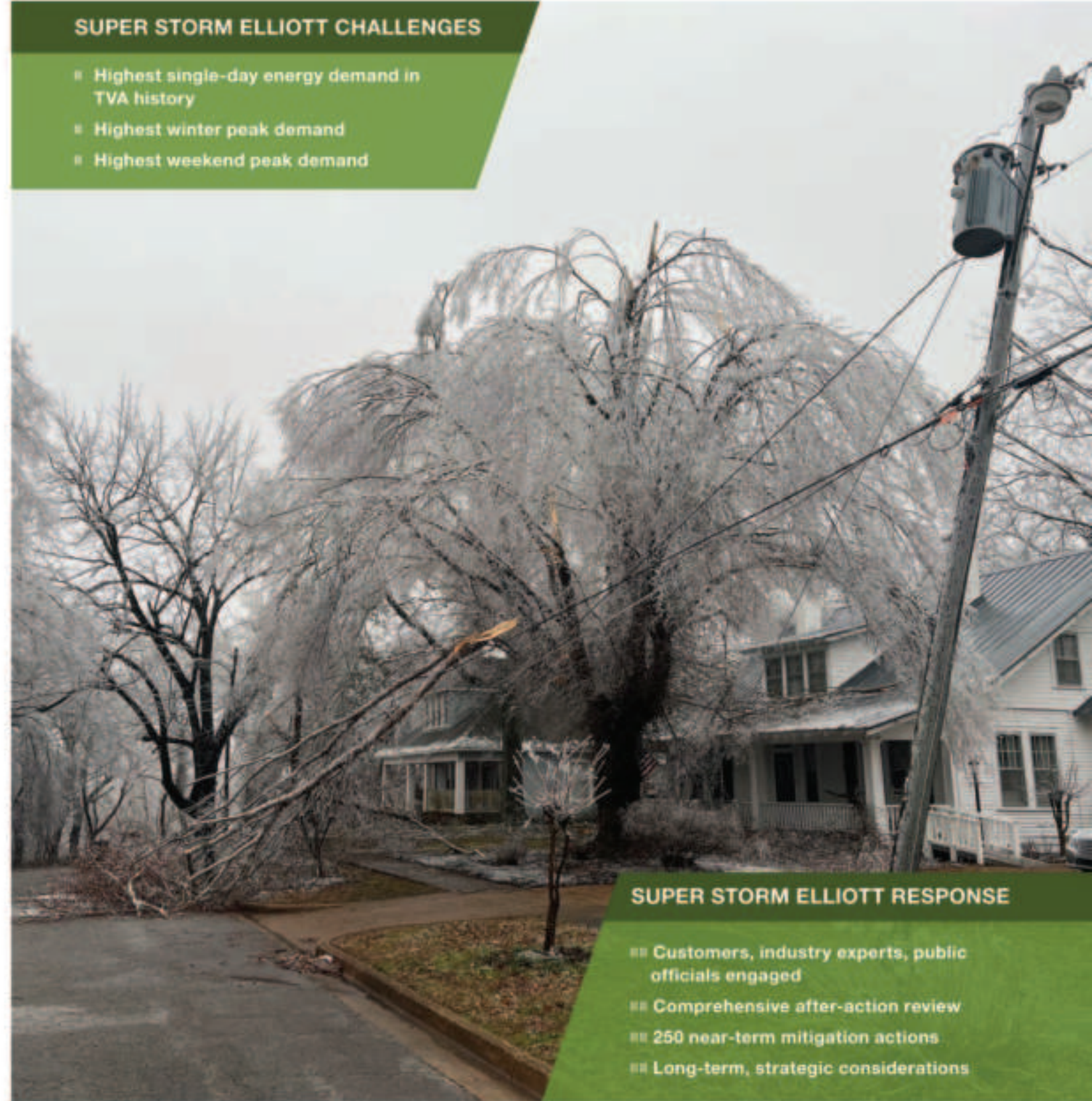
"We are grateful for the hard work and commitment of our employees who responded in December under extreme conditions and all of those who have supported our after-action efforts," said Bob Dalrymple, senior vice president of TVA Resource Management & Operations Services.

"As a learning organization, we are committed to understanding and sharing lessons learned and – more importantly – implementing actions to ensure we are better prepared to manage significant events in the future," he added.



## SUPER STORM ELLIOTT CHALLENGES

- » Highest single-day energy demand in TVA history
- » Highest winter peak demand
- » Highest weekend peak demand



## SUPER STORM ELLIOTT RESPONSE

- » Customers, industry experts, public officials engaged
- » Comprehensive after-action review
- » 250 near-term mitigation actions
- » Long-term, strategic considerations



## ‘A detailed look’

### TVA, partners embark on integrated resource planning

Tremendous population growth in the region. Increased demand for electricity. Advances in clean technologies. A drive toward a clean energy economy. Changing regulations.

These are just some of the circumstances that have led TVA to embark on its next Integrated Resource Plan, which will evaluate how the agency can meet customer demand for electricity between now and 2050 across a variety of future scenarios.

