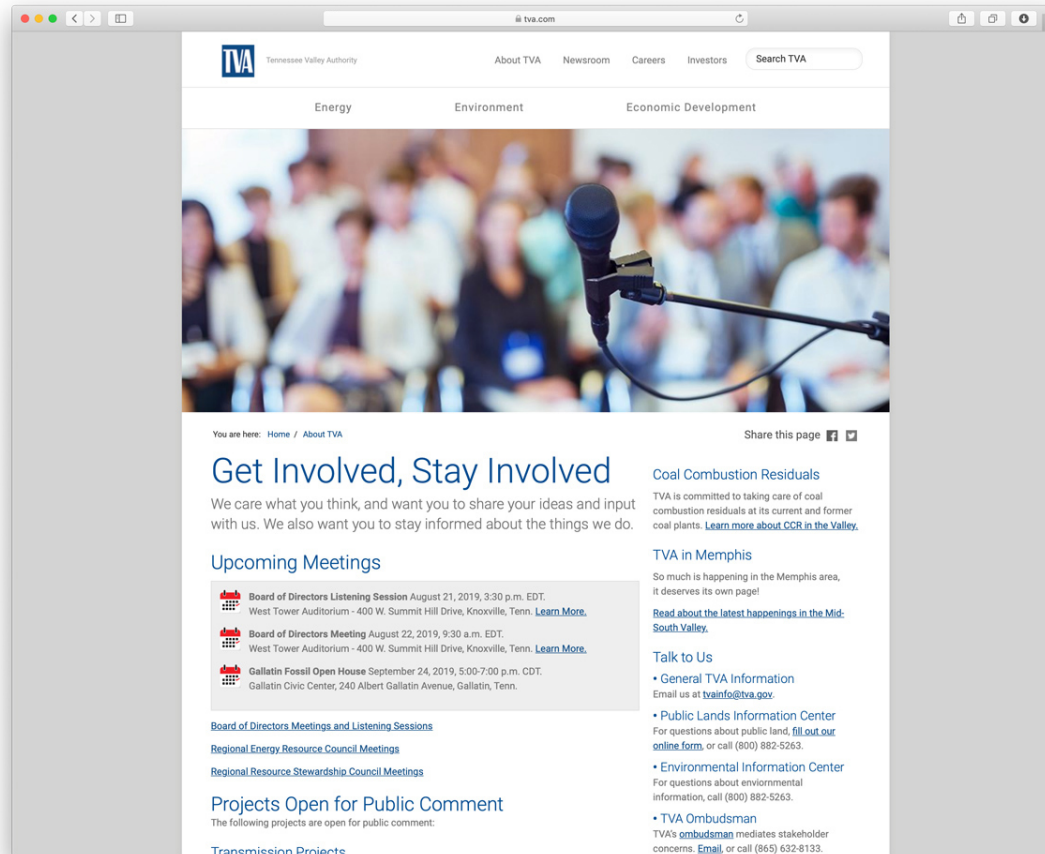




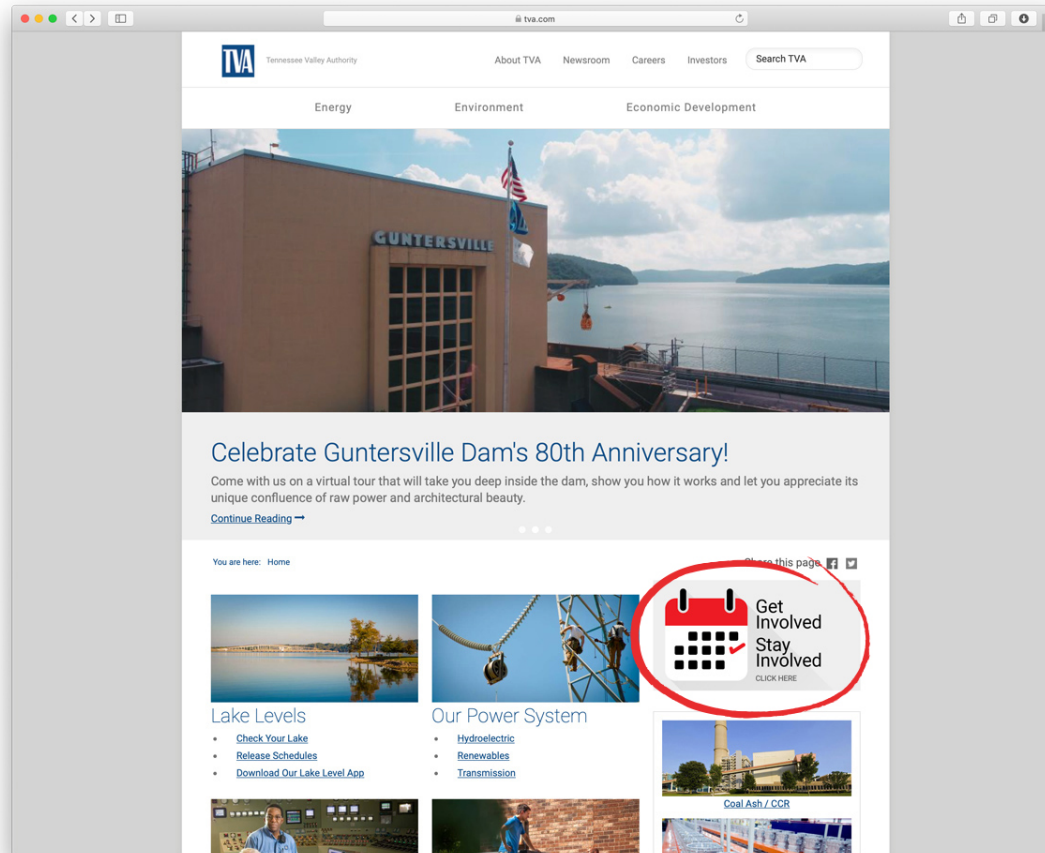
Board Meeting

August 22, 2019
Knoxville, Tennessee

Transparency



Transparency





Board Meeting

August 22, 2019
Knoxville, Tennessee



President's Report

JEFF LYASH
President and CEO

Meeting with Stakeholders



Our Mission

To serve the people
of the Tennessee Valley
to make life better.

Energy | Environment | Economic Development



Importance of Today

- Integrated Resource Plan
- 10-Year Financial Plan
- Partnership with our Local Power Companies

Public Power Model



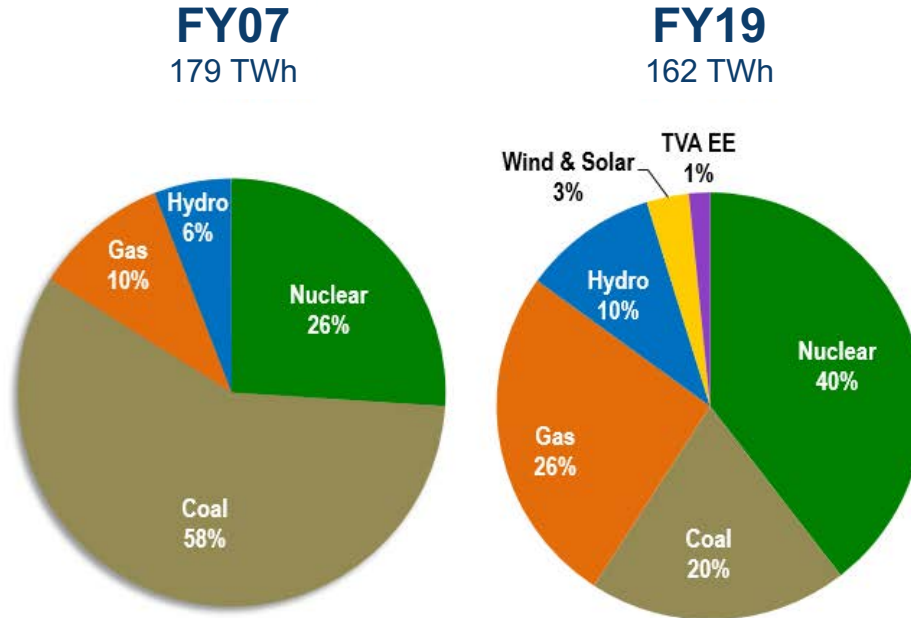
Public power. We're not here to make a profit; we're here to make a difference for you.

- People are first – we are accountable to the public, not shareholders.
- Rates are set to recover costs and reinvest in ways to serve you – not maximize profits.
- We are doing everything possible to keep more money in your wallets.

Integrated Resource Plan



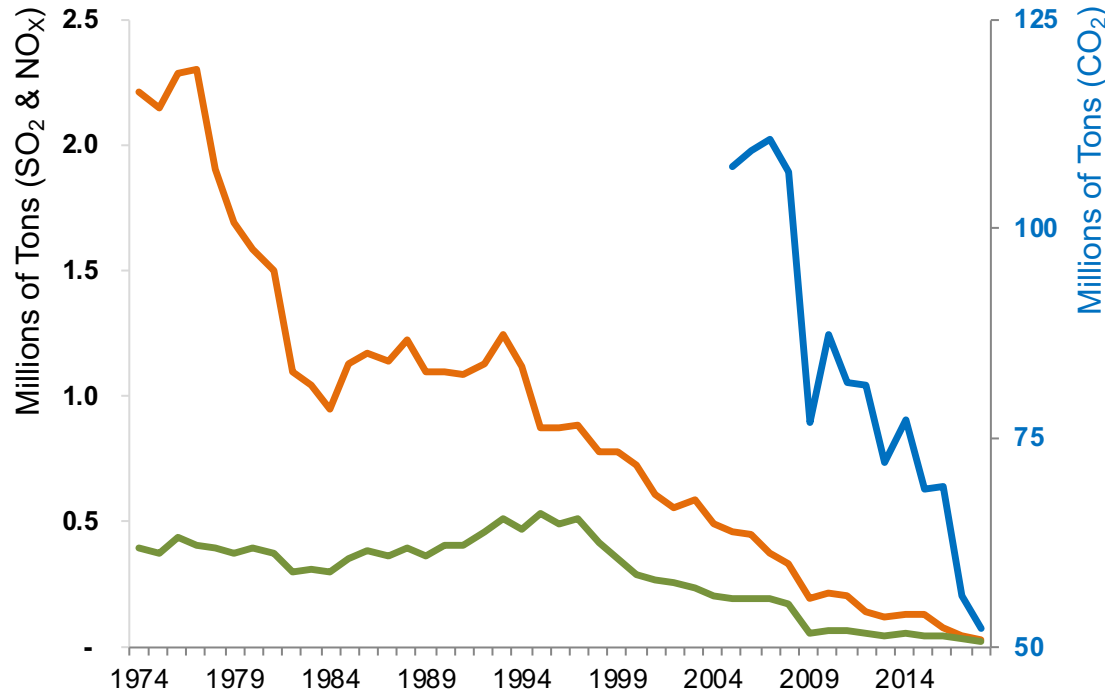
TVA Power System Diversity



Graphs represent energy. EE includes TVA Energy Efficiency Program impacts on a Net Cumulative Realized at System basis, 2007 base year, and excludes energy efficiency effects from external factors.

