

TVA BOARD MEETING

AUGUST 16, 2012



SETTING THE RIGHT PATH



Our VISION

One of the Nation's Leading Providers of Low-Cost and Cleaner Energy

ву 2020

PATH TO THE VISION

RATES

Top Quartile Rates

RELIABILITY

- Focus on system reliability
- Attention to individual plant reliability
- Balanced Portfolio

RESPONSIBILITY

- Financial health
- Cleaner air
- Economic development
- Trusted public partner

PRESIDENT'S REPORT

RATES



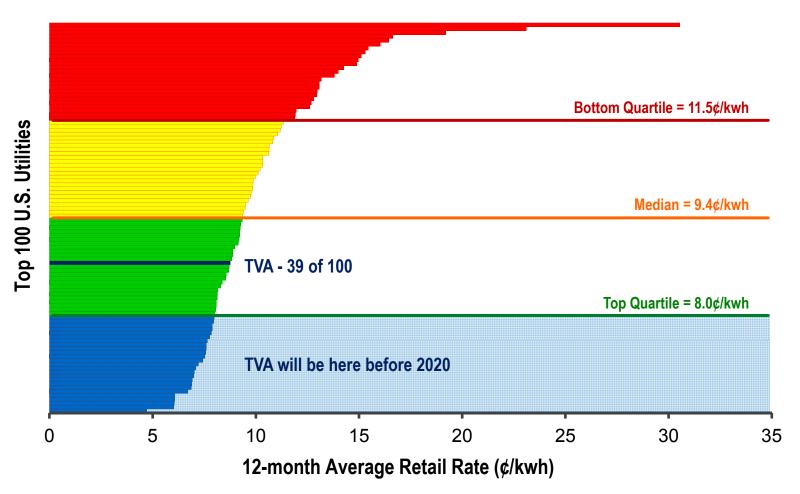






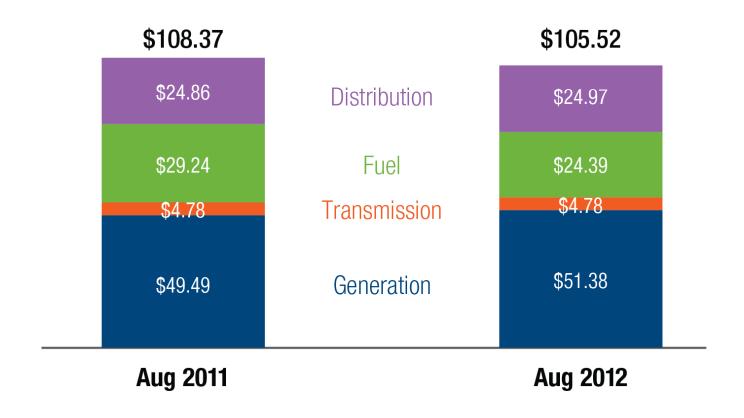


TOP QUARTILE RATES BEFORE 2020

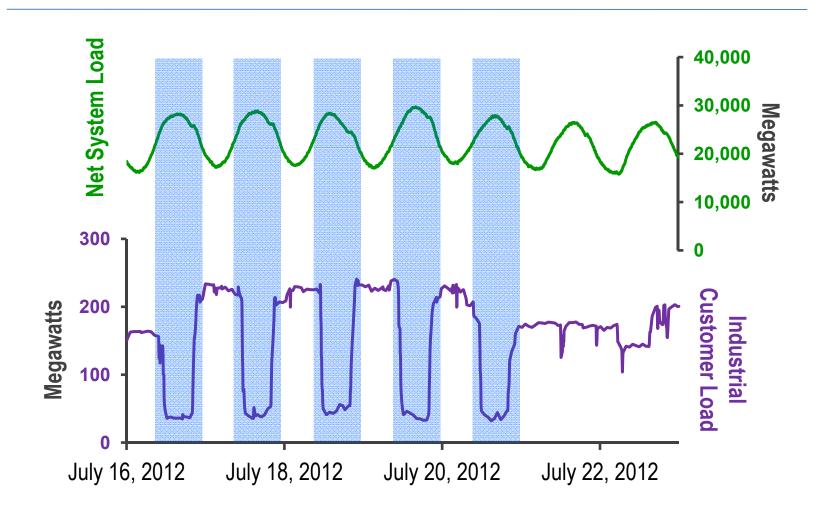


Apr, 2011 - Mar, 2012 Source: EIA-826 and ESS

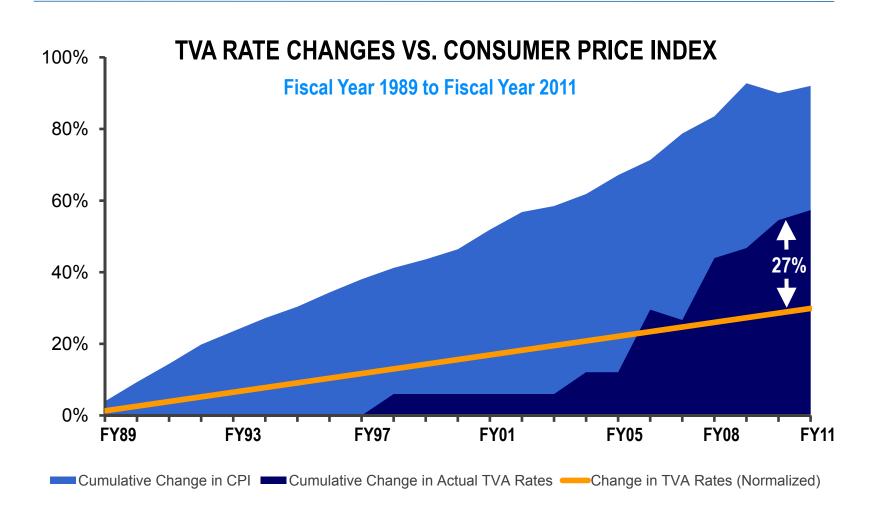
AVERAGE AUGUST 1,000 KWH POWER BILL



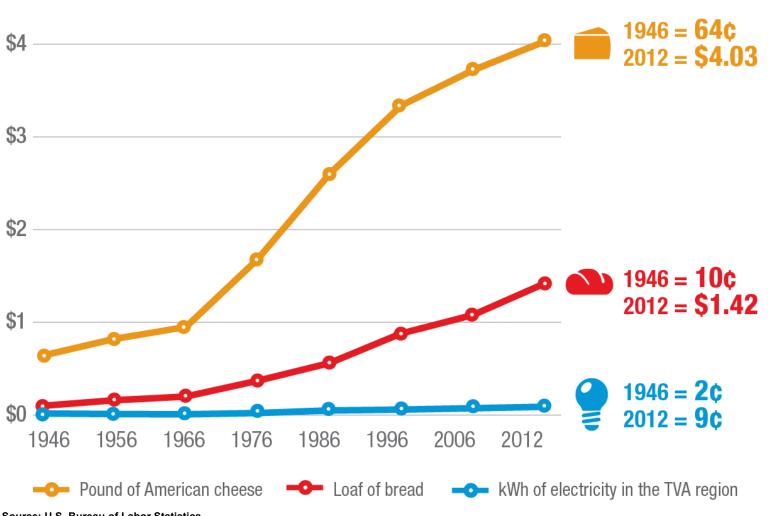
TIME OF USE RATES ARE WORKING



FUTURE RATE STRATEGY: AVOID SPIKES



VALUE OF POWER



Source: U.S. Bureau of Labor Statistics

RELIABILITY







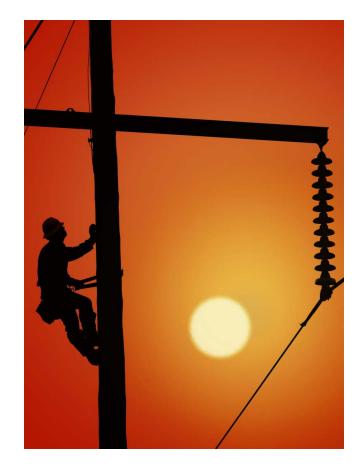




RESPONSE TO HEAT WAVE

Record-setting heat wave in 2012 June 25 to July 9

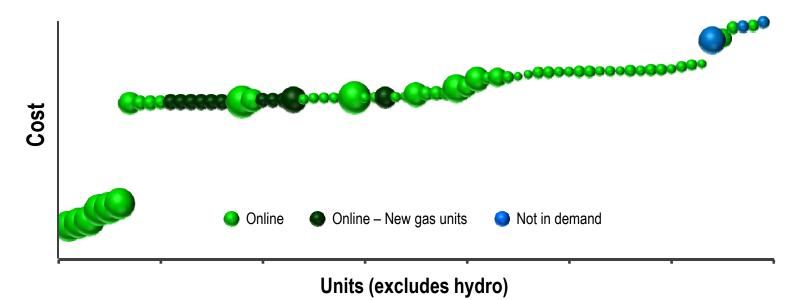
- Nashville, TN set an all time high temperature at 109°
- Chattanooga, TN tied an all time high temperature at 106°
- Tupelo, MS set a June high temperature at 106°
- All-time June peak load of 31,097 megawatts