“We must continue providing our communities and customers with energy security – energy that is affordable, reliable and resilient – while also being clean,” Jeff Lyash, TVA President and CEO, said. “That’s why it’s important to take a detailed look at where we’re headed through an Integrated Resource Plan.”

A programmatic Environmental Impact Statement will accompany the IRP to address its environmental effects.

TVA currently follows the 2019 IRP, which the TVA Board adopted in August 2019. The next IRP, expected to be completed in summer 2024, will lay the foundation for TVA’s asset strategy and the next long-range financial plan.

Stakeholder engagement is a critical aspect of the IRP. TVA formed a diverse working group of stakeholders who meet regularly to provide guidance. Periodic public meetings will be scheduled to keep members of the public updated on IRP progress. The public will also have an opportunity to provide comments on the draft IRP, expected in spring 2024.

“The IRP is really a stakeholder engagement exercise,” Melanie Farrell, vice president of TVA External Strategy & Regulatory Oversight, said. “TVA’s system planning is an ongoing, iterative process, but the IRP is different. It brings in stakeholders and the public and incorporates their broad perspectives into our planning.”

## Seeking public input

As TVA works to build a cleaner, more flexible energy system, public input will continue to be an important part of the process.

TVA seeks public feedback under the National Environmental Policy Act, which requires that agencies consider the potential environmental impacts of proposed major projects and involve the public in the process.

In summer 2023, for example, TVA sought public input on several power generation initiatives, including:

- ☒ The review of solar energy and battery storage projects that could be built on private and TVA-owned land
- ☒ The retirement of the Kingston Fossil Plant and the addition of new natural gas or solar generation
- ☒ The possible expansion of TVA’s existing pumped storage facility or construction of a new facility
- ☒ The potential construction of new natural gas combustion turbines and battery energy storage
- ☒ The development of TVA’s 2024 Integrated Resource Plan

The public also participated in several other projects, including a bridge construction proposal at Wilbur Reservoir, a shoreline development proposal near Chattanooga and a project that would modify a small dam to improve safety near the John Sevier plant.

**Integrated Resource Plan: Provides strategic direction as TVA continues to supply affordable, reliable, resilient and clean energy for the Valley region**





# Lighting the way

**Innovation, expertise and collaboration are building blocks for bright future**

More energy. Clean energy. New energy sources.

All these are necessary as energy needs change in TVA's service region.

And one thing is certain: Innovation will prove critical.

"We know that we cannot meet the clean energy needs of tomorrow by making small changes to today's power systems," Jeff Lyash, TVA President and CEO, said.

To meet that challenge, TVA is pursuing innovation to support the energy system of the future.

A future where electrification drives higher power demands. A future where carbon is reduced, and the power system includes greater use of renewable generation.

TVA expects to need 50% to 100% more energy by 2050 than it generates now. And the energy must be clean.

The U.S. uses 14 times more electricity today than in 1950.

In 1950, electricity was only 2% of total energy used.

Electricity is now 22% of the energy we use; that number could double in the next 30 years.



With partners across the energy industry, TVA is pursuing several innovative technologies, including:

**New nuclear technology:** TVA is evaluating next-generation new nuclear reactors, including small modular reactor (SMR) technology. TVA is planning for the licensing of SMRs at its Clinch River site in Roane County, Tennessee, and is considering other sites within the Valley region for the potential future development of SMR technology.

**Electric vehicles:** The transportation industry offers the greatest opportunity for reducing carbon emissions. TVA, a leader in advancing the use of electric vehicles in the region, works with a coalition of partners to support installation of Fast Charge Network sites. There are now 15 sites in the Valley region, with contracts signed for 55 more.

**Regional grid transformation:** TVA is advancing the transformation of the region's power grid to provide an interconnected, intelligent grid that supplies power reliably. This is critical as energy needs and energy sources evolve. Collaboratively, TVA and local power companies will focus on modernization, grid operations and planning capabilities.

**Energy storage:** TVA developed a long-term strategy to integrate energy storage into the power system to maximize intermittent renewable sources. The enterprise has contracted for 246 megawatts of energy storage projects and is building a 20-megawatt energy storage project in Vonore, Tennessee. TVA is also assessing the opportunity for a new hydro-pumped storage facility or expansion of its Raccoon Mountain pumped-storage facility near Chattanooga.

"TVA is focused on energy expansion and innovation," Joe Hoagland, TVA's vice president of Innovation and Research, said. "Some technologies are ready now and others may not yet be fully deployable or proven. But we must continue to innovate new technologies so we have options for ensuring effective solutions for the future.

"The key elements of innovation, expertise and collaboration are our building blocks as TVA meets growing energy demands, accelerates a clean energy economy and continues to improve the quality of life in our region," Hoagland said.



With population growth and economic development over the next 30 years, the Valley region could double the amount of electricity it requires.



## 'A vital role'

### Nuclear innovation is powered by collaboration

Advanced nuclear energy is one of the few technologies that can supply the reliable, carbon-free energy around the clock that TVA will need to meet growing energy demands.

TVA is taking action to put that technology to work in its seven-state region and beyond.

