



TENNESSEE VALLEY AUTHORITY

1933-2013



BOARD MEETING

Oxford, Mississippi

November 14, 2013



CHAIRMAN'S REPORT



BOARD MEETING

Oxford, Mississippi

November 14, 2013



PRESIDENT'S REPORT



BOARD MEETING

Oxford, Mississippi

November 14, 2013



TENNESSEE VALLEY AUTHORITY

1933-2013



Bill Johnson

President & CEO

Welcome



THE UNIVERSITY OF
MISSISSIPPI

Welcome



LOCAL POWER COMPANIES

Serving 335,000 homes &
over 83,000 businesses

DIRECTLY SERVED CUSTOMERS

Employing 3,300 people

Our Mission



8 YEARS
of progress
TENNESSEE VALLEY AUTHORITY
1933-2013
TVA

The central graphic features a large blue number '8' with a grey circle around it, containing the word 'YEARS'. Below this is the phrase 'of progress' in a script font, followed by 'TENNESSEE VALLEY AUTHORITY' in a bold sans-serif font, the year '1933-2013', and the TVA logo.

Pickwick



Magnolia



Southaven



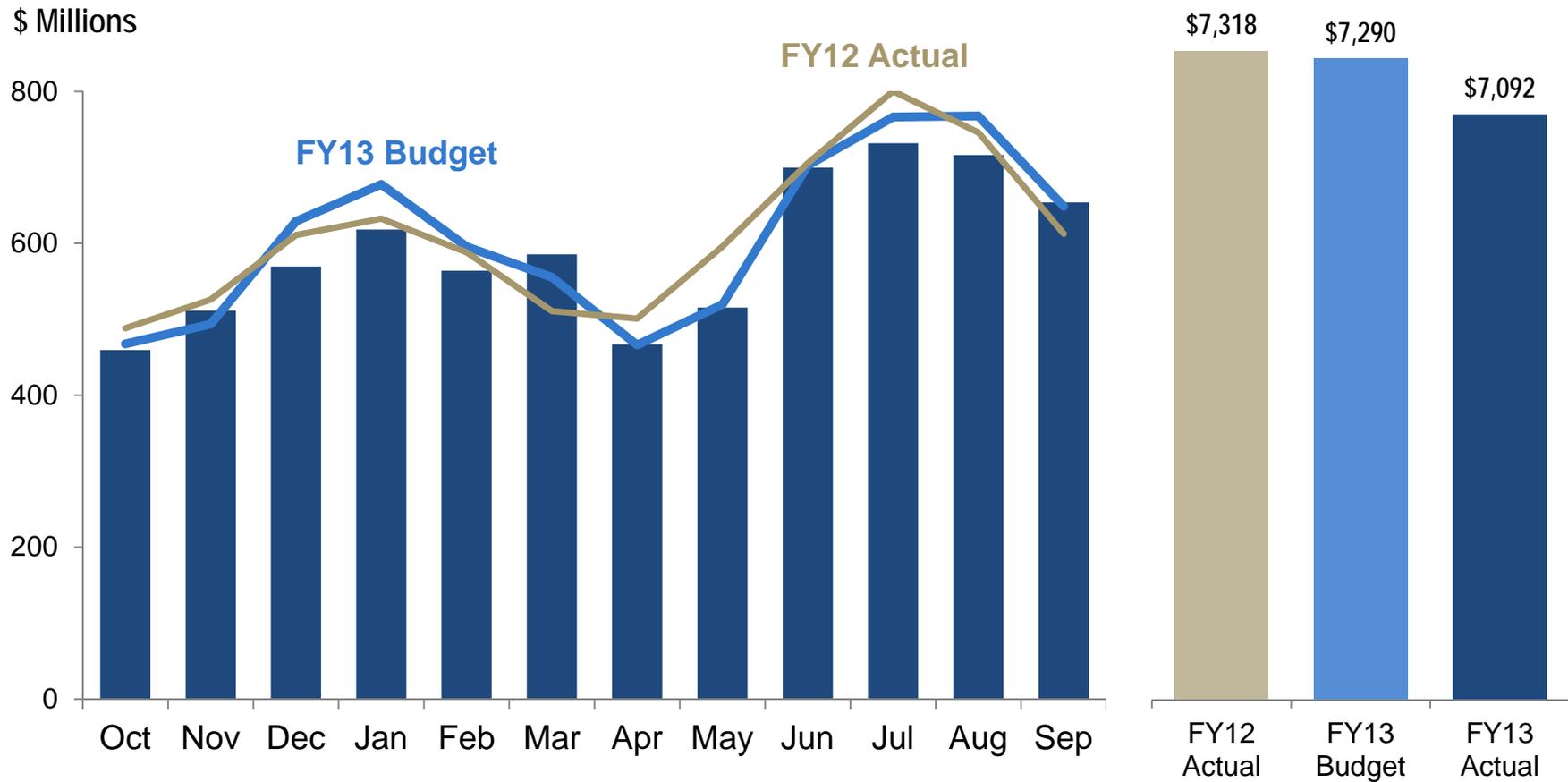
Energy | Environment | Economic Development



