



# Boilermakers Southeast Area Tripartite

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David Sorrick

Senior Vice President – Power Operations

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# TVA is Unique

## Structure

Corporate agency of  
the United States with  
independent board

Fixed territory –  
can't expand

No shareholders  
– income reinvested  
in mission

## Finances

Least-cost planning

No taxpayer funding  
– funded by power  
revenues

Statutory debt cap

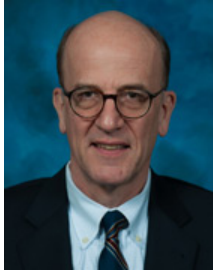
## Purpose

Electricity rates as  
low as feasible

Economic  
development for the  
Valley

Flood control,  
navigation, land  
management

# Board of Directors



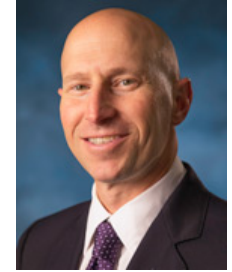
Richard Howorth, Chair  
Oxford, Mississippi  
Sworn in Dec. 16, 2015  
Term expires May 18, 2020



Virginia Lodge  
Nashville, Tennessee  
Sworn in Dec. 23, 2014  
Term expires May 18, 2019



Ronald Walter  
Memphis, Tennessee  
Sworn in Dec. 23, 2014  
Term expires May 18, 2019



Eric Satz  
Nashville, Tennessee  
Sworn in Aug. 13, 2015  
Term expires May 18, 2018



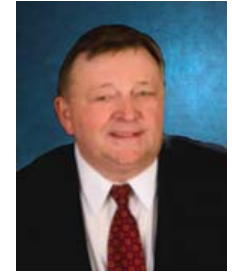
James "Skip" Thompson  
Huntsville, Alabama  
Sworn in Jan. 12, 2018  
Term expires May 18, 2021



A.D. Frazier  
Mineral Bluff, Georgia  
Sworn in Jan. 9, 2018  
Term expires May 18, 2022



Jeff W. Smith  
Knoxville, Tennessee  
Sworn in Jan. 11, 2018  
Term expires May 18, 2022



Kenneth Allen  
White Plains, Kentucky  
Sworn in Jan. 11, 2018  
Term expires May 18, 2021



