



Board Meeting

November 10, 2022
Starkville, Mississippi



Opening Remarks

Jeff Lyash
President and CEO

November 10, 2022

Mississippi State University





Starkville UTILITIES

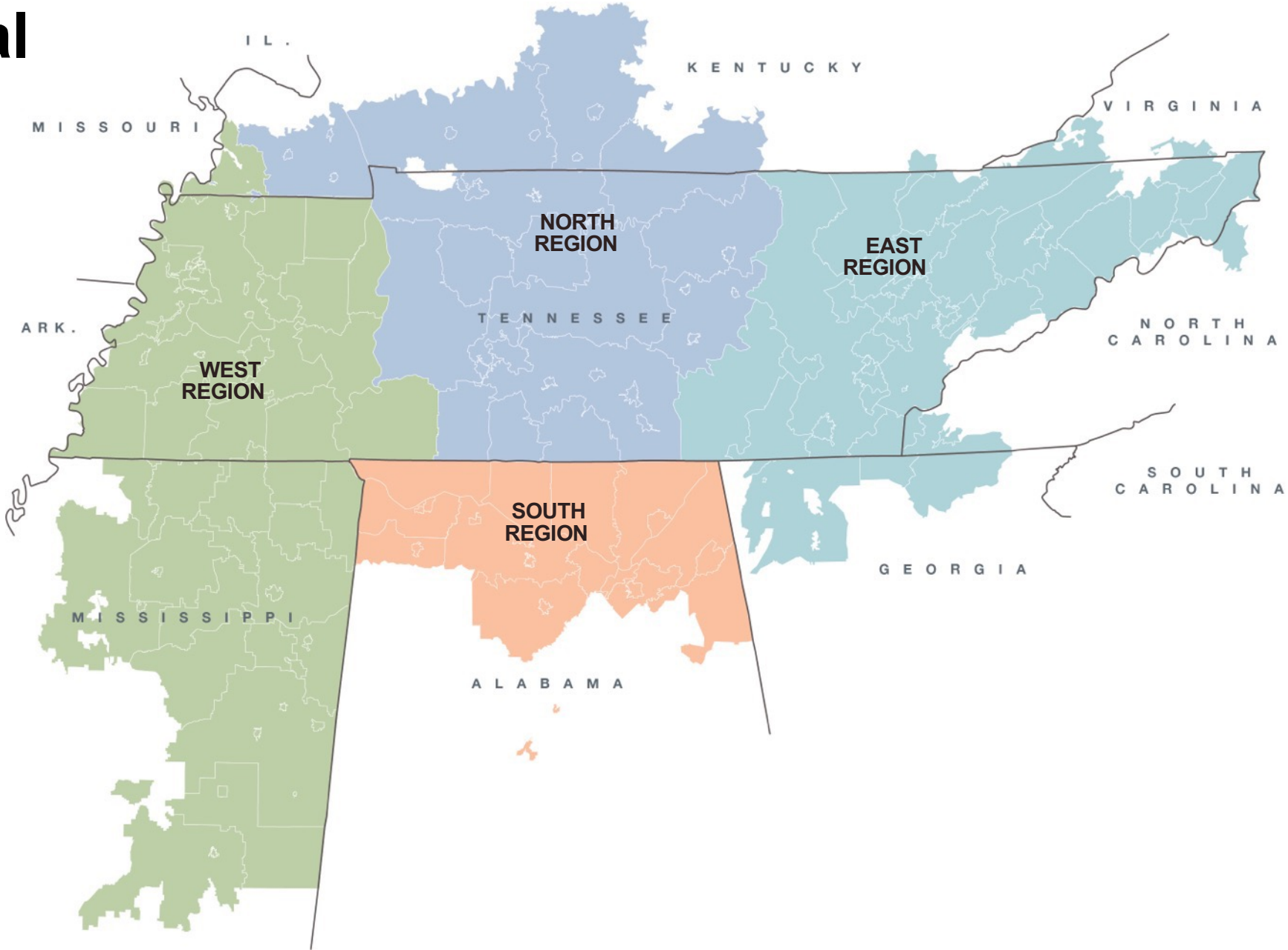
W.E. CONNECT

Serving more than

14,000

homes, businesses, and industries

Regional Model



Columbus Air Force Base



Steel Dynamics

Expanding its Lowndes County operations

\$2.5 billion

projected capital investment

1,000 new jobs

Expected to be created/retained

The largest economic development project in Mississippi history.