Revenues



Fiscal Year Non-Fuel Revenue was \$198M below budget



Energy | Environment | Economic Development



Energy | Environment | Economic Development

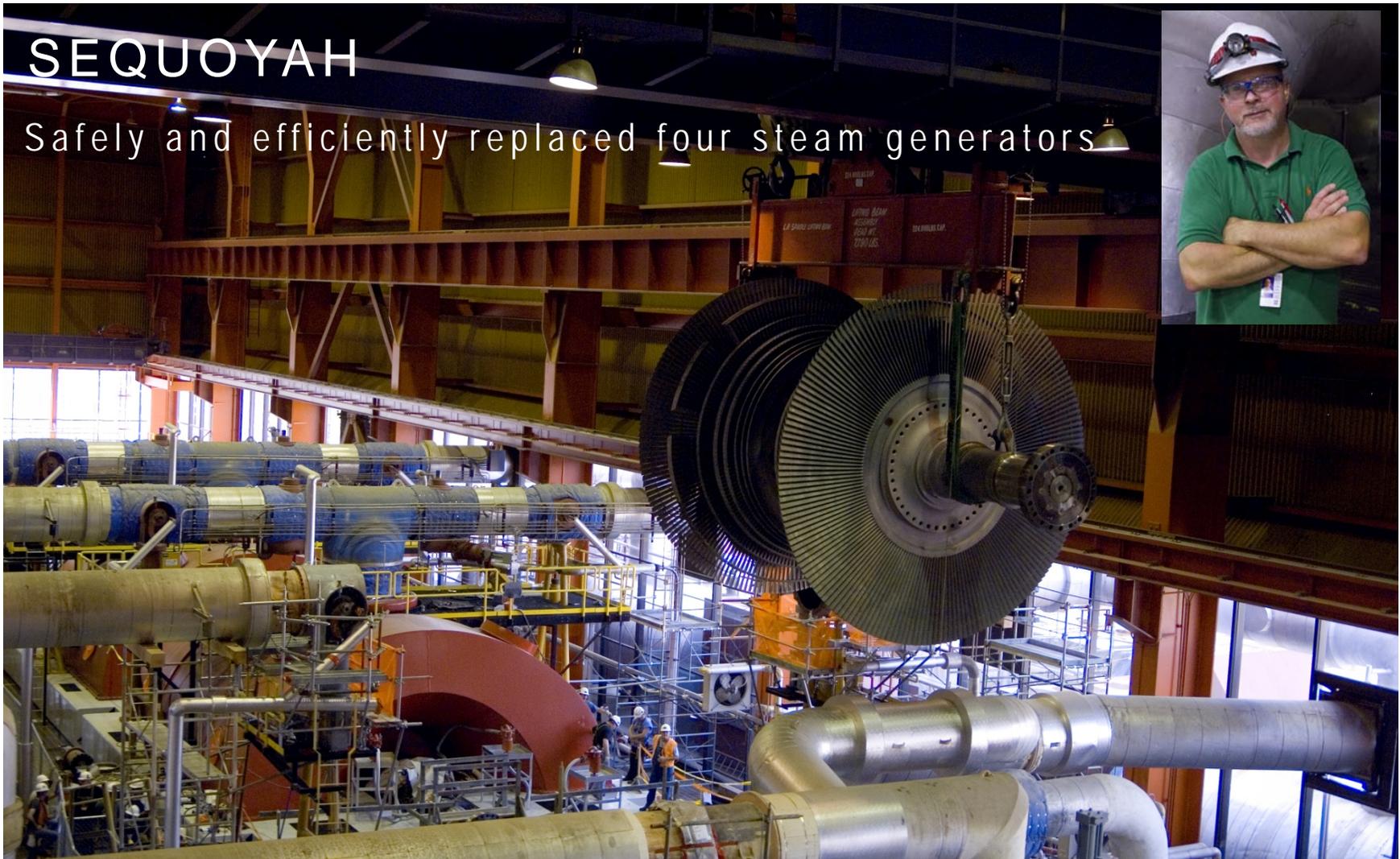


BROWNS FERRY



SEQUOYAH

Safely and efficiently replaced four steam generators

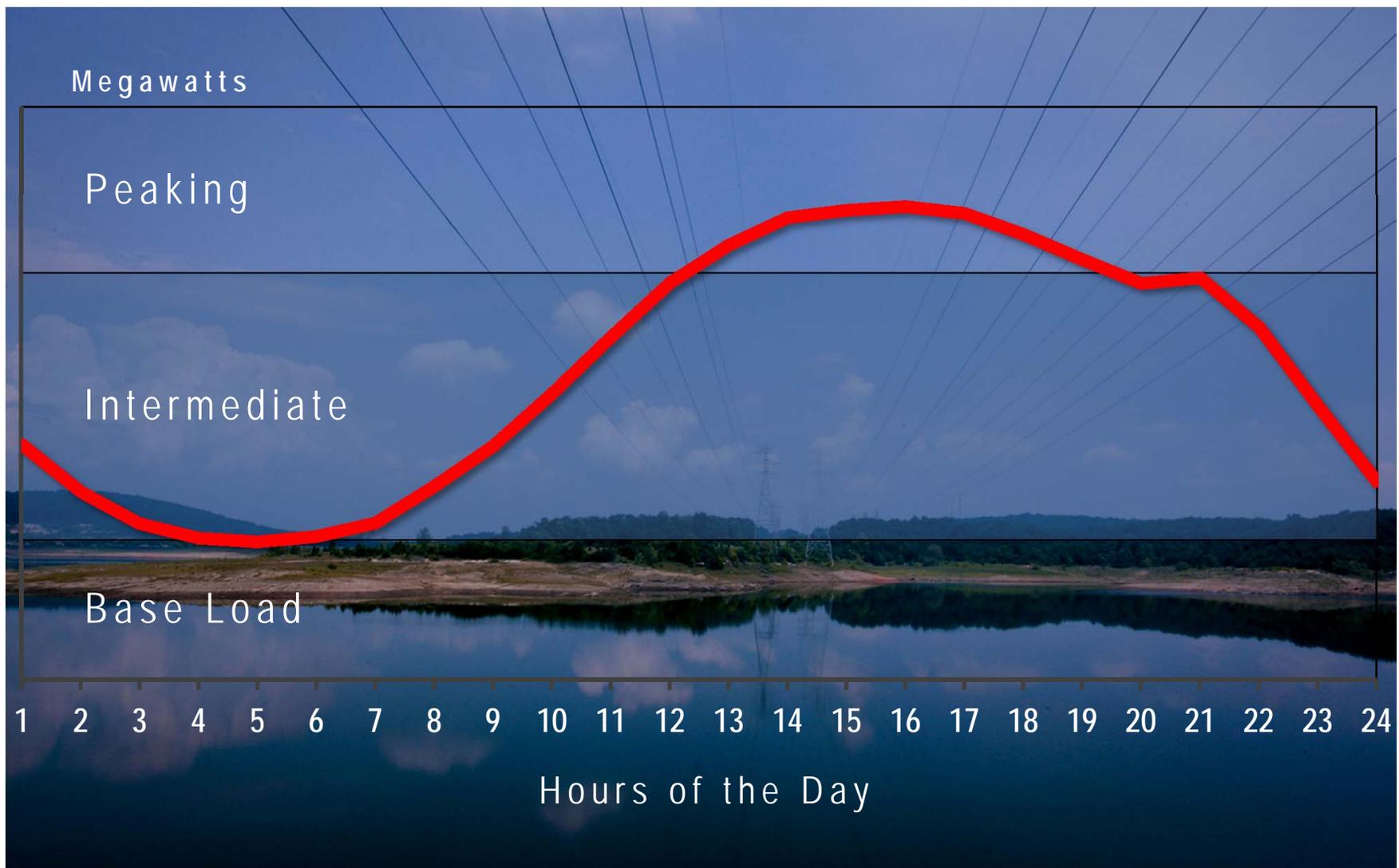


WATTS BAR



COAL





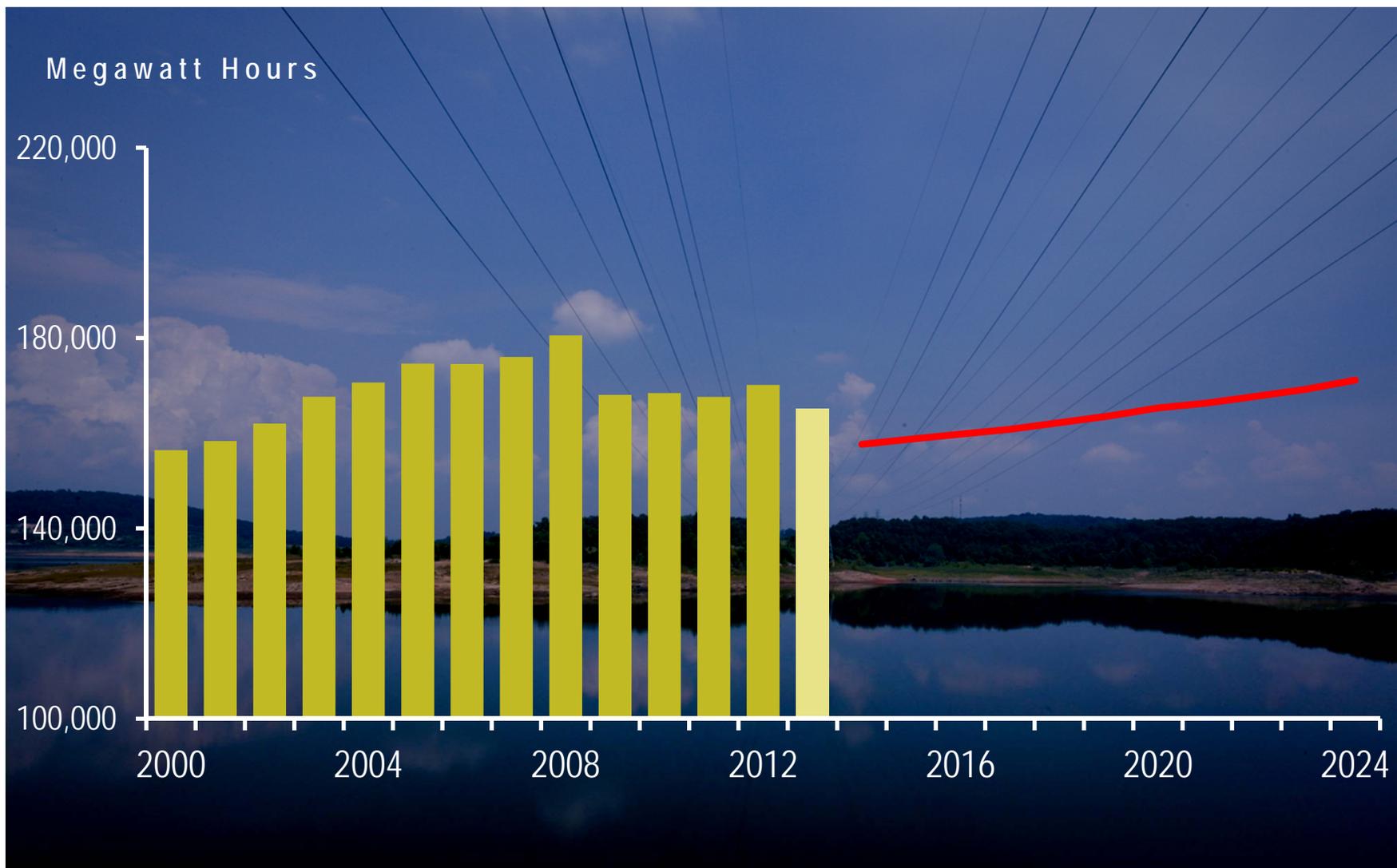
Energy | Environment | Economic Development