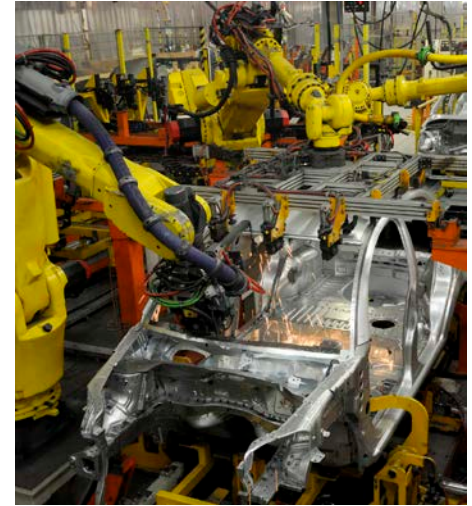
# TVA's Mission of Service



Energy



Environment



Economic  
Development

# Business Performance



TVA

# Exceeding Expectations

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Long-Term Plan

ON TRACK

Improve Operational Performance

Diversify Our Energy Mix

Improve TVA's Financial Health

Reduce Debt

Lower Power Rates

Reduced Operating Expenses by

**\$800 Million**

**\$2 Billion** in Capital Investments

ON TRACK TO

**REDUCE** **\$22 BILLION**  
**DEBT** BY 2023

# Economic Development

**70,000 JOBS**  
Attracted or Retained

*RESULTING IN*

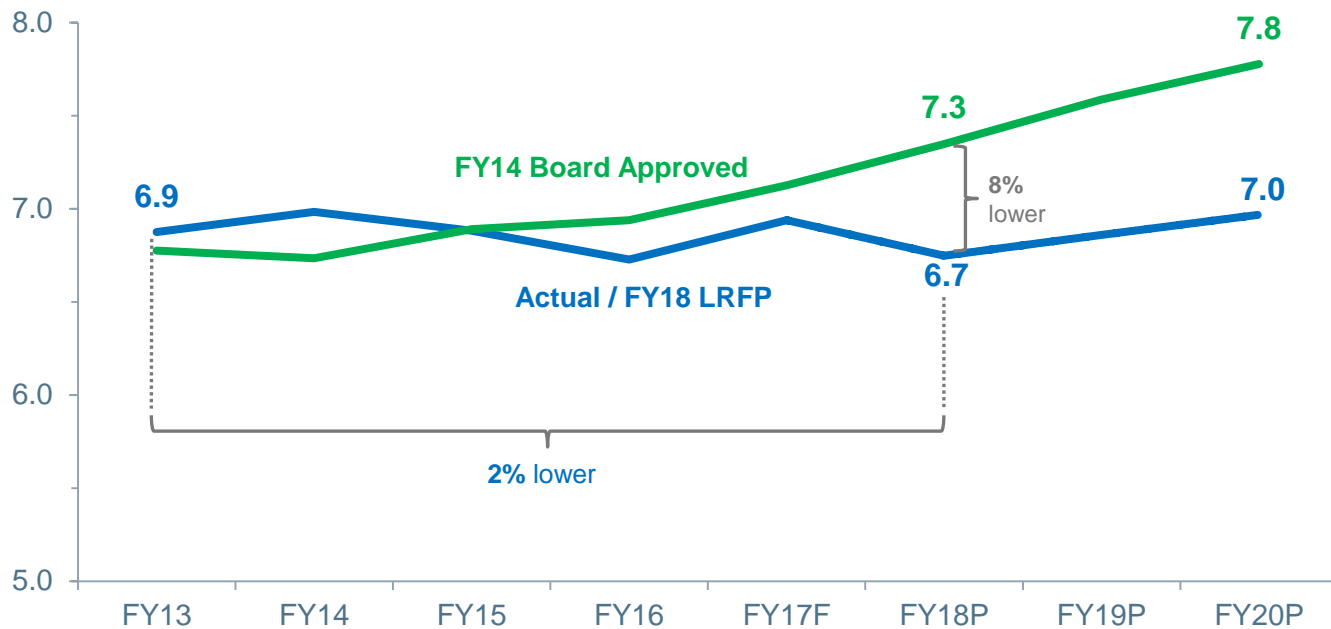
**\$8.3billion**  
Capital Investment

SITE SELECTION MAGAZINE  
12<sup>th</sup> year in a row

**TVA** NAMED  
America's  
**TOP 10 UTILITIES**  
for economic development