PLANT PERFORMANCE – JUNE 29, 2012

- All generation units running or available
- 11 new low-cost gas units

TVA Generating Units

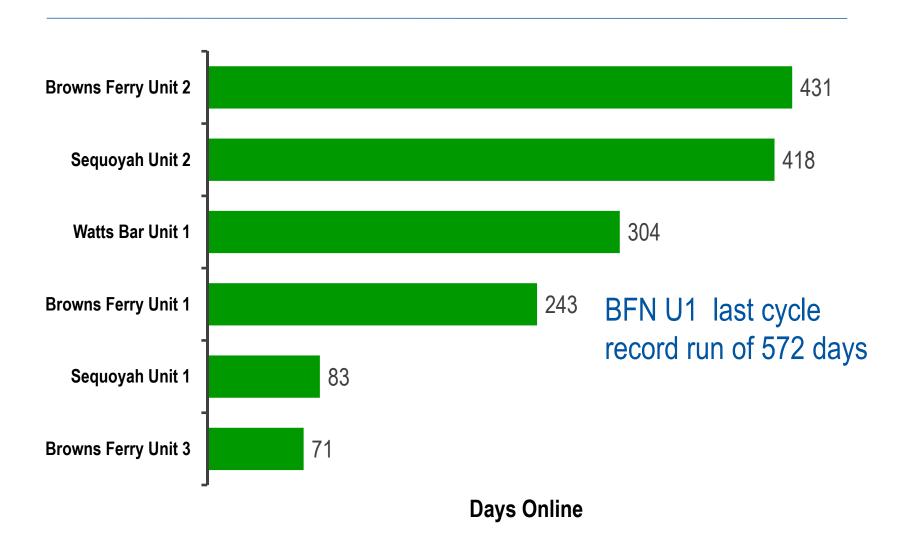


OPERATIONAL PERFORMANCE

- Reliable service provided during heat wave
- Transmission reliability 99.999%
- Worked to offset lower revenue
- Taking advantage of lower gas prices
- Coal units best (lowest) forced outage rate
- Nuclear units are running well



NUCLEAR UNITS CONTINUOUS DAYS ONLINE



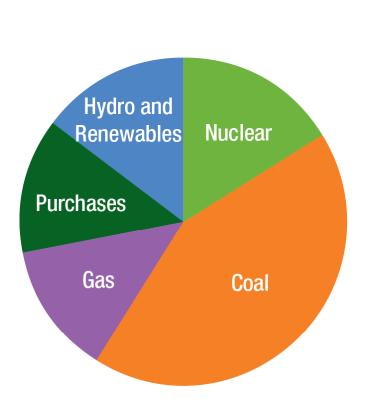
OPERATIONAL CHALLENGES

- Browns Ferry regulatory status
- Raccoon Mountain unplanned outage
- Right-of-way management
- Balancing cost savings and capital investment

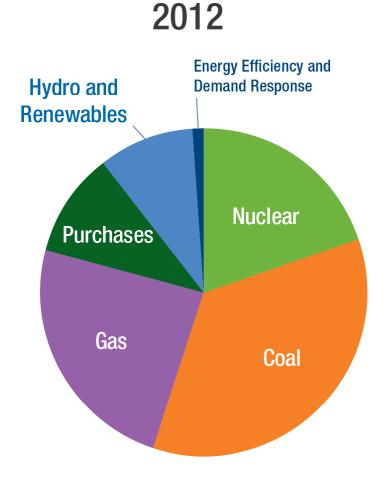


A BALANCED PORTFOLIO LOWERS

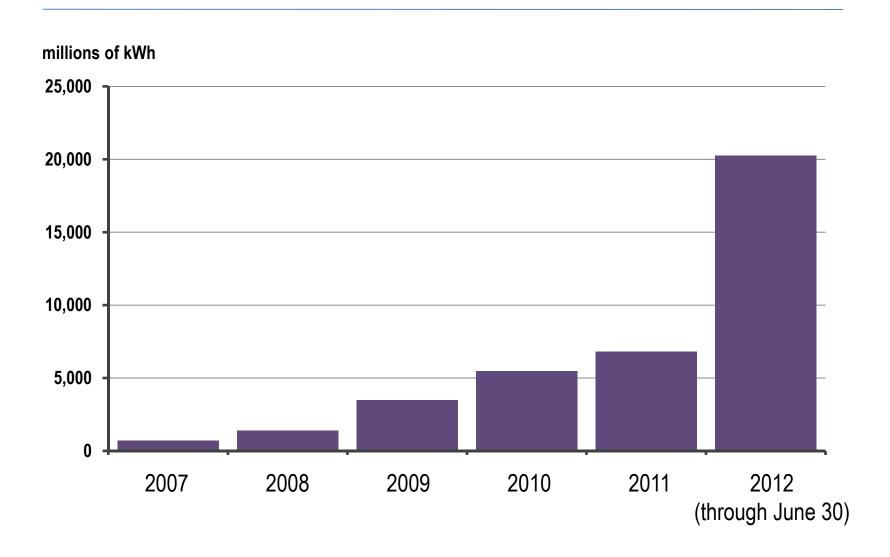




2006



GROWING GAS GENERATION



PRESIDENT'S REPORT | RELIABILITY: BALANCED PORTFOLIO

NEW NUCLEAR

WATTS BAR 2 UPDATE

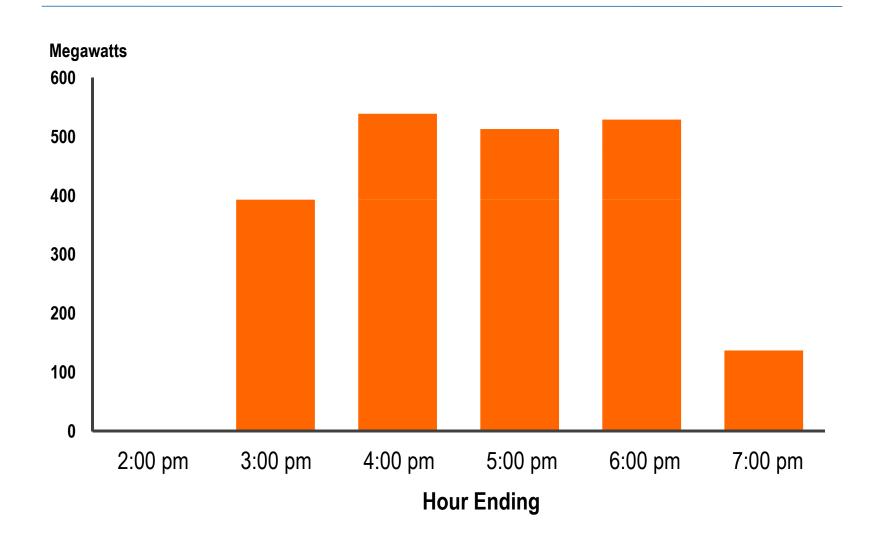
- Watts Bar 2 construction is on target
- Progress is monitored and continuous improvement plans are implemented as needed
- Regular reporting to TVA Board and the Nuclear Oversight Committee