"Nuclear energy has a vital role in our energy supply as we work to electrify the economy, eliminate emissions and provide a secure energy future," Jeff Lyash, TVA President and CEO, said. "In partnership with leaders across the industry, TVA is developing the new nuclear technology that is expected to help meet our region's energy needs and play a critical role in our nation's drive toward a clean energy future."



At this signing ceremony of the Technology Collaboration Agreement, CEO Jeff Lyash highlighted the value of working together, taking intentional steps to advance new nuclear in the U.S. and around the world.

Already a leader in nuclear energy, TVA is exploring advanced nuclear technologies with utilities, research institutes, universities and others around the world. This collaboration is mutually beneficial – it uses each entity's expertise to the fullest while also reducing the risks of innovating new technology.

TVA is evaluating the technology and exploring the economic feasibility of new small modular reactors.

TVA is preparing a Nuclear Regulatory Commission construction permit application for the Clinch River Nuclear Site, as well as evaluating opportunities for small modular reactors across TVA's service area.

In collaboration with the state of Tennessee and others, TVA sees the potential for development of an advanced nuclear industry hub in the Valley region, including component manufacturing, training programs and construction expertise to support a growing, advanced nuclear fleet across the country.

***"Nuclear energy has a vital role in our energy supply as we work to electrify the economy, eliminate emissions and provide a secure energy future."***

— Jeff Lyash, TVA President and CEO

## Leading the nation

Tennessee Gov. Bill Lee, who wants to make the state a leader in nuclear energy, visited TVA's Clinch River Nuclear Site in March 2023.

TVA has the nation's first early site permit from the Nuclear Regulatory Commission for small modular reactors.

"TVA is leading the country in the development of these future reactors," Lee said during the site visit. "We want Tennessee to be leading the country and creating the ecosystem that can surround the development of these reactors."



Tennessee Gov. Bill Lee, right, visits TVA's Clinch River Nuclear Site with Jeff Lyash and Bob Deacy, who heads the Clinch River Project. Gov. Lee describes the Clinch River site as the future of energy in America.



### 'A CLEAR SIGNAL'

TVA has spent the past year reviewing dozens of bids that could lead to about 6,000 megawatts of new solar and battery storage projects across its service region.

The enterprise issued one of the largest clean energy procurement requests in the nation in July 2022, when it requested proposals for up to 5,000 megawatts of clean energy.

TVA expects to sign agreements in late CY 2023. The clean energy is targeted to come online beginning in CY 2026.

"These intentional actions to accelerate clean energy will potentially double the amount of solar energy on our system," said Jeff Lyash, TVA President and CEO. "This request for proposal is a clear signal to our industry, our partners and our nation that we need to move further and faster, together, to make a cleaner future a reality."



## Battery storage facility will enhance grid resiliency

**TVA began construction on its first owned and operated battery storage facility**

Battery storage will prove critical in the future. As more intermittent sources such as solar and wind are integrated onto the power system, energy can be captured when available and used later when needed.

Hitachi Energy designed and installed the battery energy storage system, located near Vonore, Tennessee. It will use lithium-ion batteries to store 40 megawatt-hours of energy – enough to power more than 10,600 homes for three hours.

"The Vonore BESS will enhance the resiliency of TVA's power system and prepare us for the future energy marketplace," Said Sidiqi, senior manager of Reliability Authority & Regulatory Operations at TVA, said.

## 'An important step' for hydropower technology

TVA and the U.S. Department of Energy, through its Water Power Technologies Office, reached an agreement in March 2023 to enhance collaboration on hydropower technology development.

