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# President's Report

# Our VISION



ONE OF THE NATION'S **LEADING** PROVIDERS OF **LOW-COST**  
AND **CLEANER ENERGY** **BY 2020**



Low Rates



Cleaner Air



High Reliability



More Nuclear Generation



Responsibility



Greater Energy Efficiency

**Acting to meet the region's needs for the future, while improving our core business today.**

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# Progress on the Vision



Responsibility



Greater Energy Efficiency



High Reliability

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# Transmission Update

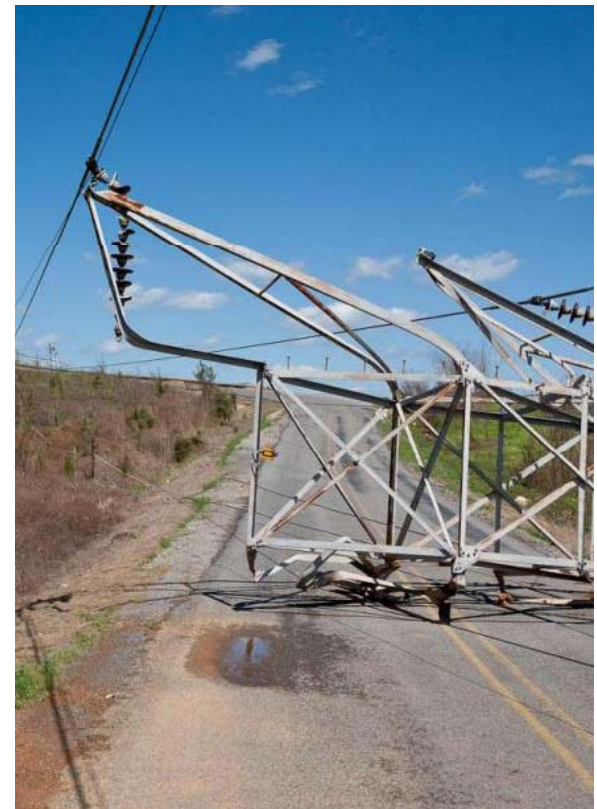
# Event and Impact

## Devastating storms hit the southeast

- 319 tornadoes
- 340 deaths
- 850,000 customers without electricity
- Three units off-line at Browns Ferry Nuclear Plant

## Widespread system damage

- 350+ transmission structures damaged
- 108 transmission lines out
- Lost 3,000 megawatts of load and 5,200 megawatts of generation
- Interruption of 128 customer substation/connection points



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# The Recovery

## Turning the lights back on

- 4,000 people working to restore power
- Customer calls three times daily during peak recovery period
- More than 80% of connections restored by Sunday
- Centralized assessment and restoration priorities
- Honest, timely communication and accountability
- Clean-Up Day: Over 11,000 volunteer hours across the TVA region



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# Energy Delivery Challenges

## Reliability

- Keep system up
- Build for new circumstances



## Responsibility

- Right-of-way clearing
- NERC Compliance









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# Keeping the Lights On

- 24 x 7 operations
- Continuous balancing of load and generation
- Real-time monitoring of the TVA Transmission System
- Links our customers with the TVA team



For 12 years, the TVA system has been 99.999% reliable

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# Progress on the Vision



Low Rates



More Nuclear Generation



Cleaner Air

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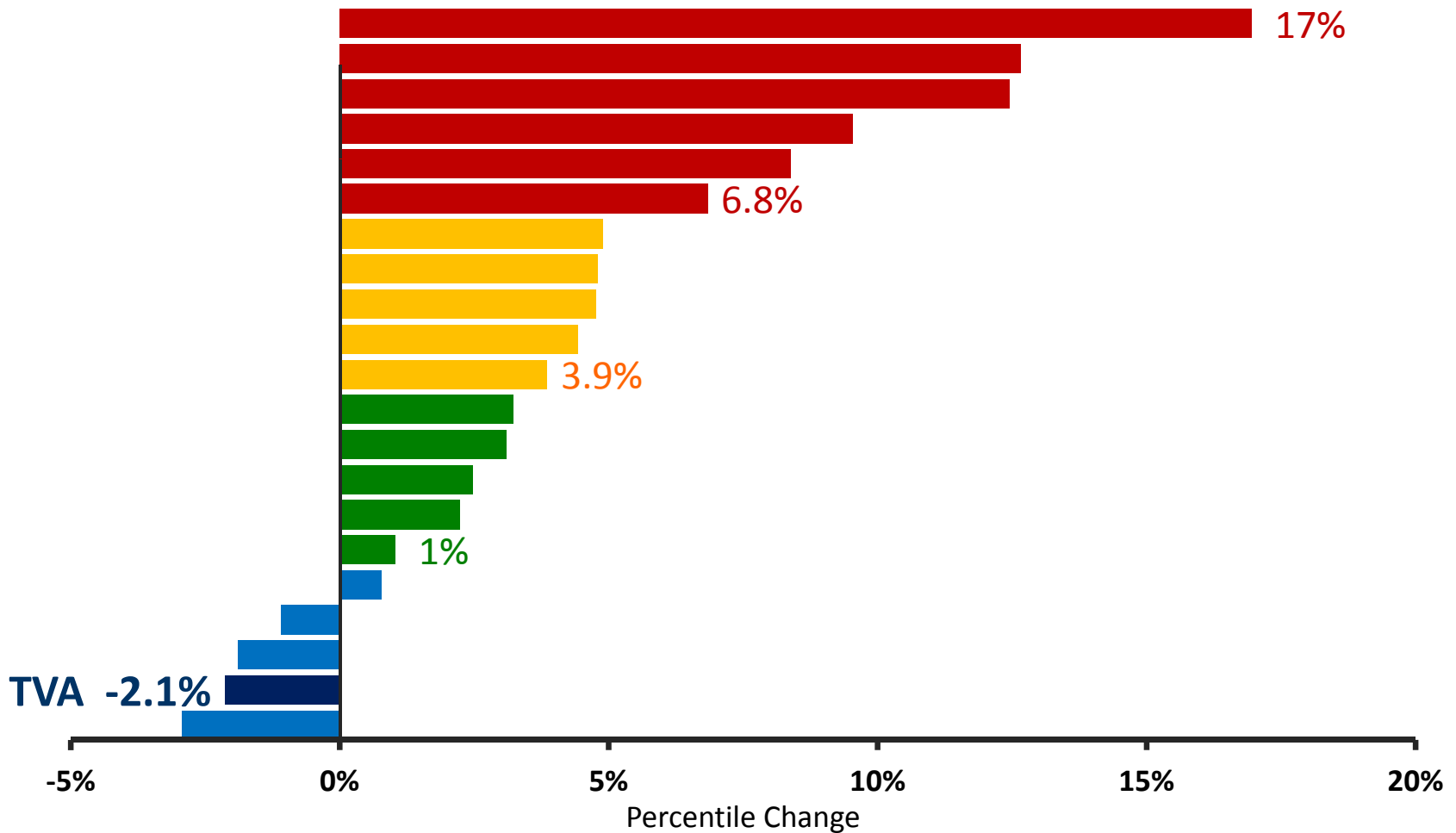
# Helping Economy by Helping Industry



Low Rates

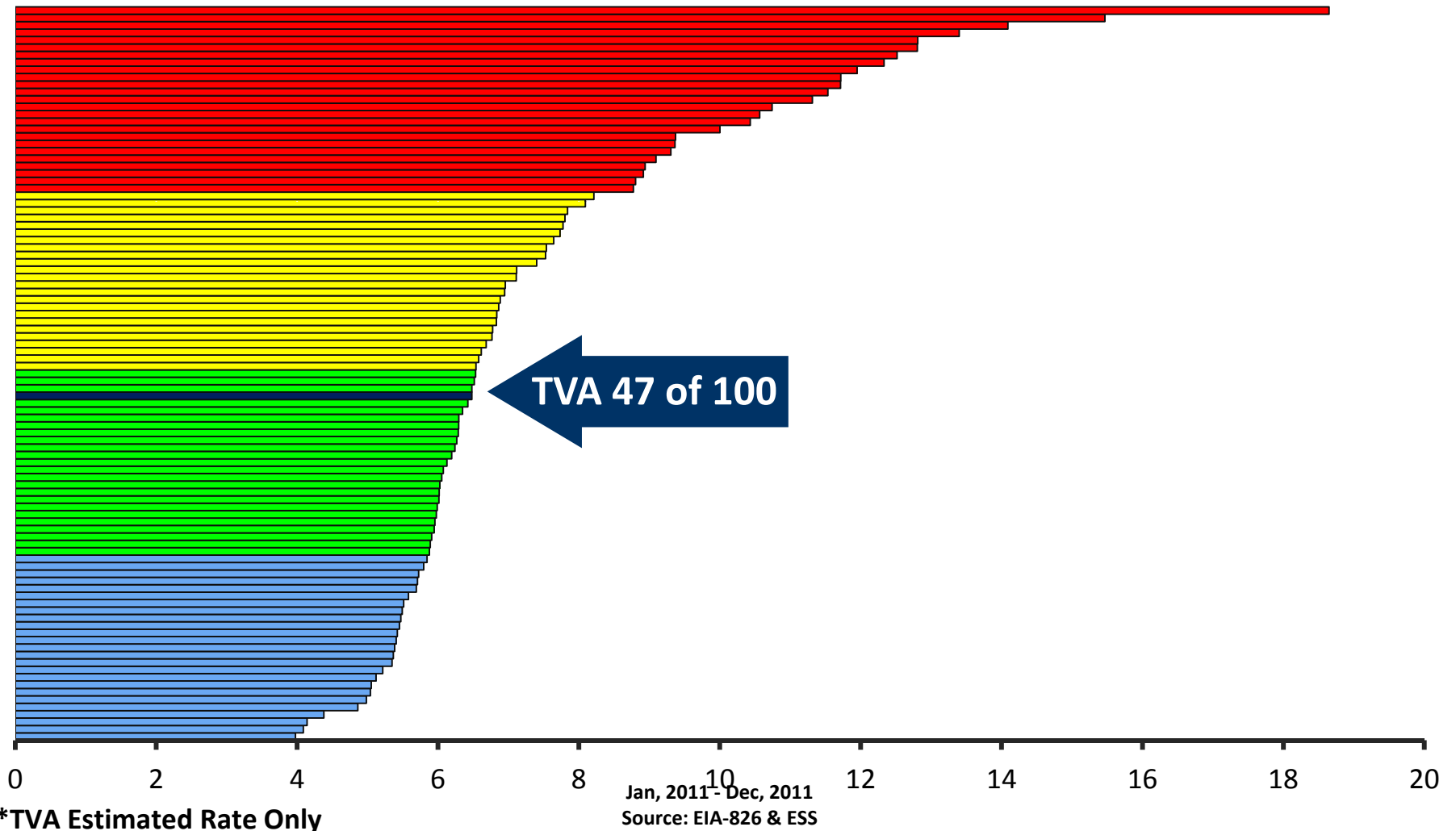
# Bill Changes for Last 12 Months

March 2011 to March 2012 Percentile Change — Monthly Bill Comparisons  
1,000 kWh per Month Residential Service