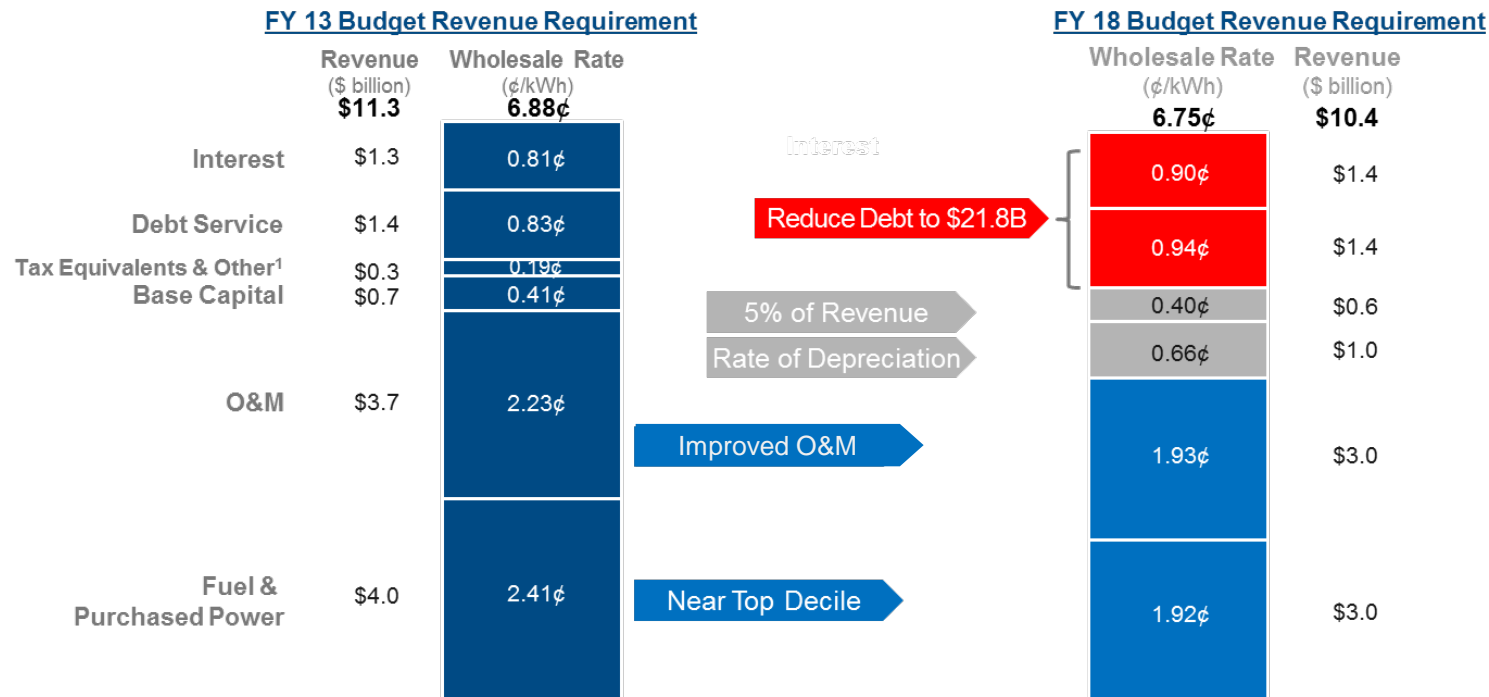
# Maintaining Low Rates

Wholesale Rate (¢/kWh)





# Debt Reduction the Key to Lower Rates



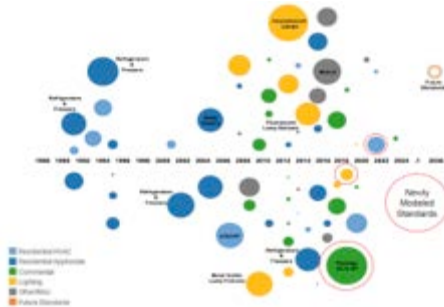
<sup>1</sup>Tax Equivalents & Other for FY13 excludes adjustment for pension expense

# Business Sustainability



# The Evolution has begun...

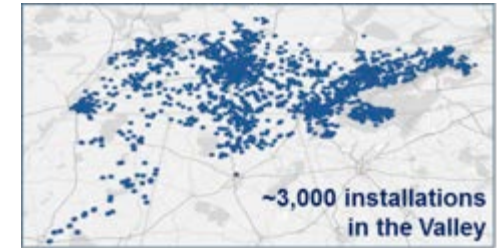
Energy efficiency  
penetration continues



Load is declining despite  
economic recovery



Renewables are becoming  
more attractive



Pledged commitment:



**“We intend to achieve this goal, with or without you” – WalMart Exec**

“It is not necessary to change,  
survival is not mandatory.”

W. Edward Deming



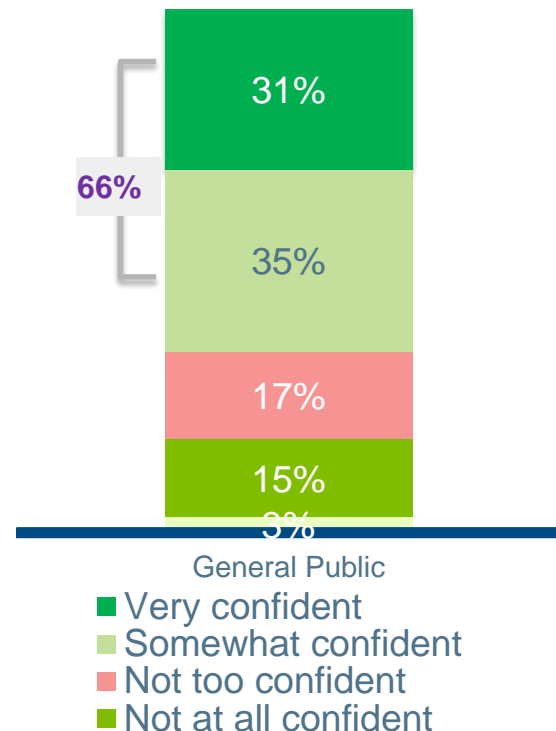


# ... and the public thinks they can have it all

Percentage of 'having electricity generated from renewable sources' keeps increasing