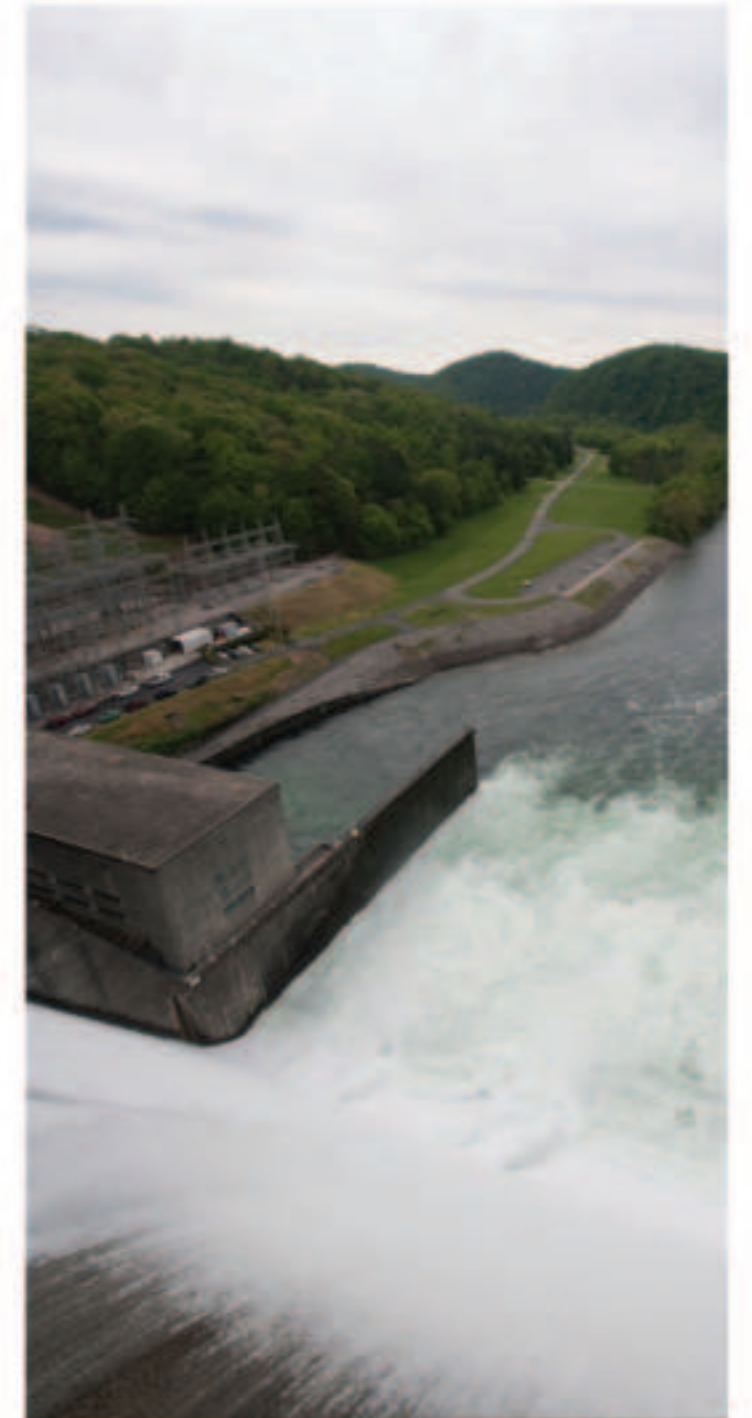
TVA's hydroelectric system includes 29 power-generating dams throughout the Tennessee River system and a pumped storage plant near Chattanooga, Tennessee.

The partners developed an action plan that outlines their joint efforts to evaluate and demonstrate technologies for improving the existing hydro fleet and adding new capabilities. Collaboration topics include climate change adaptation, asset optimization, valuation of hydro, advanced manufacturing, workforce development and emerging opportunities.

"WPTO and TVA have been working together to advance hydropower technologies over the last several years, and this agreement is an important step in formalizing and building on those activities," Jennifer Garson, director of the Water Power Technologies Office, said.

**Hydroelectric dams are TVA's original renewable energy resource.**

**Hydroelectric power provided about 9% of TVA's total energy supply in FY 2023.**



Norris Dam on the Clinch River in Tennessee was the first dam in the system that was constructed by TVA.



## Positioned to take the lead

TVA and partners drive adoption of EVs in the region



**TVA's internal fleet electrification program is among the most aggressive in the electric utility industry. By 2030, TVA plans to transition 100% of its light-duty vehicles and 50% of its medium-duty vehicles to electric.**

When TVA was founded 90 years ago, it changed lives and spurred tremendous economic growth by bringing electricity to the Southeast.

Today, TVA is working with a broad coalition of partners to electrify transportation.

"The electrification of transportation can be as transformative to this region as TVA's electrification of the Valley was back in the 1930s," Jeff Lyash, TVA President and CEO, said.

With a shared goal to increase electric vehicle adoption to well over 200,000 EVs by 2028, TVA aims to improve charging infrastructure availability, set innovative and supportive policies, help expand EV availability and offerings, and increase consumer awareness.

TVA is working with local power companies, state agencies and third-party charging developers to build the Fast Charge Network. When completed by 2026, the network is expected to include about 80 locations and 200 fast chargers that connect interstates and major highways

***"With electric vehicle initiatives, TVA and its partners aren't just paving the way for more EVs on local roads. They are laying the foundation for a clean energy economy."***

— Jeff Lyash, TVA President and CEO

in rural and urban communities across TVA's seven-state service area.

As of September 30, 2023, the network includes 15 operational locations with a total of 36 chargers in Alabama, Georgia, Kentucky, Mississippi and Tennessee. The system continues to grow, with 55 additional sites contracted with local power companies across six states.

The benefits of EV adoption are significant. An increase of 200,000 EVs could reduce carbon emissions by about 1 million metric tons per year.

Economically, automakers and suppliers have announced investments of \$17.2 billion in the region, and the creation of more than 14,000 new jobs over the past 10 years.

With large auto manufacturers announcing plans in the past few years to manufacture EVs in the region, TVA's economic development team has now helped attract EV suppliers. LG Chem, a manufacturer of EV battery components, announced plans to invest \$3.2 billion and create 860 jobs at a new facility in Clarksville, Tennessee.

EVs can also strengthen local power. There is a potential to use energy stored inside EV batteries to support the power system and increase resiliency.

Additionally, off-peak charging better utilizes the existing power system, and that helps keep rates low for everyone.

"Our public power model means TVA and our partners are best positioned to take the lead in reducing and removing the major barriers to electric transportation," Lyash said. "As a mission-driven organization, we can work and invest today for the benefit of all our residents tomorrow."