# Top 100 Utilities' Industrial Rates

12 Month Average of the Top 100 U.S. Utilities\*



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# Valley Investment Initiative

Economic development  
incentive

- Capital investment
- Jobs created and retained
- Average wages paid
- Load factor

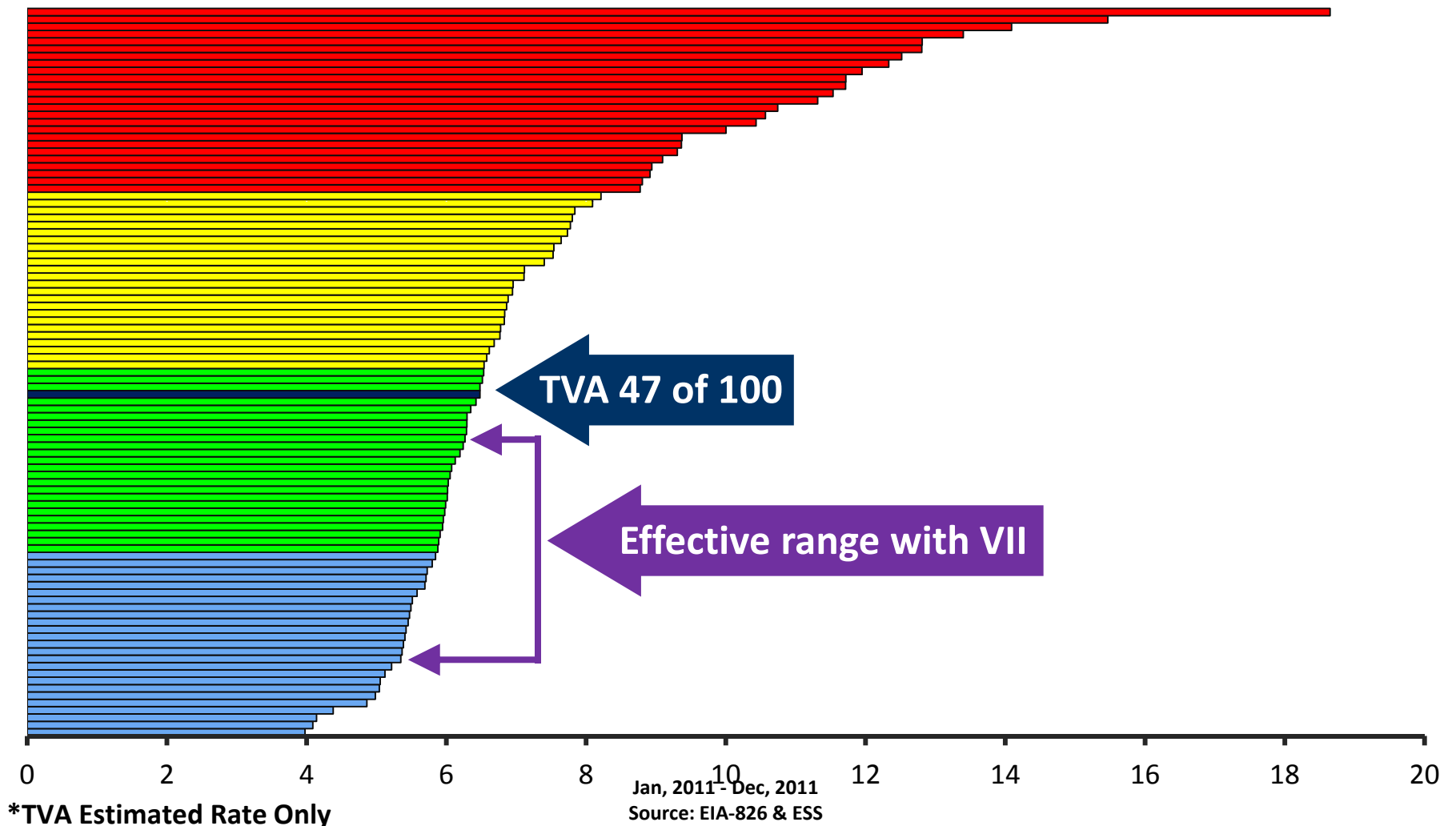
Enhancements include:

- Increasing benefit
- Increasing value of high load factor



# Top 100 Utilities' Industrial Rates

12 Month Average of the Top 100 U.S. Utilities\*



\*TVA Estimated Rate Only



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# Diet and Exercise at TVA



Low Rates

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# Agile company - Diet and Exercise

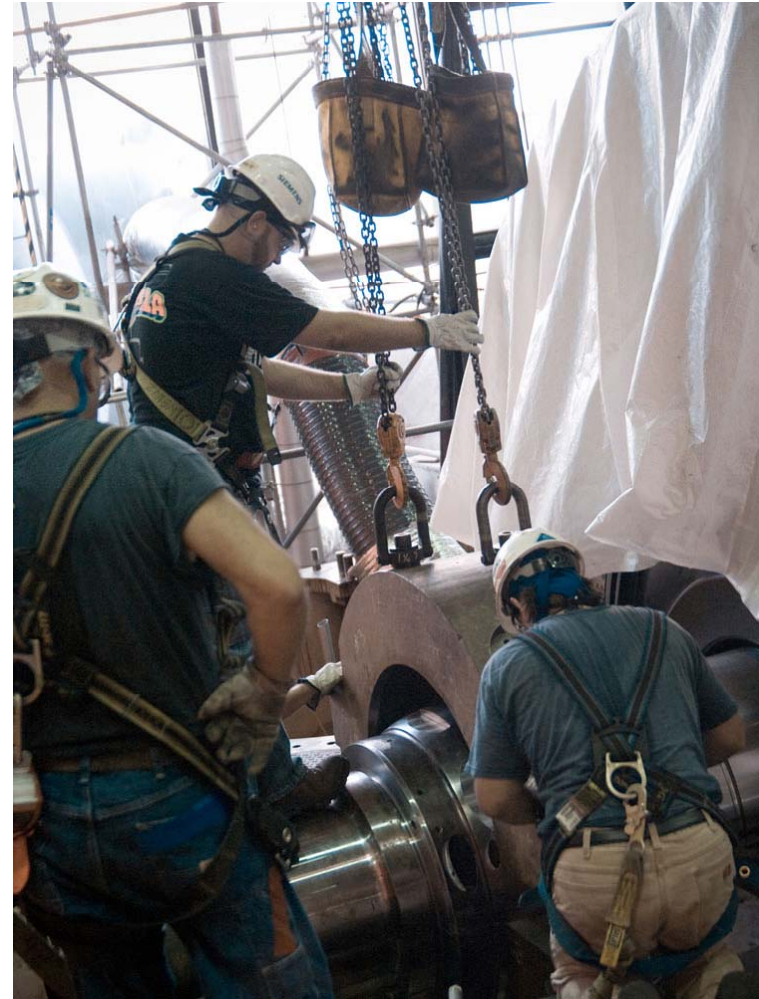
*Diet* is shedding those things that increase our costs or hinder our performance

*Exercises* are changing behaviors and sustaining cost reductions

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# Spending Reductions

- Expansion Projects
  - Reprioritization
  - Interest Expenses
- Productivity Initiatives



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# Nuclear Needed for a Balanced Portfolio



More Nuclear Generation

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# Nuclear Energy

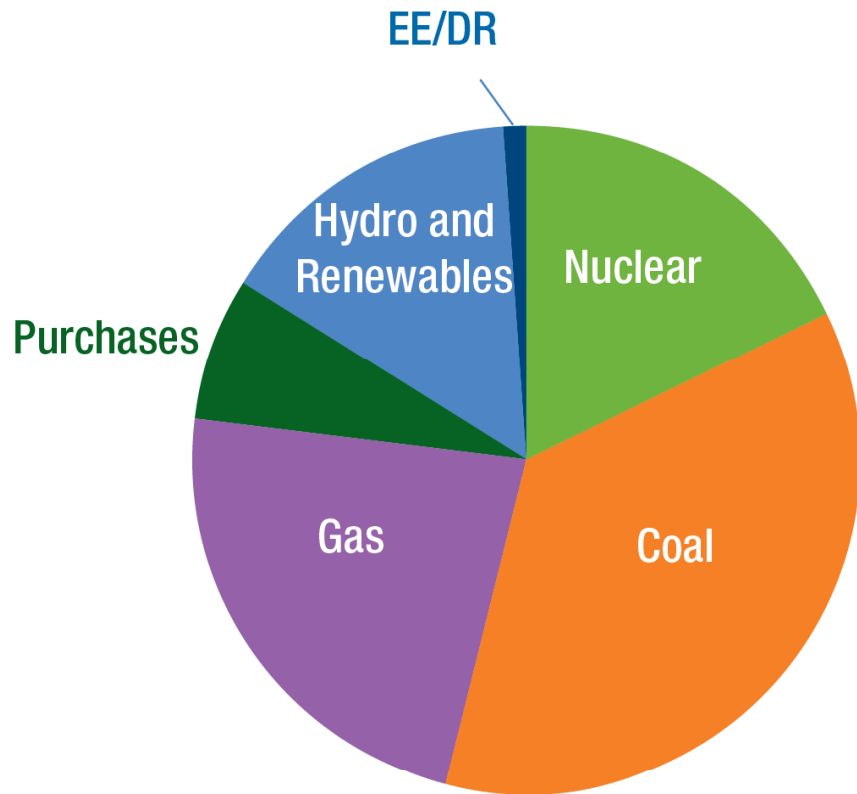
- Proven technology
- Low production costs
- High reliability



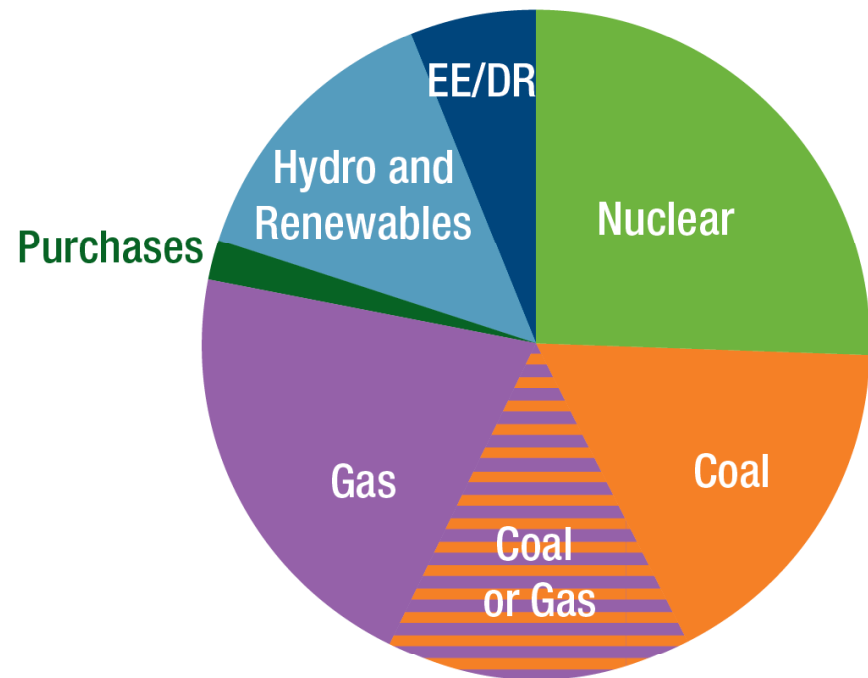
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# Portfolio

