



Board Meeting

November 10, 2016
Blairsville, Georgia



President's Report

BILL JOHNSON
President and CEO

Blairsville, Georgia



Mission to Serve

Energy

Delivering affordable, reliable power

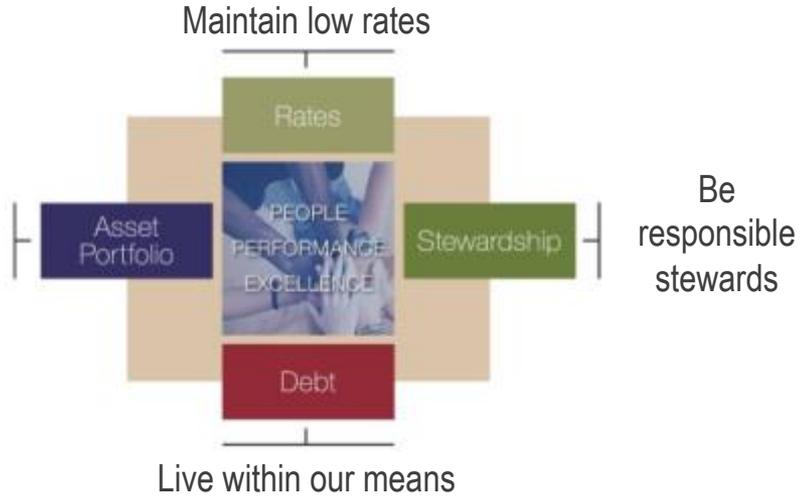
Environment

Caring for our region's natural resources

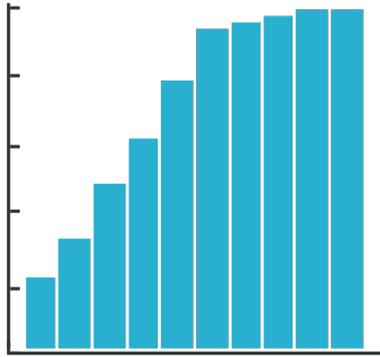
Economic Development

Creating sustainable economic growth

Meet reliability expectations & provide a balanced portfolio



Performance Overall



**REDUCED
LOAD
GROWTH**

**POWER
RATES**

MORE COMPETITIVE
YEAR OVER YEAR

EFFECTIVE RATE

LOWER
TODAY

THAN
5 YEARS
AGO

Performance Overall

FY16 FUEL & PURCHASED POWER COSTS **\$1 BILLION** LESS THAN 2012

\$800 MILLION
O&M COST REDUCTIONS

\$1.8 BILLION
EMPLOYEE EXPENSE REDUCTIONS

FISCAL YEARS 2012-2019

\$300 MILLION DEBT REDUCTION
WHILE INVESTING
\$20 BILLION CAPITAL INVESTMENTS

Energy | Environment | Economic Development



Energy



Nuclear – Watts Bar Unit 2



Energy



Browns Ferry



Energy – Diversified Fleet



Paradise



Energy – Diversified Fleet



Allen



Energy – Diversified Fleet

River Bend Solar Project



Energy – Diversified Fleet

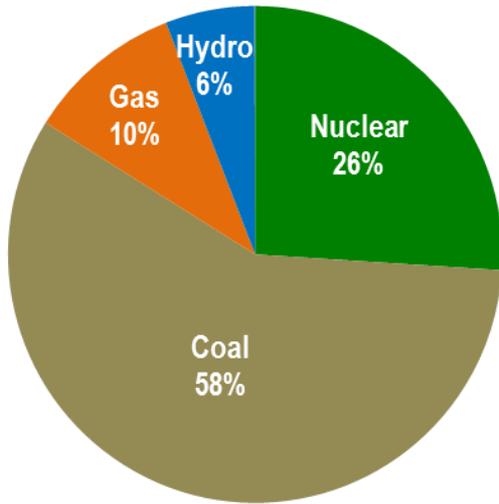


Residential Energy Conservation



Energy

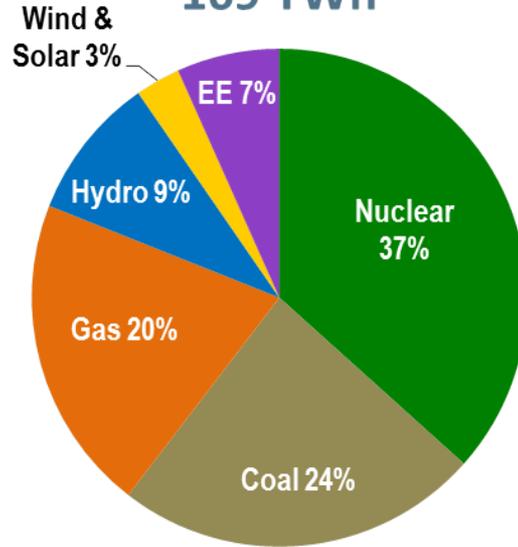
FY07
179 TWh



Total CO2
Emissions
(millions of
tons)