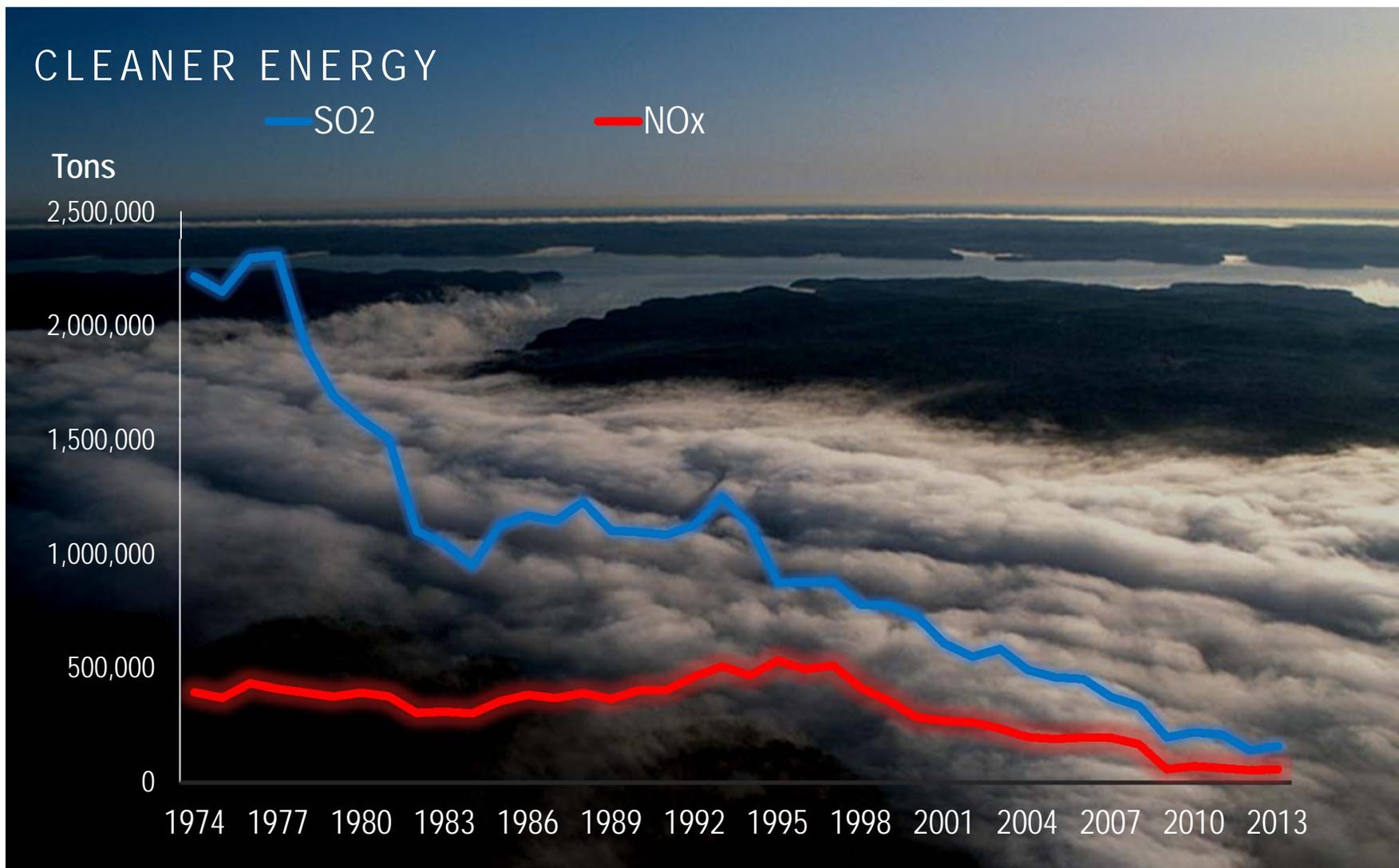
Energy | Environment | Economic Development