*A Ford Lightning truck at Paradise Combined Cycle Plant. The vehicle is part of TVA's growing EV fleet.*



## Innovative solar projects help region, companies shine

To lead in carbon reduction, TVA is taking an innovative approach to bringing solar power to the region it serves.

In the past year, through its Green Invest program, which matches customers committed to renewable energy with new-to-the-world renewable projects, TVA collaborated with:

- Google, Origis Energy and Excelsior Energy Capital to provide Google with Skyhawk Solar, a 100-megawatt utility-scale solar project in Tennessee. This will provide carbon-free energy to Google data centers in Montgomery County, Tennessee, and Jackson County, Alabama.
- Nashville Electric Service, Vanderbilt University and Silicon Ranch to provide Vanderbilt with the first of two solar facilities that will move the university toward its goal to become carbon neutral by 2050.

"Together with our partners, we are building the nation's most advanced energy system to help us meet our decarbonization and energy security goals," said Doug Perry, senior vice president of TVA External Strategy & Communications.



MORE THAN

**\$3 billion**

regional investments generated with the help of TVA Green Invest since 2018



Heather Ford, TVA Natural Resources and Conservation Specialist, and Suzanne Farris, senior program manager of TVA Green Invest, are in the field with a local conservation group, and a look at the opportunity to learn about sustainable projects.





## Here to serve

### Financial strength and powerful partnerships are central to TVA's success

As the seven-state region grows, TVA's financial strength and stability help keep energy flowing to homes, businesses and industries.

"TVA's financial strength and stability serve our region well," John Thomas, TVA Chief Financial and Strategy Officer, said. "They help TVA to ensure a reliable power supply, meet growing energy needs, supply clean energy and use new technologies to prepare for growth."

TVA's disciplined financial performance, operational performance and diversified generating sources help keep its power rates among the lowest in the nation.

The enterprise kept base rates flat for four consecutive years through 2023, while also providing pandemic credits totaling \$674 million to all its customers, helping the region meet pandemic-related challenges in recent years.

And every year, local power company customers in long-term agreements with TVA receive credits of 3.1% on their wholesale power bills. These credits have now totaled \$764 million.

Together, the long-term agreement credits and pandemic credits have totaled more than \$1.4 billion in funds going back to customers and communities through FY 2023.

TVA IS  
FINANCIALLY  
STRONG

\$199M in  
long-term  
partner credits  
delivered in  
FY 2023

Entirely  
self-funded  
since 1999

Total financing  
obligations at  
Sept. 30, 2023,  
were among the  
lowest in over  
30 years.



Chris Jones, President and CEO of Middle Tennessee Electric, tells TVA employees that TVA and customers can lead a new day in the energy industry.

Supplying electricity for approximately 10 million people across seven states requires long-term planning and long-term investments.

TVA has long-term partnership agreements with 96% of the 153 local power companies it serves, and they work together to ensure a secure energy future for the region.

"TVA invests now to maintain and improve the power system over the next 20 to 30 years," Thomas said. "Having 96% of our local power company customers as long-term partners gives us the financial stability to commit to making long-term investments in the power system. And that means a stronger energy future for the region."

**"TVA is here to serve. And our sustained success comes from partnerships. We work hand in hand with our customers and communities to achieve success for the Tennessee Valley."**

— John Thomas, TVA Chief Financial and Strategy Officer



TVA is self-funded – without taxpayer support – primarily through the sale of electricity. TVA borrows funds to invest in the power system and various programs.

While investor-owned utilities pay dividends to shareholders, TVA reinvests proceeds from power sales into the power system and keeps rates low. TVA revenues in FY 2023 were \$12.1 billion, and its asset base is valued at more than \$51.3 billion.

TVA also makes tax equivalent payments, returning 5% of power sales revenues to state and local governments where it sells electricity or owns power system assets or property. TVA's tax equivalent payments totaled \$611 million\* in 2023, with payments over the past 10 years totaling more than \$5.3 billion.

"TVA is here to serve," Thomas said. "And our sustained success comes from partnerships. We work hand in hand with our customers and communities to achieve success for the Tennessee Valley."

### STRONG DEMAND FOR \$1B POWER BONDS

In March 2023, TVA priced \$1 billion of new, five-year maturity global power bonds, with an interest rate of 3.875%. This is TVA's first bond offering with a five-year maturity since 2020.

The bonds attracted interest from a wide variety of domestic and global institutions, including official institutions, state and local governments, pension funds, money managers and insurance companies.

The bond rate ranks as TVA's third-lowest rate ever on a five-year bond offering. TVA used the proceeds to pay down other debt and fund general corporate purposes. The bond saved TVA over \$5 million in interest expense during 2023, helping keep costs lower for TVA's customers.