Governor Tate Reeves ✓
@tatereeves

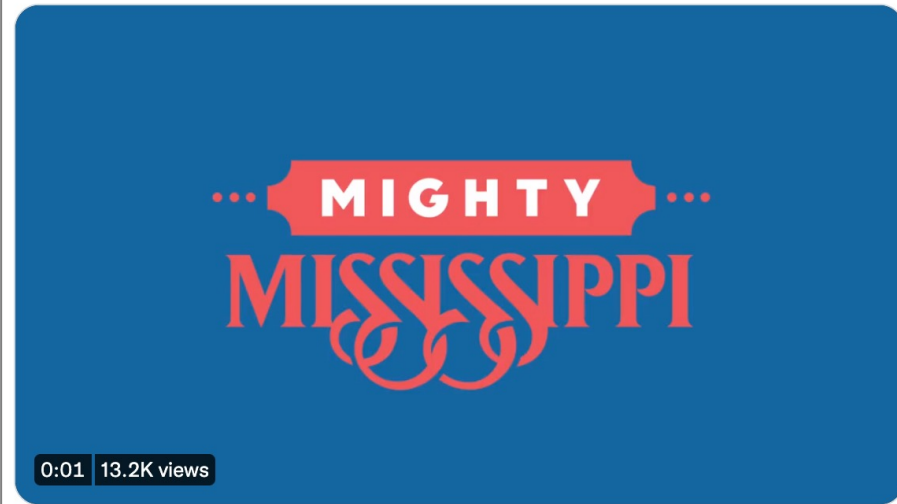


The best and biggest economic development deal in state history is done!

Thanks to the Legislature for quickly finalizing this project that will improve the lives of 1,000+ Mississippians.

\$2.5 billion investment. \$93,000 average salary.

Historic day for Mississippi!



Economic Development

Fiscal Year 2022

Expected to attract or retain

66,500 Jobs

and more than

\$10.2 Billion

in capital investment



Public Power Model



Public power exists to serve and benefit the public good at the local levels – families, communities, businesses and industries.

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Operations and Nuclear Oversight Committee

Jeff Smith, Chair

Pilot Solar Project at Shawnee Fossil Plant

Request for Budget Approval and CEO Delegation

Don Moul

Executive Vice President and Chief Operating Officer

November 10, 2022

For Board Consideration

Approve the budget and delegate authority to the Chief Executive Officer to take specific actions, as appropriate, to support the potential future deployment of a solar cap system on the closed coal combustion residuals management unit at the TVA Shawnee Fossil Plant in Paducah, Kentucky

Background

Provides the capability of a revolutionary new approach to solar on closed landfills and impoundments

Makes available the potential to enable future solar additions on existing TVA property

Aligns to TVA's 2021 Strategic Intent and Guiding Principles and

Affords optionality to achieve 2035 solar generation targets

Additional Project Benefits

Option to alleviate land constraint challenges

Expansion of avenues for beneficial reuse

Transmission interconnection efficiencies



For illustrative purposes only

Basis for Request

High levels of competition for new energy resources driven by market conditions

Preservation of a solar cap installation option at this site

Project Development Actions

Conduct environmental reviews, project scoping, engineering and long-lead actions

Evaluate the applicability of relevant Inflation Reduction Act provisions related to investment in new solar

Any actions taken prior to the completion of the National Environmental Policy Act process will not irreversibly and irretrievably commit TVA to a particular course of action prior to a final decision.

Recommendation

Approve the budget and delegate to the Chief Executive Officer the authority to approve project actions relative to the pilot solar project at the Shawnee Fossil Plant

The Chief Executive Officer will periodically report to the Board on actions taken in accordance with the delegations granted and will inform the Board prior to making any final decisions.