## Current

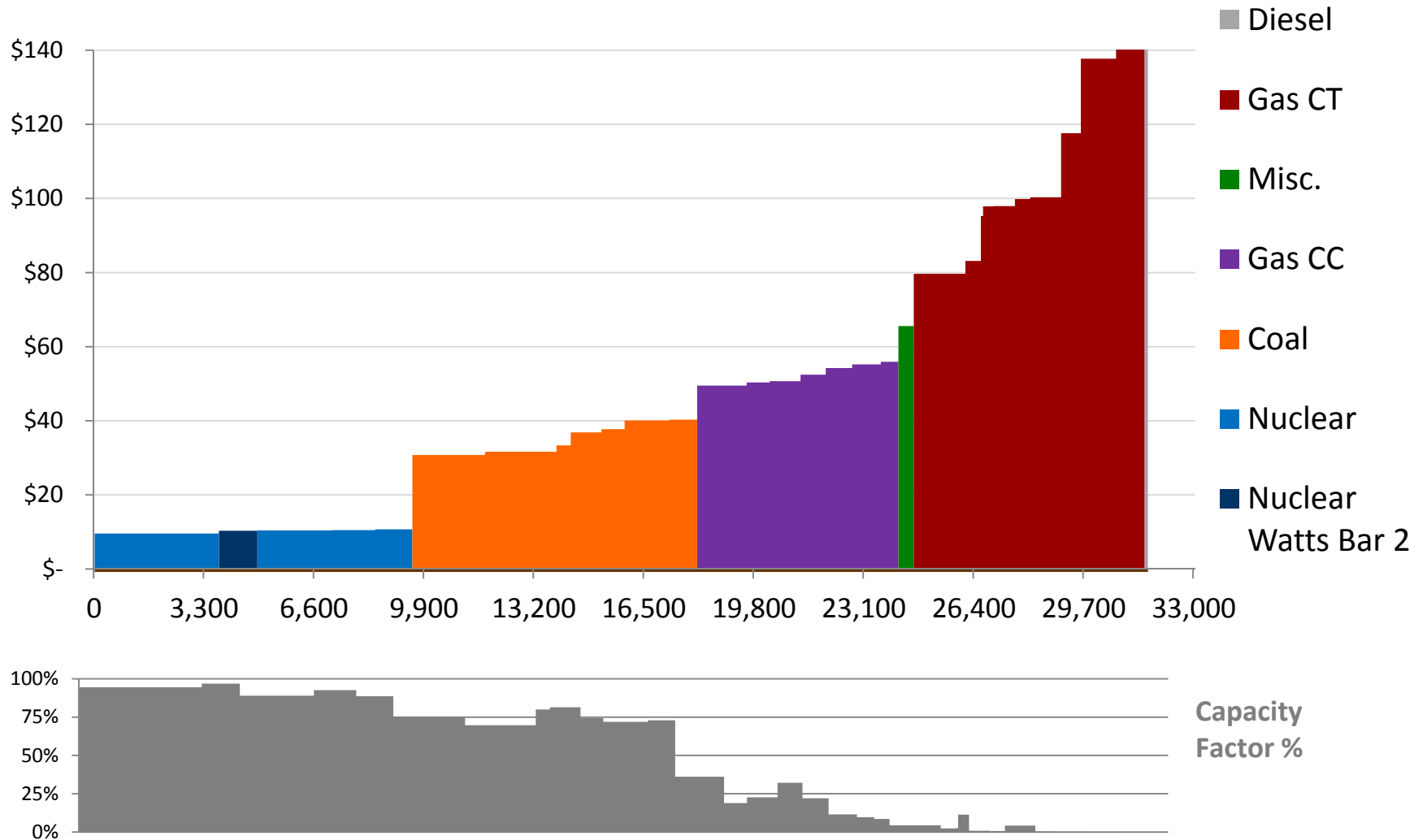


## Future



# Nuclear Generation Serves Baseload Needs

Dispatch Stack (Total Variable \$/MWh \* Summer MW), FY2020



\*Not shown: Hydro, Renewables, EEDR

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# Nuclear Improvements

- Sequoyah moves to NRC Green
- Higher Operating Capacity Factor
- No manual or automatic scrams this fiscal year
- Browns Ferry set a new site record for continuous operation of all three reactors



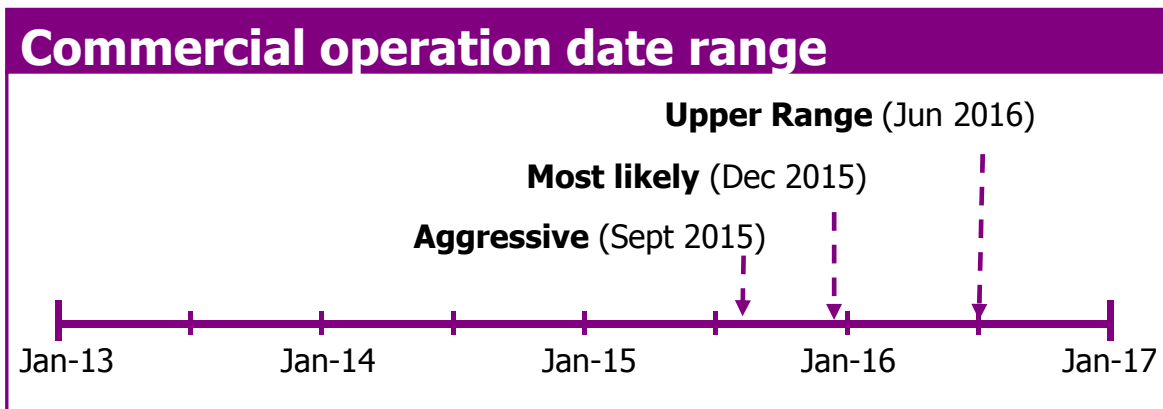
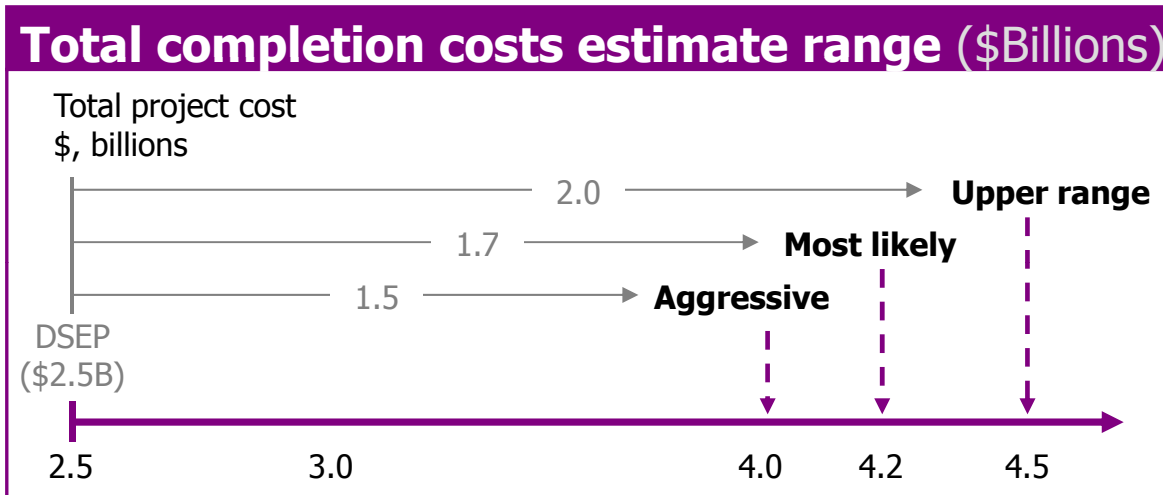


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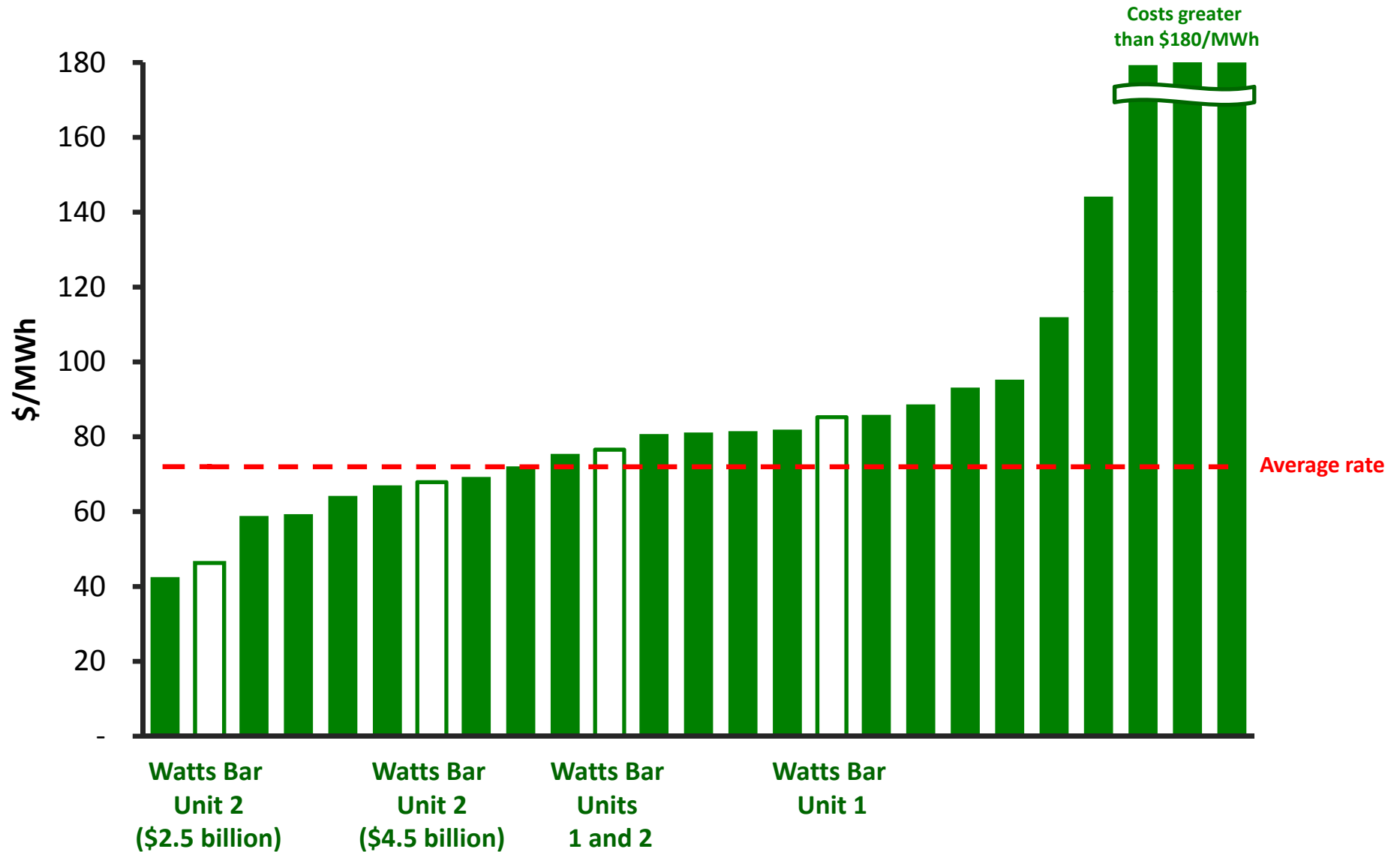
# Watts Bar 2