Cleaner & Greener Energy

Emissions from TVA-Owned Generation



Emissions data reported on a calendar year basis

CO₂

51%
from 2005

SO₂

99%
from 1977
peak

NO_x

96%
from 1995
peak

10-Year Financial Plan

operating expenses  **DRIVEN BY** **\$800** MILLION **IN** **SUSTAINABLE** efficiency improvement **& REDUCED** operating costs **SAVING \$1 BILLION** PER YEAR IN LOWER FUEL COSTS

The **TVA power system** is one of the **CLEANEST**, **MOST DIVERSE**, and **MOST RELIABLE** power systems **in the nation.**

DEBT REDUCED **\$3.9 BILLION** **TO DATE** **Long-Range Financial Plan** **FAITHFULLY FOR FOLLOWED** **6 YEARS**

FY30 Financial Plan

- Maintain rates as low as feasible
- Stabilize debt at \$18-20B range
- Balance commitments with obligations
- Maintain \$300M cash
- Drive efficiencies into the business

TVA and Local Power Companies



Long-Term Partnership Proposal

- 20-year commitment between TVA and LPCs
- Increases long-term partnerships
- Greater engagement in resource and financial planning
- Increased flexibility to meet customer expectations
- Lower base rates

Sustainability

tva.com/esgreport

Tennessee Valley Authority

2018 EEI ESG/Sustainability Reporting Template



June 2019

Introduction and Purpose

The Tennessee Valley Authority (TVA) provides the people of the Tennessee Valley with low-cost and reliable electricity while maintaining a healthy environment and prosperous economy — without compromising the ability of future generations to do the same. The three Es — energy, environmental stewardship, and economic development — continue to drive everything TVA does to sustain the Tennessee Valley region. TVA's mission to "serve the people to make life better" is as relevant today as it was when President Franklin Delano Roosevelt signed the TVA Act in 1933.

Today, utilities are challenged to think differently to foster a sustainable environment going forward, or risk the potential loss of future business. The Edison Electric Institute (EEI) Environmental, Social, and Governance (ESG/Sustainability) reporting template is a summary of key sustainability metrics for voluntary use. TVA participated in the template development process and is continuing participation because sustainable performance is paramount to its customers and other stakeholders.

ESG/Sustainability Governance at TVA

TVA's nine-member Board of Directors (the Board) serves as the governing body for TVA. As provided by the TVA Act and the TVA Bylaws, the principal responsibilities of the Board are to establish broad strategies, goals and objectives; set long range plans and policies; and ensure their implementation by the TVA staff under the leadership of the Chief Executive Officer (CEO). The Board members are nominated by the President of the United States and confirmed by the Senate, and each board member serves a term of five years.

The Board has established two separate councils — the Regional Resource Stewardship Council and the Regional Energy Research Council — under the Federal Advisory Committee Act to advise TVA on its stewardship activities and energy resource activities in the Tennessee Valley. Both of these councils focus on decisions and performance to foster a sustainable environment in the Tennessee Valley.

TVA also has an Enterprise Leadership Team, led by the CEO, which drives business strategy and deployment, including decisions relating to sustainable performance. TVA considers sustainability in overall planning and business decisions. TVA's goals align with customer

cost and clean power that helps the Tennessee Valley and its

executive leader as Chief Sustainability Officer (CSO). TVA's CSO and a TVA-wide Sustainability Working Group, which is responsible for the ability at TVA.

Sustainability efforts are the Environmental Policy, the Environmental the Integrated Resource Plan (IRP), and the Natural Resource Plan in with TVA's mission. More detailed information about TVA's programs (9-20), as well as in the annual reports (10-Ks), quarterly reports (10-Qs), (Ks) TVA files with the Securities and Exchange Commission.

Managing Business Environment

The energy industry is evolving based on customer preferences, regulatory pressures and expectations. TVA's energy mix has shifted from a portfolio to a more diversified mix, which utilizes a balance of coal, gas, and renewables. In the Tennessee Valley, TVA is projected to lead growth. TVA is actively adjusting and expanding its business tributed energy resources and partnerships with the local power weavable projects. To adapt to future business dynamics, TVA is also abilities to further optimize its generation and transmission system.

Managing Future ESG/Sustainability Risks and Opportunities

Several business and industry groups to manage ESG/sustainability sing from regulation, customer trends, and research and development. Electric Institute, TVA is a member of the Electric Power Research American Energy Standards Board, and the Business Council on SE), among others.

Who oversees TVA's enterprise risk management function and al and external risks are identified and fully integrated into strategic

set the increasing pressure for a low-carbon generating fleet. In delivered electricity with a system average carbon rate of 825.09 percent below the national rate and 30 percent below the SERC C) Tennessee Valley regional rate). TVA is on track to further elow 600 lbs/MWh by the end of 2020. This allows TVA to offer ty, which helps the region attract and retain business and i Tennessee Valley.

grid resiliency assessment to support continuing advances in ng, education, training, and expertise. The assessment includes

cy action plans that enhance resiliency through damage prevention, improved (speedy recovery from severe events.

Partnerships with stakeholders that help bring jobs to the Tennessee Valley and try stronger to benefit the people of the region. TVA is charged with developing g strategic programs to attract capital investment within its service area and to jobs.

Plans and Progress

cy, TVA has developed a Federal Sustainability Performance Plan that follows EEO 13834 guidance. As part of this Federal Sustainability Performance Plan, ed annual sustainability objectives to meet in accordance with the Office of Budget federal scorecard targets. TVA works to integrate its federal goals for 13834 into its existing business operations.

Key programs and initiatives that support its sustainability strategy, such as the Adaptation Plan" which guides TVA's planning process to include a long- ste impacts on TVA's system. TVA also manages the Tennessee River ated public lands to reduce flood damage, maintain navigation, support and recreational uses, improve water and air quality, and protect shoreline il continue to manage the natural resources of the Tennessee Valley using ces Plan, which is currently being updated.

Expand its groundbreaking methodology on customer carbon calculations. diles CO₂ rates for certain customers based on actual hourly electric is. TVA currently calculates over 700 specialized carbon rates. In an effort y behavior changes, TVA has established annual carbon awards for the top it improved companies.

ive the people of the Tennessee Valley with low-cost and reliable electricity a healthy environment and prosperous economy without compromising the rations to do the same.

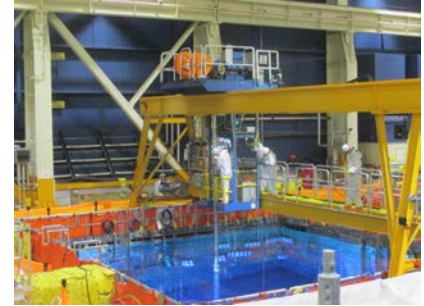


Managing Coal Combustion Residuals



Nuclear Energy is Clean Energy

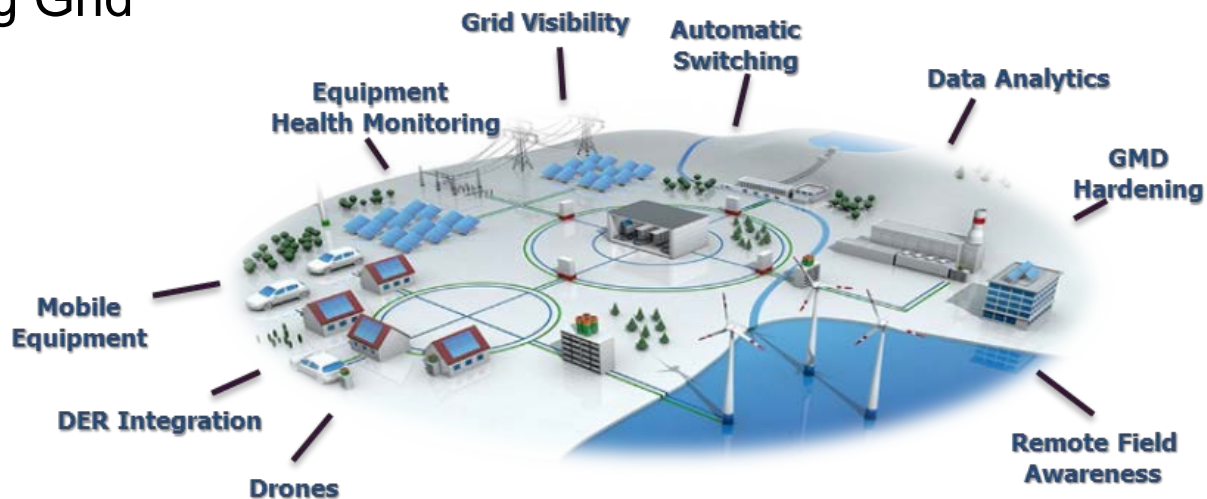
- Browns Ferry, Extended Power Uprate
- Generating 465 megawatts from nuclear – instead of coal – avoids carbon emissions of more than 4 million tons a year
- Create sustainable, industry-leading performance across TVA, including nuclear organization
- Nuclear's importance cannot be overstated
- Look forward to continuous improvement
- Watts Bar 2 Maintenance Outage
- Senior Vice President & Chief Nuclear Officer Tim Rausch