Operations and Nuclear Oversight Committee

Jeff Smith, Chair

Audit, Finance, Risk, and Cybersecurity Committee

A.D. Frazier, Chair

Financial Update

John Thomas
Executive Vice President
Chief Financial & Strategy Officer

November 10, 2022

Fiscal Year 2022

Base Revenue of \$8.0 billion was \$326 million favorable to budget

Partner and pandemic credits for FY22 totaled \$427 million

Diverse generating fleet helps mitigate extreme natural gas prices

O&M is \$63 million favorable to budget

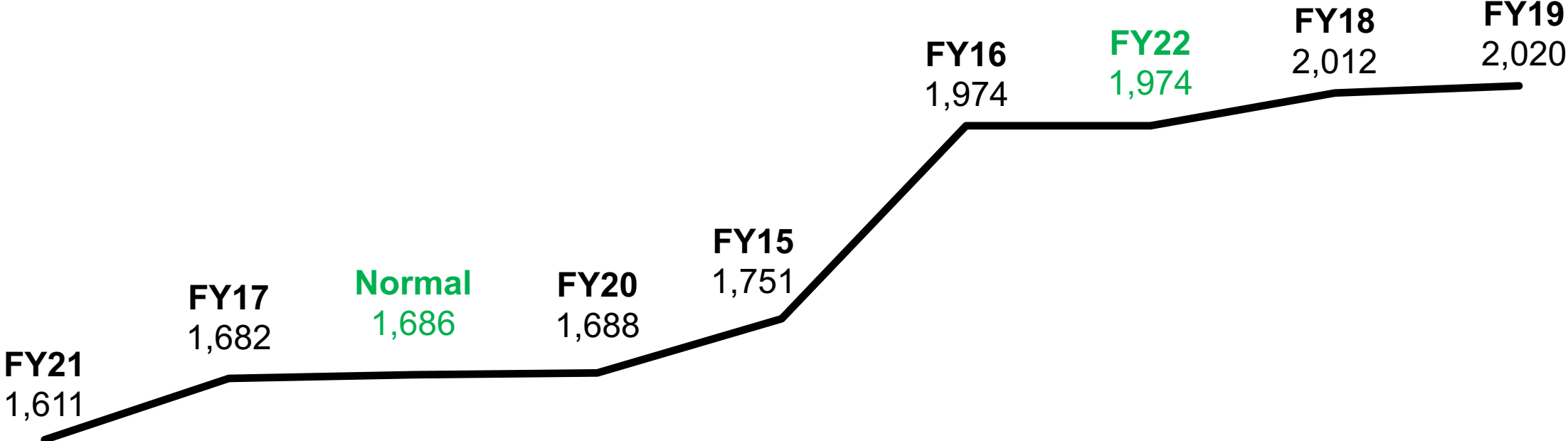
Net income \$463 million favorable to budget

Total Financing Obligations (TFO)

- \$727 million favorable to budget
- \$207 million lower than prior year
- Lowest debt level in 35 years

Cooling Degree Days Above Normal

Overall weather was closer to normal, but higher Cooling Degree Days due to more extreme summer weather



FY15-17 data has been adjusted in order to incorporate a change in TVA's current calculation of total degree days