Load Growth Projections



Environmental Pressures



2014 Strategic Imperatives



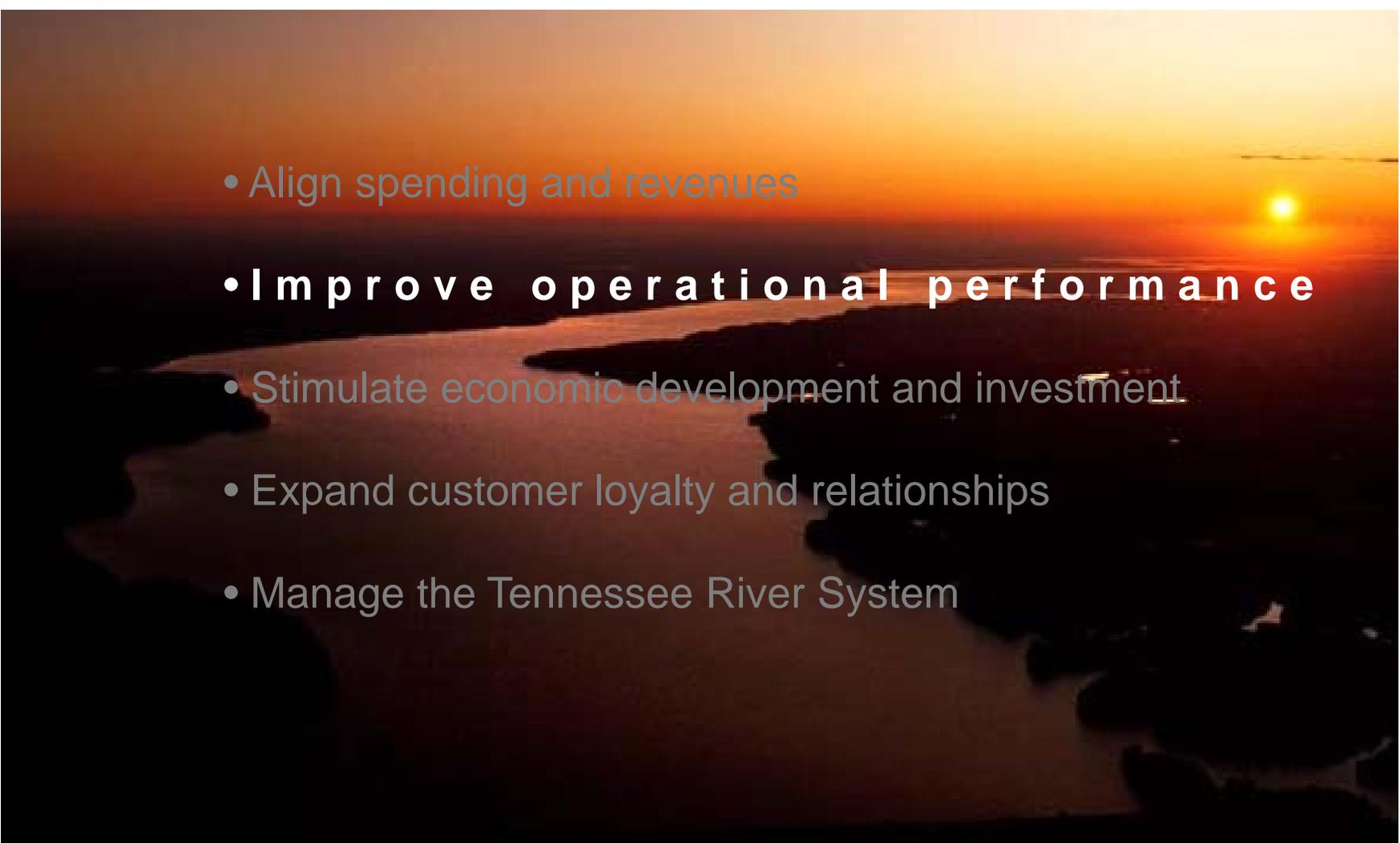
2014 Priorities



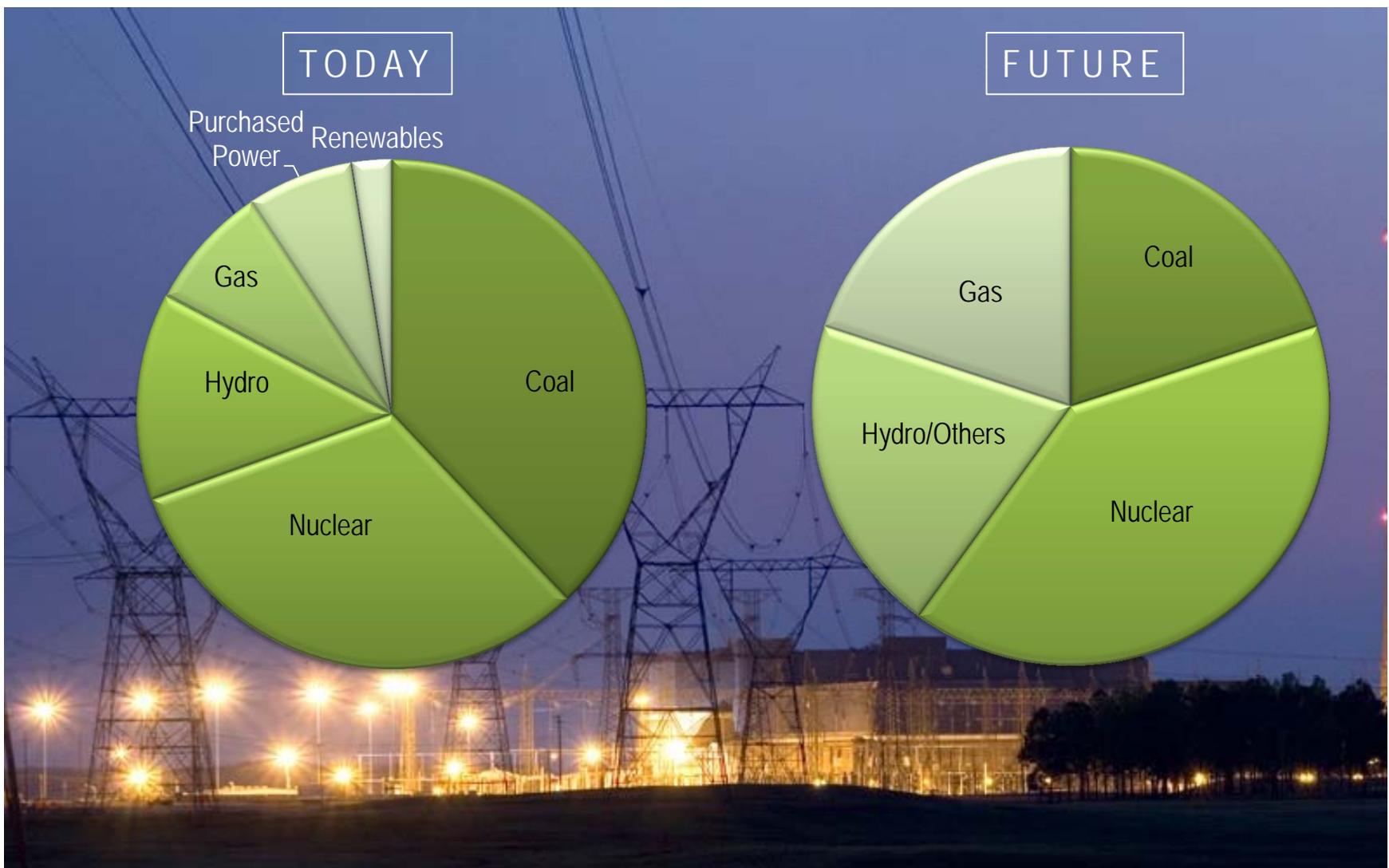
- 
- A photograph of a sunset over a wide river, likely the Tennessee River. The sun is low on the horizon, creating a warm orange and yellow glow that reflects on the water. The sky transitions from a bright orange near the sun to a darker, deep blue at the top. The river flows from the foreground towards the horizon, with some land visible on the right side.
- Align spending and revenues
 - Improve operational performance
 - Stimulate economic development and investment
 - Expand customer loyalty and relationships
 - Manage the Tennessee River System

2014 Priorities



- 
- A photograph of a sunset over a wide river, likely the Tennessee River. The sun is low on the horizon, creating a bright orange and yellow glow that reflects on the water. The sky transitions from orange to a darker blue. The river flows from the foreground towards the horizon, with some land visible on the banks.
- Align spending and revenues
 - **Improve operational performance**
 - Stimulate economic development and investment
 - Expand customer loyalty and relationships
 - Manage the Tennessee River System

Board Request



Serving the Region





TENNESSEE VALLEY AUTHORITY

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COMMITTEE
FINANCE, RATES
AND PORTFOLIO