Tim Rausch
Chief Nuclear Officer

Grid 2023 – TVA's Future Transmission System

- Leverage Existing Grid Investments
- 2023 Grid Vision



Investing in a Dynamic, Multi-Directional Grid

FY 2020 Goals

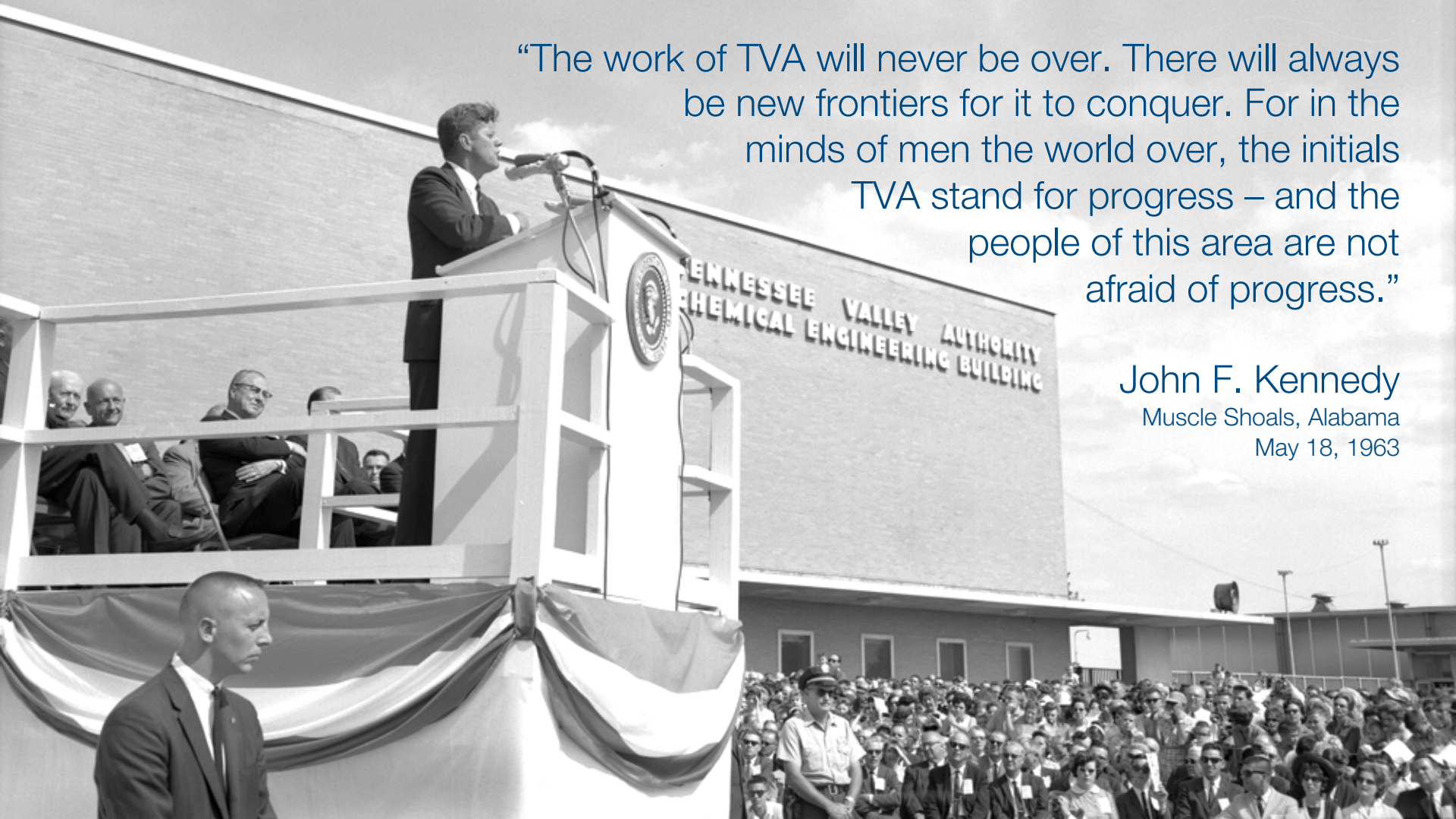


Our Employees



“The work of TVA will never be over. There will always be new frontiers for it to conquer. For in the minds of men the world over, the initials TVA stand for progress – and the people of this area are not afraid of progress.”

John F. Kennedy
Muscle Shoals, Alabama
May 18, 1963





President's Report

JEFF LYASH
President and CEO



Finance, Rates, and Portfolio Committee



A background image showing a close-up of two people in business attire. One person, wearing a blue suit and tie, is holding a white pen. Another person, wearing a grey suit, is also holding a white pen. They appear to be in a meeting or discussion.

2019 Integrated Resource Plan

LAURA CAMPBELL

Vice President, Supply Chain

For Board Consideration

That the TVA Board:

- Approve the planning direction in the 2019 IRP
- Direct TVA staff to take identified near-term actions
- Direct TVA staff to monitor signposts to appropriately consider possible adjustments to the planning direction
 - Changing market conditions
 - More stringent regulations
 - Technology advancements
- Direct TVA to initiate an update no later than 2024

The IRP is Grounded in the TVA Mission

Energy



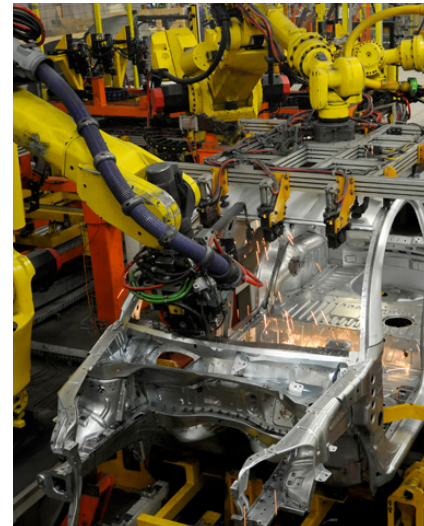
Provide affordable electric power throughout the Tennessee Valley

Environment



Act as a steward of the Valley's natural resources

Economic Development



Serve as a catalyst for sustainable economic development

Evaluates Scenarios and Options to Meet the Valley's Future Electricity Needs

THE IRP STRIVES TO ACHIEVE SIX KEY GOALS:

Low Cost

Risk Informed

Environmentally
Responsible

Reliable

Diverse

Flexible

Provides Directional Guidance

THE IRP FUNCTIONS LIKE A COMPASS, NOT A GPS

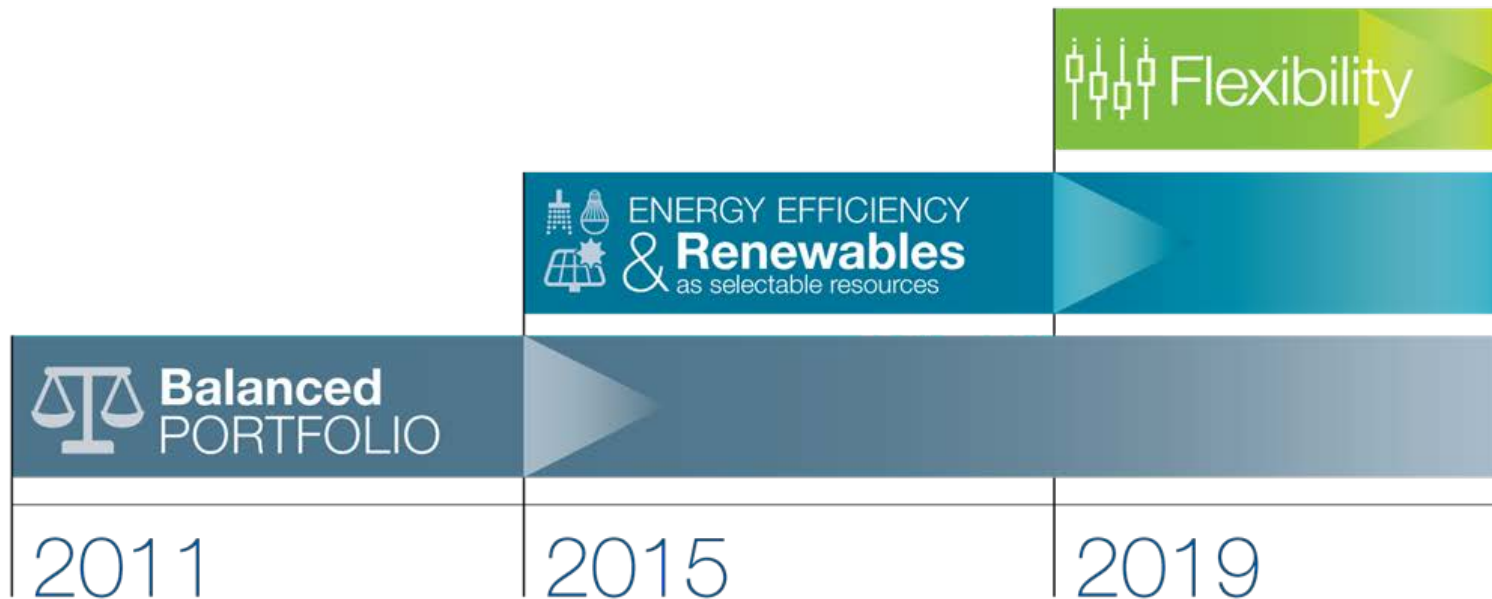


- Recommends directions and ranges
- Does not prescribe specific assets, rates, or programs

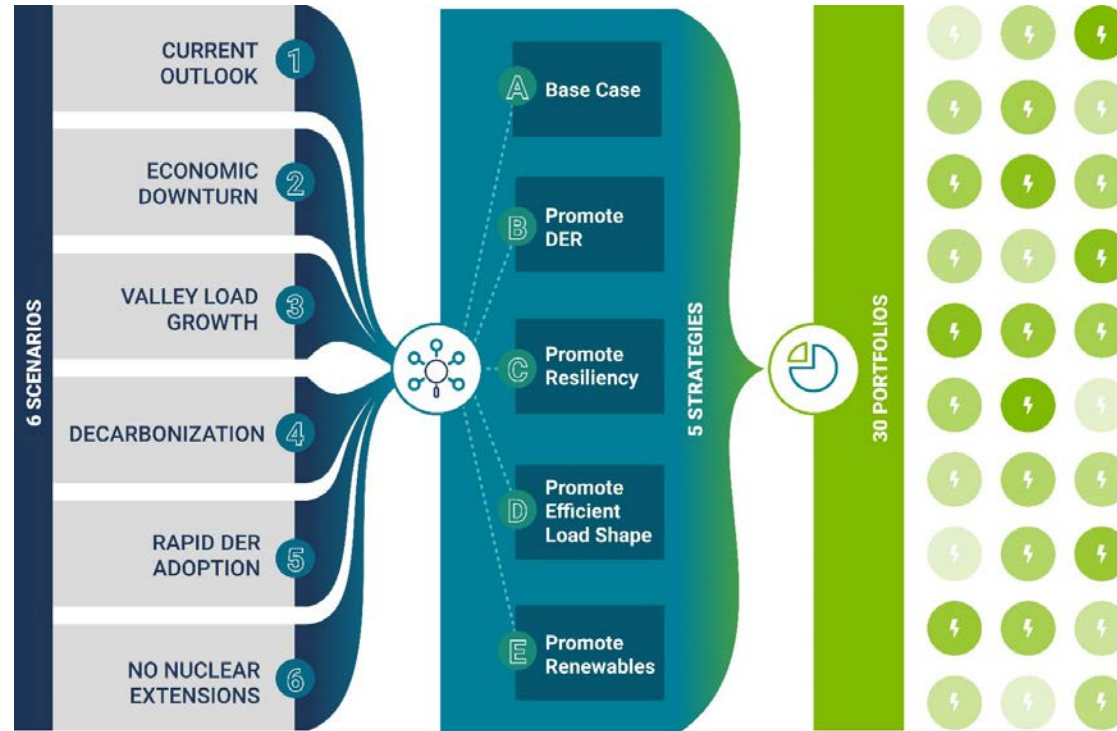
Continues to Innovate

Focus Areas:

- *Distributed Energy Resources*
- *System Flexibility*
- *Portfolio Diversity*



Utilizes Rigorous Analytical Process



Stakeholder and public comments informed additional sensitivity analyses to test the impact of changes in key assumptions

Engages Stakeholders as a Cornerstone of TVA's IRP Process

- TVA's Integrated Resource Planning is unique
- Input incorporated throughout the process
- More informed decision-making and better outcomes
- Incorporated TVA's responsibilities under the National Environmental Policy Act (NEPA) for enhanced environmental analysis and public outreach

Key Stakeholder Groups Offered Diverse, Valley-wide Perspectives

- IRP Working Group provided individual input from diverse interests
 - State Agencies
 - Local Power Companies / TVPPA
 - Industrial Customers / TVIC
 - Environmental / Energy / Community Non-Governmental Organizations
 - Academia / Research
 - Economic Development / Business
- TVA's Regional Energy Resource Council reviewed and validated at key points
 - Unanimously recommended the TVA Board approve the 2019 IRP Recommendation



RERC Members (Term 3)

Michael Butler

Tennessee Wildlife Federation

Wayne Davis*

University of Tennessee

Rodney Goodman

Habitat for Humanity

Dan Ionel

University of Kentucky

Wes Kelley

Huntsville Utilities

Doug Lawyer

Knoxville Chamber

Peter J. Mattheis

Tennessee Valley Industrial Committee

Shari Meghreblian

State of Tennessee (retired)