# Watts Bar Unit 2 Estimate to Complete



# Watts Bar Unit 2 – Rates





# General Site – April 24, 2012



A photograph of two utility workers on a tall, lattice-structured metal tower. The workers are wearing hard hats and safety harnesses. One worker is in a white shirt and the other is in a red shirt. They are positioned on a horizontal cross-arm of the tower. The background is a clear, bright blue sky. The text 'TVA Employees' is overlaid in white on the right side of the image.

# TVA Employees

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# Summary

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# Summary for Today

- Providing additional incentives to retain and create jobs in the Valley
- Addressing revenue pressures through “diet and exercise”
- Maintaining a balanced portfolio



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# Financial Performance

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# 2nd Quarter Summary – FY12

Sales and Revenue less than planned

Fuel costs favorable

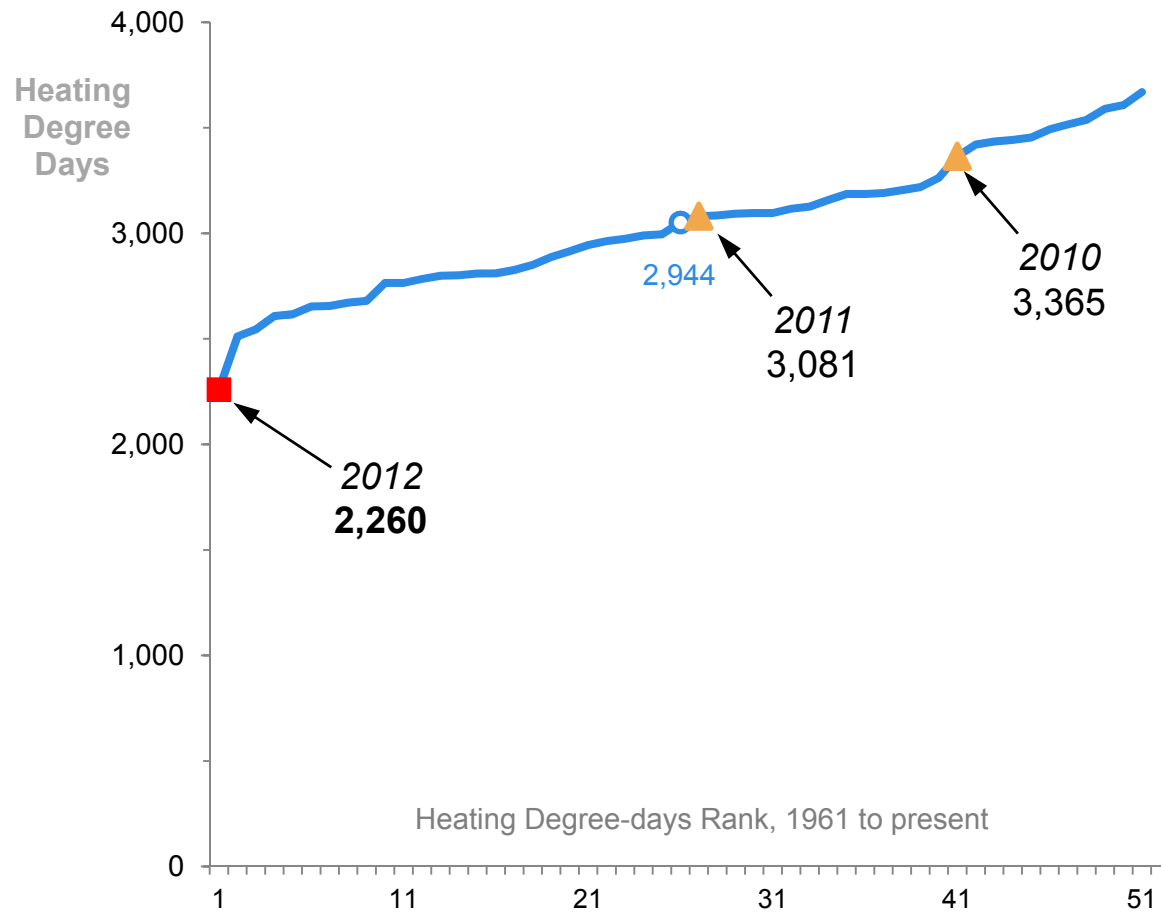
O&M and Base Capital favorable

Capacity Expansion favorable due to timing

Net Income variance to plan -\$347M

Winning Performance Net Cash Flow variance to plan -\$10M

# Warm Weather Drove Sales

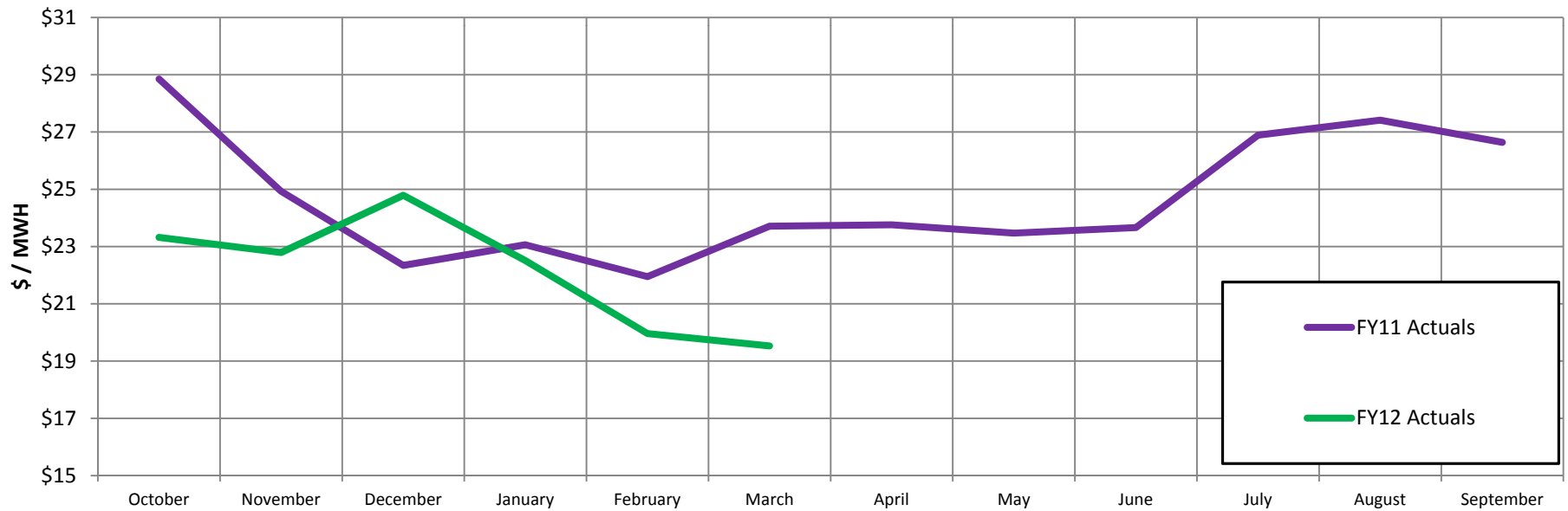


*“ Winter 2012 Named 4<sup>th</sup> Warmest on Record “*

*“ March 2012 was the warmest on record since 1961 “*

# Fuel Rates: Year over Year Analysis

**FY12 Fuel Rates Lower than both FY11 Rates and FY12 Plan**



# Tax Equivalent Estimates

## FY13 Tax Equivalent Payments

- Mild weather and a sluggish economy impacted actual revenues
- Tax Equivalent forecasted down approximately 6% from FY12 estimates

*(in millions)*

State	Final FY 2008	Final FY 2009	Final FY 2010	Final FY 2011	Estimated FY 2012	Estimated FY13
Alabama	\$ 112	\$ 120	\$ 125	\$ 116	\$ 123	
Georgia	7	8	9	9	9	
Illinois	<1	1	1	<1	1	
Kentucky	43	46	49	47	47	
Mississippi	26	32	35	33	41	
North Carolina	3	3	3	3	3	
Tennessee	265	295	327	321	354	
Virginia	<1	<1	1	1	1	
<b>Total</b>	<b>\$ 457</b>	<b>\$ 505</b>	<b>\$ 550</b>	<b>\$ 530</b>	<b>\$ 579</b>	<b>\$ 544</b>

# Summary Income Statement

(Preliminary Unaudited March 2012)

<i>(\$ millions)</i>	<u>YTD Actual</u>	<u>YTD Budget</u>	<u>Variance</u>
<b>Operating Revenue</b>	\$ 5,193	\$ 5,808	\$ (615)
Base Revenue	\$ 3,438	\$ 3,847	\$ (410)
Fuel Revenue	\$ 1,755	\$ 1,961	\$ (206)
<b>Operating Expenses</b>	\$ 4,860	\$ 5,057	\$ 196
Fuel & Purchased Power	\$ 1,817	\$ 2,003	\$ 186
Operations & Maintenance	\$ 1,809	\$ 1,830	\$ 21
Depreciation / Amortization	\$ 934	\$ 913	\$ (21)
Tax Equivalents, Other	\$ 300	\$ 311	\$ 10
<b>Operating Income</b>	<u>\$ 333</u>	<u>\$ 752</u>	<u>\$ (419)</u>
<b>Other Income</b> (investments, external business)	\$ 14	\$ 3	\$ 11
<b>Interest Expense</b>	\$ 645	\$ 707	\$ 61
<b>Net Income</b>	<u>\$ (298)</u>	<u>\$ 48</u>	<u>\$ (347)</u>