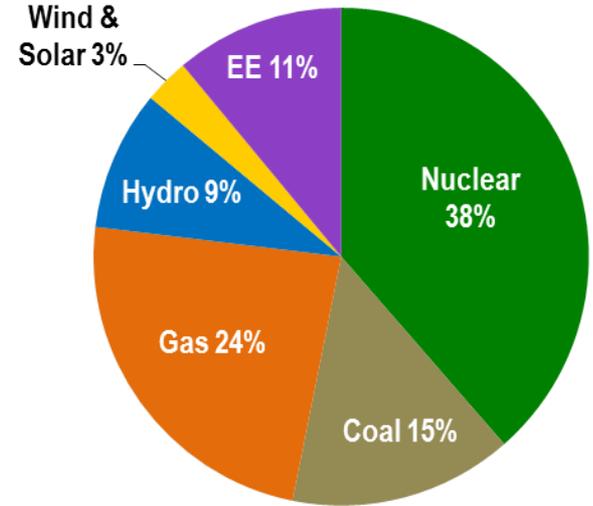
108

FY17
169 TWh



57

FY26
178 TWh



46

Energy



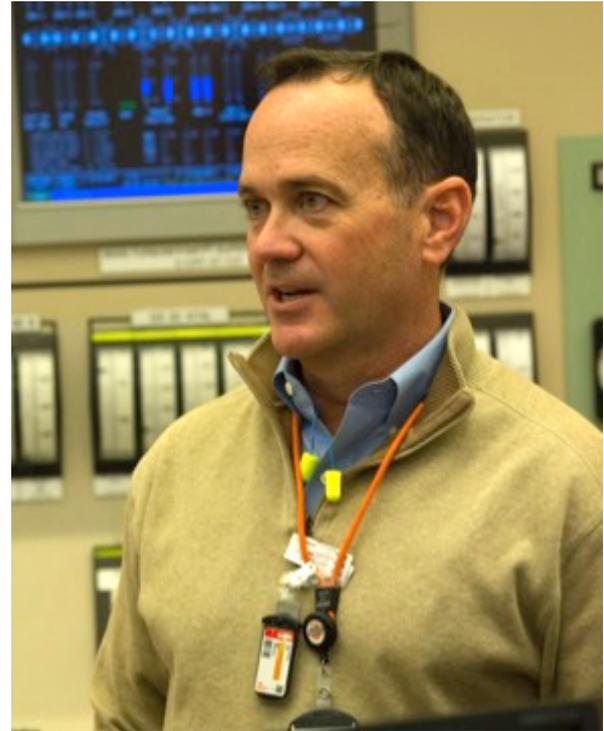
Chip Pardee



Strong Internal Leaders



Joe Grimes
EVP Generation & CNO



Mike Skaggs
EVP Operations

Energy | **Environment** | Economic Development



Energy | **Environment** | Economic Development



Energy | **Environment** | Economic Development

- Year-round navigation
- **Reduced** flood risk
- **Low-cost** hydropower
- **Recreation** opportunities
- Water supply
- **Improved** water quality



Energy | **Environment** | Economic Development



Energy | **Environment** | Economic Development



Energy | Environment | **Economic Development**



STEWARDSHIP – ECONOMIC DEVELOPMENT

Stimulating economic development and investment in the Valley



FY 2016

- **72,000** jobs created and/or retained
- **\$8.3 billion** of capital investment

STEM Education



Robotics



Energy | Environment | Economic Development



Performance

Our People



Performance



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Caring for our region's natural resources