BOARD MEETING

Oxford, Mississippi

November 14, 2013

FINANCE, RATES, AND PORTFOLIO COMMITTEE

FINANCIAL PERFORMANCE UPDATE

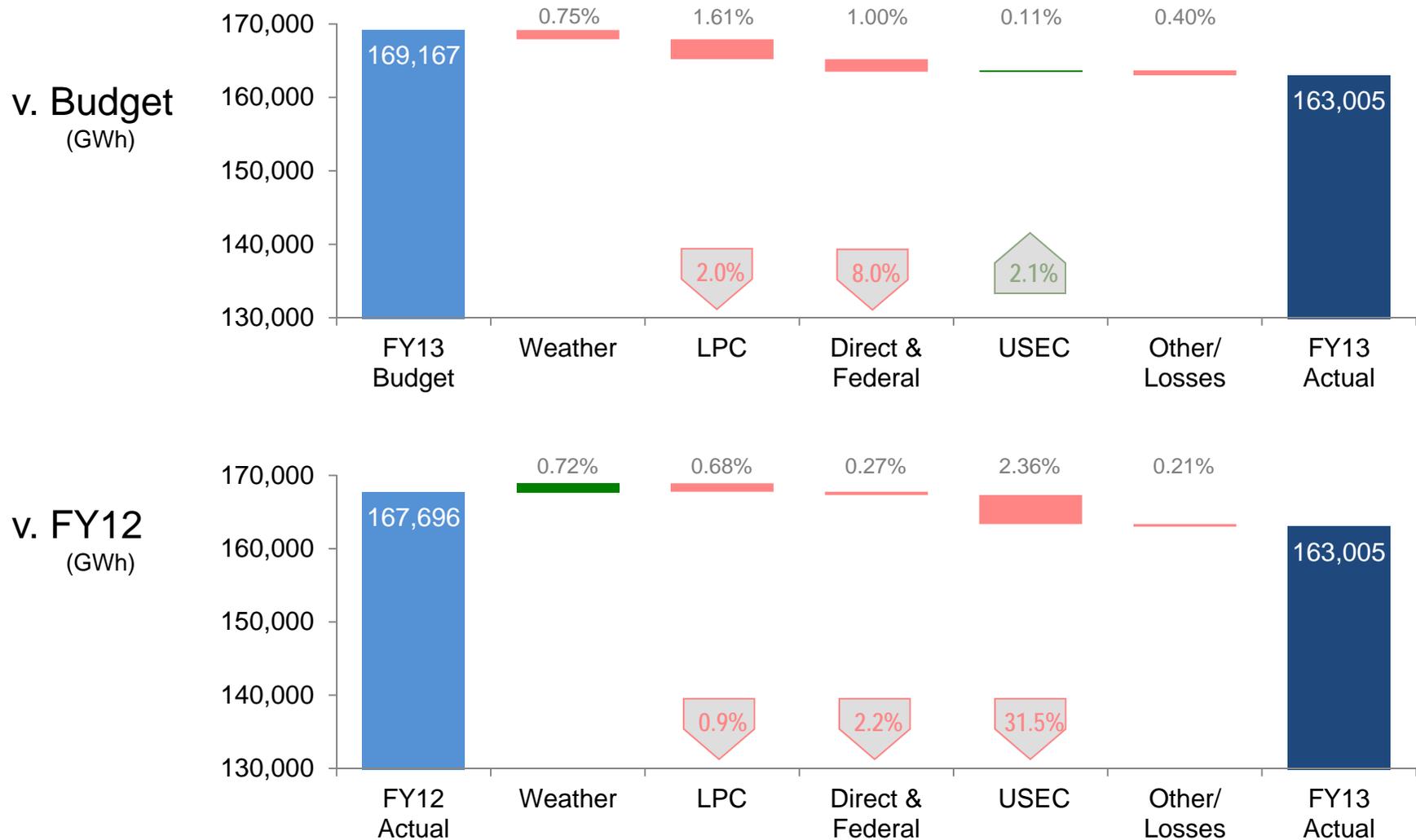
NOVEMBER 14, 2013

FISCAL YEAR 2013

- Lower base revenues than planned with milder weather
- Fuel is favorable from increased hydro generation as result of higher rainfall/runoff – offset by higher than planned natural gas prices
- Cash flow impacted by lower revenues but offset by management actions
- Capacity expansion slowed to match current conditions