PRESIDENT'S REPORT | RELIABILITY: BALANCED PORTFOLIO

GREATER LOAD MANAGEMENT

DEMAND RESPONSE



ENERGY EFFICIENCY



RESIDENTIAL

- 1. Insulation
- 2. HVAC
- 3. Hot water



COMMERCIAL

- 1. Refrigeration
- 2. Lighting



INDUSTRIAL

- 1. Processes
- 2. Motors

Lower bills
Better homes

Lower energy charge

Lower demand charge with Demand Response

Lower bills

Processes efficiencies

Retains jobs

PRESIDENT'S REPORT

RESPONSIBILITY







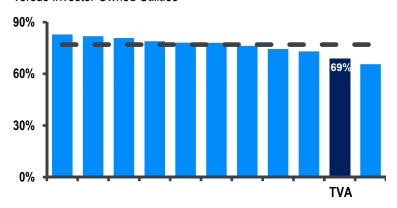




FINANCIAL HEALTH

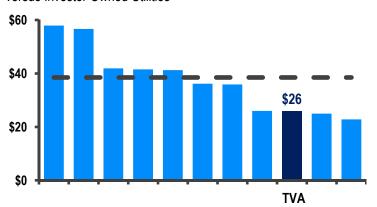
Total Capitalization to Total Assets

versus Investor Owned Utilities



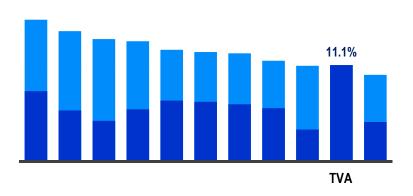
Fuel and Purchased Power Cost

versus Investor Owned Utilities

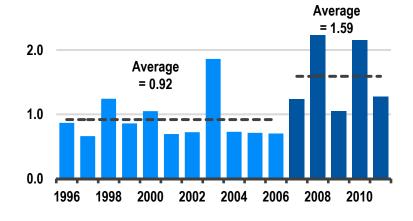


Financing Expense as a % of Revenue

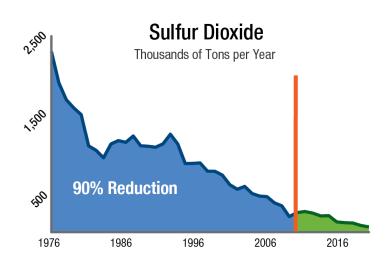
versus Investor Owned Utilities

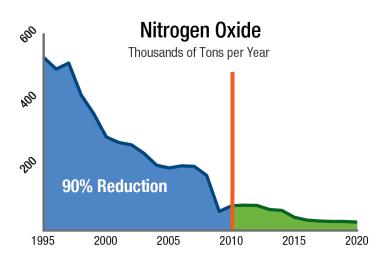


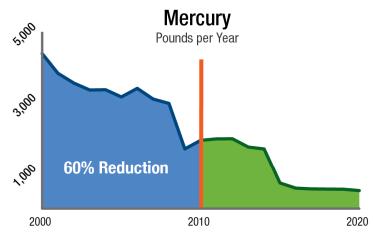
Debt Service Coverage

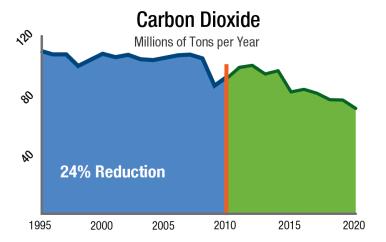


CLEAN AIR



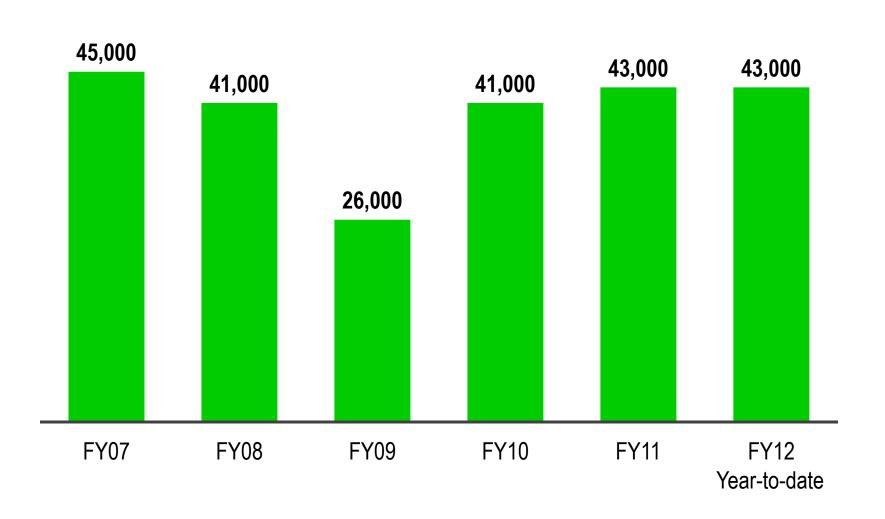






Data current as of November 2009

ECONOMIC DEVELOPMENT: JOBS CREATED AND RETAINED



STRIVE TO BE A TRUSTED PUBLIC PARTNER

Working to preserve public lands for the enjoyment of everyone



SUMMARY

On the right path to reach Our Vision

Focus remains on:
Rates, Reliability, and Responsibility





FINANCE, RATES, AND PORTFOLIO

COMMITTEE

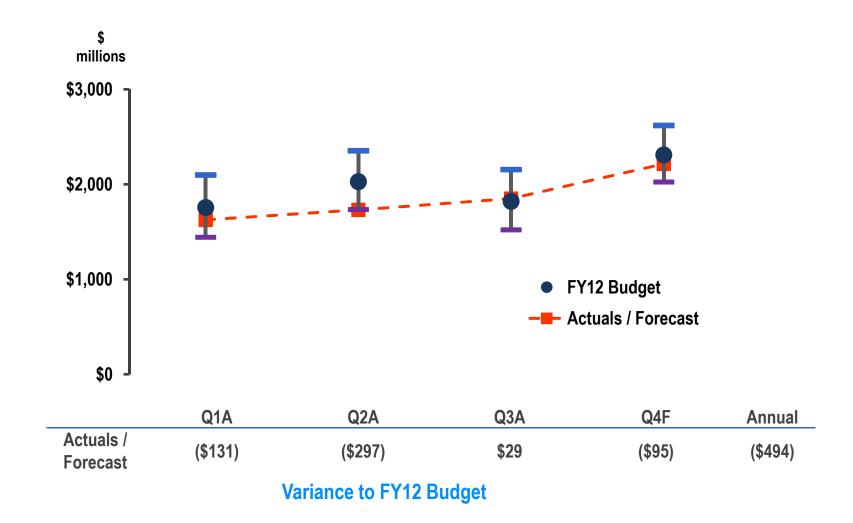
FINANCE, RATES, AND PORTFOLIO COMMITTEE

FY12 FINANCIAL UPDATE

FYTD JUNE 2012

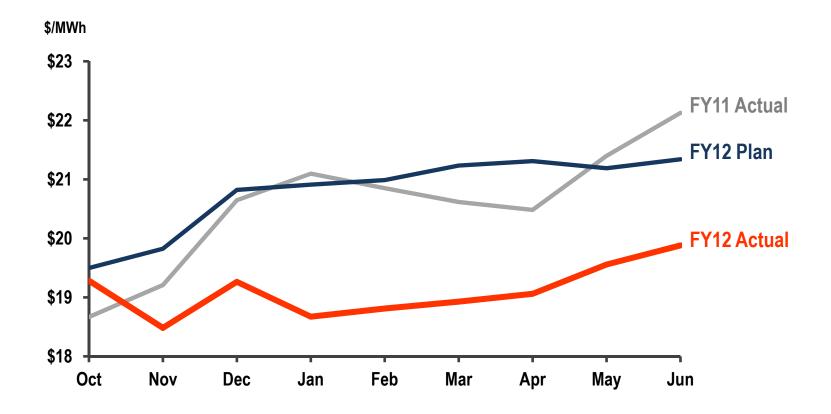
- Mildest temperatures in 60 years drove lower sales and demand
- Lower base revenues than planned
- Cash Flow impacted by lower revenues and offset by management actions
- Discretionary spending conserved to offset mild weather
- Capacity Expansion slowed to match current conditions
- Net Income unfavorable to plan and forecasted as a loss