### RATES

**Residential rates are lower than 75% of the top 100 U.S. utilities. Industrial rates are lower than more than 95% of the top 100 U.S. utilities.**

### PAYMENTS IN LIEU OF TAXES

**Return 5% of power revenues in tax equivalent payments:**

TOTALED

**\$611 million**

in FY 2023, up from \$512 million in FY 2022

MORE THAN

**\$5.3 billion**

in past 10 years

**\$16.3 billion**

since 1941

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



## Strengthening service

### Credits help local power company partners offset costs

In the west Tennessee city of Milan, local power company superintendent Jason Griggs puts TVA credits to work to help keep service reliable and prices stable.

The Milan Department of Public Utilities benefits from a 3.1% long-term partner credit that TVA provides, as well as a 2.5% pandemic credit provided to all TVA customers through FY 2023.

"These credits make a big difference for us," Griggs said. "We've been able to improve our system without passing along the costs to families and businesses we serve."

His team invests the TVA credits in three priorities:

- ❖ Offsetting cost increases for supplies, including transformers and conductors. "Costs spiked during the pandemic," Griggs said. "Without the credits, we would have had to pass along the costs to our customers in a local rate action."
- ❖ Keeping the lights on, even when storms bring high winds. "The risk of tree limbs coming into contact with power lines is a major problem," Griggs said. "With the credits, we've been able to establish an aggressive

vegetation management program. We're reducing outages for our customers and saving money on repairs."

- ❖ Further improving service for customers. Milan's reliability will continue to improve as it invests TVA credits in an advanced metering system that can locate, analyze and help reduce outages.

He also pointed to an additional TVA program that benefits the Milan community.

Two doors down from his office, the nonprofit Mustard Seed provides food to families and school supplies to children, as well as helping people pay bills and purchase other necessities.

The group receives funds through the Community Care Fund that TVA established during the pandemic. TVA and local power companies provide matching dollars for charitable groups to meet local needs.

"The Mustard Seed is a great ministry to our community," Griggs said. "The Community Care Fund is helping keep the doors open for the people it serves."



Jason Griggs, superintendent, Milan Department of Utilities

**Long-term partner credits  
FY 2023: \$199M  
Total to date: \$764M**

**Pandemic credits  
FY 2023: \$225M  
Total to date: \$674M**

**Community Care Fund TVA  
and LPC contributions -  
Total impact since its  
inception: \$22M**

### CREDITS AT A GLANCE

- ❖ Local power companies in long-term partnerships with TVA benefit from an ongoing credit on their power bills – a base rate credit of 3.1% on their monthly bills. This returned \$199 million in bill credits to those local power companies in 2023 and \$764 million since the long-term partner option was introduced in 2019.
- ❖ For the past three fiscal years, all TVA customers have also benefitted from a 2.5% pandemic credit on the base rate on their monthly bills. This credit returned a total of \$674 million to address hardships created by the COVID-19 pandemic.
- ❖ Together, the pandemic credit and the long-term partner credit totaled more than \$1.4 billion through fiscal year 2023 – dollars going back to customers and the communities they serve.
- ❖ These credits are made possible through the financial discipline and outstanding performance of TVA employees.
- ❖ TVA established the Community Care Fund during the pandemic to serve those most in need in local communities. TVA and LPCs have contributed about \$11 million each to the fund.



## Inspired by our students

TVA's Investment Challenge Program has been highly successful over its 25 years of operation – and so have the students who participate.

The workforce development initiative allows university student teams to actively manage stock portfolios under the guidance of faculty members and within investment guidelines established and monitored by TVA.

### Partnership with 25 universities

For calendar year 2022, 11 of the 25 student teams beat the S&P 500 Total Return Index. One team produced returns in excess of over 1,000 basis points above that of the S&P 500.