FY13 SYSTEM ENERGY LOWER

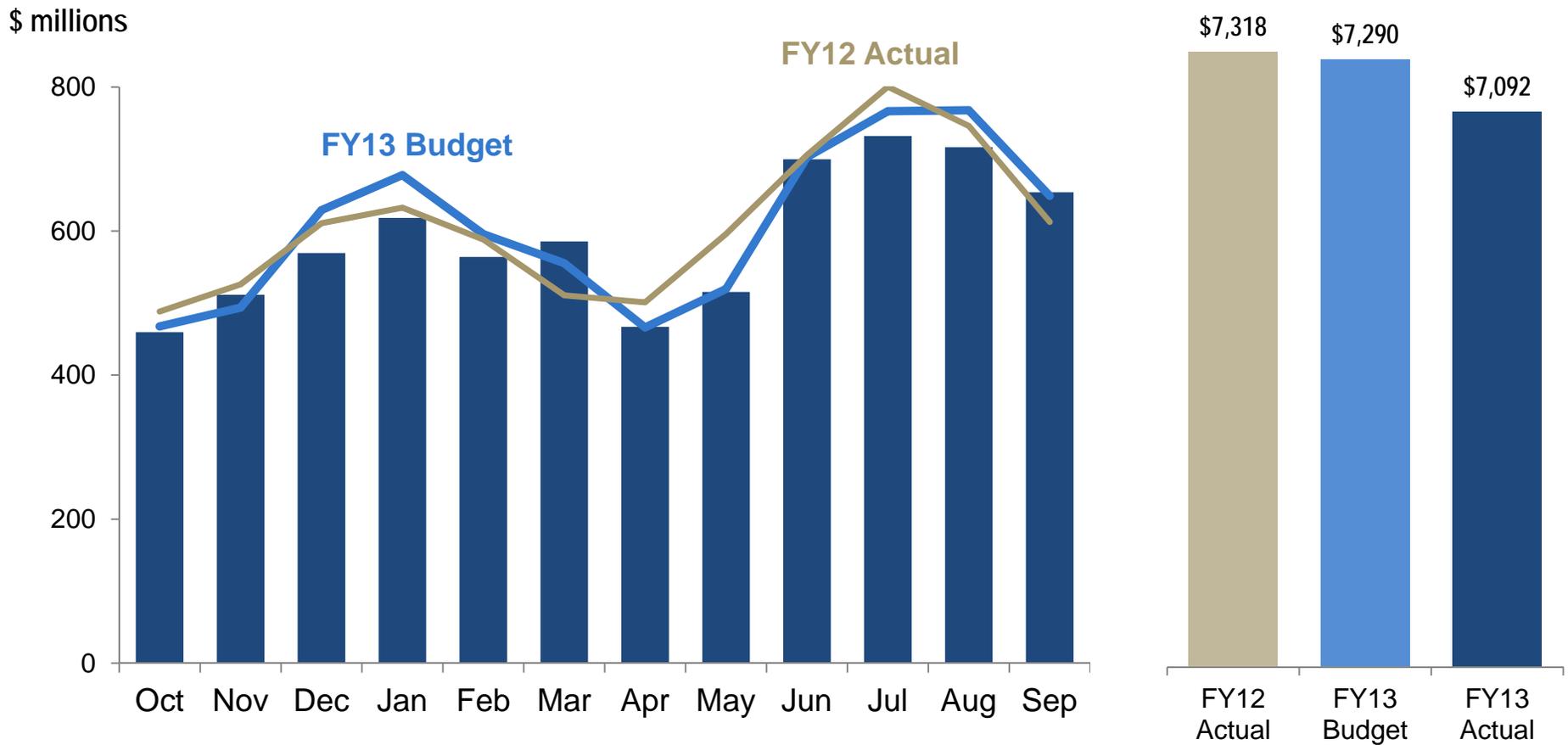
3.6% below budget and 2.8% below FY12



System Energy = sales + system losses

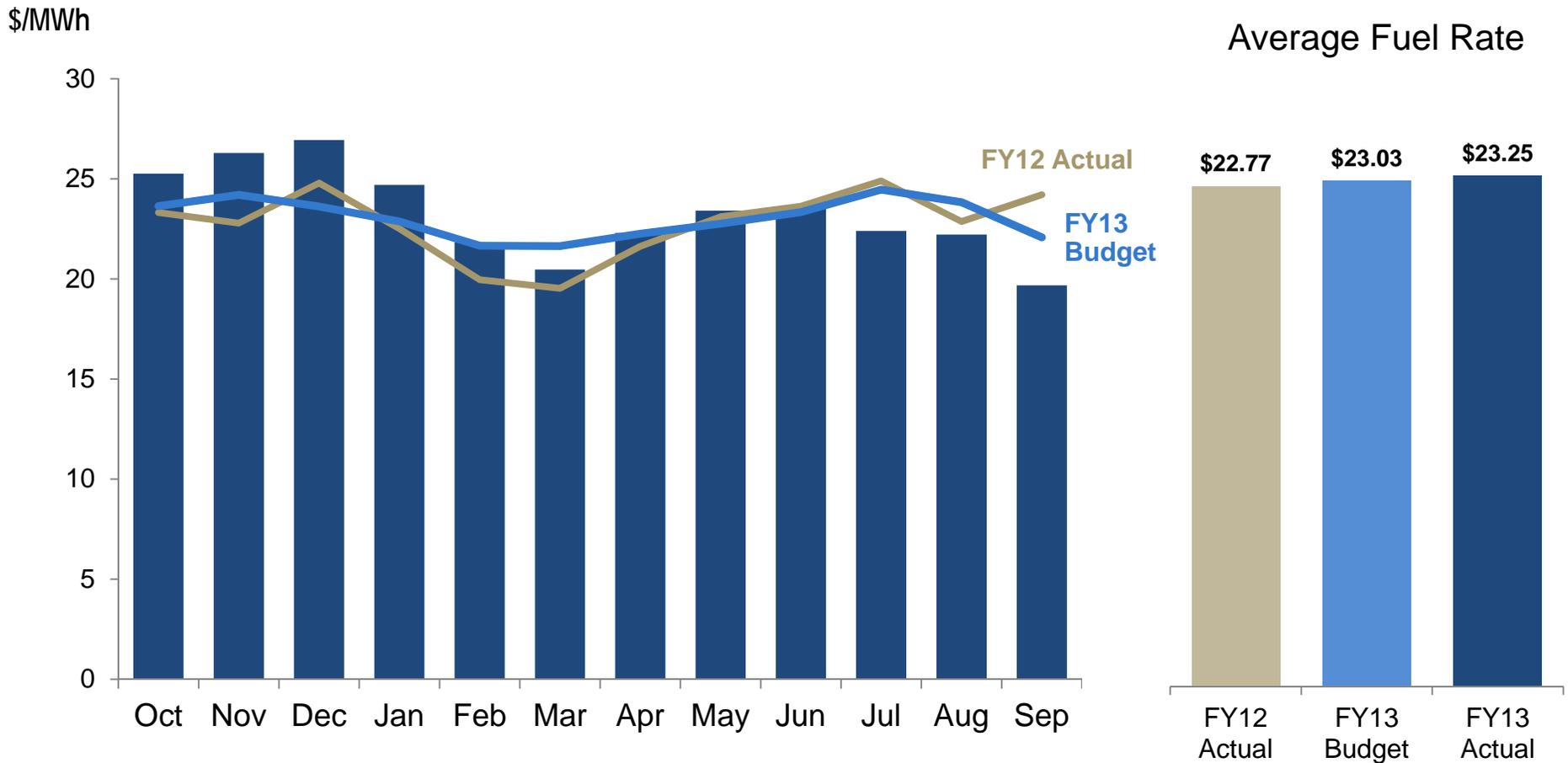
BASE REVENUES

Fiscal Year Non-Fuel Revenue was \$198M below budget



LOWER FUEL RATES

Record Hydro Generation helped lower FY13 Q4 Fuel Rates



Preliminary

FYTD13 INCOME STATEMENT

FYTD Income is favorable to budget by \$189 million & prior year by \$211million

<i>\$ millions</i>	FY13			FY12	Diff
	Actuals	Budget	Variance	Actuals	13 vs 12
Total Operating Revenue	\$ 10,956	\$ 11,236	\$ (280)	\$ 11,220	\$ (264)
Fuel & Purchased Power	3,847	3,968	121	3,869	22
O&M Routine	2,231	2,441	210	2,336	105
O&M Outage/Other	1,197	1,220	23	1,174	(23)
Taxes, Depreciation, Other	2,184	2,189	5	2,508	324
Interest	1,226	1,336	110	1,273	47
Net Income/(Loss)	\$ 271	\$ 82	\$ 189	\$ 60	\$ 211

Preliminary

FYTD13 CASH FLOW STATEMENT

Both Ending Cash and Statutory Debt are favorable to budget

<i>\$ millions</i>	FY13			FY12	Diff
	Actual	Budget	Variance	Actuals	13 vs 12
Beginning Cash/Short-term Investments	\$ 868	\$ 200	\$ 668	507	\$ 361
Cash Flow from Operating Activity	2,435	2,119	316	2,574	(139)
Cash Flow (used in) Investing Activity	(2,223)	(2,727)	504	(2,513)	290
Cash from Financing Activity	522	608	(86)	300	222
Ending Cash/Short-term Investments	\$ 1,602	\$ 200	\$ 1,402	\$ 868	\$ 734
Statutory Debt	\$ 24,820	\$ 25,220	\$ (400)	\$ 24,103	\$ 717
Total Financing Obligations	\$ 27,473	\$ 27,473	\$ -	\$ 26,912	\$ 561

FINANCIAL TRACK RECORD

\$12 billion increase in productive assets

- \$2.8 billion increase in financing obligations

Reduced long-term debt average coupon rate from 5.8% to 4.9%

Extended average debt term from 16 to 18 years

Increased credit facilities to \$2.7 billion

Finished FY13 with \$1.6 billion in cash

- Plans to accelerate debt reduction

FINANCE, RATES, AND PORTFOLIO COMMITTEE

SECTION 13 TAX EQUIVALENT PAYMENTS

FOR BOARD CONSIDERATION

Approve the final tax equivalent payment allocations to the states and counties for Fiscal Year 2013

Approve the estimated tax equivalent payment allocations to the states and counties for Fiscal Year 2014

BACKGROUND

- TVA Act requires five percent of TVA's gross proceeds from power sales to be redistributed as tax equivalent payments
- The payments are determined by the following criteria:
 - 50% from the states' book value of power properties compared to TVA total power properties
 - 50% from the states' power sales compared to TVA total power sales

TAX EQUIVALENT PAYMENTS

\$ millions	Final	Final	Estimated
State	FY 2012	FY 2013	FY 2014
Alabama	\$ 123	\$ 111	\$ 104
Georgia	9	8	9
Illinois	1	1	1
Kentucky	47	47	39
Mississippi	41	39	37
North Carolina	3	3	3
Tennessee	354	337	328
Virginia	1	1	1
Total	\$ 579	\$ 547	\$ 522

RECOMMENDATION

Approve the final tax equivalent payment allocations to the states and counties for Fiscal Year 2013

Approve the estimated tax equivalent payment allocations to the states and counties for Fiscal Year 2014