BASE REVENUES



LOWER FUEL RATES

FY12 Fuel Rates Lower than Plan



SUMMARY INCOME STATEMENT

Base Revenue impacted by weather, economy, customer usage

(\$ millions)	YTD I	Prior Year	•	YTD Budget		YTD Actual		<u>Variance</u>
Operating Revenue	\$	8,453	\$	8,610	\$	7,949	\$	(661)
Base Revenue		5,459		5,606		5,159		(447)
Fuel Revenue		2,903		2,914		2,691		(223)
Other Revenue		91		91		100		9
Operating Expenses		7,534		7,581		7,288		293
Fuel & Purchased Power		3,097		2,968		2,772		196
Operations & Maintenance		2,677		2,774		2,625		148
Depreciation / Amortization		1,296		1,375		1,439		(64)
Tax Equivalents, Other		464		464		452	_	12
Operating Income	\$	919	\$	1,029	<u>\$</u>	661	<u>\$</u>	(368)
Other Income (investments, external business)		25		7		16		9
Interest Expense		979		1,049		967		81
Net Income	\$	(35)	\$	(12)	<u>\$</u>	(290)	\$	(278)

SUMMARY CASH FLOW STATEMENT

Weather impacts offset by less spending on O&M and capital

Fiscal Year to Date (\$ millions)	YTD F	Prior Year	YTD	Budget	YTD	Actual	<u>Var</u>	iance
Beginning Cash and Short-term Investments	\$	328	\$	500	\$	507	\$	7
Cash Flow from Operating Activities		1,703		1,650		1,252		(398)
Cash Flow from Investing Activities		(1,880)		(2,850)		(1,867)		983
Cash Flow from Financing Activities		391		885		355		(530)
Net Change in Cash & Cash Equivalents		214		(315)		(260)		- 55
Ending Cash and Short-Term Investments	\$	542	\$	185	\$	247		62
FYTD Debt and Financing Obligations	\$	26,192	\$	27,174	\$	27,001	\$	173

FYTD SUMMARY

Highlights

- Lower commodity prices (natural gas and purchased power)
- Diet & Exercise producing efficiency gains
- Lower borrowing and interest rates
- Lower spending on discretionary items

Hard Spots

- Mild weather significantly impacted demand in winter
- Slower economic recovery
- Fuel inventory and natural gas margins are pressuring working capital
- Still addressing plant material condition

FINANCE, RATES, AND PORTFOLIO COMMITTEE

FISCAL YEAR 2013

BUDGET AND BUSINESS PLAN

FINANCIAL UPDATE

Discussion Topic	Key Takeaway
FY13 Planning	Top Quartile Rate Trajectory Slight Sales Growth
Cost Drivers	Near Top Quartile Nuclear Recovery & Pension Challenges
Debt Funded Obligations	Addressing Future Needs
FY13 Rate Outlook	No increase recommended

FY13 PLANNING PROCESS HIGHLIGHTS

Financial Guiding Principles

- Retire Debt Over Useful Life Of Assets
- Only Issue New Debt For New Assets
- Use Regulatory Treatment For Specific Unusual Events
- Rate Increases As Necessary To Fund Operational Spending
- Evaluate Rate Actions To Avoid Significant Rate Volatility

External Considerations

- Increased Regulatory Pressures
- Commodity Prices
- Lower Growth/Slower Economy

Vision 2020

Mission

- Low Rates
- High Reliability
- Responsibility

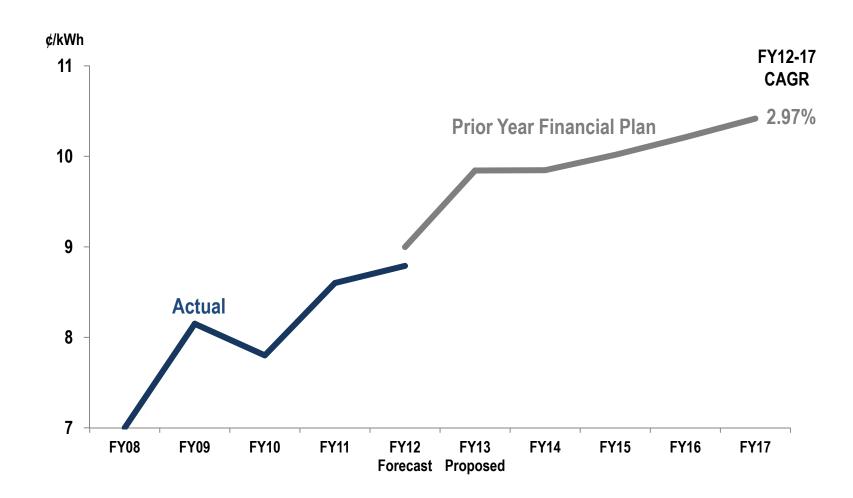
Portfolio Balance

- Cleaner Air
- More Nuclear Generation
- Greater Energy Efficiency

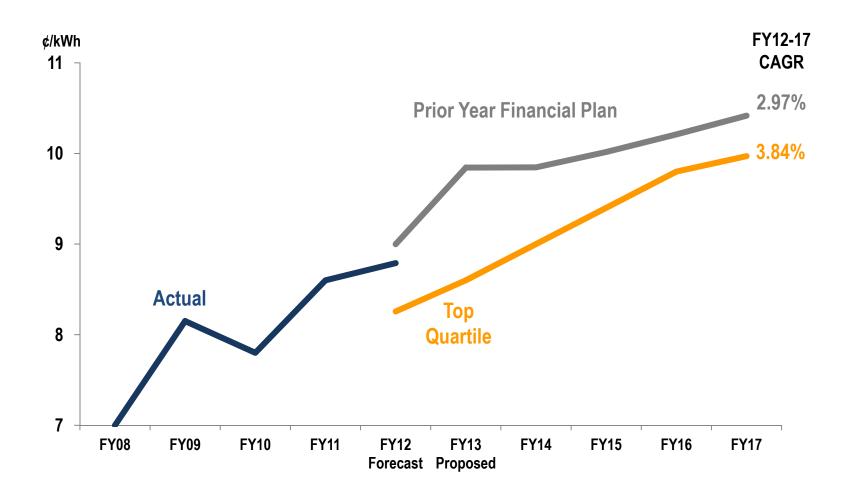
TVA Challenges

- Increasing Our Rate Competitiveness
- Managing Risk
 - Material Condition
- Sustaining Productivity Improvements
- Executing Our Major Projects