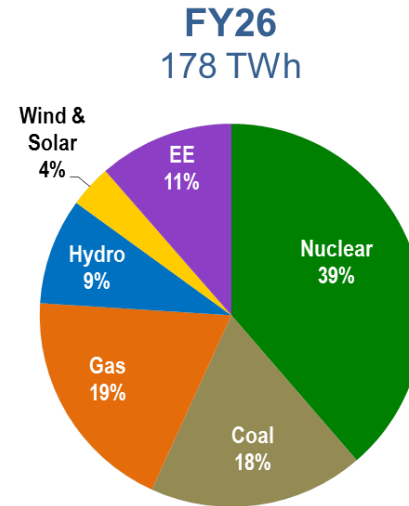
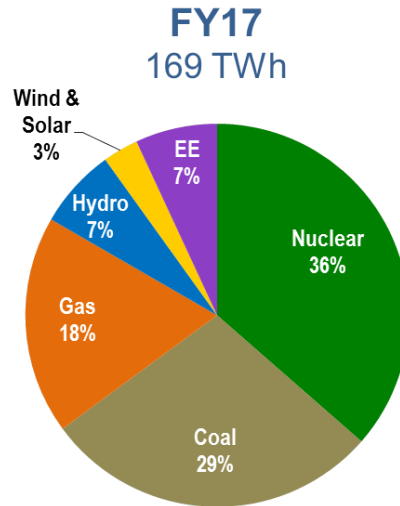
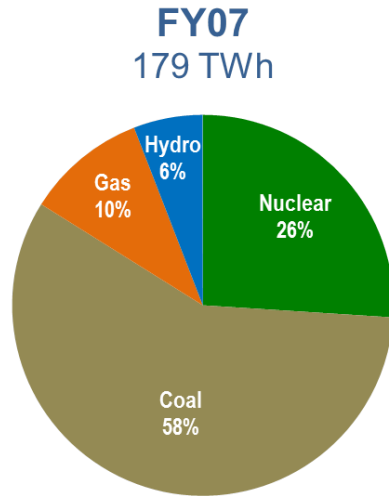
Which is most important to you...	Total
Reliable electricity	39%
Low cost electricity	29%
Having electricity generated from renewable sources	28%
Don't know/Declined	4%