# Summary Cash Flow Statement

(Preliminary & Unaudited March 2012)

<b>Fiscal Year to Date (\$ millions)</b>	<b><u>YTD Actual</u></b>	<b><u>YTD Budget</u></b>	<b><u>Variance</u></b>
Beginning Cash and Short-term Investments	\$ 507	\$ 500	\$ 7
Cash Flow from Operating Activities	693	1,179	(486)
Cash Flow from Investing Activities	(1,187)	(2,143)	957
Cash Flow from Financing Activities	357	751	(394)
Net Change in Cash & Cash Equivalents	<u>(137)</u>	<u>(213)</u>	<u>77</u>
Ending Cash and Short-Term Investments	\$ 371	\$ 287	\$ 84
<b>FYTD Debt and Financing Obligations</b>	<b>\$ 27,018</b>	<b>\$ 27,053</b>	<b>\$ (35)</b>

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# Summary

## Highlights

- Low commodity prices  
(natural gas & purchased power)
- Diet & Exercise
- Low interest rates
- Market returns
- Project cash flows

## Hard Spots

- Mild weather significantly impacting demand
- Sluggish economy
- Regulatory maintenance driving operational project spend

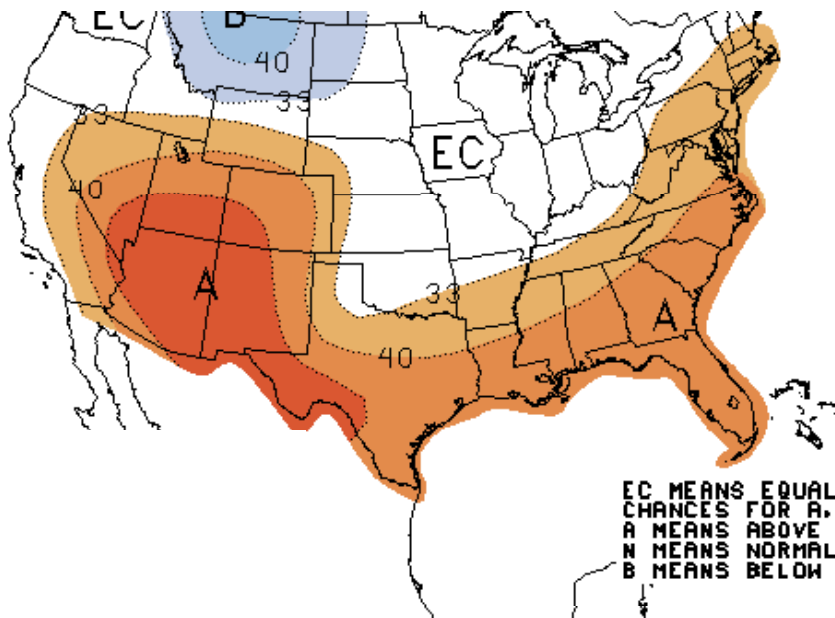


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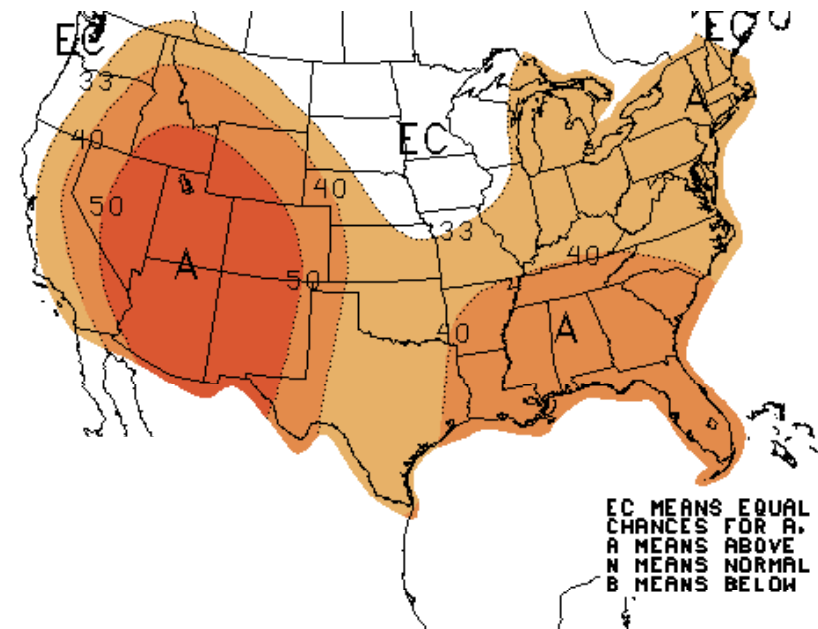
# Fiscal Year 2012 Look Ahead

# Weather Pattern Normalizing

May – July Outlook



July – September Outlook



Weather showing less variance to normal temperatures than we have experienced year-to-date

# Non-Fuel Revenue Outlook

Base Revenue Drivers (millions)	FYTD12 Actuals (Oct – March)	FYTD12 Forecast* (April – Sept)	FY12 Total Year
Economy & Consumer Behavior	-\$130	-\$140	-\$270
Weather	-\$280	+\$50 to -\$50	-\$230 to - \$330
<b>Total</b>	<b>-\$410M</b>	<b>-\$90 to -\$190M</b>	<b>-\$500M to -\$600M</b>

\* Forecast as of March 31, 2012

# Effective Base Rates

Customer Rates Favorable to FY12 Plan and to Prior Year

Year over Year Comparison ¢/kWh	FYTD <sup>12</sup> Ending 3/31/12	FYTD <sup>11</sup> Ending 3/31/11	Effective Rate
Base Rate	4.25	4.46	<b>-4.6%</b>
Fuel Rate	2.21	2.37	<b>-6.5%</b>

FY12: Actual versus Plan ¢/kWh	<u>Actual</u> FYTD12 Ending 3/31/12	<u>Plan</u> FYTD12 Ending 3/31/12	Effective Rate
Base Rate	4.25	4.45	<b>-4.4%</b>
Fuel Rate	2.21	2.31	<b>-4.1%</b>

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# Fiscal Year 2012 Look Ahead

## Highlights

- Stable fuel and purchased-power prices expected
- Continued active Diet & Exercise program
- Continued interest favorability
- Lower Rates

## Hard Spots

- Weather uncertainty
- WBN U2 cost increases
- Anticipated net loss for FY12
- Market volatility

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# Finance, Rates, and Portfolio Committee

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# Spent Nuclear Fuel Storage and Management Project

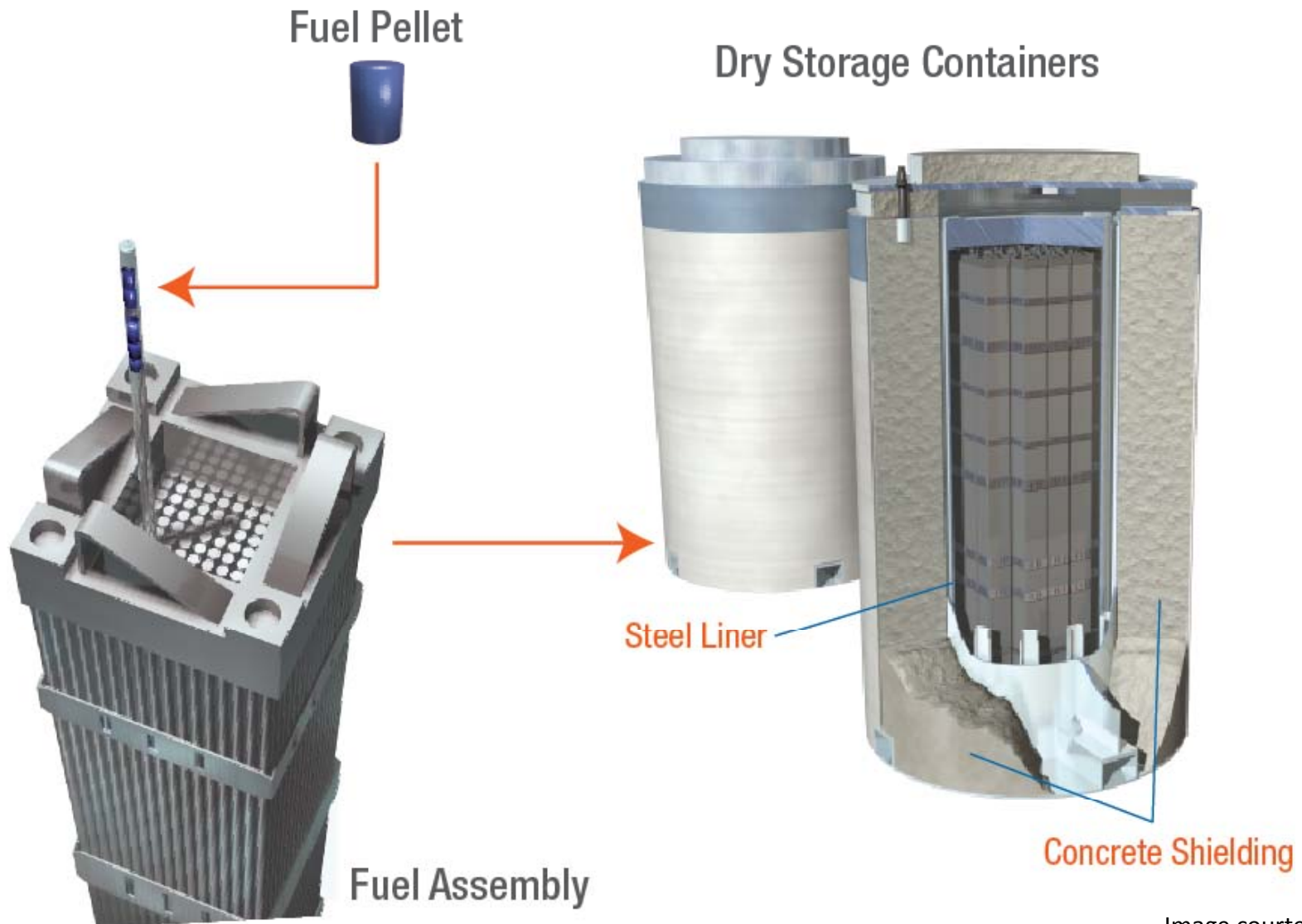
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# For Board Consideration

Authorize the award of a contract for \$298 million to support TVA's long-term management and storage project for spent nuclear fuel



# Dry Cask Storage



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# Cost and Duration

Contract cost of \$298 million

10-year contract, with an option to extend for up to five additional years

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# Vendor Options

Issued RFP

Five vendors' responses considered using the following criteria:

- Technical merit
- Cost volatility and overall cost
- Contract length
- Ability to address changes to regulatory landscape

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# Background

Previous issues with Holtec's qualification for award of TVA or other Government contracts

Holtec took actions required by TVA to improve governance and demonstrate corporate responsibility