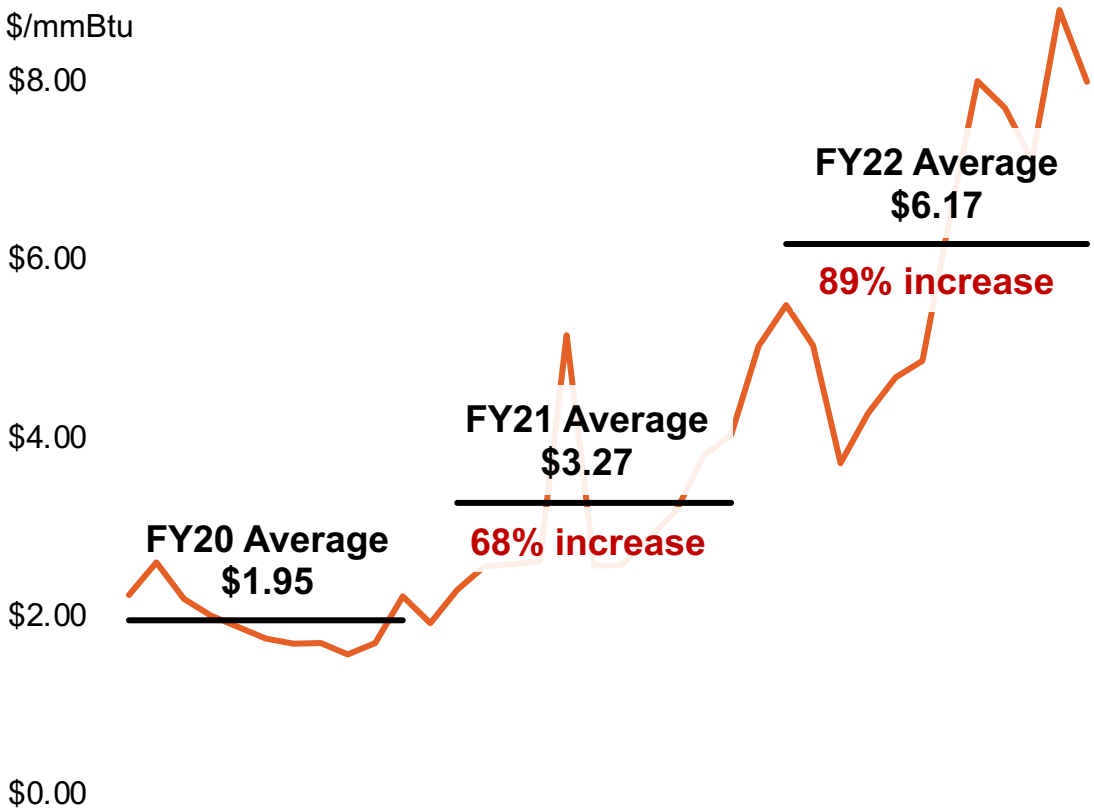
Sales and Revenue

	FY22	FY21	Change	Percent Change	Comment
Power Sales (GWh)	162,608	157,353	5,255	3.3%	
Total Operating Revenues (\$ M)	\$12,540	\$10,503	\$ 2,037	19.4%	
Base Revenue	7,985	7,752	233	3.0%	Load growth and weather
Fuel Cost Recovery	4,379	2,601	1,778	68.4%	Mostly natural gas price