TVA RETAIL RATE

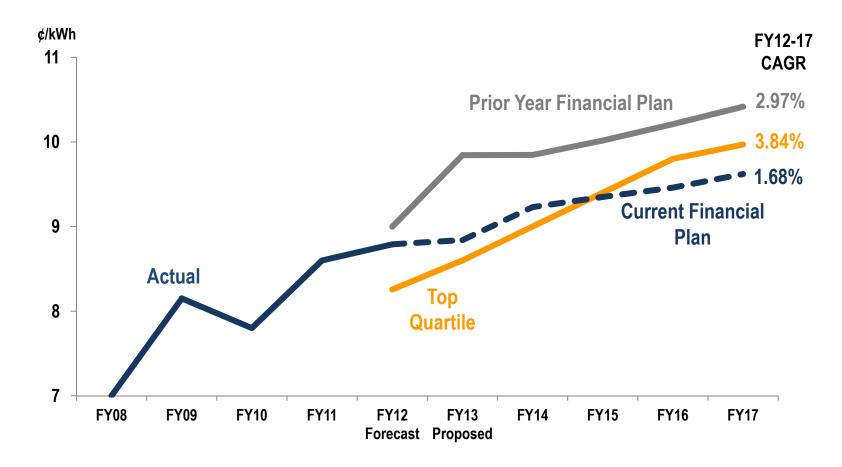


TVA RETAIL RATE



TVA RETAIL RATE

Current trajectory achieves top quartile by FY16



ECONOMIC FACTORS

Regional Growth 2.3%

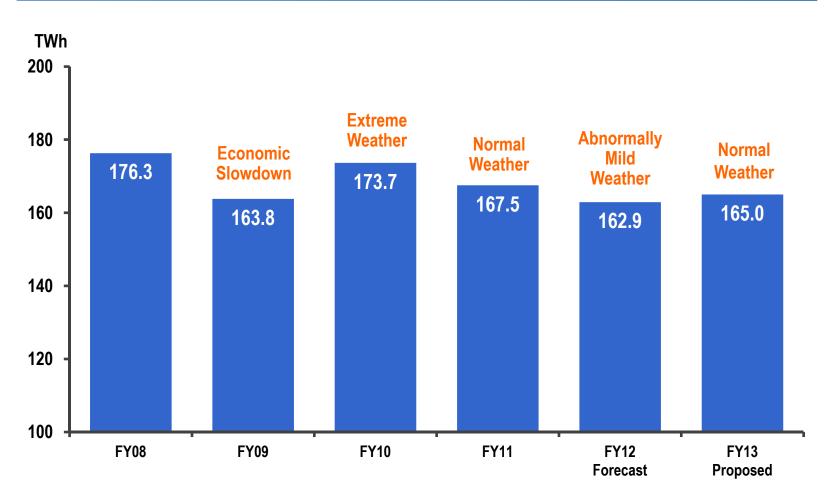
Lower near-term

Regional Unemployment 8.2%

Flat to little growth in:

- Industrial Employment
- Population
- Real Income

SALES

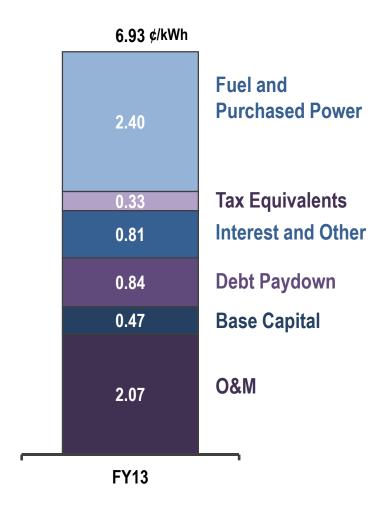


Projected TVA Sales (kWh) = System Energy less Transmission Losses

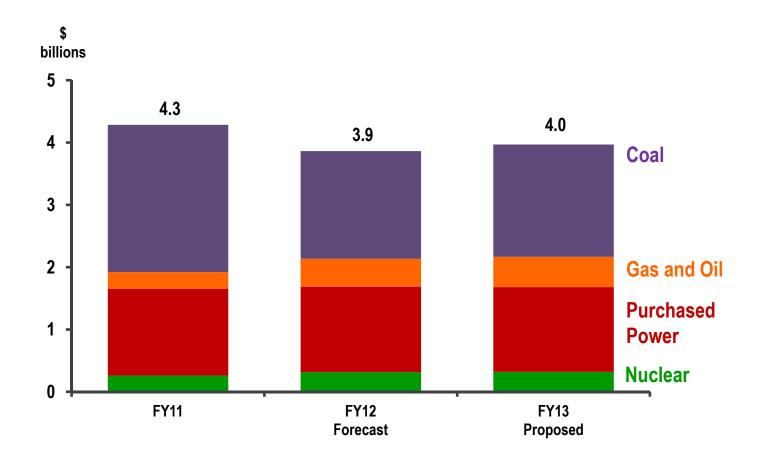
FINANCE, RATES, AND PORTFOLIO COMMITTEE FISCAL YEAR 2013: BUDGET PLANNING AND BUSINESS PLAN

COST DRIVERS

TVA AVERAGE WHOLESALE RATE BY REVENUE REQUIREMENTS



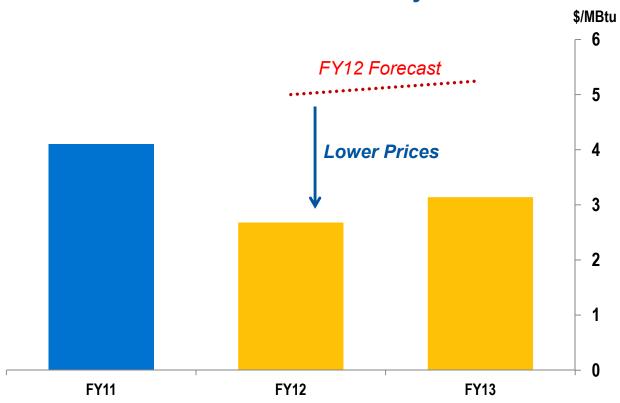
FUEL AND PURCHASED POWER



Does not reflect adjustments to fuel expense related to FCA fuel revenue over/under recovery.

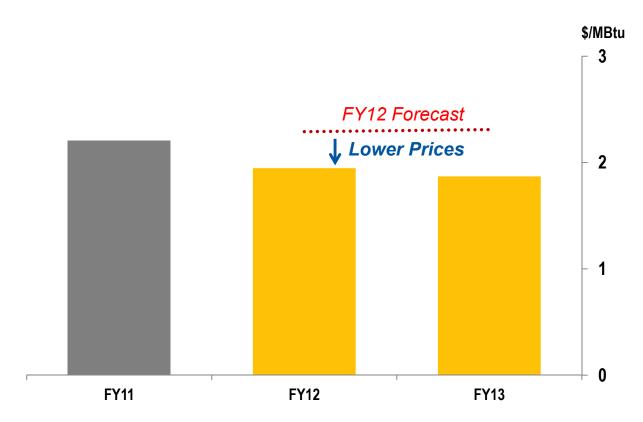
COMMODITY PRICE OUTLOOK





COMMODITY PRICE OUTLOOK

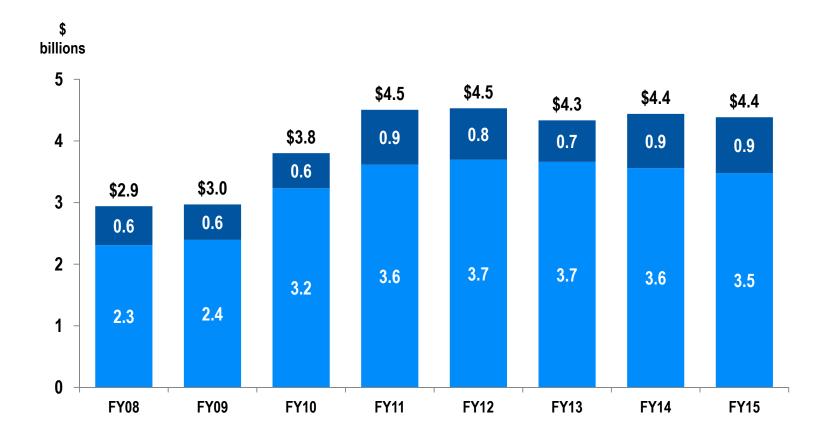
Illinois Basin Coal Price - FOB Mine



FUEL AND PURCHASED POWER SUMMARY

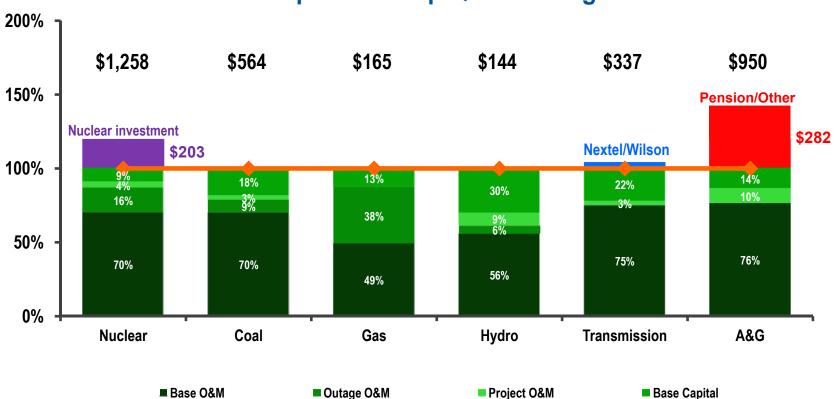
- Lower commodity prices (natural gas and purchased power)
- Increased fuel switching between coal and natural gas assets
- Reducing coal inventories
- Continued natural gas price volatility