Eligible for June 2011 RFP

Appropriate corporate responsibility measures in place

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# Recommendation

Authorize the award of a ten-year contract for \$298 million to support TVA's long-term management and storage project for spent nuclear fuel

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# Optional Wholesale Rates

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# For Board Consideration

Request Board approval of two new wholesale rate options to complement the rate structure change implemented in April 2011

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# Background

In April 2011, TVA implemented two alternative wholesale rate options:

1. Nearly Flat Time of Use
2. Seasonal Demand and Energy rate structure

Current Seasonal Demand and Energy structure considered a transition rate and set to expire in October 2012



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# Background

Endorsed by TVPPA's Rates & Contracts  
Committee

Consistent with setting rates more reflective of  
costs

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# Proposed Rate Options

1. Seasonal Demand and Energy Structure
  - Revised for consistency with time of use options
2. Optional Time of Use Rate
  - Greater on-peak to off-peak price differential

# Three Primary Wholesale Options

Common Elements					Option 1		Option 2	
					Time-of-Use (Default)		Modified Time-of-Use (Option)	
	Demand \$/kW-month		Non-Fuel Energy ¢/kWh	Estimated Fuel Energy ¢/kWh	Fuel TOU ¢/kWh	Total Energy ¢/kWh	Fuel TOU ¢/kWh	Total Energy ¢/kWh
Summer	\$9.62	On-Peak	3.594	2.463	0.75	6.807	1.50	7.557
		Off-Peak	3.594	2.463	-0.35	5.707	-0.70	5.357
Winter	\$8.80	On-Peak	3.305	2.463	0.40	6.168	0.80	6.568
		Off-Peak	3.305	2.463	-0.10	5.668	-0.20	5.568
Transition	\$8.80		3.189	2.463		5.652		5.652

## Option 3

Modified Seasonal Demand & Energy (Option)						
	Demand \$/kW-month		Non-Fuel Energy ¢/kWh	Estimated Fuel Energy ¢/kWh		Total Energy ¢/kWh
Summer	\$9.62		3.594	2.463		6.057
Winter	\$8.80		3.305	2.463		5.768
Transition	\$8.80		3.189	2.463		5.652

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# Recommendation

Approve making the optional modified Time-Of-Use wholesale rate schedules and the optional modified Seasonal Demand and Energy wholesale rate schedules available to distributors beginning October 2012

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# Direct Served Industrial Customers

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# Uranium and Enrichment Services

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# For Board Consideration

Authorize actions to support proposed Department of Energy multi-party agreement including the purchase of uranium feed and uranium enrichment services from Energy Northwest from 2015 through 2025

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# Background

Department of Energy (DOE) request for a multi-party partnership to support production of enriched uranium to support DOE program needs

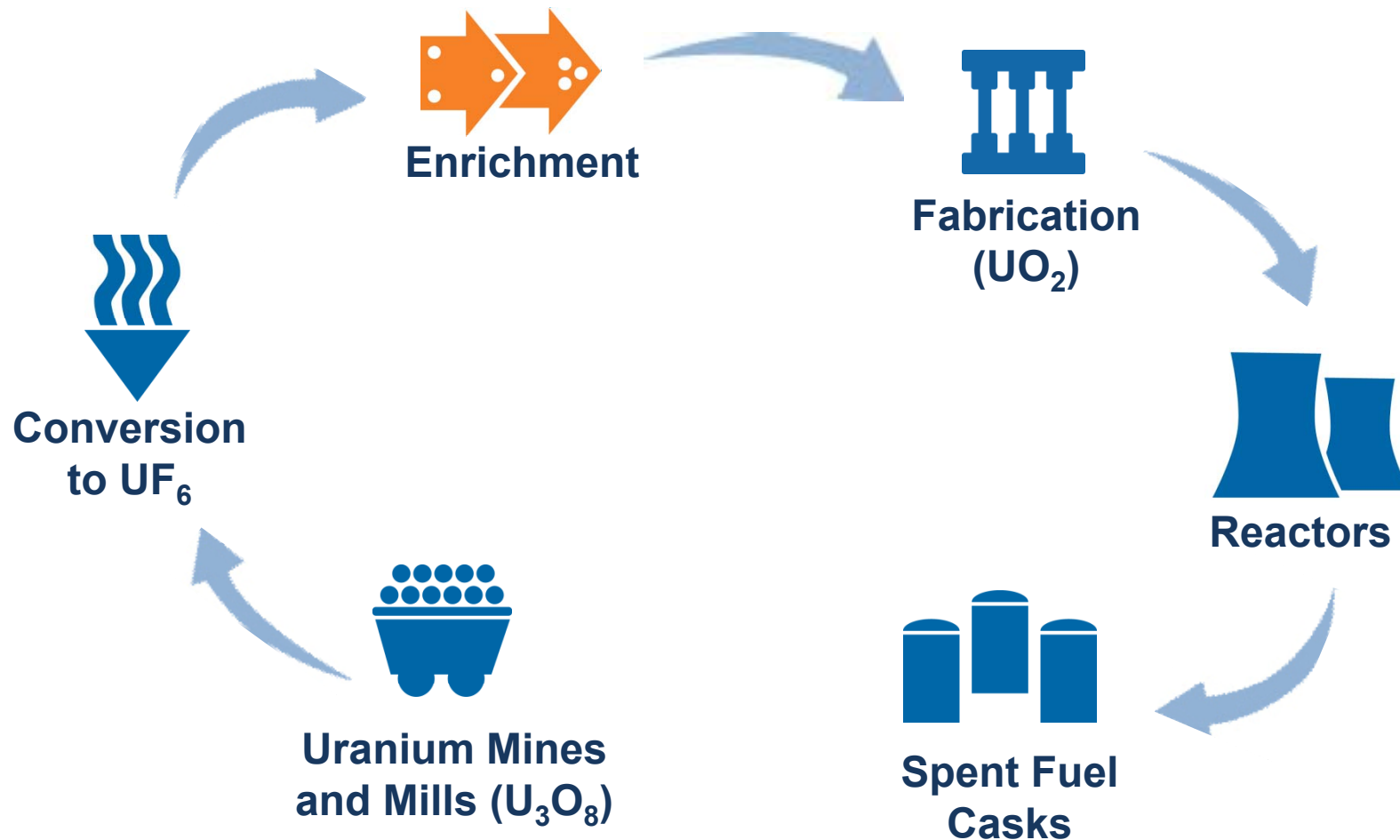
TVA's involvement would be to provide power to the USEC enrichment facility and to purchase enriched uranium from Energy Northwest

Today's approval would permit discussions to continue



# Background

Uranium goes through several processing steps before becoming reactor fuel



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# Benefits of Agreement

Will ensure TVA fuel supply at or below market pricing-  
fuel cost would be approximately \$888 million over the  
ten year period

Supports key DOE program needs

Proposed solution is beneficial to the Valley and  
Kentucky

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# Benefits

Pricing compares favorably with previously accepted contracts and maintains appropriate supply diversification

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# Recommendation

Authorize actions to support proposed Department of Energy multi-party agreement including the purchase of uranium feed and uranium enrichment services from Energy Northwest from 2015 through 2025

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Finance, Rates, and Portfolio  
Committee

Nuclear Oversight  
Committee

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# Watts Bar Unit 2

## Estimate to Complete

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# Recommendation

Request Board approval to continue with  
Watts Bar Unit 2 construction project based on  
the revised Estimate to Complete

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# Today's Briefing

- Performance Assessment
- Review Estimate to Complete Results
- Cost Analysis
- Project Status Report
- Recommendation



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# Assessment of Performance Issues

Several root and contributing causes of project performance have been identified

- Leadership
- Estimation
- Execution
- Oversight

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# Estimate to Complete Process

- Finished “walk downs”
- Validated remaining engineering products
- Re-planned time and labor
- Added appropriate contingency
- Independent reviews conducted

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# Key Project Risks

- Operating license challenges / delays (i.e., Fukushima)
- Long lead time if equipment breakage occurs
- Potential productivity declines

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# Actions to Improve Performance

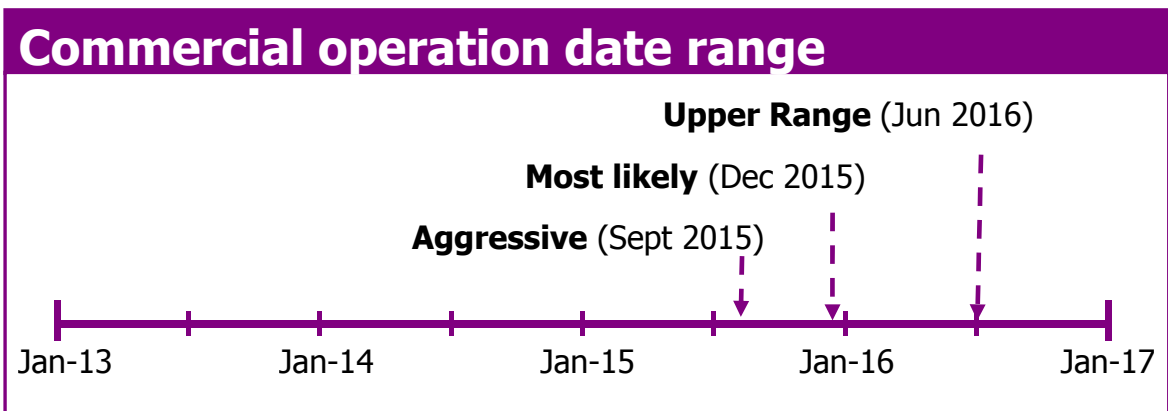
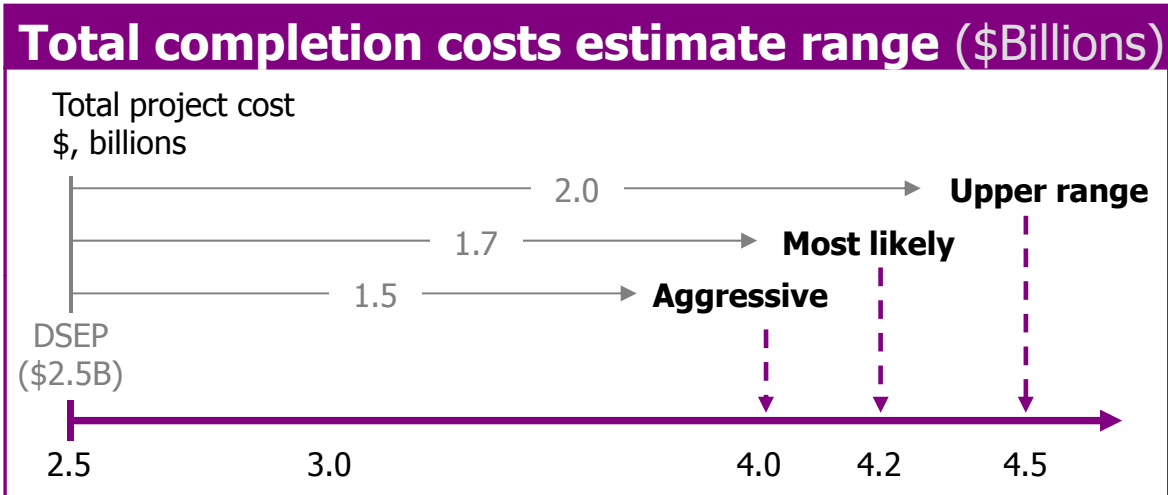
## Project Execution Improvements