Jennifer Mundt

State of North Carolina

Jeremy Nails

Morgan County Economic Development Association

Alice Perry**

State of Mississippi

Doug Peters

Tennessee Valley Public Power Association

Derwin Sisnett

Gestalt Community Schools

Stephen Smith

Southern Alliance for Clean Energy

Charles Snively

Commonwealth of Kentucky

John Warren

Commonwealth of Virginia

Lloyd Webb

Olin Chlor Alkali

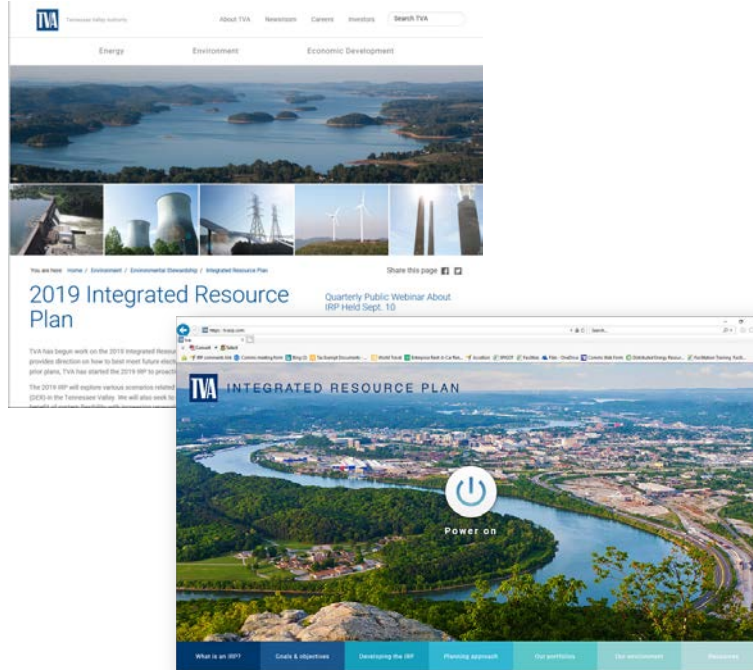
Susan R. Williams

SRW & Associates

*RERC Chair

** Retired from the RERC June, 2018

TVA Kept the Public Informed and Used Public Input to Develop the IRP



Opportunities for public input

- Public Scoping Period
- Draft IRP/EIS Comment Period
- 9 Public Open Houses
- 7 listening sessions

Public input informed:

- IRP document
- Environmental Impact Statement
- Sensitivity analysis
- Final recommendation

2019 IRP Public Meetings

February 19 – Murfreesboro (12 attendees)

February 26 - Public Webinar (105 attendees)

February 27 - Knoxville (39 attendees)

March 18 - Memphis (56 attendees)

March 19 - Huntsville (48 attendees)

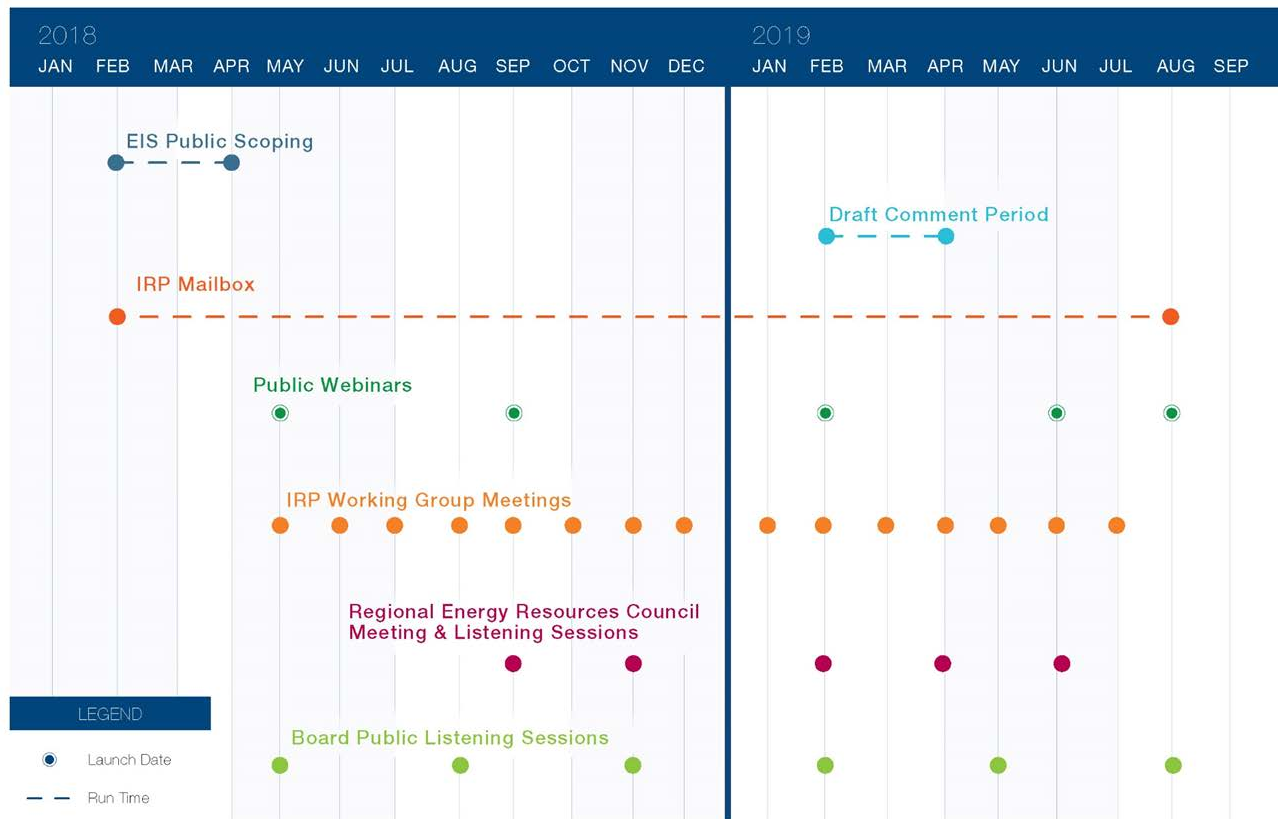
March 20 - Chattanooga (31 attendees)

March 21 - Nashville (99 attendees)

March 26 - Bowling Green (17 attendees)



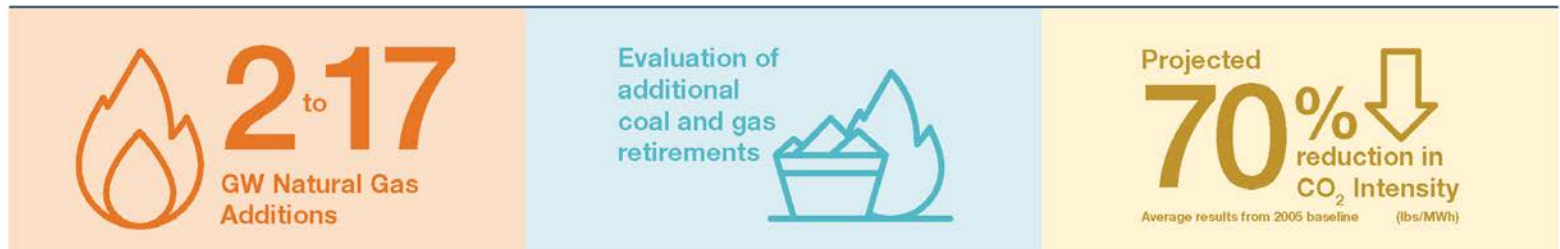
Stakeholder Input Opportunities Summary



The Future of Our Energy Supply



All portfolios point to a TVA power system that will be LOW-COST, RELIABLE, and CLEAN



IRP Indicates Near-Term Actions

Renewables & Flexibility



- Add solar based on economics and to meet customer demand
- Enhance system flexibility to integrate renewables and distributed resources
- Evaluate demonstration battery storage to gain operational experience

Existing Fleet



- Pursue option for license renewal for TVA's nuclear fleet
- Evaluate engineering end-of-life dates for aging fossil units to inform long-term planning

Energy Usage



- Conduct market potential study for energy efficiency and demand response
- Collaborate with states and local stakeholders to address low income energy efficiency
- Collaboratively deploy initiatives to stimulate the local electric vehicle market

Distribution Planning



- Support development of Distribution Resource Planning for integration into TVA's planning process

Signposts Guide Long-Term Actions

Portfolio shifts will be driven by changing market conditions, more stringent regulations, and technology advancements, such as:



- Demand for electricity
- Natural gas prices
- Customer expectations
- Regulatory requirements
- Operating costs for existing units
- Solar and wind costs
- Emerging and developmental technologies

Recommendation

That the TVA Board:

- Approve the planning direction in the 2019 IRP
- Direct TVA staff to take identified near-term actions
- Direct TVA staff to monitor signposts to appropriately consider possible adjustments to the planning direction
 - Changing market conditions
 - More stringent regulations
 - Technology advancements
- Direct TVA to initiate an update no later than 2024



Finance, Rates, and Portfolio Committee



Financial Performance Update

JOHN THOMAS

Executive Vice President
and Chief Financial Officer



Q3 Fiscal Year 2019

Operating Revenues: \$443M above budget

- Higher demand and energy revenue

Controllable O&M essentially on plan

Net Income: \$829M

Interest Expense: \$67M favorable to budget

Total Financing Obligations (TFO) \$1.1B less than budget

Q3 Summary Income Statement

\$169M favorable due to operating revenue and lower expenses

\$ million	FYTD 2019			FYTD 2018	
	Actual	Budget	Variance Fav/(Unfav)	Actual	'19 v '18 Fav/(Unfav)
Operating Revenue	\$ 8,079	\$ 7,636	\$ 443	\$ 8,048	\$ 31
Fuel & Purchased Power	2,134	2,023	(111)	2,204	70
Total O&M	2,289	2,147	(142)	1,881	(408)
Taxes, Depreciation, Other	1,925	1,837	(88)	1,801	(124)
Interest	902	969	67	942	40
Net Income (Loss)	\$ 829	\$ 660	\$ 169	\$ 1,220	\$ (391)
Accelerated Depr. & Write-offs	\$ 487	\$ -	\$ 487	\$ -	\$ 487
Net Income (Loss) excluding Accelerated Depr. & Write-offs	\$ 1,316	\$ 660	\$ 656	\$ 1,220	\$ 96

Q3 Summary Cash Flow Statement

TFOs were \$1.1B favorable to budget

\$ million	FYTD 2019			FYTD 2018	
	Actual	Budget	Variance	Actual	'19 v '18
Cash Flow from Operating Activities	\$ 2,479	\$ 2,193	\$ 286	\$ 2,537	\$ (58)
Cash Flow used in Investing Activities	(1,533)	(1,765)	232	(1,546)	13
Cash Flow from Financing Activities	(945)	(428)	(517)	(979)	34
Ending Debt and Financing Obligations	\$ 23,362	\$ 24,468	\$ 1,107	\$ 24,997	\$ 1,635

Q3 Summary (Results v. Plan)

Higher Revenues – Weather impacts increased demand

Higher Expenses – Accelerated Depreciation & Write-offs

Lower Debt Balance – FY18 and FY19 performance driving favorability



Finance, Rates, and Portfolio Committee



A close-up photograph of a person's hands in a business setting. The person is wearing a dark blue suit jacket and a striped tie. Their right hand is holding a silver pen, poised over a document. The background is slightly blurred, showing more of the person's attire and the document they are working on.