Power Supply Summary

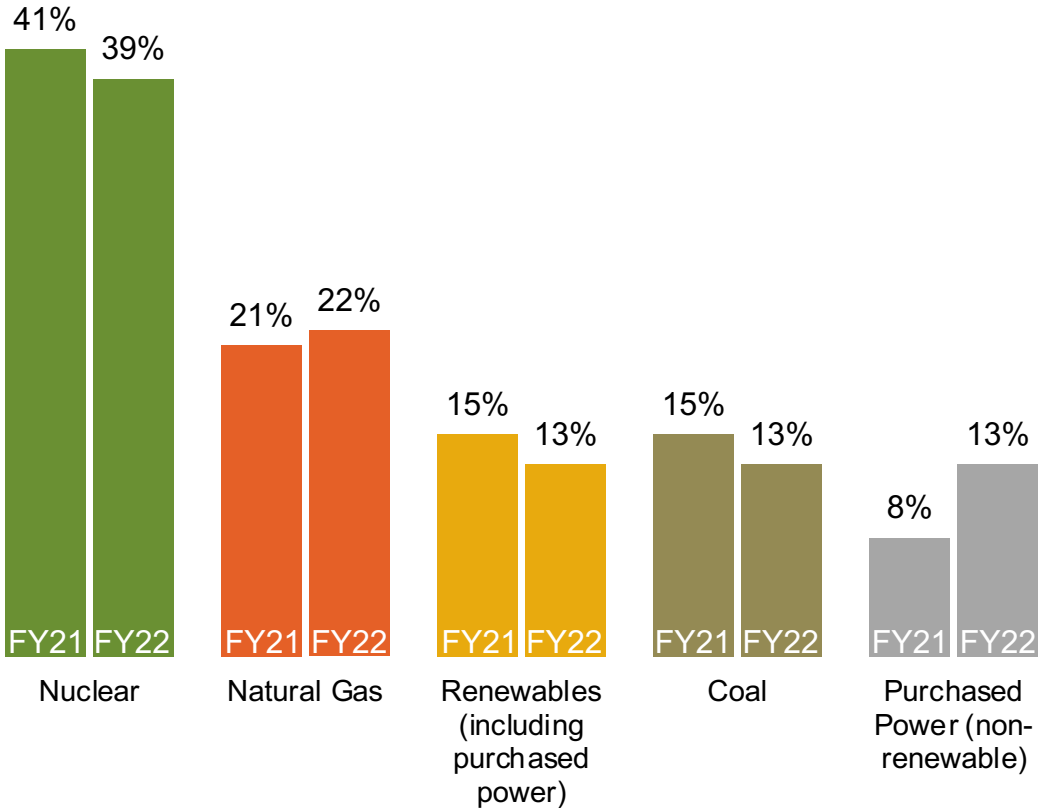
Natural Gas Prices

Henry Hub Historical Prices



Power Supply by Source

FY21 vs FY22



FY22 Summary Income Statement

\$ million	FY22			FY21	
	Actual	Budget	Variance Fav/(Unfav)	Actual	'22 v '21 Fav/(Unfav)
Base Revenue	\$ 7,985	\$ 7,659	\$ 326	\$ 7,752	\$ 233
Fuel Revenue	4,379	2,629	1,750	2,601	1,778
Other Revenue*	176	133	43	150	26
Total Operating Revenue	\$ 12,540	\$ 10,421	\$ 2,119	\$ 10,503	\$ 2,037
Fuel & Purchased Power	4,488	2,815	(1,673)	2,721	(1,767)
Total O&M	2,986	3,049	63	2,890	(96)
Tax Equivalents	601	514	(87)	514	(87)
Depreciation and Amortization	2,054	2,097	43	1,533	(521)
Other	251	213	(38)	245	(6)
Interest	1,052	1,088	36	1,088	36
Net Income (Loss)	\$ 1,108	\$ 645	\$ 463	\$ 1,512	\$ (404)

* Includes off-system sales

FY22 Summary Cash Flow Statement

\$ million

Net Cash Provided by / (Used in)	FY22			FY21	
	Actual	Budget	Variance	Actual	'22 v '21
Operating Activities	\$ 2,948	\$ 2,643	\$ 305	\$ 3,256	\$ (308)
Investing Activities	(2,663)	(3,165)	502	(2,338)	(325)
Financing Activities	(283)	322	(605)	(921)	638
Net Change in Cash	\$ 2	\$ (200)	\$ 202	\$ (3)	\$ 5
Beginning Total Financing Obligations	\$ 20,543	\$ 20,660	\$ 117	\$ 21,421	\$ 878
Change in Debt and Financing Obligations	(207)	403	610	(878)	(671)
Ending Total Financing Obligations	\$ 20,336	\$ 21,063	\$ 727	\$ 20,543	\$ 207

Recap of Financial Results

For 12 months ended September 30, 2022 (comparison to prior year)

Total Financing Obligations of \$20.3 billion

Cumulative partner and pandemic credits (since inception) of \$1.0 billion

No change in base rates

Diverse generating fleet helps mitigate extreme natural gas prices

Best financial health in decades

Audit, Finance, Risk, and Cybersecurity Committee

A.D. Frazier, Chair

People and Governance Committee

Brian Noland, Chair

External Stakeholders and Regulation Committee

Beth Harwell, Chair



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President's Report

Jeff Lyash
President and CEO

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Carbon Reduction Leadership

TVA is a national leader in carbon reduction

70%

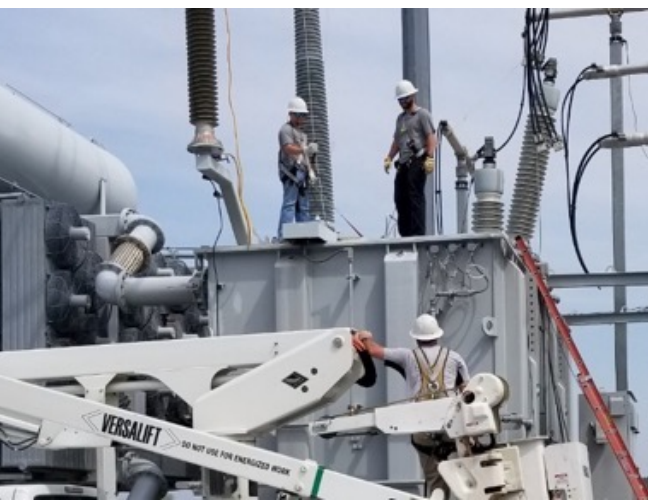
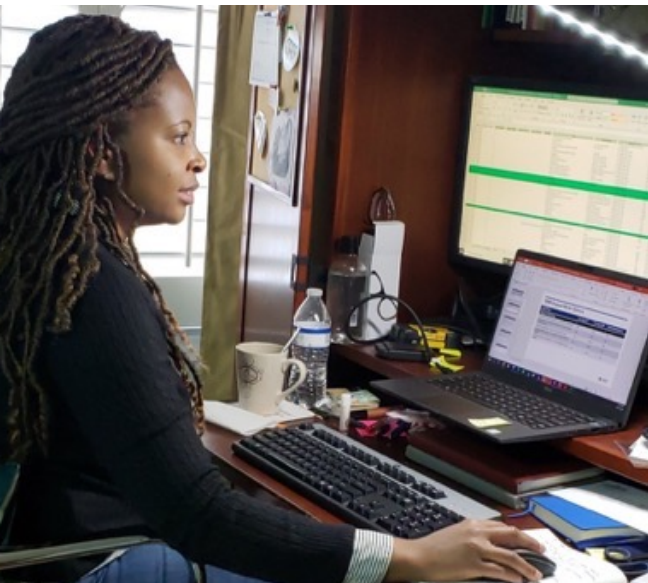
Plan by 2030