People believe wind and solar are **reliable** and **affordable** energy sources



# Transition to a Diversified Asset Portfolio

Energy from non-emitting resources increases from 32% in FY07 to 63% by FY26



Fuel cost per  
kWh, FY2017

Coal	2.71
Gas	2.78
Nuclear	0.57
Renew	0.00

# While Caring for Each Other

From 2015 to 2018

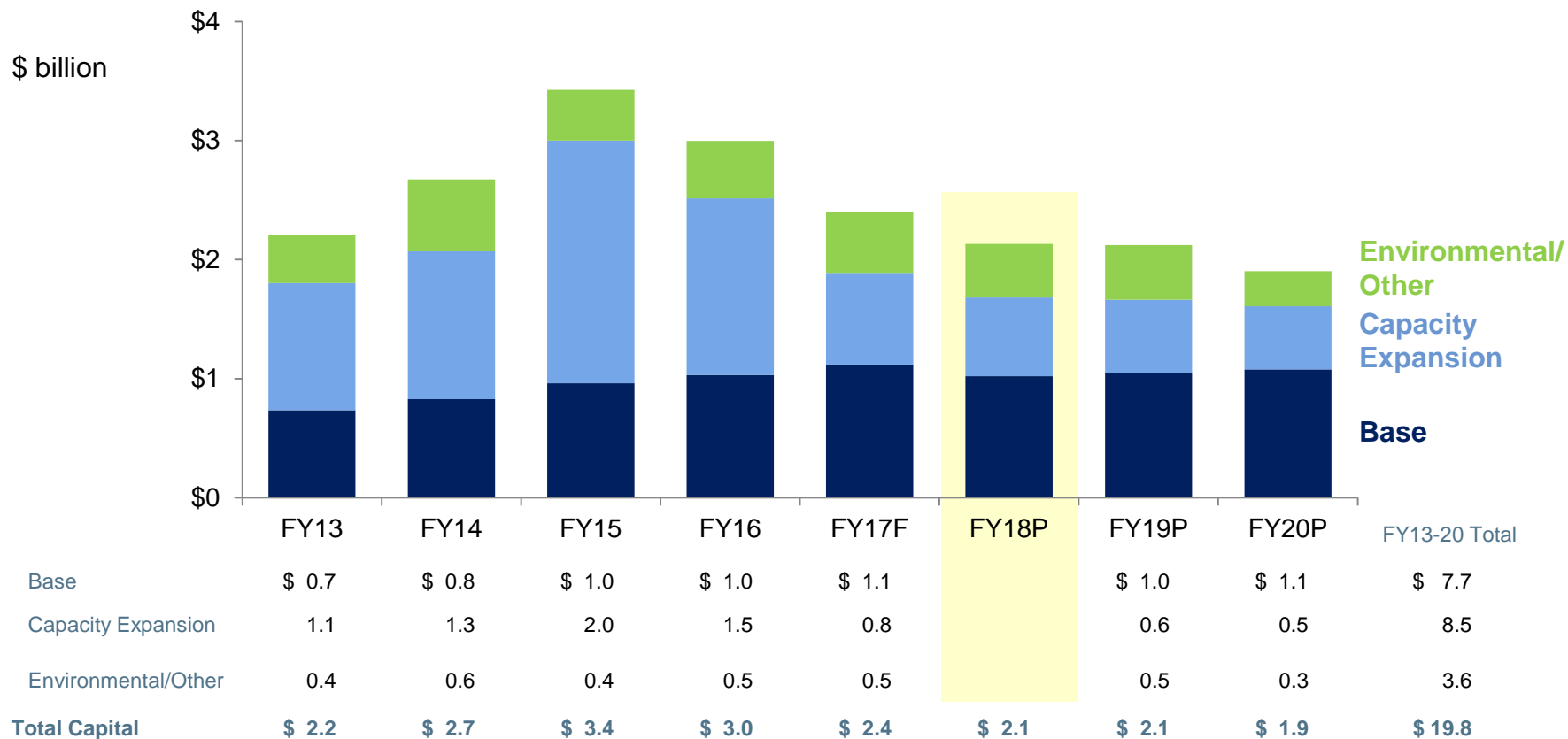
- Idled 5 ½ plants
- Relocated 325 employees
- Voluntary exits of 510 employees
- Robust career transition services
- Two involuntary exits

# Project Updates





# Capital Expenditures



*Capital Expenditures include AFUDC, ARO/Decommissioning, Kingston Ash Cleanup and Bellefonte Regulatory Asset Spend.*

# Paradise Combined Cycle

- In service: April 7, 2017
- Safety incident rate: 0.40
- 2.5 million man hours
- \$995 million  
(\$220 million under budget)
- 1,025 MW



# Allen Combined Cycle

- Estimated in service first quarter of 2018
- Safety incident rate: 0.08
- \$975 million budget
- 1.1 million man hours to date
- 1,076 MW



# Others

## Gallatin Clean Air

- Complete
- \$1.1 billion
- 6.85 million man hours
- Safety incident rate of 1.23

## Johnsonville Combined Cycle

- January 1
- \$157 million

## Shawnee Clean Air

- Complete
- \$206 million
- 1.23 million man hours
- Safety incident rate of 0.17

## Browns Ferry Extended Power Uprate

- 3 Outages February 2018 – April 2019
- 165 MW added

## Coal Combustion Residuals

- Through 2031
- \$2.75 billion
- Safety incident rate of 0.61



# Our Partnership



# TVA is Unique

36% of our workforce  
performs a skilled craft

100% of our skilled  
crafts people are  
represented

We couldn't be  
more proud



YOU are our most critical  
internal partner in  
business sustainability

# We Need Your Help

**Create the highest performing craft workforce in the nation**

## A **passion** for:

- Keeping each other **safe**
- The **mission**
- Only working with the **highest skill**, most **committed, most respectful** talent
- **Teaching** the next generation
- Making the **changes** needed to serve the Valley

## **Peer-to-peer** intolerance for:

- Crossing **safety** barriers
- Not being **work ready**
- Less than journeyman **skill**
- **Quality** issues
- Poor **leadership**