BASE EXPENDITURE TRENDS

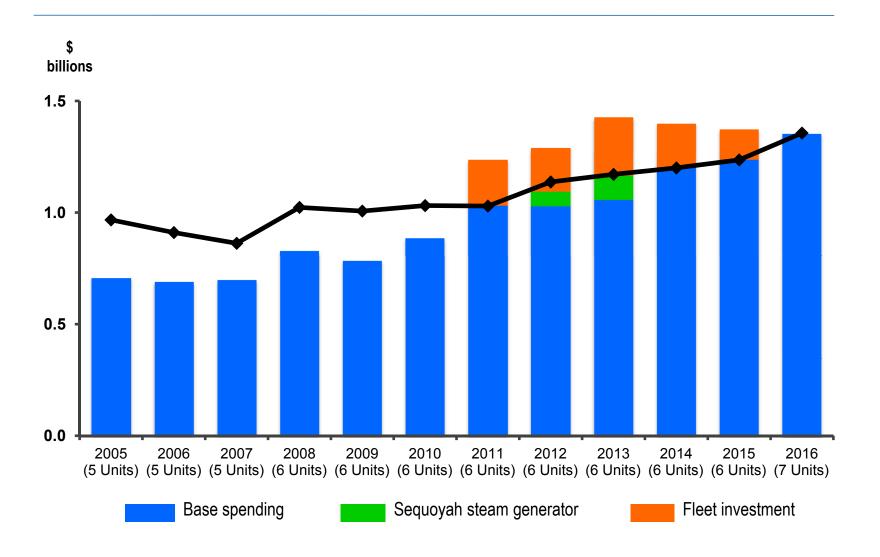


FY13 BASE EXPENDITURES

Total Spend vs. Top Quartile Target



NUCLEAR SPENDING



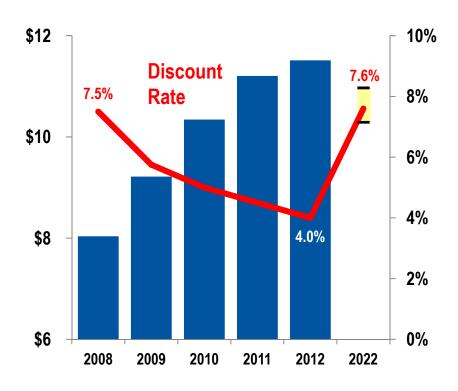
PENSION

Contributions and Earnings Have Increased Pension Assets

Contributions \$3 \$270 million \$2 \$1 billion \$1 **Earnings** \$0 Payments -\$1 -\$2 -\$3 2009 2010 2011 2012

Cumulative Change (billions)

Pension Liabilities Have Been Impacted By The Drop in the Discount Rate



NUCLEAR SPENDING/PENSION SUMMARY

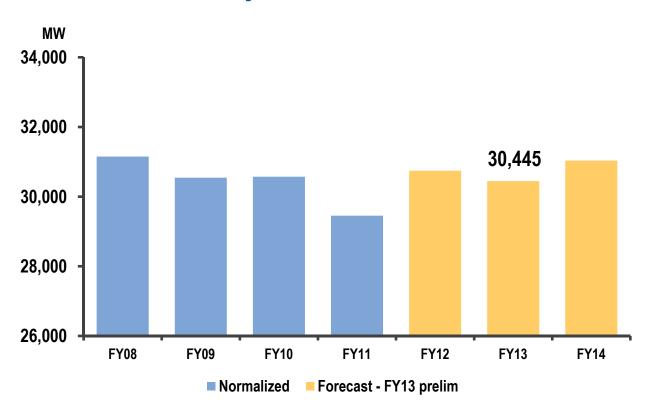
- No quick fixes; recovery addressed over many years
- Ongoing funding obligation
- Prioritization & Risk Management necessary as recovery continues

FINANCE, RATES, AND PORTFOLIO COMMITTEE
FISCAL YEAR 2013: BUDGET PLANNING AND BUSINESS PLAN

DEBT-FUNDED OBLIGATIONS

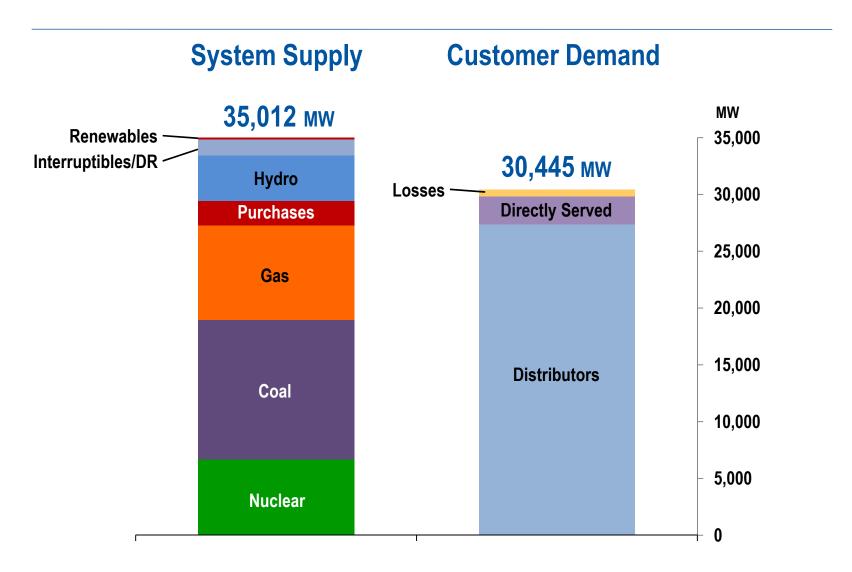
SYSTEM PEAK

Annual Summer System Peak – Weather Normalized

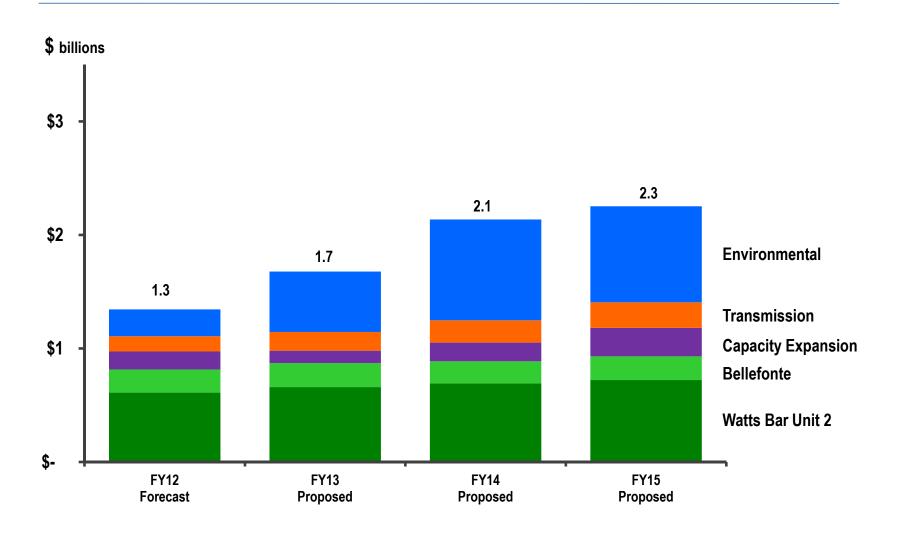


TVA All-Time Peak: 33,482 MW - August 16, 2007

2013 CAPACITY AND DEMAND BALANCE



DEBT FUNDED INVESTMENTS



DEBT AND DEBT-LIKE OBLIGATIONS

	FY12 Forecast	FY13 Proposed		
Beginning Debt	\$ 26.7	\$ 26.9		
New Borrowings:				
Capacity Expansion	1.1	1.2		
Kingston	0.1	0.2		
Environmental	0.2	0.5		
Total New Borrowings	1.5	1.9		
Total Debt Paydown	(1.3)	(1.4)		
Total Change in Debt	0.2	0.5		
Ending Debt Levels:				
Alternative Financing	2.7	2.2		
Statutory Debt Balance	24.2	25.2		
Total Financing Obligations	\$ 26.9	\$ 27.4		