FY 2020 Financial Plan and Budget

JOHN THOMAS

Executive Vice President
and Chief Financial Officer

Progress Achieved

TVA/Lazard Study... TVA model is best for the Valley if TVA executes the plan

Approve 1.5% annual rate increases
as long as rates remain competitive

- ✓ Effective wholesale rate flat since 2013
- ✓ Residential rates near top quartile
- ✓ Industrial rates top decile

Reduce overall controllable O&M

- ✓ \$800M reduction by 2015
- ✓ O&M effectively flat since 2015

Make investments to balance and
modernize TVA's asset portfolio

- ✓ \$15B invested since 2013
- ✓ \$1B reduction in fuel expense
- ✓ 54% carbon-free portfolio

Report progress with key stakeholders

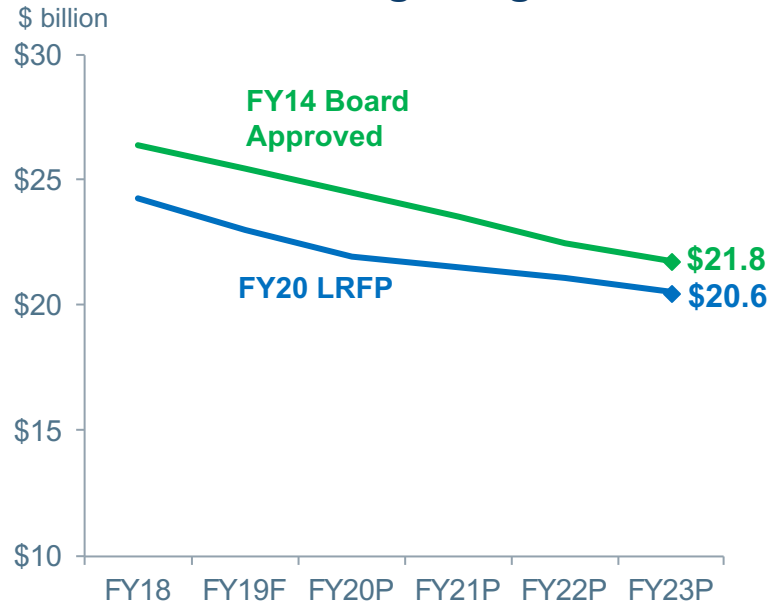
- ✓ Consistent reporting to customers, investors,
and federal government

Reduce debt to \$21.8B by 2023

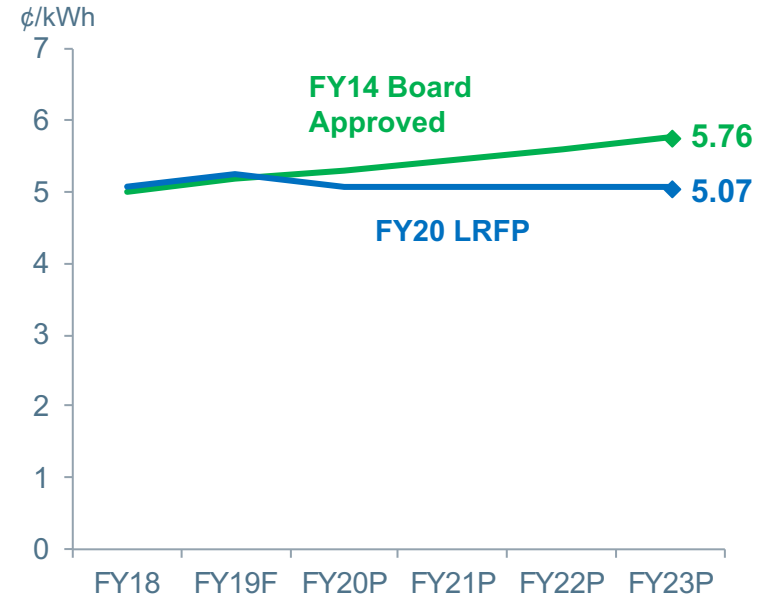
- ✓ Lowest debt in 25 years
- ✓ High confidence of achieving \$21.8B debt goal

Rates and Debt – FY20 LRFP

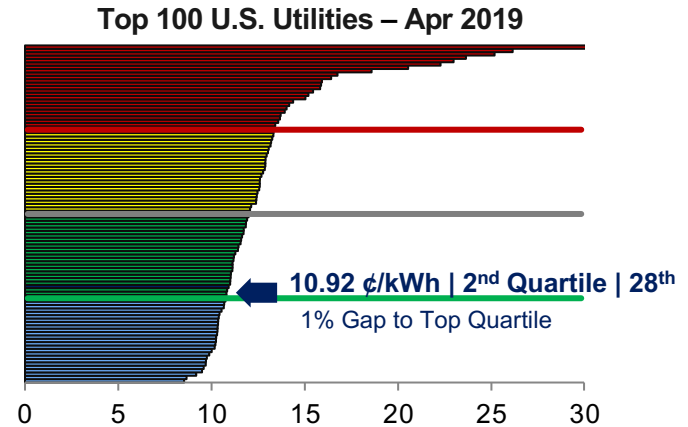
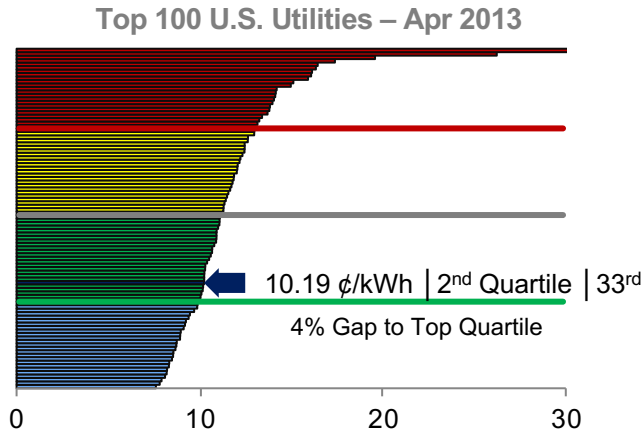
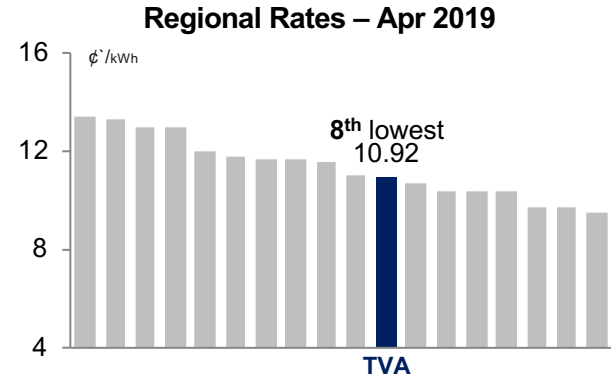
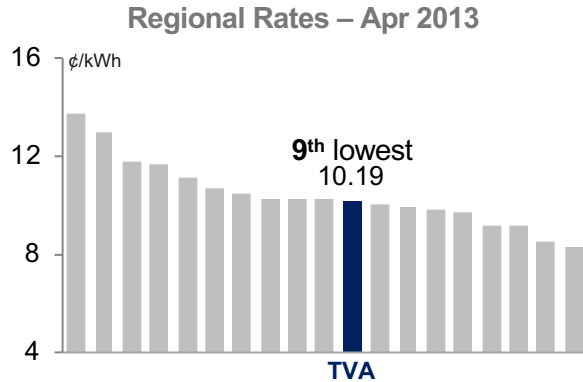
Total Financing Obligations



Wholesale Rate excluding Fuel



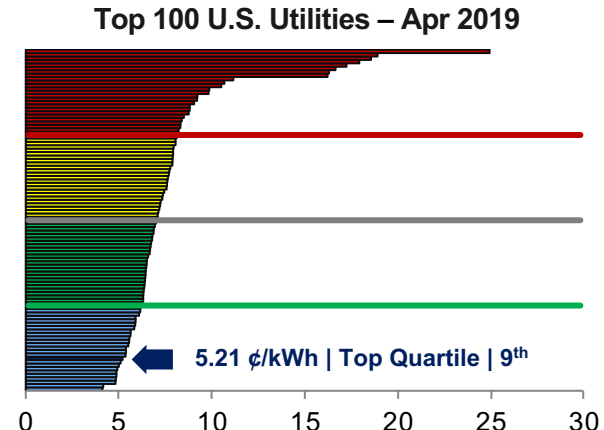
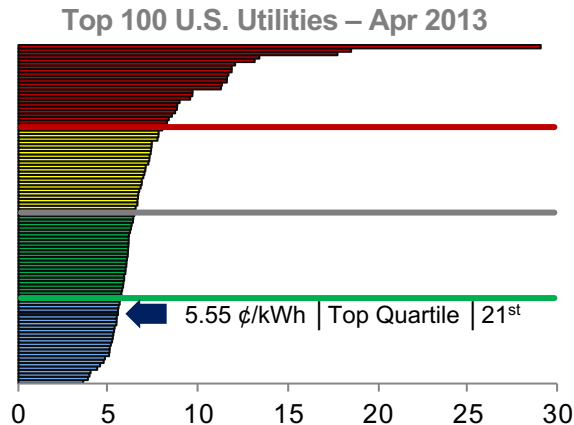
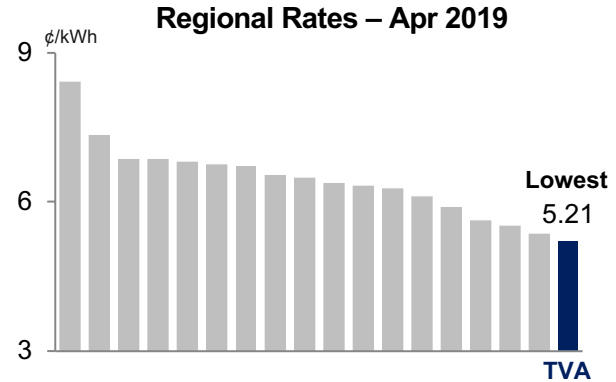
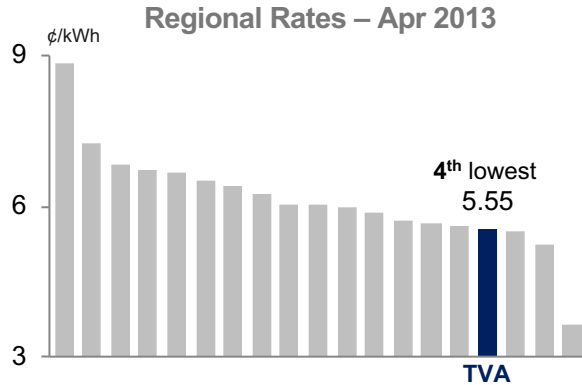
Residential Rate Competitiveness