FINANCE, RATES, AND PORTFOLIO COMMITTEE

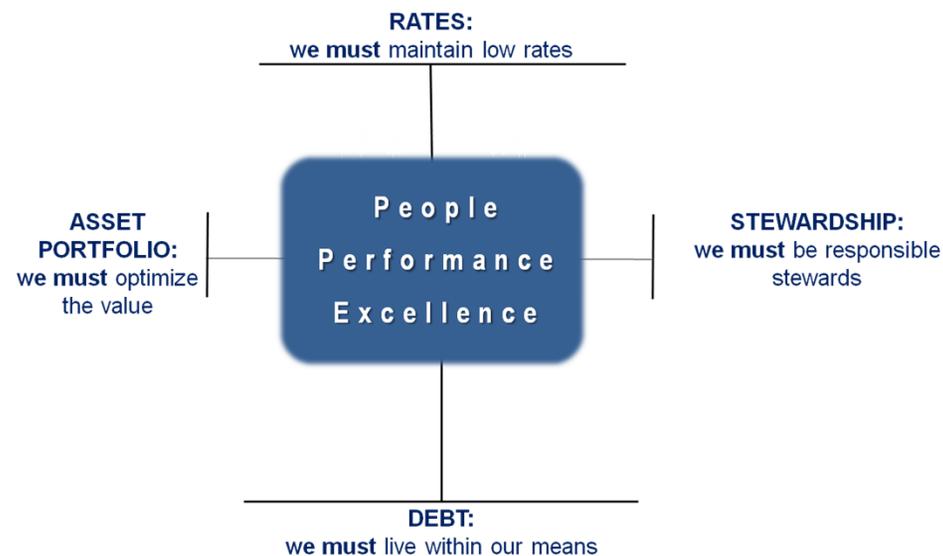
GENERATION FLEET PLANNING

NOVEMBER 14, 2013

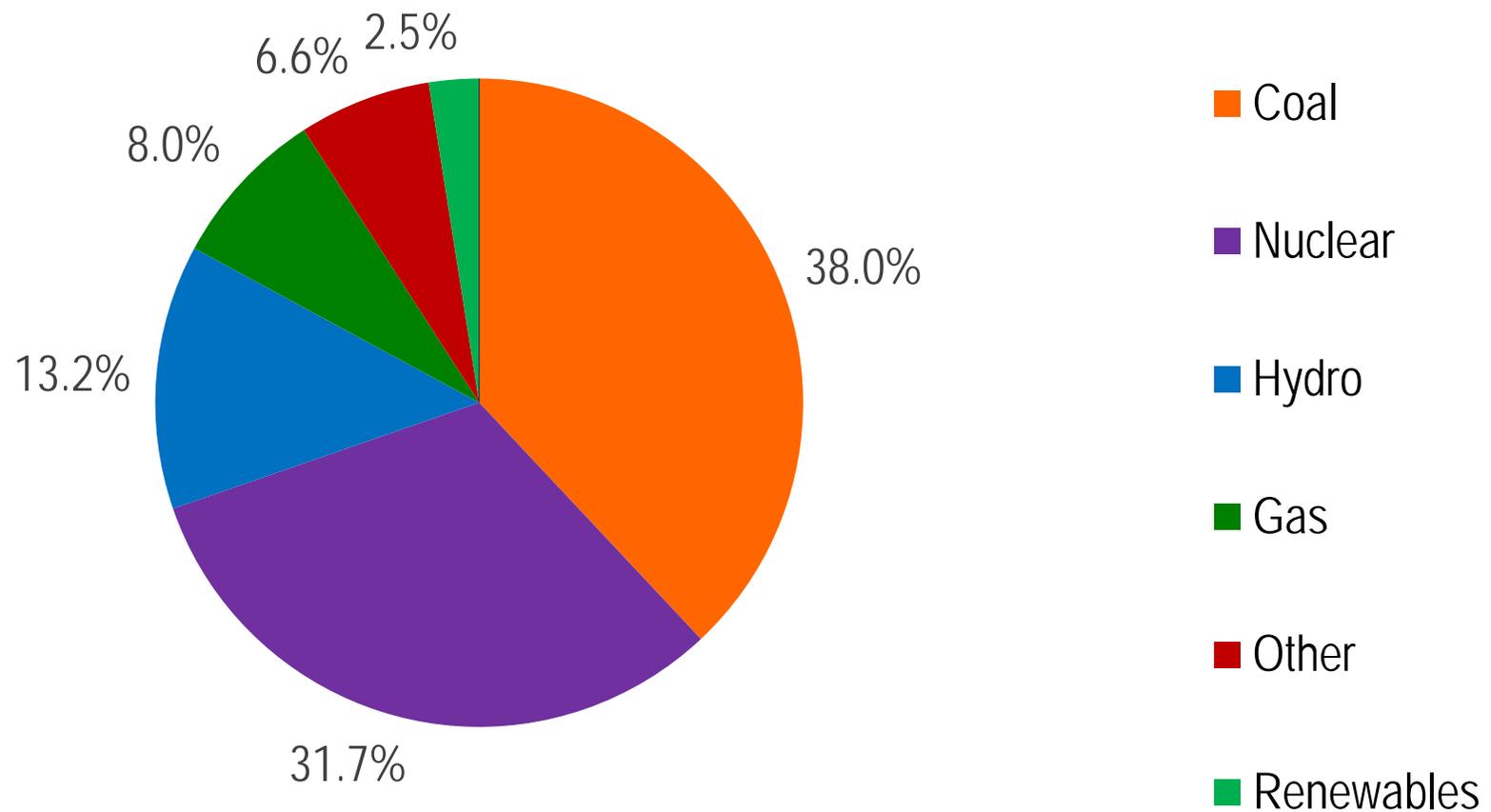
TVA'S GENERATION FLEET

The Ideal Generating Portfolio Is:

- **Cost-Effective** – low cost; reliable; no stranded assets
- **Efficient** – matches load profile
- **Clean** – environmentally responsible
- **Diversified** – mitigates uncertainty