FISCAL YEAR 2013 FINANCIAL SHELF

Power bonds are typically issued to:

Refinance existing debt: \$2.9 billion

Fund new capacity: \$1.9 billion

Additional Flexibility: \$0.2 billion

Total: \$5.0 billion

Interest rate hedges may be used to reduce exposure to fluctuating interest rates

Issuing individual bonds requires:

- Notification of Board Finance, Rates, and Portfolio Committee
- Approval of Chief Executive Officer and Chief Financial Officer

RISKS AND CHALLENGES

- Weather
- Economy
- Regulatory Pressures
- Asset Risk Management: Material Condition
- Sustainable Productivity Improvements

FINANCE, RATES, AND PORTFOLIO COMMITTEE
FISCAL YEAR 2013: BUDGET PLANNING AND BUSINESS PLAN

RATE OUTLOOK

OPERATING BUDGET AND REVENUES

FISCAL YEAR 2013

(\$ millions)	
Operating Revenue	\$11,236
Operating Expenses	
	2.067
Fuel & Purchased Power	3,967
Operations, Maintenance, and Other	3,662
Interest & Other	1,336
Tax Equivalents	550
Subtotal	9,515
Other Operating Cashflow	398
Operating Cashflow	\$2,119

CAPITAL BUDGET

FISCAL YEAR 2013

(\$ millions)		
Operating Cashflow	\$	2,119
Capacity Expansion Environmental Nuclear Fuel Nuclear Fossil Transmission River Operations Gas Other		1,146 532 364 276 104 84 43 22 155
Capital Expenditures		(2,726)
Net Cashflow Prior to Financing	;	\$ (607)

FINANCING

FISCAL YEAR 2013

(\$ millions)	
Net Cashflow Prior to Financing	\$(607)
Mar David Care	4.044
New Borrowings	1,844
Debt Paydown	(1,362)
Other Financing	125
Subtotal	607
Shortfall	\$(0)

No Increase Recommended

RECOMMENDATION

Approve the 2013 budget:

- Revenues of \$11.2 billion
- Operating Expenses of \$9.5 billion
- Capital Expenditures of \$2.7 billion

Approve Contracting Plan for Fuel and Purchased Power

Fuel & Purchased Power of \$4.0 billion (In Operating Expenses)

Approve the Financial Shelf for issuance of up to \$5 billion of long-term bonds and the ability to utilize interest rate hedges in fiscal year 2013

FINANCE, RATES, AND PORTFOLIO COMMITTEE

DISTRIBUTOR POWER CONTRACT AMENDMENT



NUCLEAR OVERSIGHT

COMMITTEE

NUCLEAR OVERSIGHT COMMITTEE

NUCLEAR POWER GROUP PERFORMANCE









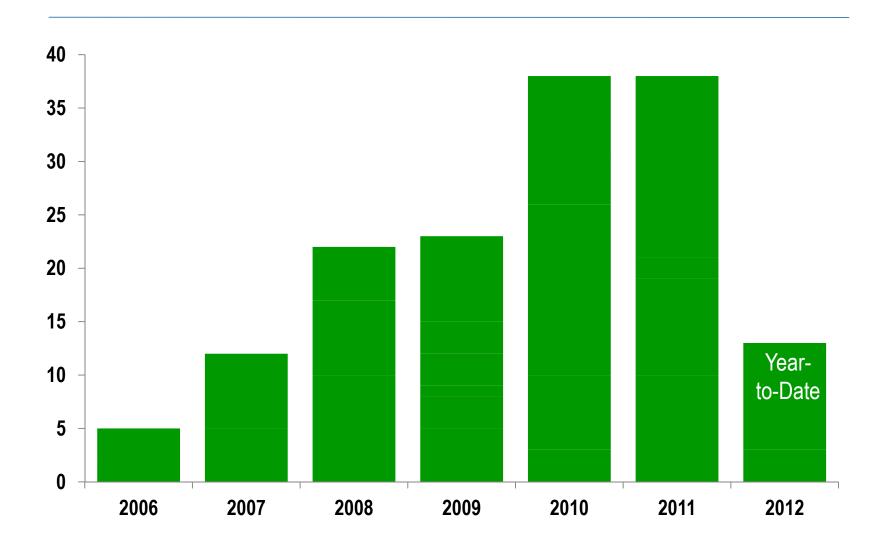


PEOPLE

- Excellent Safety Performance: OSHA Injury Rate of 0.25 vs. 0.36 three years ago
- Continued focus on:
 - Talent Management and Succession Planning
 - Training and Development
 - Increasing number of licensed personnel
 - First Line Supervisors accountability
- Positive results observed:
 - Safety
 - Human Performance Error Rate
 - New operators licensed
 - Cultural Health



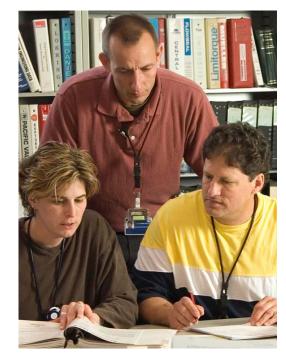
NEW OPERATOR LICENSES



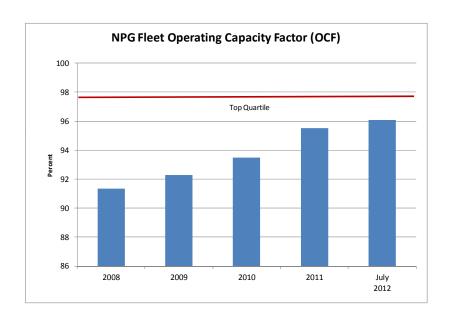
PROCESSES

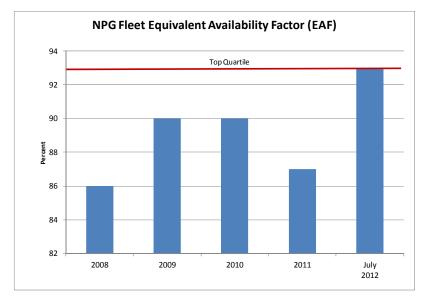


- Established Nuclear Operating Model
- Improved performance through five Focus Areas
- Implemented System, Component, and Program health monitoring