~80%

Path by 2035

Net-Zero

Aspiration by 2050



Nuclear Fleet



WB2 Steam Generators



Boone Dam Project



Power Demand

Twelve days this summer
with peak demand above

30,000
Megawatts





Community Care Fund

Provided almost

\$18 Million

In matching donations over first 3 years

Partnering with LPCs to support more than 800 nonprofit and community programs.



Long-Term Partners

147 LPCs

96% of LPCs

Multiple Benefits Including

3.1% Bill Credit & Generation Option

Long-Term Alignment

Direct Engagement

in TVA Business planning
process and decision-making

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Renewables

Issued RFP for up to
5,000 MW

Received proposals for
14,000 MW

Including solar, wind, nuclear, and energy storage

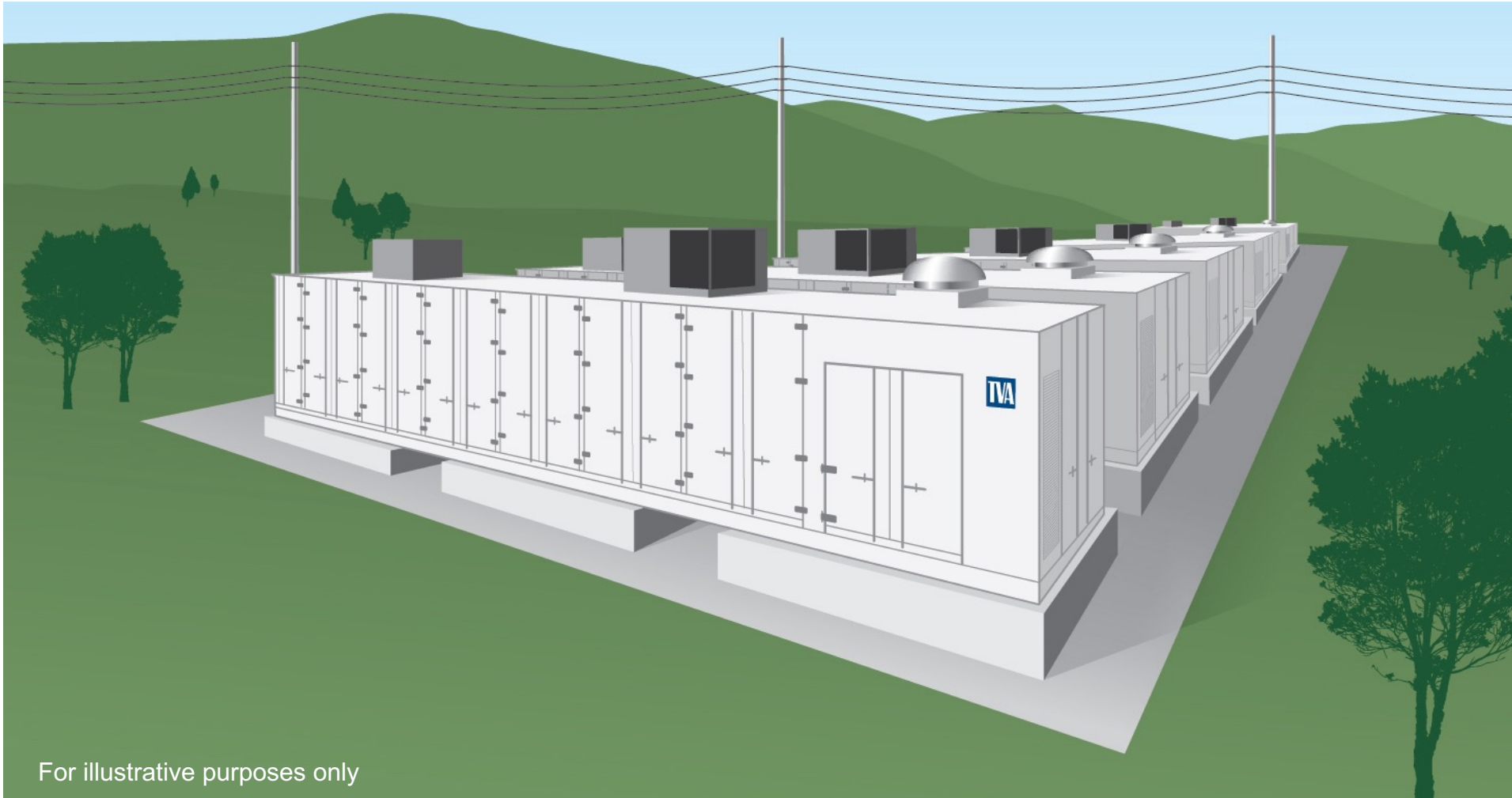
Grid Operations



System Operations Center



Vonore Battery Energy Storage System



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Southeast Hydrogen Hub