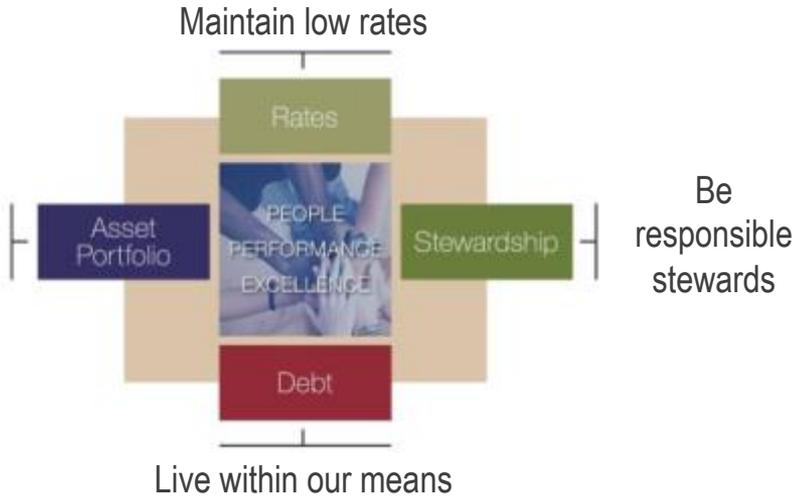


Economic Development

Creating sustainable economic growth



Meet reliability expectations & provide a balanced portfolio



Mission to Serve

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Environment

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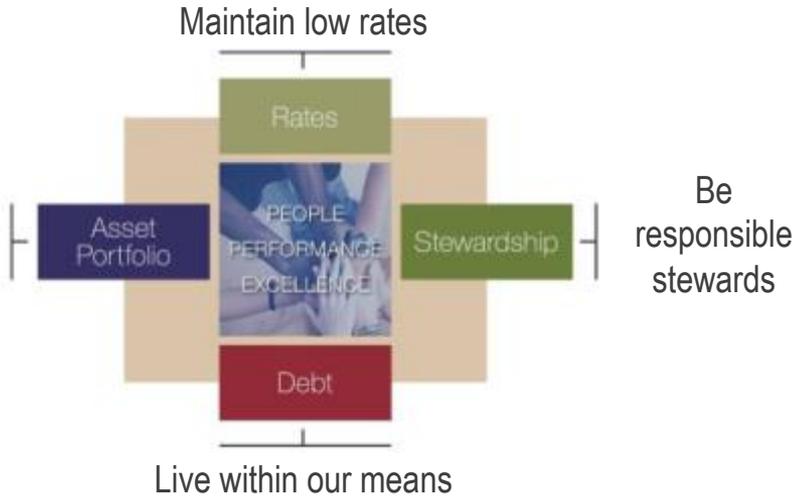