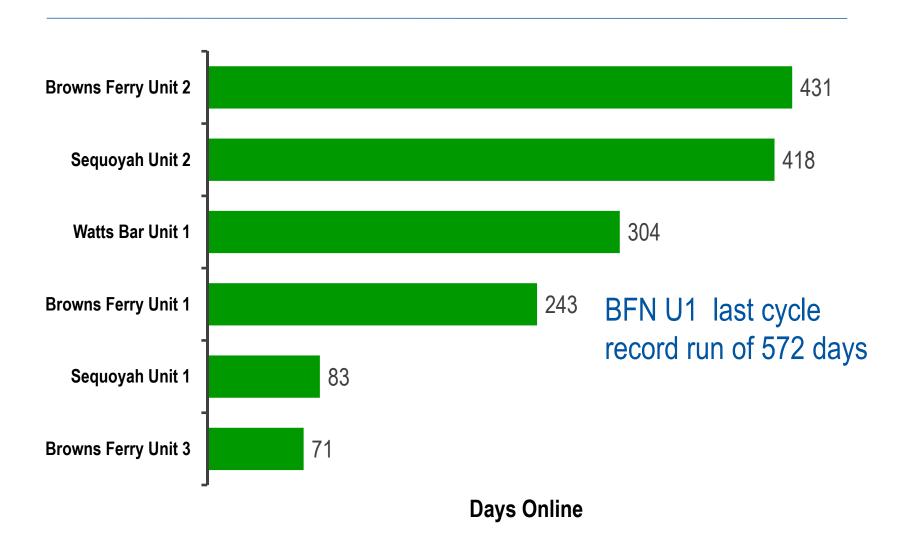


NUCLEAR OPERATING CAPACITY FACTOR AND EQUIVALENT AVAILABILITY FACTORS





NUCLEAR UNITS CONTINUOUS DAYS ONLINE

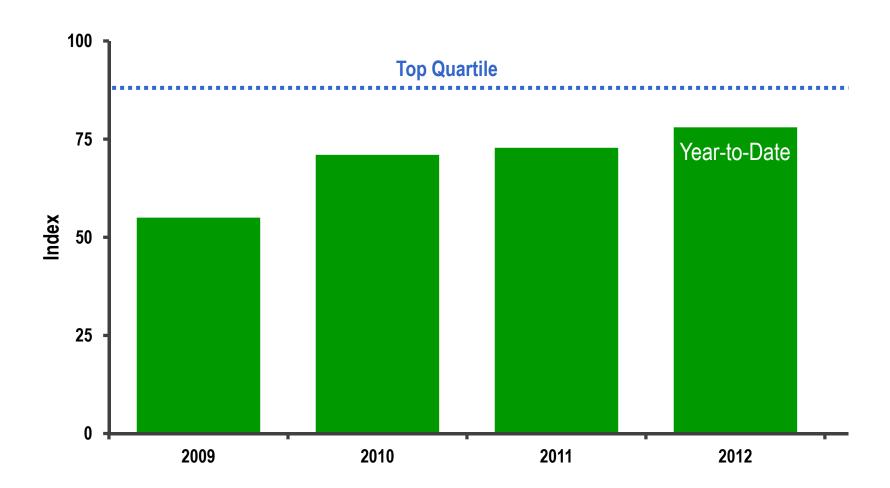


PLANT

- Improved the Equipment Reliability Index from 55 to 80
- Increased funding for Equipment Reliability improvements
- Developed engineering excellence plan
- At TVA, Nuclear Power continues to be low cost generator with a 2008-2010 average of \$17.54/MWH
- Success of BFN cooling towers has caused no power reduction in 2012, allowing approximately \$10 M savings vs. loss of \$53 M over 2010 and 2011



EQUIPMENT RELIABILITY INDEX



NEXT STEPS

- Return Browns Ferry to normal regulatory oversight column
- Steam generators replacement at Sequoyah
- Asset management for equipment reliability
- Fukushima upgrades
- Watts Bar Unit 2 Integration
- Integrating licensed operators
- Operational excellence from reliable generation



NUCLEAR OVERSIGHT COMMITTEE

WATTS BAR 2 UPDATE









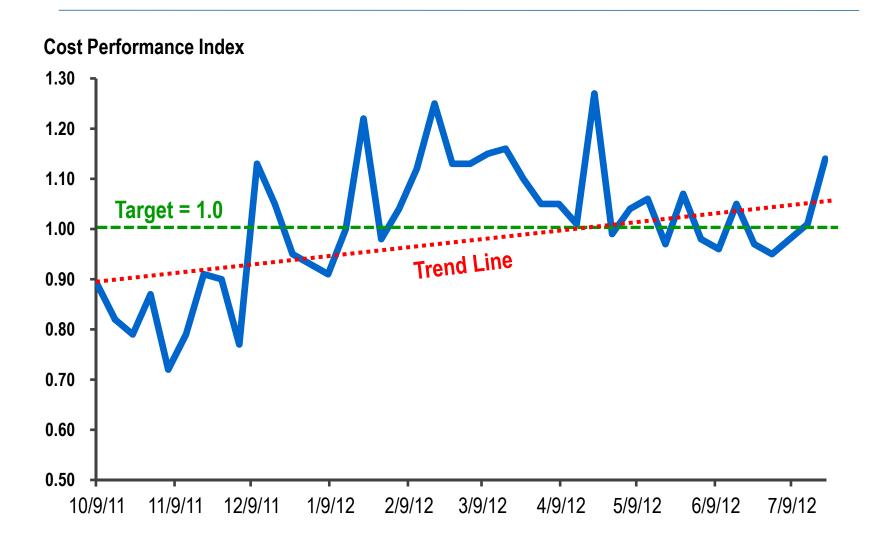


HIGHLIGHTS

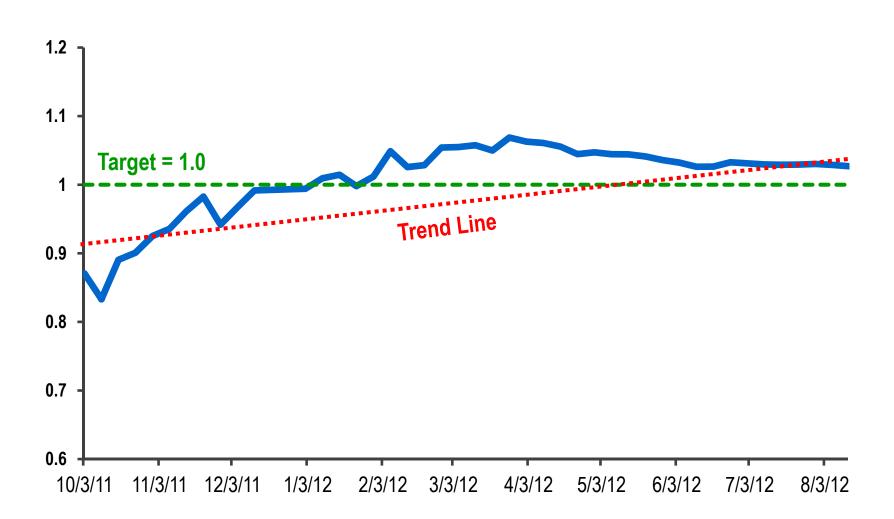
- 15 million man-hours exceeded without a lost-time accident
- Corrective Action Program improvements
- Work package improvement
- Major equipment completions
- Organizational health initiatives



WATTS BAR 2 COST PERFORMANCE INDEX



SCHEDULE PERFORMANCE INDEX



GOING FORWARD

- Documentation closure
- System turnover transition
- Watts Bar Unit 1 / Unit 2 integration
- Completion of quarterly Estimate To Complete update





NUCLEAR OVERSIGHT



PEOPLE AND PERFORMANCE



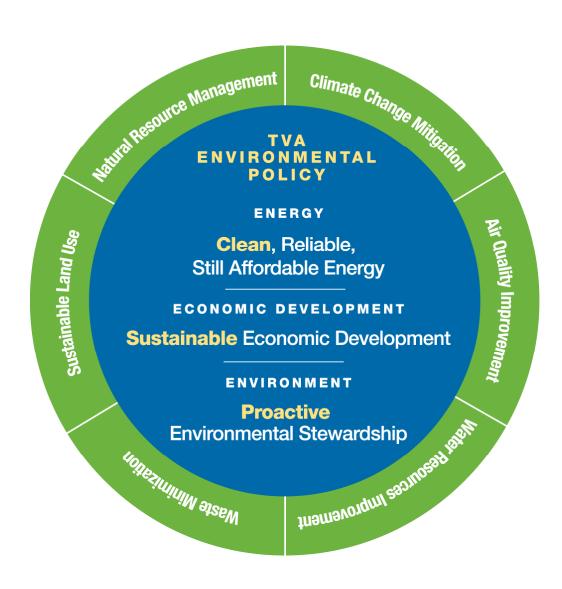
AUDIT, RISK, AND REGULATION

AUDIT, RISK, AND REGULATION COMMITTEE

FY13 EXTERNAL AUDITOR SELECTION



EXTERNAL RELATIONS





EXTERNAL RELATIONS