12-Month Rolling Average (¢/kWh) – Source: EIA-861M & ESS

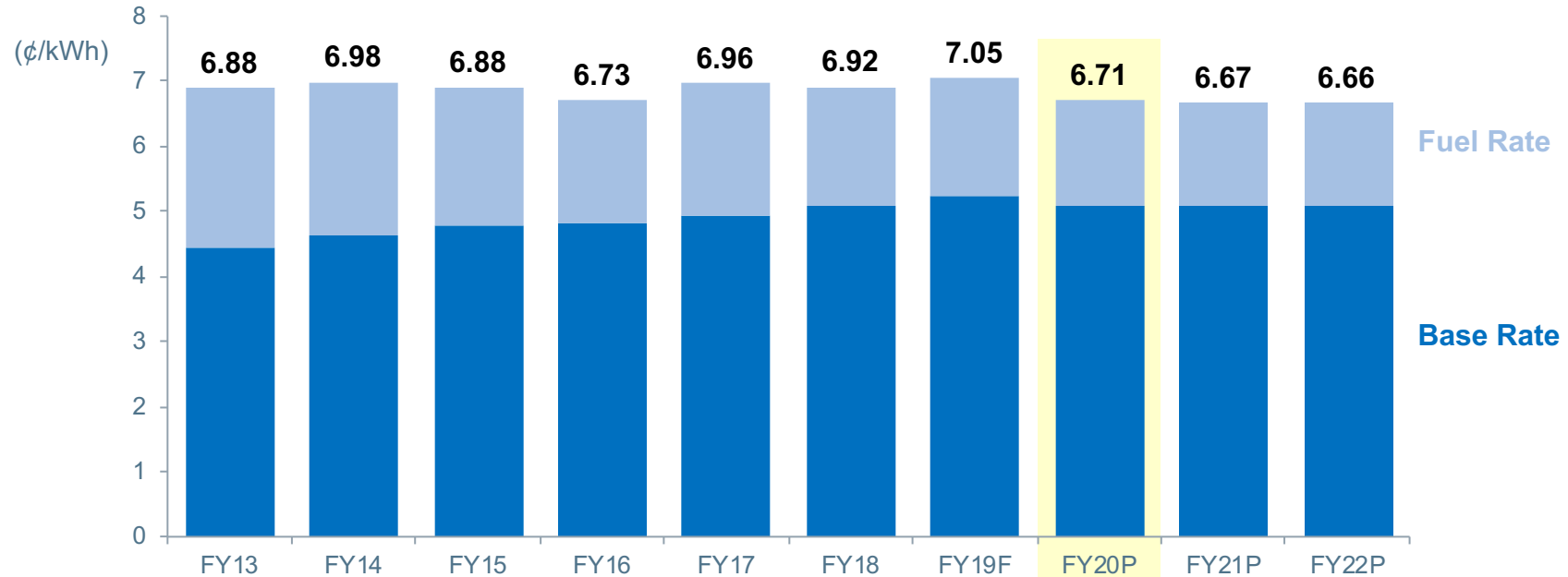
FY20 FINANCIAL PLAN AND BUDGET | 54

Industrial Rate Competitiveness



12-Month Rolling Average (¢/kWh) – Source: EIA-861M & ESS

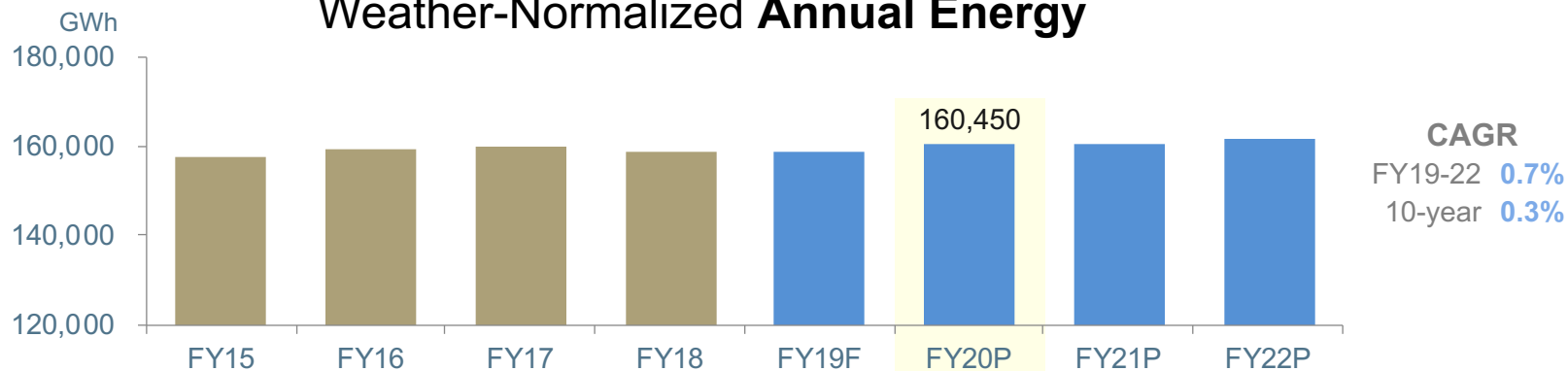
Flat Effective Wholesale Rate



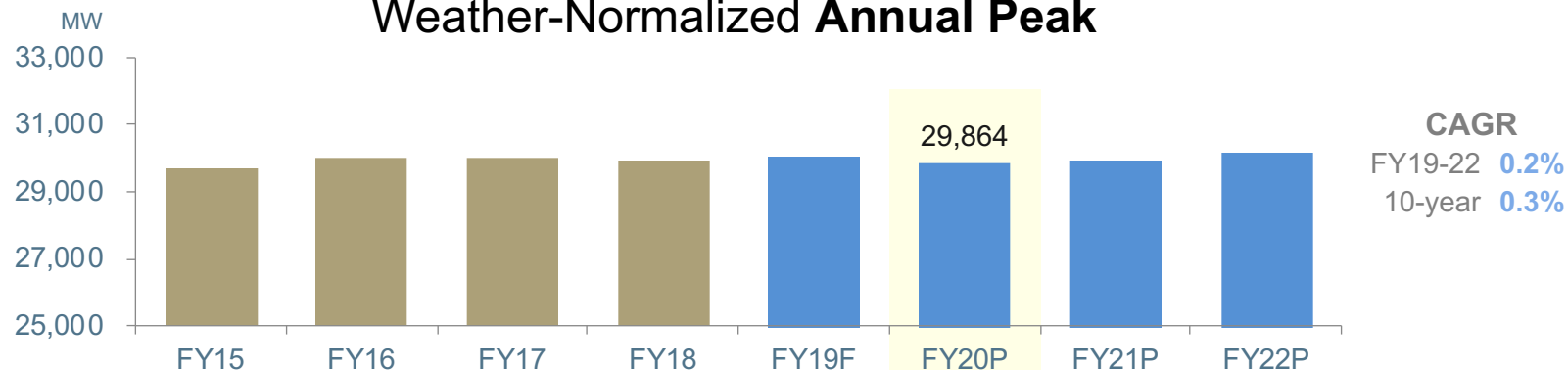
Base Rate	4.44	4.64	4.78	4.81	4.93	5.08	5.25	5.07	5.07	5.07
Fuel Rate	2.44	2.34	2.10	1.92	2.03	1.84	1.80	1.64	1.60	1.59
Total	6.88	6.98	6.88	6.73	6.96	6.92	7.05	6.71	6.67	6.66