Economic Development

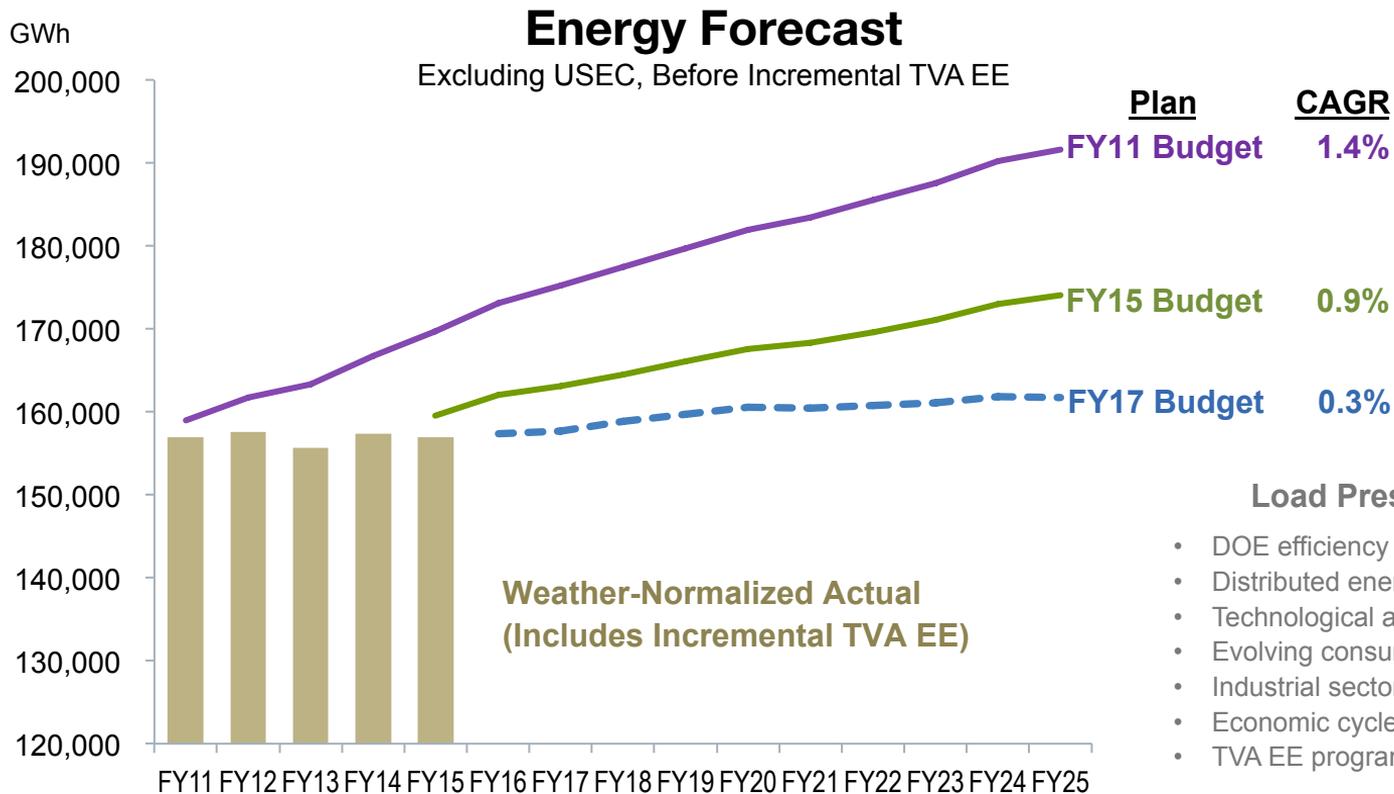
Creating sustainable economic growth



Meet reliability expectations & provide a balanced portfolio



Looking Ahead



Mission to Serve

Energy

Delivering affordable, reliable power



Environment

Caring for our region's natural resources

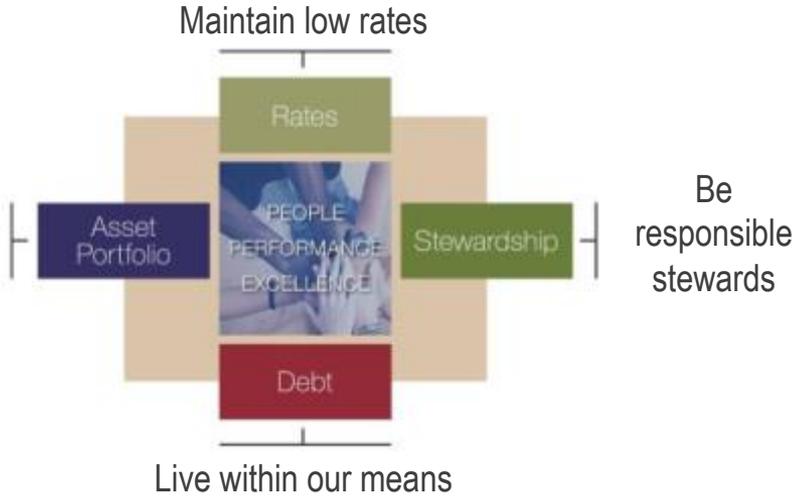


Economic Development

Creating sustainable economic growth



Meet reliability expectations & provide a balanced portfolio



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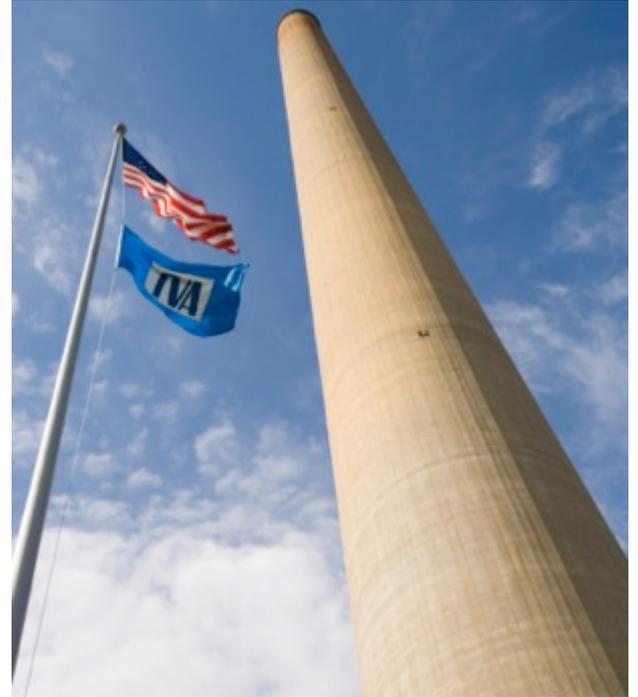