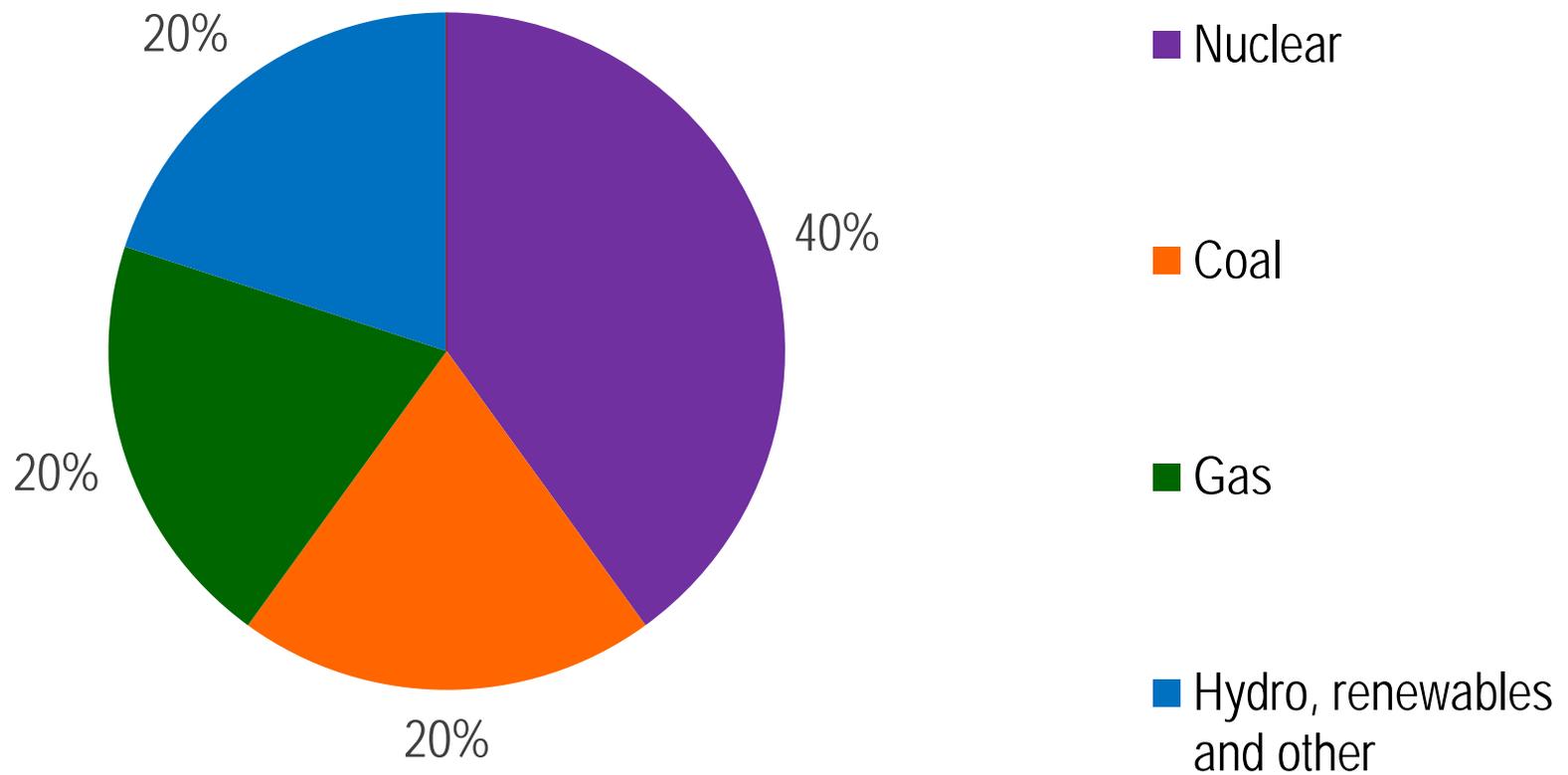


ENERGY GENERATION – FY 2013



Hydro and renewables include a portion of purchased power

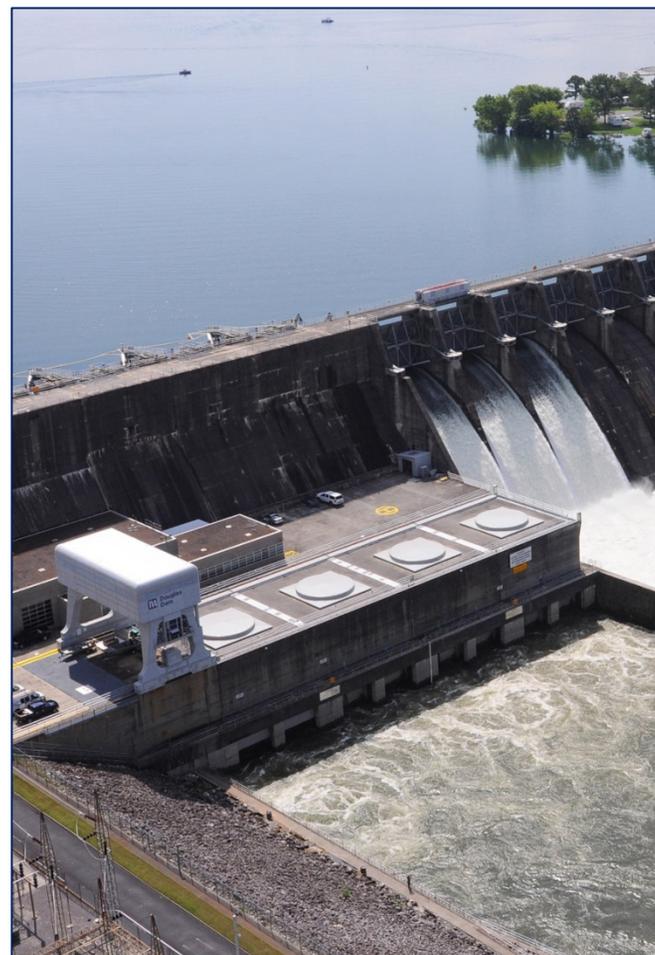
ENERGY GENERATION – FUTURE



Hydro and renewables include a portion of purchased power

OUR ADVANTAGES

- World-class integrated river system and hydro assets
- Clean, baseload nuclear power
- Clean generation mix
- Diversified portfolio



OUR CHALLENGES

- Significantly lower demand
- Commodity price uncertainty
- Environmental standards
- Supply/demand mismatch



CONSIDERATIONS

- Costs to the consumer
- Age and material condition of asset, or expected life if new asset
- Maintaining portfolio diversity
- Economic impact to local communities
- Impact to our employees
- Anticipated future regulations

GENERATION FLEET PLANNING
**COAL PLANT
RETIREMENTS**

BACKGROUND

Colbert and Widows Creek

- The April 2011 EPA Agreements require TVA to either install certain environmental controls, retire, or convert Colbert units 1-5
- Compliance with the environmental regulations would require certain controls to be installed at Colbert units 1-5 and Widows Creek unit 8

Paradise

- In August 2012, TVA Board approved a project budget for environmental controls for Paradise units 1 and 2
 - Significant changes in TVA's business environment required TVA to re-evaluate that decision

BACKGROUND – COLBERT AND WIDOWS CREEK

- Economic evaluations indicate investment in additional emission controls would not be as economically beneficial as retiring Colbert units 1-5 and Widows Creek unit 8
- Retiring these units would avoid capital costs of \$1.01 billion and \$163 million for controls at Colbert and Widows Creek, respectively

BACKGROUND - PARADISE

- Environmental assessment considered three options
 1. Taking no action
 2. Installing additional emission controls on units 1 and 2
 3. Building a new natural gas-fired generating plant at that location
- Risks and benefits considered as part of this decision:
 - Economic evaluation
 - Construction costs
 - Anticipated future regulations
 - Impact to our employees
 - Impact to communities around Paradise
- Building a gas plant was the best long-term decision when all of the benefits and risks were weighed

RECOMMENDATION

Colbert and Widows Creek

- Approve retirement of Colbert units 1-5 and Widows Creek unit 8
- Delegate authority to the CEO to determine retirement timeframe

Paradise

- Approve construction of a new gas-fired plant at a cost not to exceed \$1.12 billion, and retirement of Paradise units 1 and 2
- Delegate authority to the CEO to determine retirement timeframe



COMMITTEE
PEOPLE
AND PERFORMANCE



BOARD MEETING

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COMMITTEE
AUDIT, RISK
AND REGULATION



BOARD MEETING

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November 14, 2013



COMMITTEE
NUCLEAR
OVERSIGHT



BOARD MEETING

Oxford, Mississippi

November 14, 2013

NUCLEAR OVERSIGHT COMMITTEE

WATTS BAR UNIT TWO

NOVEMBER 14, 2013

OVERVIEW

- Physical plant approximately 80% complete
- Targets being met for safety, quality, cost and schedule
 - Over 22.9 million work hours without a lost-time incident
 - Over 95% work presented for inspection meeting quality control requirements
 - Tracking to \$4 billion to \$4.2 billion completion cost
 - On track for commercial operation by December 2015



OPEN VESSEL TESTING

- First time several key systems will be operated together
- Finishing and documenting work on key systems
- Involves pumping of water into reactor - to occur Spring 2014
- Component testing scheduled for December 2014



CHALLENGES

- Complexity of integrating schedules for remaining work
- Validation of work documentation
- Work identification and scope control
- Regulatory milestones
- Unit 1 and Unit 2 shared safety-system testing
- Dual-unit operational readiness

SUMMARY

- Meeting targets for safety, quality, cost and schedule
- Completing and readying systems for testing
- Challenges remain





COMMITTEE
EXTERNAL
RELATIONS



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FLOATING HOUSES





TENNESSEE VALLEY AUTHORITY

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