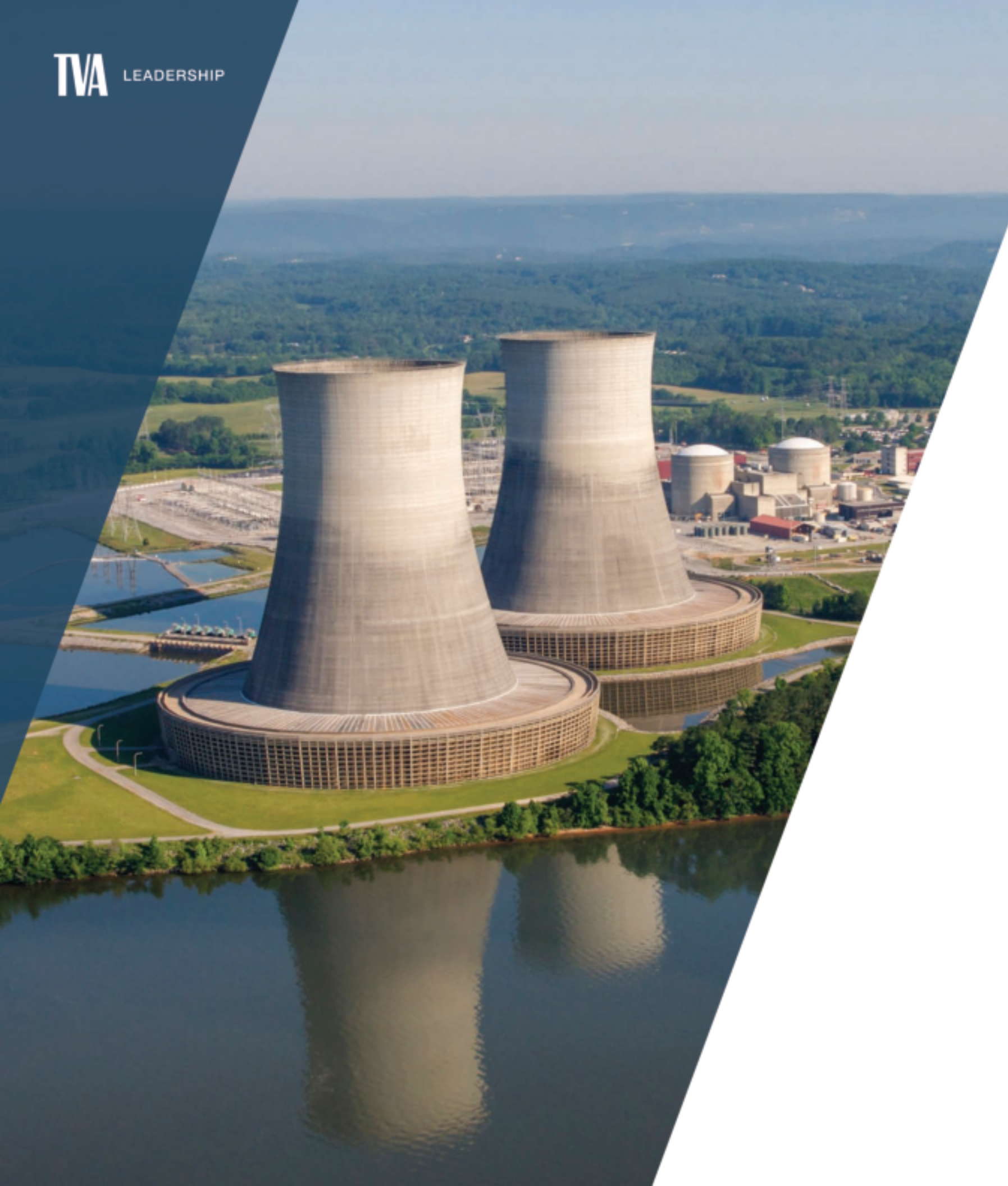
### Students at each university manage a portfolio of about \$500K

Through 2023, the program has grown to students managing an \$11 million portfolio.

### Have generated \$16 million in investment returns throughout history of program

Teams that have outperformed the S&P 500 have earned over \$1.3 million in performance awards for their universities over the life of the program.

"Surging interest rates and high inflation made 2022 a difficult year for investing," Tom Rice, Vice President, Treasurer and Chief Risk Officer at TVA, said. "I'm inspired by our ICP students, who powered through extreme volatility with many outperforming the market in a very difficult year."



## Securing the future

### Nuclear energy helps ensure stability

TVA is exploring the development of new nuclear technologies to help ensure its seven-state region continues to be served by a secure energy supply. The enterprise is also leading the way in urging the energy industry to consider new nuclear initiatives for a clean energy future for all.

“The stability of our economies and the lives of people we serve depend on a safe and secure energy supply,” Jeff Lyash, TVA President and CEO, said. “Energy security begins with diverse energy sources, including new nuclear technologies in particular.”

Lyash is sharing this message with industry leaders worldwide. He chairs the boards of the Nuclear Energy Institute and the Atlanta Centre Regional Governing Board of the World Association of Nuclear Operators.

Other groups of industry and policy leaders he addressed in 2023 include the CERAWEEK event on “Navigating a Turbulent World: Energy, Climate and Security”; the Nuclear Energy Assembly, where Tennessee Gov. Bill Lee presented a keynote address; the New Nuclear Capital symposium by the Atlantic Council and U.S. Nuclear Industry Council; and the International Atomic Energy Agency’s International Ministerial Conference.

TVA also works with its customers to keep public officials at all levels apprised of TVA’s work in serving the people of this region.



Jeff Lyash and Tennessee Governor Bill Lee

**“Energy security begins with diverse energy sources, including new nuclear technologies.”**

— Jeff Lyash, TVA President and CEO

## Embracing an inclusive culture

Team members from all walks of life help shape TVA's legacy of service



Jan Brown, TVA's Chief Diversity & Inclusion Officer

When Jan Brown talks about inclusion with diversity, she talks business – the critical need for TVA to develop current employees and more broadly recruit new ones, so the TVA team can build the energy system of the future.

"TVA is challenged to produce more energy and develop new technologies to continue to serve the region. Our success depends on our people," Brown, TVA's new Vice President of Culture, Inclusion, and Performance and TVA's Chief Diversity and Inclusion Officer, said.

Her goal is to continue to build an inclusive work environment at TVA – a workplace where every employee feels fully connected and valued.

"When employees have a sense of belonging, they are more engaged, excited about their work, and willing to go above and beyond what is required," she said. "A highly engaged workforce is successful, which, in turn, leads to TVA's overall success as the largest public power producer in the country."