Economic Development

Creating sustainable
economic growth



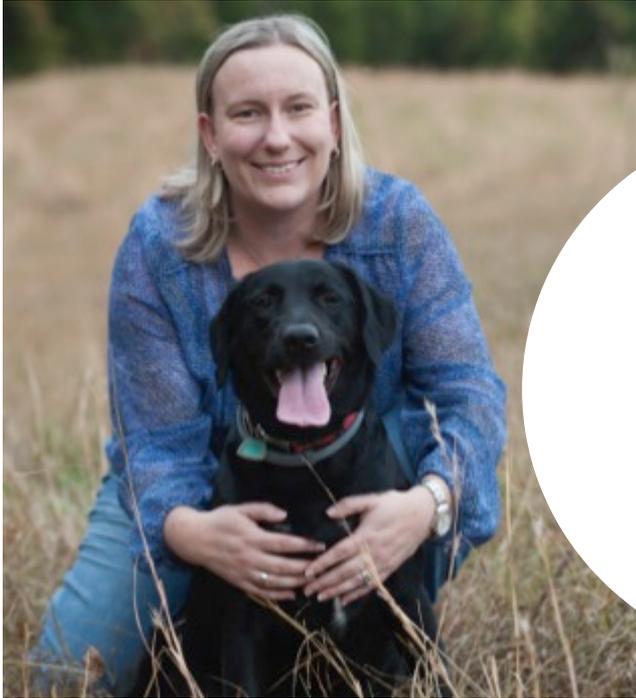
Here
To
Serve



Mission to Serve

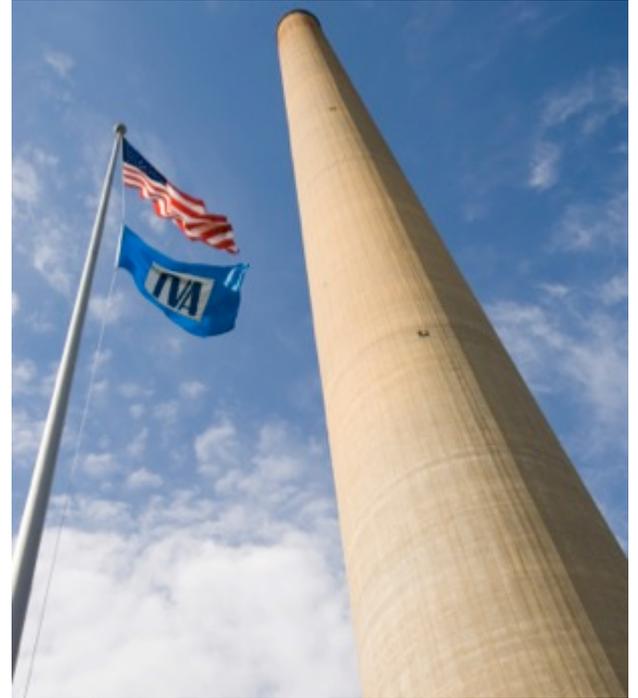


Mission to Serve



Here
To
Serve

Heather Thompson
Project Control Specialist



Mission to Serve





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Finance, Rates, and Portfolio Committee





Financial Performance Update

JOHN THOMAS

Executive Vice President
and Chief Financial Officer

Fiscal Year 2016

Net Income: \$1,233M

- \$641M more than budget and \$122M above last year

Operating Revenues: Effective rate of 6.7¢ v. 6.9¢ last year

- Favorable fuel cost results in lower customer rates

Operating & Maintenance Expenses: \$77M favorable to budget

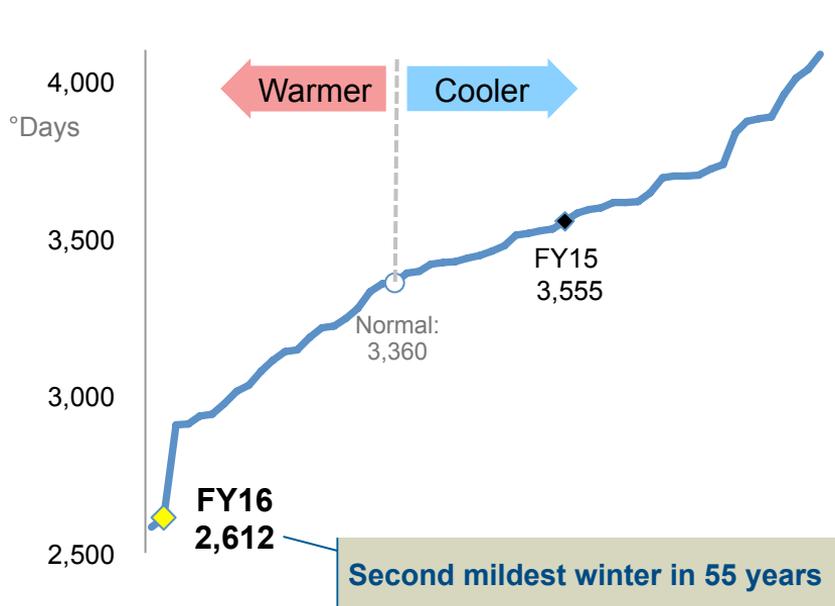
- Reduced O&M over \$800M

Interest Expense: \$229M favorable to budget

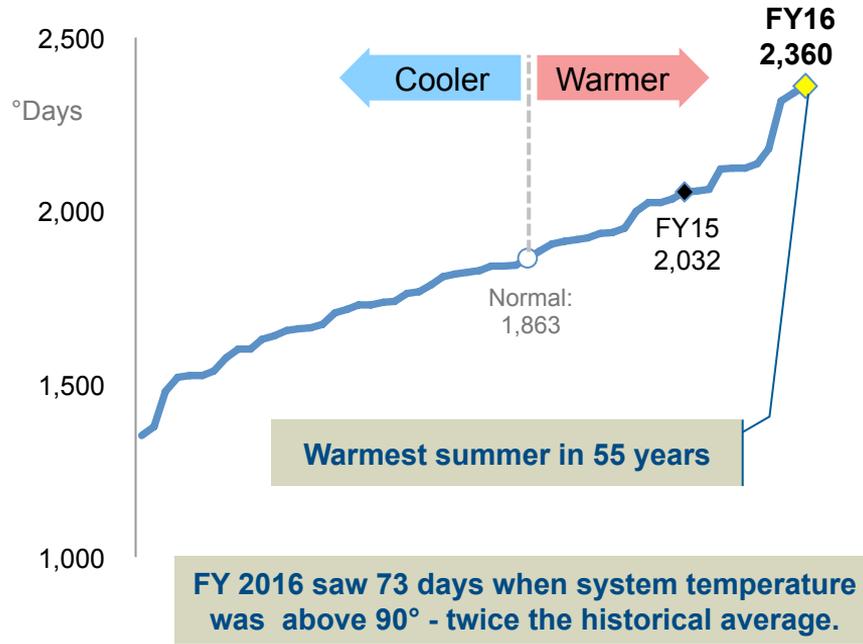
- Total Financing Obligations (TFO): \$776M less than budget
- Additional AFUDC recognition and lower debt rates