Energy and Peak

Weather-Normalized Annual Energy

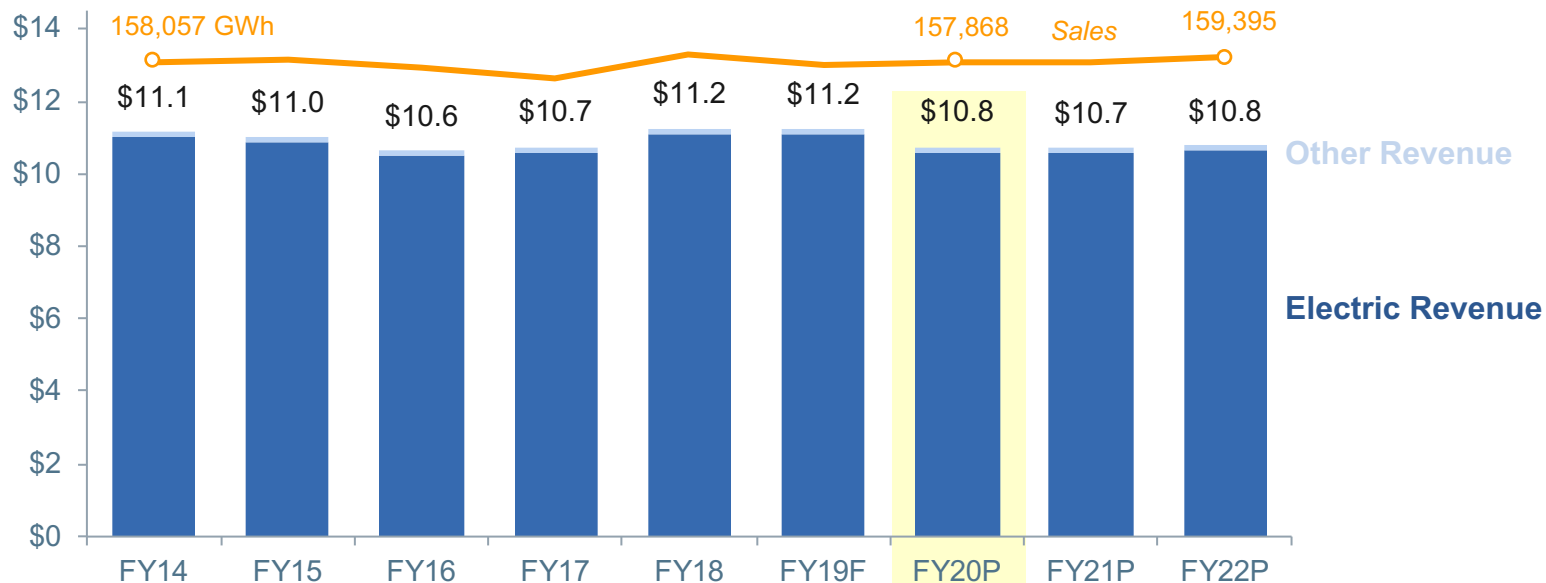


Weather-Normalized Annual Peak



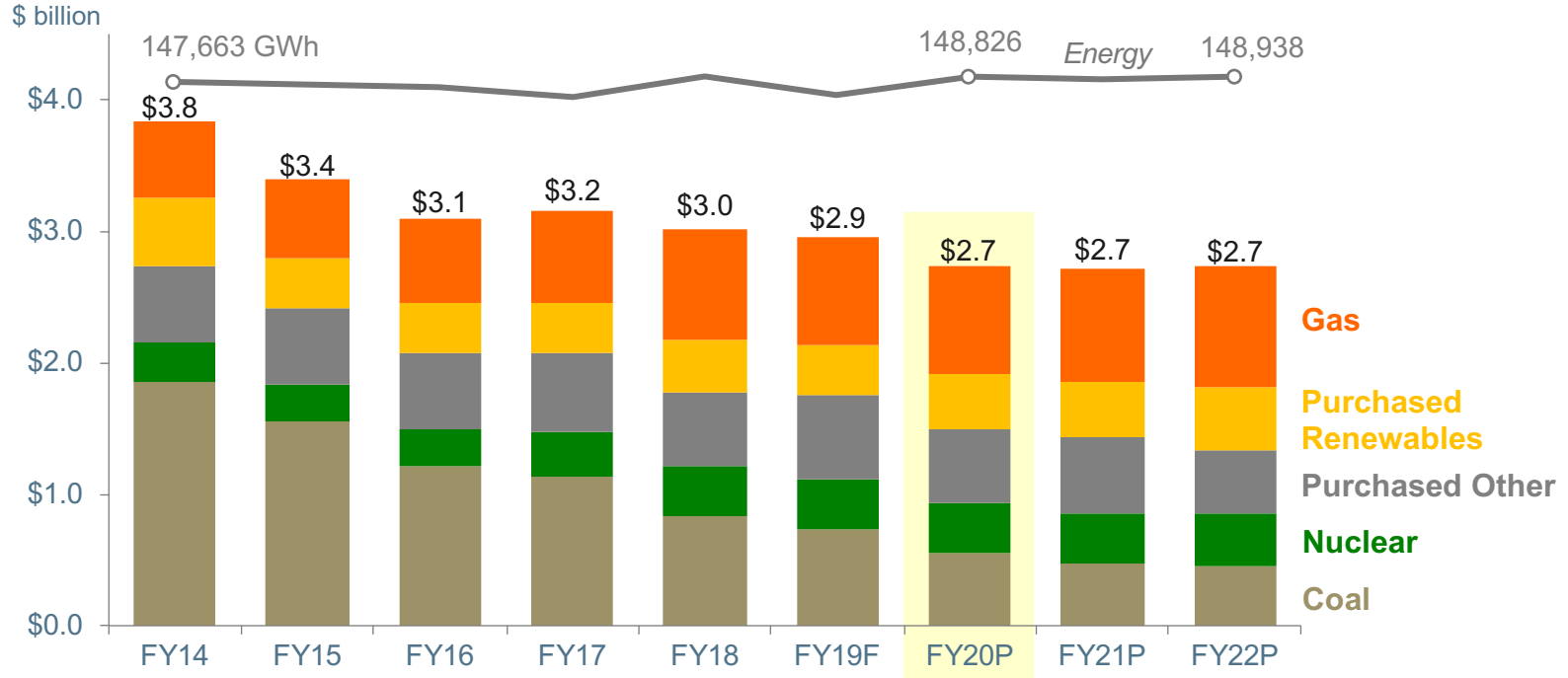
Operating Revenue

\$ billion



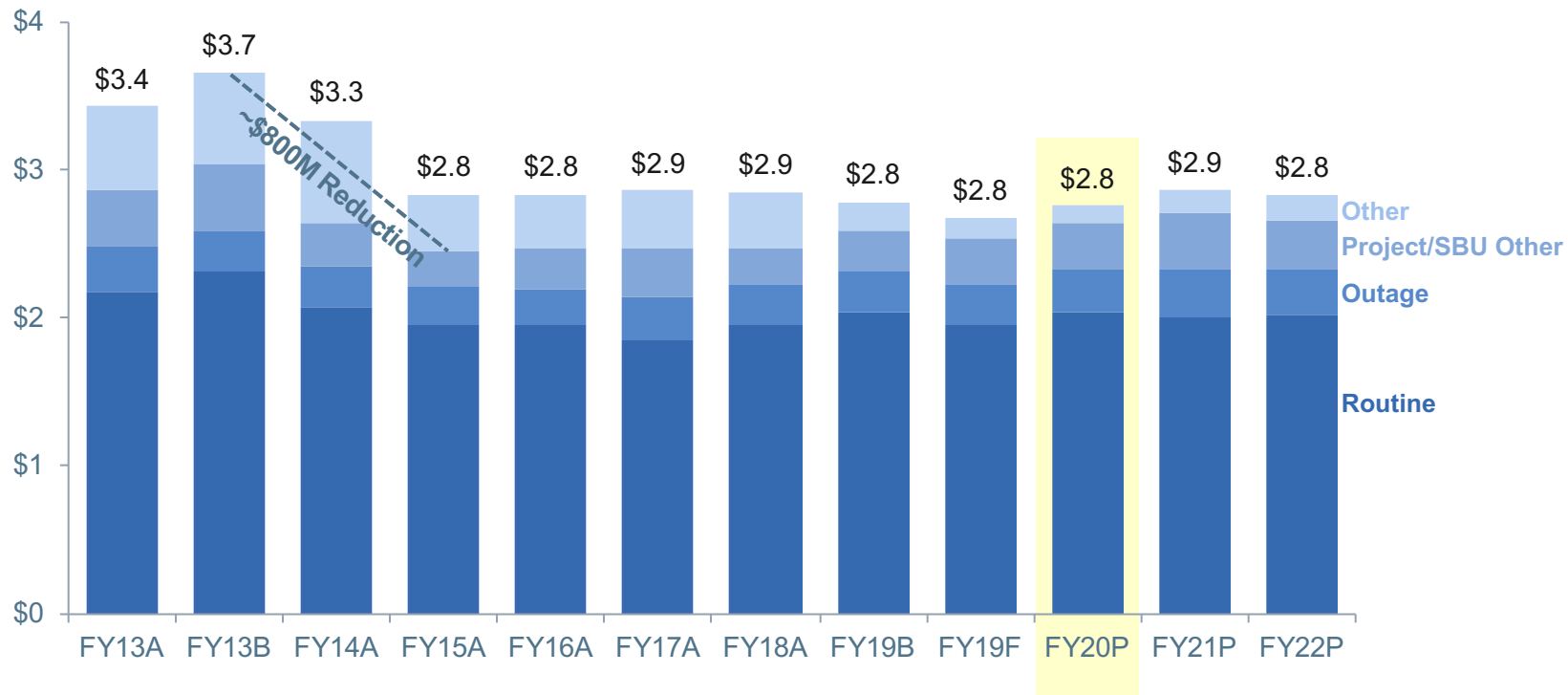
Electric Revenue	\$11.0	\$10.8	\$10.5	\$10.6	\$11.1	\$11.0	\$10.6	\$10.5	\$10.6
Other Revenue	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2
Total Revenue	\$11.1	\$11.0	\$10.6	\$10.7	\$11.2	\$11.2	\$10.8	\$10.7	\$10.8