As TVA looks to the future, it is imperative that the culture embrace people from different backgrounds and with different perspectives, she said.

"We must expand how we recruit and how we foster inclusion, with everyone still having to prove themselves as the most eligible and capable to hold positions," she said. "That's how winning football teams do it. Why wouldn't we?"

Brown started her new role with a listening tour to hear from TVA managers, employees and external stakeholders. She's working closely with colleagues in workforce development and talent acquisition and with TVA's union partners. All are critical to reaching a broader base of qualified talent for future jobs and fostering an inclusive culture.

A 21-year TVA employee, Brown sees similarities between TVA's workforce and her large, extended family of cousins, aunts and uncles.

"Inclusion isn't new. It's how we are with our families," she said. "You don't always agree or have the same opinions or beliefs. You recognize the differences, but you embrace family members to keep your family's legacy going.

"That's what we're talking about here – building the culture and workforce so TVA can continue serving the Tennessee Valley," Brown said.

**"A highly engaged workforce is successful, which, in turn, leads to TVA's overall success as the largest public power producer in the country."**

— Jan Brown, TVA Chief Diversity and Inclusion Officer

## Don Moul named to Tennessee Nuclear Energy Advisory Council

Don Moul, TVA's Chief Operating Officer, has been appointed to serve on Tennessee Gov. Bill Lee's newly formed Tennessee Nuclear Energy Advisory Council.

The council consists of state, local and industry leaders whose recommendations will drive continued nuclear energy innovation and investment across the state.

"Tennessee can lead America's energy independence and deliver continued economic growth with safe, reliable and clean nuclear energy for the future," Gov. Lee said. "I am confident that these appointees will use their unique industry expertise to ensure that Tennessee is the top state for nuclear energy companies to invest and succeed, creating quality jobs and greater opportunity for Tennesseans."



Jeannette Mills, TVA Executive Vice President and Chief External Relations Officer, and Don Moul, TVA Chief Operating Officer, meet with a guest at the August 2023 Business Plan Rollout.



## Enterprise Leadership Team

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

With years of experience, our talented and diverse senior leaders are committed to and oversee all TVA strategy, policy and operations and are responsible for delivering TVA's mission of service through affordable, reliable and resilient power, environmental stewardship and economic development.

**Jeff Lyash**  
President and CEO

**Sue Collins**  
Executive Vice President and Chief Human Resources and Administrative Officer

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

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

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

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

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

## 'Diverse perspectives and experience'

On Jan. 4, 2023, TVA welcomed six new members to its Board of Directors, creating its first full complement of Board members since 2019.

The newest members are Beth Geer, of Brentwood, Tennessee; Bobby Klein, of Chattanooga, Tennessee; Michelle Moore, of Midlothian, Virginia; Bill Renick, of Ashland, Mississippi; Joe Ritch, of Huntsville, Alabama; and Wade White, of Eddyville, Kentucky.

"We are delighted to have them on the TVA team during this challenging but exciting period," Bill Kilbride, former Board Chair, said. "They each bring diverse perspectives and experience that will help guide TVA as it plans for the future while celebrating its 90th year of service to the region."

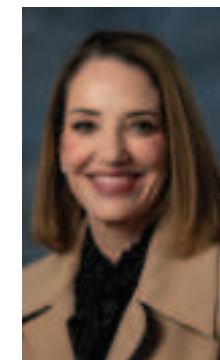
They join existing members Kilbride, of Chattanooga, Tennessee; Beth Harwell, of Nashville, Tennessee; and

Brian Noland, of Johnson City, Tennessee.

TVA Board members are nominated by the U.S. President and confirmed by the Senate. Each member serves a five-year term.

At their February 2023 meeting, Board members elected Kilbride to remain as Chair until November 2023 and they elected Ritch, a former TVA Board Chair, to succeed Kilbride.

As provided by the TVA Act and the TVA Bylaws, the principal responsibilities of the Board are to establish broad strategies, goals and objectives and to set long-range plans and policies. They then ensure these plans and policies are implemented by TVA's staff, which is led by the CEO. Directors swear an oath to perform the duties of the office faithfully and impartially. TVA Board meetings are open to the public.



**Beth Geer**  
Brentwood, TN



**Bobby Klein**  
Chattanooga, TN



**Michelle Moore**  
Midlothian, VA



**Bill Renick**  
Ashland, MS



**Joe Ritch**  
Huntsville, AL



**Wade White**  
Eddyville, KY

**"We are delighted to have them on the TVA team during this challenging but exciting period. They each bring diverse perspectives and experience that will help guide TVA as it plans for the future while celebrating its 90th year of service to the region."**

— **Bill Kilbride**, former TVA Board Chair



---

**TVA has the energy to lead.**



TENNESSEE  
VALLEY  
AUTHORITY

400 W. Summit Hill Drive  
Knoxville, TN 37902

[tva.com](http://tva.com)

[facebook.com/TVA](https://www.facebook.com/TVA)

[X @TVAnews](https://twitter.com/TVAnews)

[@TVA](https://www.instagram.com/TVA)

[linkedin.com/company/tva](https://www.linkedin.com/company/tva)