Warm Winter – Long, Hot Summer

Heating Degree Days



Cooling Degree Days



Fiscal years 1962 through 2016 (ranked low to high). FY16 heating degree days adjusted for leap year for comparison purposes



Summary Income Statement

\$641M favorable due to lower expenses, despite unfavorable winter weather

\$ million	FY 2016			FY 2015	
	Actual	Budget	Variance Fav/(Unfav)	Actual	'16 v '15 Fav/(Unfav)
Operating Revenue	\$ 10,616	\$ 10,754	\$ (138)	\$ 11,003	\$ (387)
Fuel & Purchased Power	3,090	3,406	316	3,394	304
Total O&M Expense	2,842	2,919	77	2,838	(4)
Taxes, Depreciation, Other	2,315	2,472	157	2,527	212
Interest	1,136	1,365	229	1,133	(3)
Net Income (Loss)	<u>\$ 1,233</u>	<u>\$ 592</u>	<u>\$ 641</u>	<u>\$ 1,111</u>	<u>\$ 122</u>

Summary Cash Flow Statement

TFOs were \$776M favorable to budget, reflecting \$392M of favorability FY16

\$ million	FY 2016			FY 2015	
	Actual	Budget	Variance	Actual	'16 v '15
Cash Flow from Operating Activities	\$ 3,042	\$ 2,632	\$ 410	\$ 3,315	\$ (273)
Cash Flow used in Investing Activities	(3,113)	(3,176)	63	(3,585)	472
Cash Flow from Financing Activities	71	544	(473)	70	1
Net Change in Cash & Cash Equivalents	-	-	-	(200)	200
Ending Cash & Short-Term Investments	300	300	-	300	-
Ending Debt and Financing Obligations	\$ 26,202	\$ 26,978	\$ 776	\$ 26,120	\$ (82)
Statutory Debt	24,175	24,951	776	23,878	(297)

FY 2016 Summary (Results v. Plan)

Lower Rates for our Customers

Lower Expenses

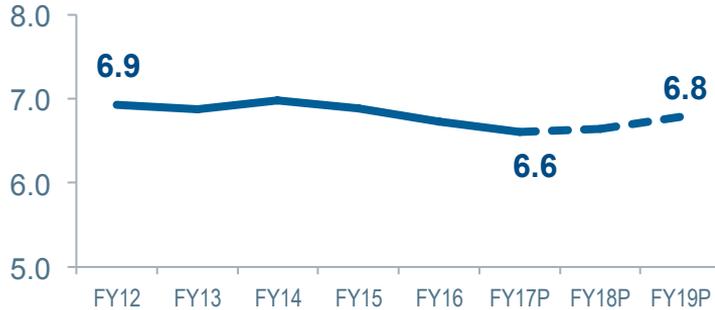
Lower Debt Balance

Higher Net Income

Financial Track Record

Good Strategy, Aligned Planning, Performance Expectations

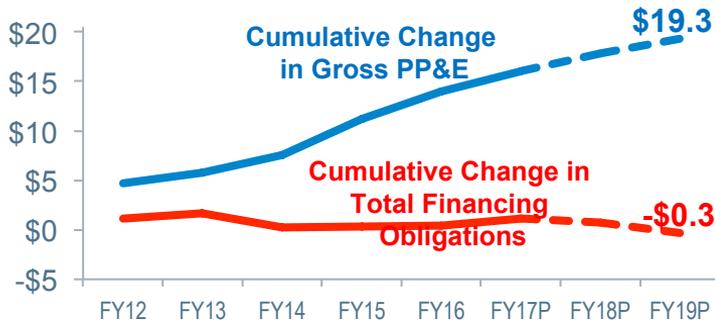
Maintaining Low Rates (¢/kWh)



Aligning Non-Fuel O&M Cost (Gap to top quartile)



Effectively Managing Debt (\$ billions)



Balanced Portfolio – Fuel & PP Cost (\$/MWh)





Section 13 Tax Equivalent Payments

JOHN THOMAS
Executive Vice President
and Chief Financial Officer

Tax Equivalent Payments

The TVA Act requires TVA to make tax equivalent payments to states and counties in which TVA holds power property or sells power.