- Planning documents
- Field engineering
- Independent monitoring tools
- Project organization
- Employee communication
- Transparent oversight

## Additional planned measures

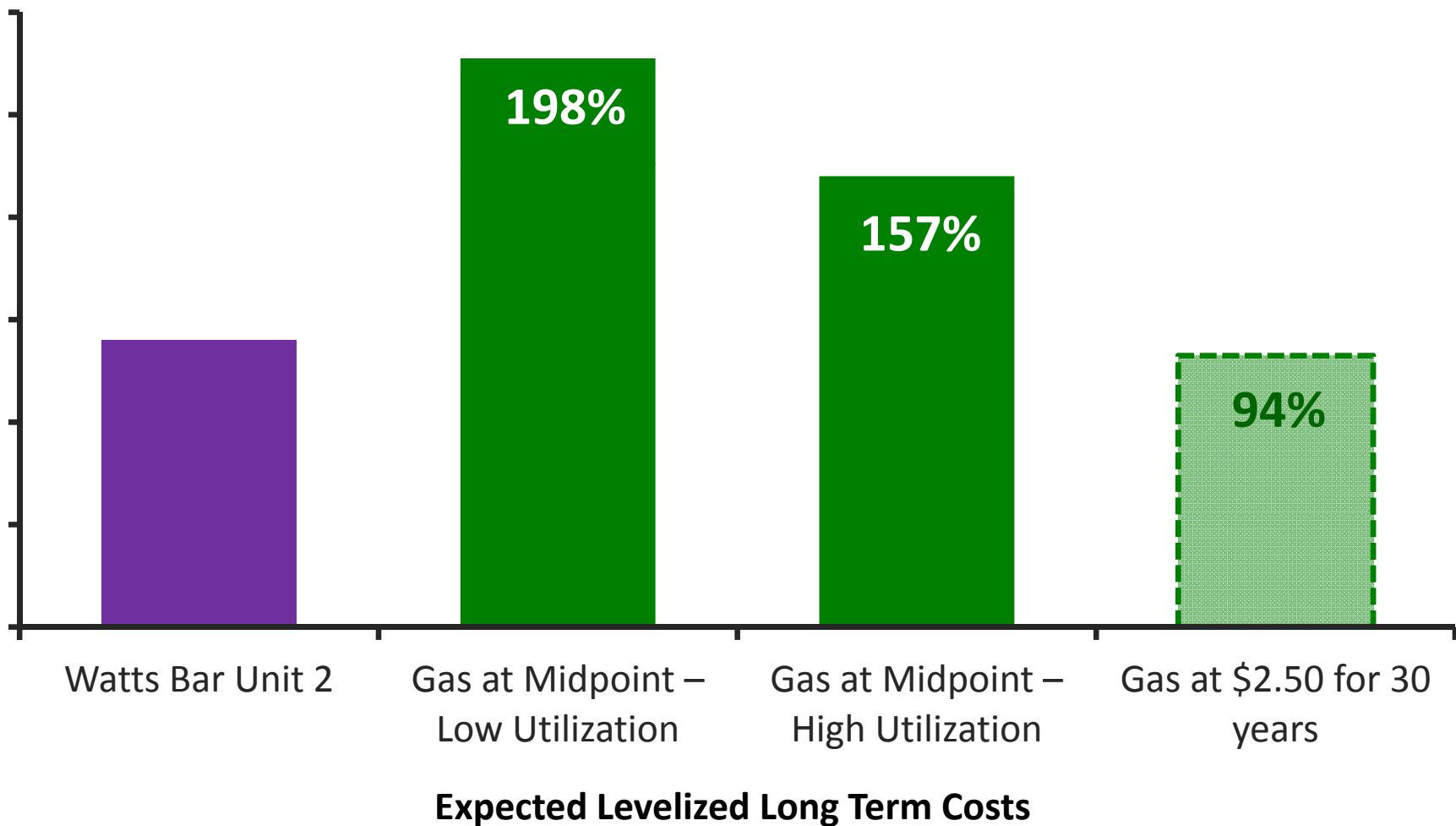
- Initiate regular executive sponsor meetings
- Streamline work package rebuilds
- Regular productivity measures