A coalition of Southeastern utilities and research and development organization Battelle



Nuclear Fleet



An aerial photograph of a rural landscape. A river flows through the scene, winding between green fields and patches of trees. The terrain is a mix of cultivated land and natural vegetation. The overall color palette is dominated by various shades of green and brown.

Advanced Nuclear

Accelerate progress toward our aspiration of net-zero carbon

Designed to develop, deploy and safely and economically operate viable advanced nuclear reactors

Develop a roadmap for our exploration of advanced nuclear technologies

Electric Vehicles



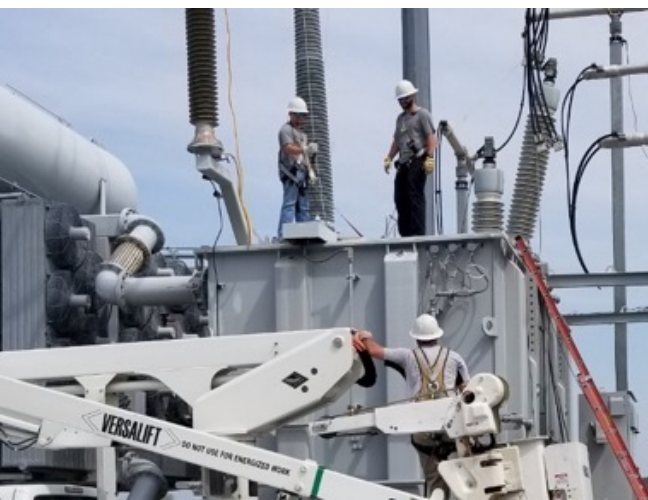
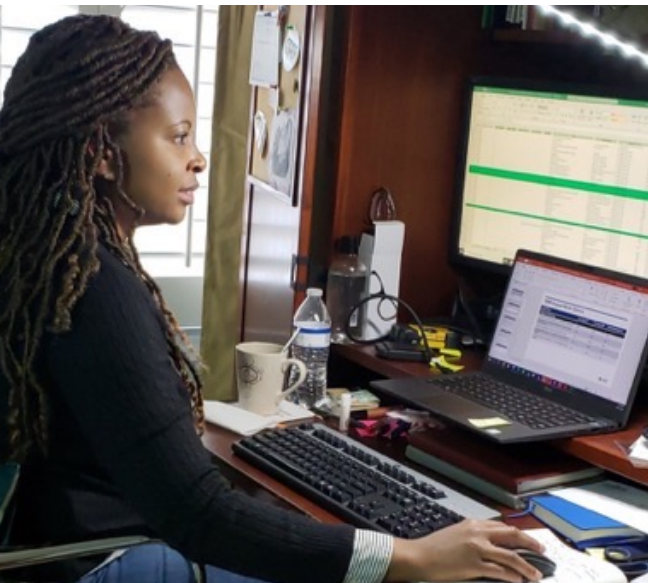
Electric Vehicle and Battery Manufacturers in the TVA Region

More than
12,000 Jobs
\$8.2 Billion
in capital investments

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TVA

**TENNESSEE
VALLEY
AUTHORITY**