For Board Consideration:

Approval of the final tax equivalent payments to the states and counties for FY 2016

Approval of the estimated tax equivalent payments to the states and counties for FY 2017

Background

Section 13 of the TVA Act requires five percent of TVA's gross proceeds from power sales* to be redistributed as tax equivalent payments.

The payments to states are determined by the following criteria:

- 50 percent from the state's book value of TVA power properties compared to TVA's total book value of power property
- 50 percent from the state's power sales compared to total TVA power sales

*excluding federal sales, off-system sales, and power used by TVA

Total Tax Equivalent Payments

Tax Equivalent Revenues and Payments

(\$ million)

	FY15	FY16	Estimated FY17
Gross Proceeds from Power Sales	\$10,840	\$10,697	\$10,343
Required % to be Distributed	5%	5%	5%
Total Tax Equivalent Payments*	\$ 542	\$ 535	\$ 517*

* Tax equivalent payments to states will be reduced by 2% for the October 2016 – August 2017 payments. Pending final audited financial information, the remaining amounts determined to be payable will be included in the September 2017 payment.

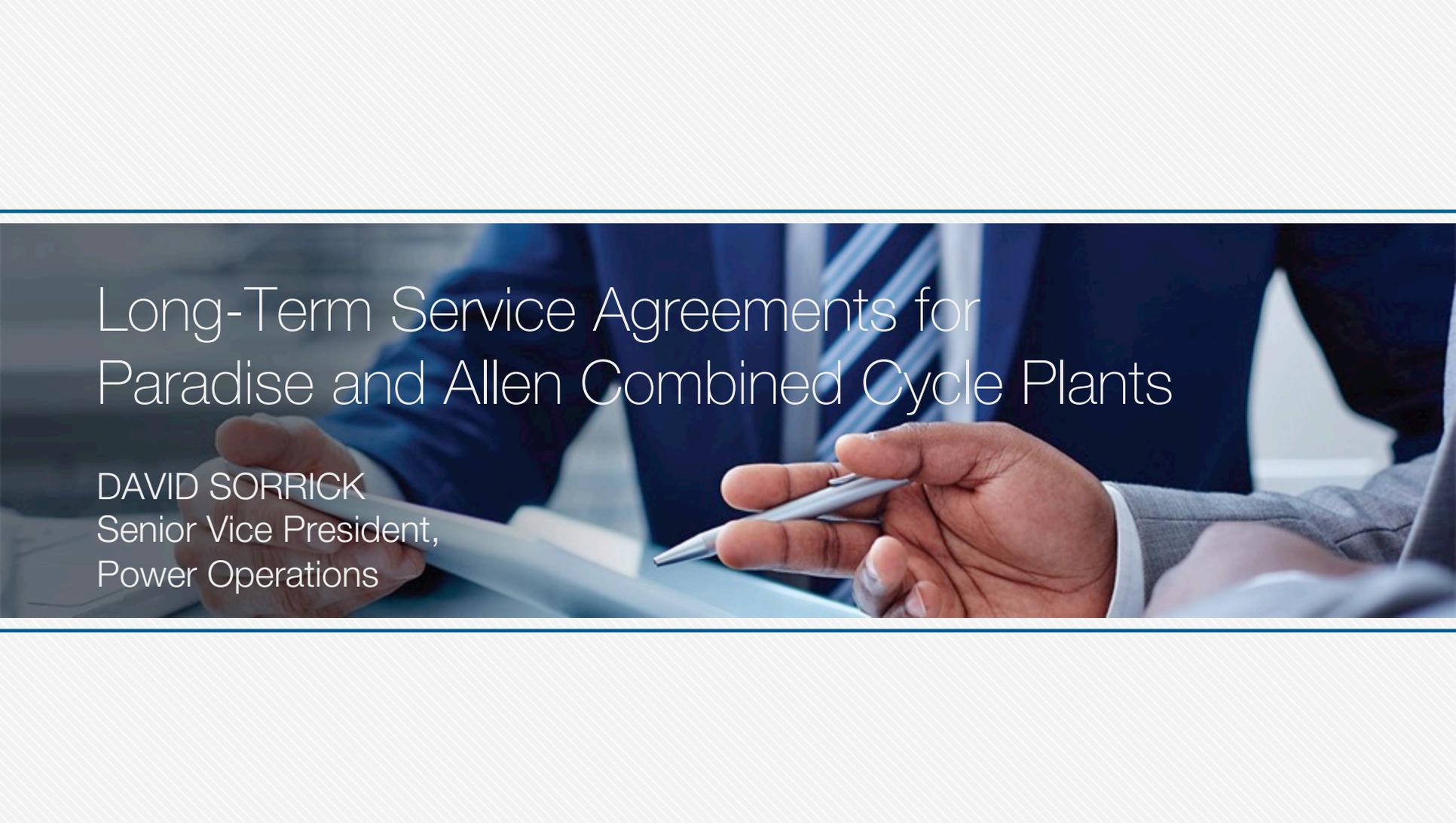
Recommendation

1. Approval of the final tax equivalent payment allocations to the states and counties for FY 2016
2. Approval of the estimated tax equivalent payment allocations to the states and counties for FY 2017



People and Performance Committee



A background image showing a close-up of two people in business attire. One person is holding a pen over a document, and another person is holding a pen over a laptop. The scene is dimly lit, suggesting an office or meeting environment.