# Watts Bar Unit 2 Estimate to Complete

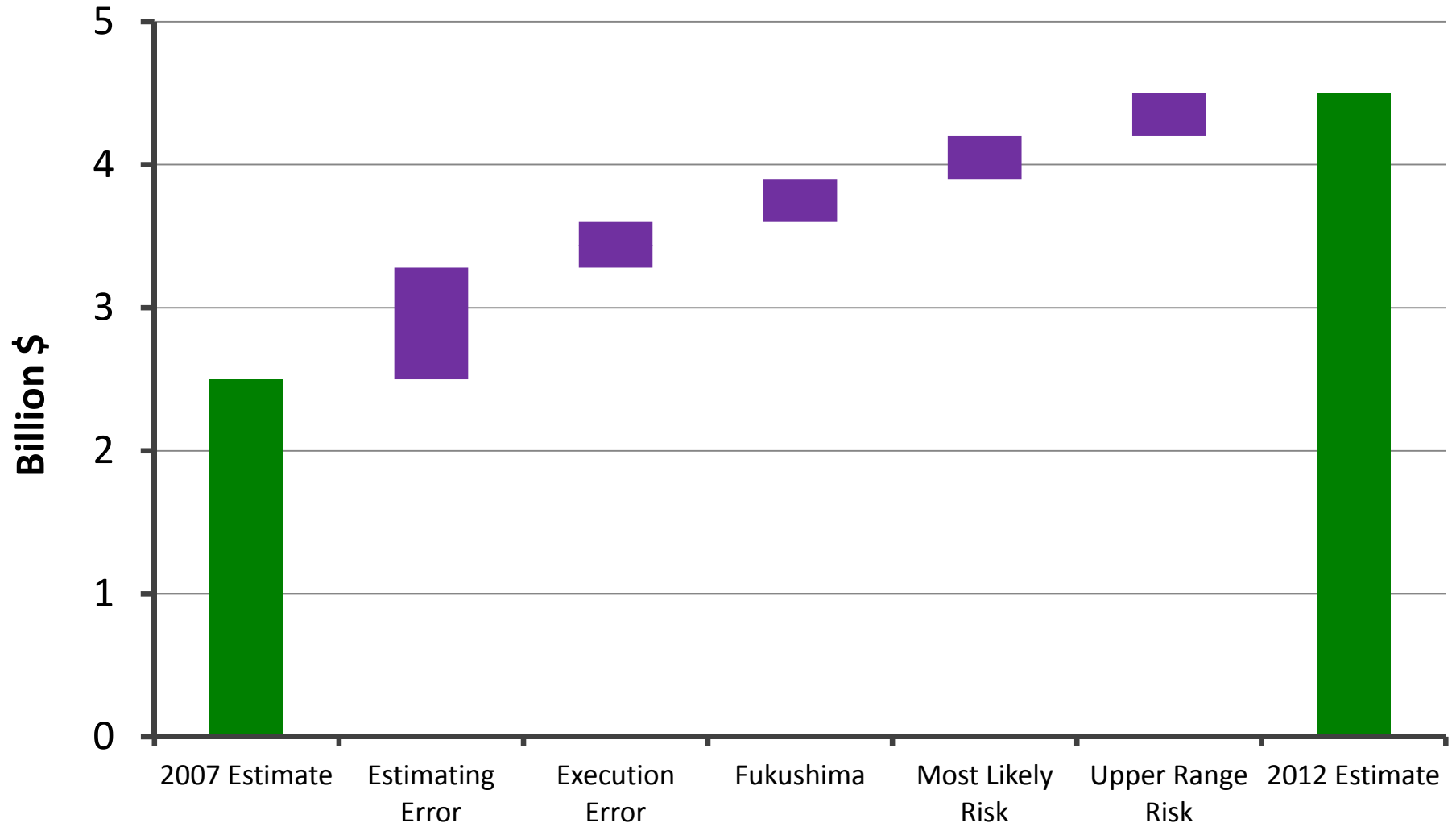


# Cost Analysis

Watts Bar Unit 2 cost to complete versus building new gas plants



# Cost Breakdown

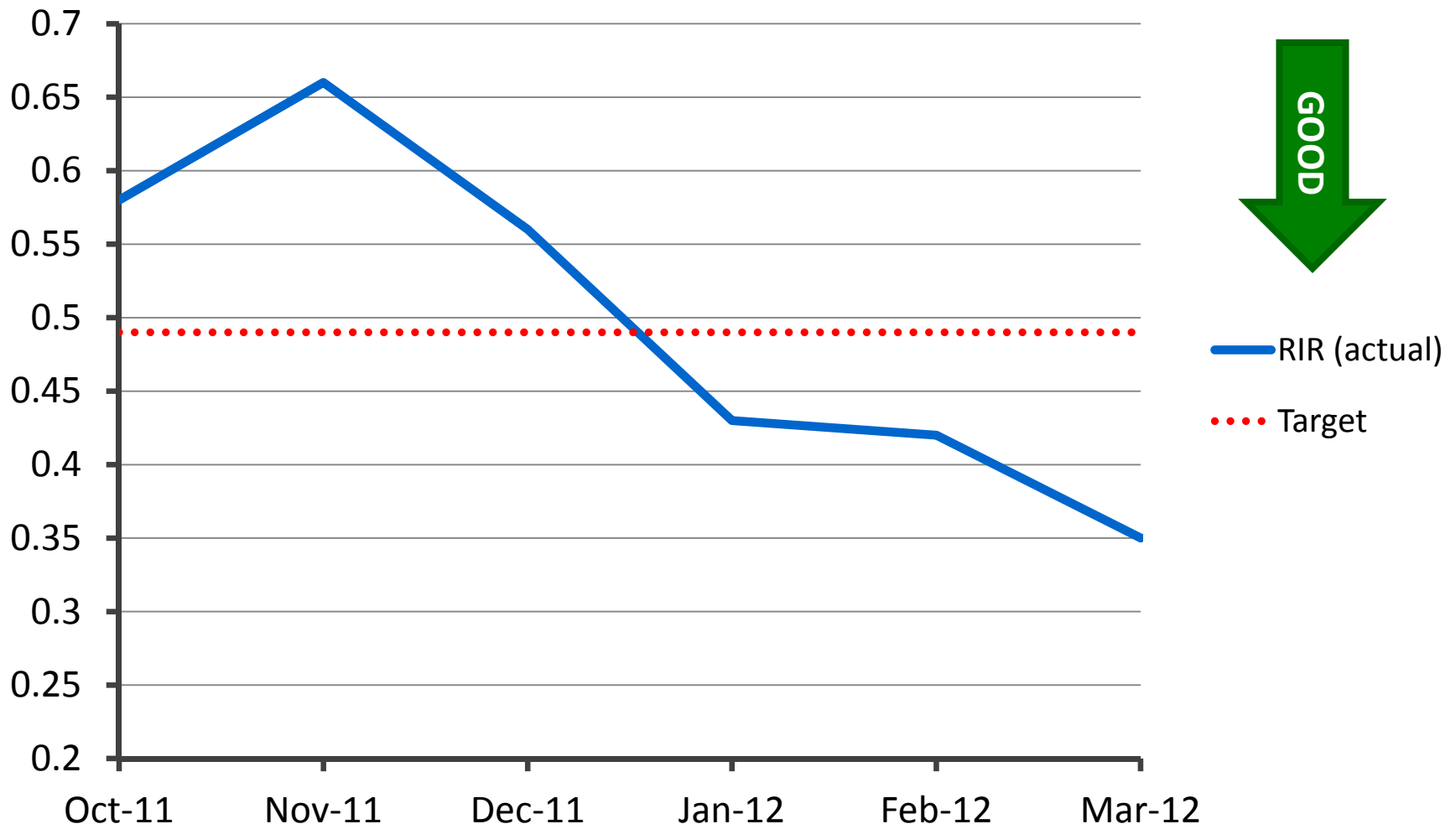


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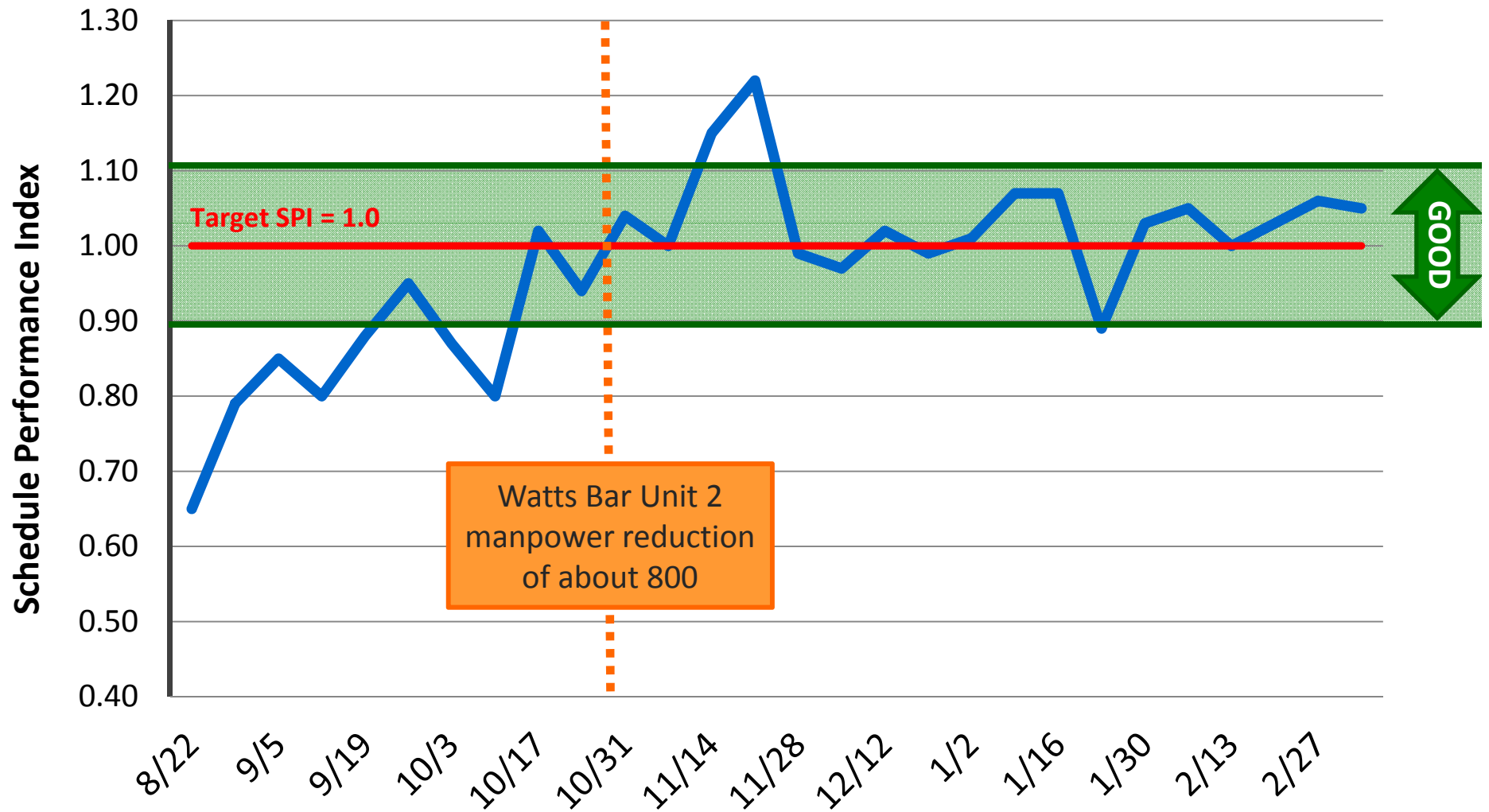
# Project Status Report



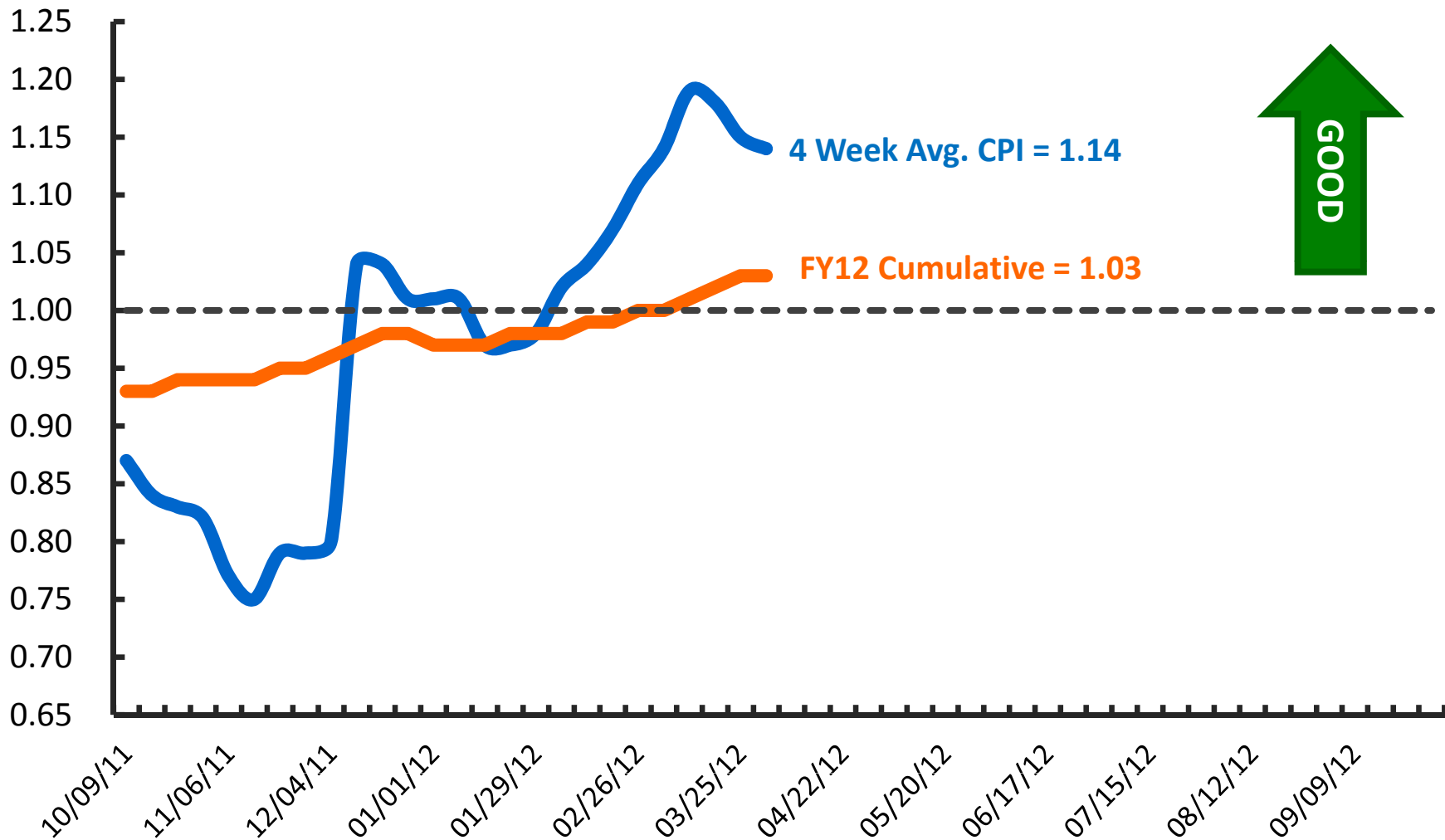
# Safety Performance



# Schedule Performance Index



# Cost Performance Index



# Quality Control Acceptance Rate



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# Summary

Confidence in the revised estimate

Risks and opportunities remain

Watts Bar Unit 2 continues to be  
cost-competitive

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# Recommendation

Request approval to continue with Watts Bar  
Unit 2 construction project based on the revised  
Estimate to Complete

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# Nuclear Oversight Committee

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# Nuclear Safety Policy



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# Commitment to Nuclear Safety

Protection of the public, employees, and the environment are paramount considerations

Maintain a strong nuclear safety culture

Value honest, open communication

Seek continuous improvement

Clearly defined roles and responsibilities

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# People and Performance Committee

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# Audit, Risk, and Regulation Committee

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# External Relations Committee

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# Regional Resource Stewardship Council Charter

# For Board Consideration

Approve the charter and renewal of the Regional Resource Stewardship Council for a seventh two-year term



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# Background

Created in 1999

Advice and recommendations reported to the TVA Board  
External Relations Committee

Six previous Council terms

Term of the existing Council members will expire on  
February 2, 2013



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# Membership

Council consists of up to 20 members and balanced to include a broad range of diverse views and interests

Seven members are nominated by the governors of the Valley states

Council members include:

- Four representing distributors of TVA power
- One representing a direct-served customer
- Beneficiary of TVA's navigation program
- Beneficiary of TVA's flood control program
- Recreational interest
- Environmental interest



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# Recommendation

Approve the charter and renewal of the Council for a seventh two-year term

Authorize the appropriate TVA officer to complete the charter renewal process

Proposed members will be presented to the board for review and approval