Long-Term Service Agreements for Paradise and Allen Combined Cycle Plants

DAVID SORRICK
Senior Vice President,
Power Operations

For Board Consideration

Approval to execute two Long-Term Service Agreement (LTSA) contracts between TVA and General Electric International, Inc. (GEI), the original equipment manufacturer, for TVA's Paradise and Allen Combined Cycle sites

Term

The expected terms, based on TVA's generation plan are 20 and 16 years for Paradise and Allen, respectively. Should TVA operate the facilities sufficiently less than the current generation plan, the agreements will reach end of term at 24 years

Background

- Long-Term Service Agreements are industry standard practice
- Paradise and Allen Combined Cycle plants are newly constructed
- Low gas prices and the need for operational flexibility are driving significant reliance on combined cycle fleet generation
- Multiple options were evaluated in reaching recommendation

Recommendation

Approval to execute two Long-Term Service Agreement (LTSA) contracts between TVA and General Electric International, Inc. (GEI), the original equipment manufacturer, for TVA's Paradise and Allen Combined Cycle sites



Audit, Risk, and Regulation Committee





Nuclear Oversight Committee

Watts Bar Unit 2

MIKE SKAGGS
Executive Vice President,
Operations



Watts Bar Unit 2 Completion Overview

- Safety remained overriding priority
- Quality of asset validated
- Cost within approved budget
- Commercial operations declared



Watts Bar Unit 2 Completion

- Completed design closure
- Completed the Pre-operational Test Program
- Completed the transfer of systems to the operating organization
- Closed required regulatory commitments



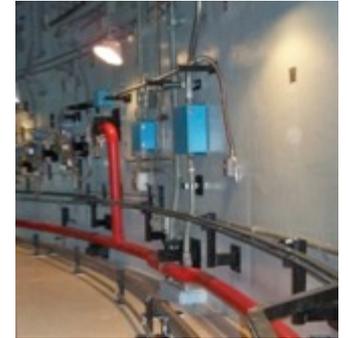
Watts Bar Unit 2 Completion

- Completed initial fuel loading
- Achieved initial criticality
- Achieved initial generator synchronization
- Completed the Power Ascension Test Program



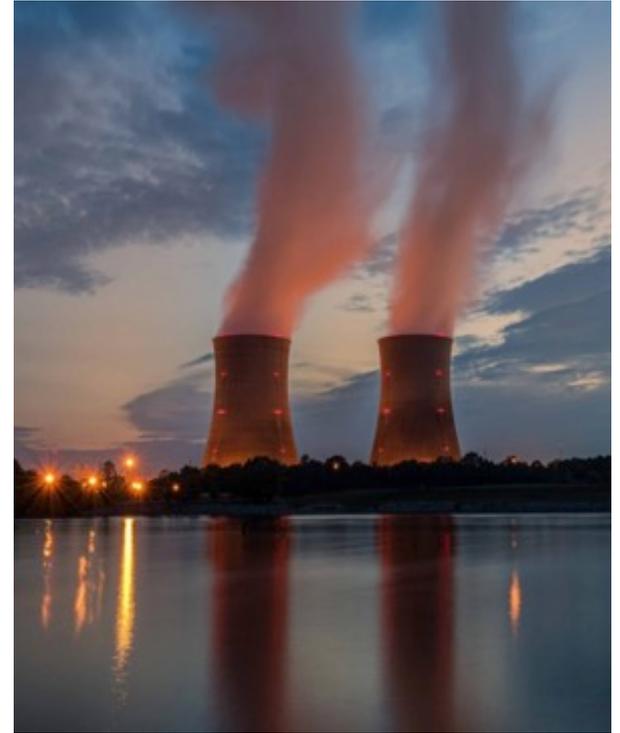
Watts Bar Unit 2 Completion

- Demobilized the project
- Cleaned and restored areas
- Completed transition activities for dual-unit operations
- Declared commercial operations



Watts Bar Unit 2

- Completed Unit 2 the right way – safely and with quality
- Moved methodically through Unit 2 power ascension testing while protecting Unit 1
- Safely and effectively operating a dual-unit site
- Appreciate the hard work, support, and commitment of those involved





External Relations Committee





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