Fuel and Purchased Power



O&M Expense

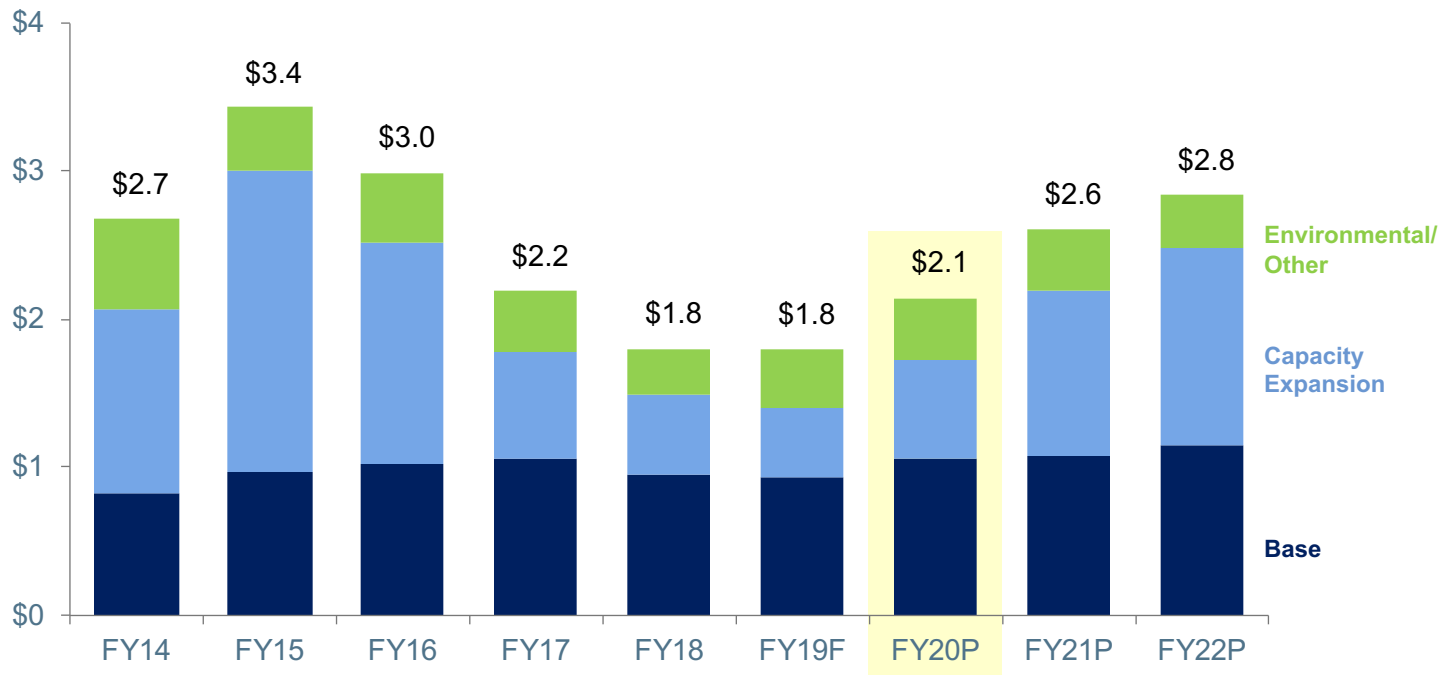
\$ billion



Excludes unusual items

Capital Expenditures

\$ billion



Tax Equivalents

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

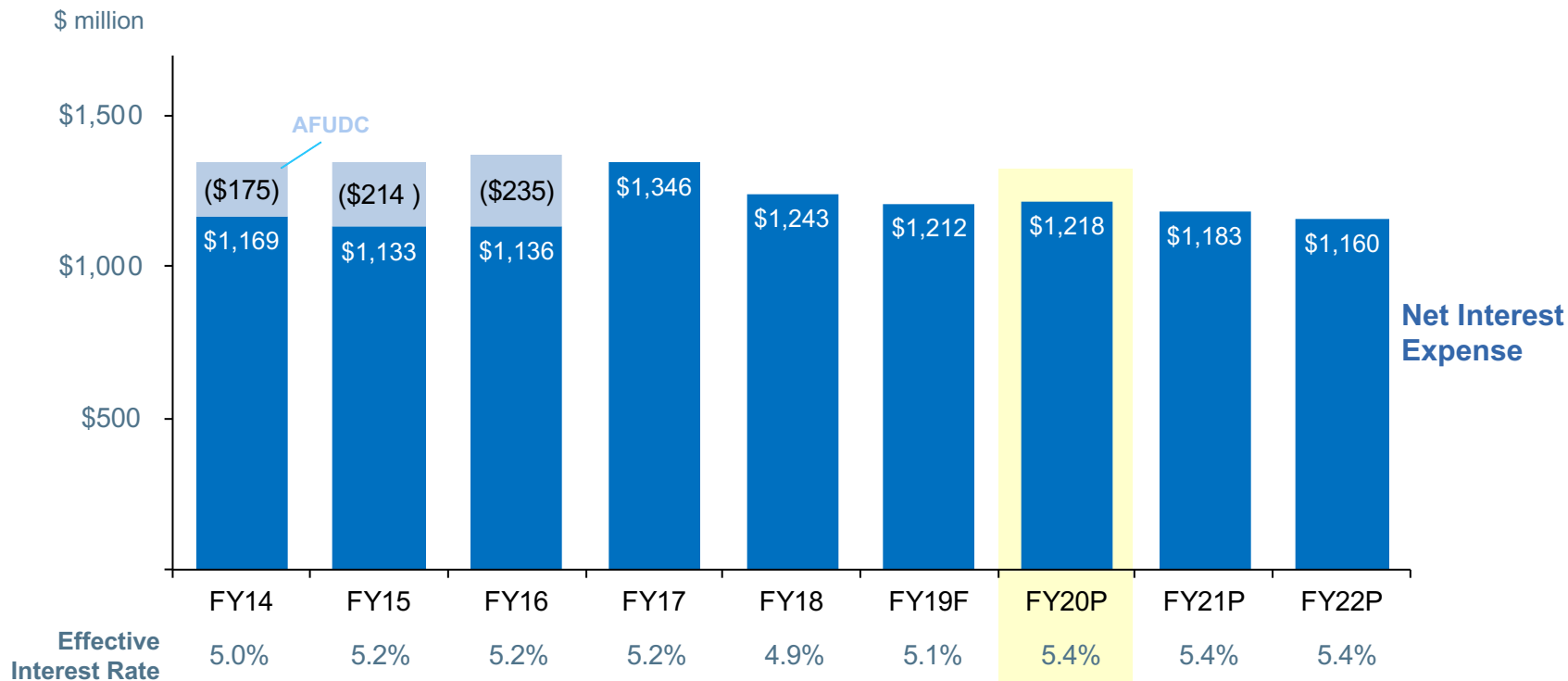
Tax Equivalent Payments by State

\$ million

State	FY18	FY19
Tennessee	\$ 347	\$ 367
Alabama	88	86
Mississippi	40	42
Kentucky	36	39
Georgia	8	9
North Carolina	3	3
Virginia	1	1
Illinois	<u>1</u>	<u>1</u>
Total Payments	\$ 524	\$ 548
FCA Adjustment	<u>(6)</u>	<u>(12)</u>
Total Expense	\$ 518	\$ 536

Interest Expense

Debt reduction offsetting higher effective interest rates



Risks to the Plan: \$Billion+

Pension Liability

Financial Risk/Economy

Loss of Load and/or Customers

Environmental Remediation Cost

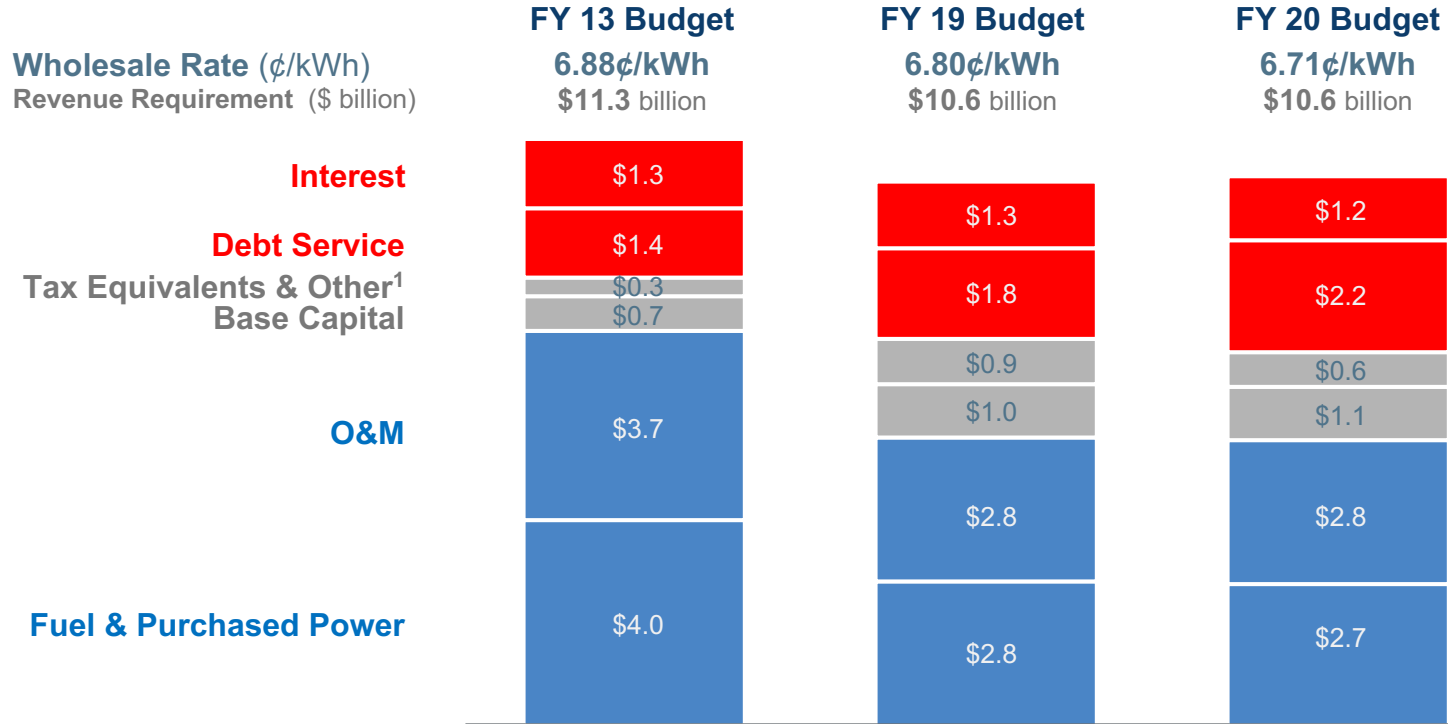
Litigation

Aging Infrastructure

Industry Issue

New Regulation/Compliance

Debt Reduction



¹Tax Equivalents & Other for FY13 excludes adjustment for pension expense

Revenue Requirements

\$ millions

	FY19B	FY19F	FY20P	FY21P	FY22P
<u>Revenue Forecast</u>					
Fuel	2,792	2,948	2,733	2,713	2,733
O&M	2,790	3,074	2,756	2,865	2,828
Base Capital	1,041	936	1,055	1,081	1,152
Interest	1,291	1,212	1,218	1,183	1,160
Tax Equivalents	527	536	538	526	526
Debt Paydown	1,759	2,124	2,170	1,973	2,053
Other	356	225	124	211	162
Total TVA Revenue Requirements	\$ 10,556	\$ 11,055	\$ 10,594	\$ 10,552	\$ 10,614
 Base Revenues	 7,898	 8,227	 8,002	 7,977	 8,008
Fuel Revenues	2,658	2,828	2,592	2,575	2,606
Rate Action Revenues	-	-	-	-	-
Total Electric Revenues	\$ 10,556	\$ 11,055	\$ 10,594	\$ 10,552	\$ 10,614
 Surplus / (Shortfall)	 -	 -	 -	 -	 -
 Strategic Capital	 1,030	 856	 1,093	 1,522	 1,684
Cash on Hand	-	-	-	-	-
Debt Paydown	(1,759)	(2,124)	(2,170)	(1,973)	(2,053)
Change in TFO	\$ (729)	\$ (1,268)	\$ (1,077)	\$ (451)	\$ (369)

Summary Income Statement

\$ millions	FY14	FY15	FY16	FY17	FY18	FY19B	FY19F	FY20P	FY21P	FY22P
Operating Revenue	\$ 11,137	\$ 11,003	\$ 10,616	\$ 10,739	\$ 11,233	\$ 10,714	\$ 11,214	\$ 10,751	\$ 10,708	\$ 10,760
Fuel & Purchased Power	3,824	3,394	3,090	3,160	3,022	2,792	2,948	2,733	2,713	2,733
O&M	3,341	2,838	2,842	3,362	2,854	2,790	3,074	2,756	2,865	2,828
Depreciation & Amortization	1,843	2,031	1,836	1,717	2,527	1,728	2,029	1,890	1,645	1,689
Taxes	540	525	522	525	518	527	536	538	526	526
Operating Expenses	9,548	8,788	8,290	8,764	8,921	7,837	8,587	7,917	7,749	7,776
Operating Income	1,589	2,215	2,326	1,975	2,312	2,877	2,627	2,834	2,959	2,984
Other Income / (Expense)	49	29	43	56	50	(223)	(205)	(220)	(207)	(125)
Interest Expense	1,344	1,347	1,371	1,346	1,243	1,291	1,212	1,218	1,183	1,160
AFUDC Borrowed Funds	(175)	(214)	(235)	-	-	-	-	-	-	-
Net Interest Expense	1,169	1,133	1,136	1,346	1,243	1,291	1,212	1,218	1,183	1,160
Net Income	\$ 469	\$ 1,111	\$ 1,233	\$ 685	\$ 1,119	\$ 1,363	\$ 1,210	\$ 1,396	\$ 1,569	\$ 1,699

Summary Cash Flow Statement

\$ millions	FY14	FY15	FY16	FY17	FY18	FY19B	FY19F	FY20P	FY21P	FY22P
Cash Flows from Operating Activities	\$ 2,980	\$ 3,315	\$ 3,042	\$ 2,736	\$ 3,955	\$ 3,146	\$ 3,470	\$ 3,514	\$ 3,364	\$ 3,454
Cash Flows from Investing Activities	(2,756)	(3,585)	(3,113)	(2,536)	(2,269)	(2,399)	(2,169)	(2,407)	(2,883)	(3,054)
Cash Flows from Financing Activities	(1,326)	70	71	(200)	(1,687)	(747)	(1,300)	(1,107)	(481)	(400)
Net Change in Cash	(1,102)	(200)	-	-	(1)	-	1	-	-	-
Beginning Cash Balance	1,602	500	300	300	300	300	299	300	300	300
Ending Cash Balance	\$ 500	\$ 300	\$ 300	\$ 300	\$ 299	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300

Summary Balance Sheet

\$ millions	FY14	FY15	FY16	FY17	FY18	FY19B	FY19F	FY20P	FY21P	FY22P
Assets:										
Current Assets	\$ 3,788	\$ 3,506	\$ 3,644	\$ 3,446	\$ 3,430	\$ 3,438	\$ 3,200	\$ 3,177	\$ 3,171	\$ 3,166
Property, Plant & Equipment	30,350	32,407	34,043	34,947	35,414	36,113	35,119	35,338	36,268	37,328
Investments	1,981	2,011	2,257	2,603	2,862	2,791	2,883	2,949	3,013	3,077
Regulatory and Other Long-Term Assets	9,477	10,821	10,550	9,021	6,961	7,471	6,914	6,664	6,429	6,251
Total Assets	45,596	48,745	50,494	50,017	48,667	49,813	48,116	48,128	48,881	49,822
Liabilities & Capitalization:										
Short-Term Debt	596	1,034	1,407	1,998	1,216	1,255	1,118	675	1,826	2,056
Current Maturities of Long-Term Debt	1,032	32	1,555	1,728	1,032	1,032	1,031	1,862	1,030	530
Other Current Liabilities	2,821	2,869	2,900	2,675	2,606	2,309	2,274	2,427	2,285	2,289
Other Liabilities	11,816	13,757	14,064	13,045	12,223	11,701	12,013	11,503	11,096	10,685
Long Term Debt	23,227	23,850	22,148	21,438	21,307	21,262	20,218	18,811	18,232	18,158
Total Liabilities	39,492	41,542	42,074	40,884	38,384	37,559	36,654	35,278	34,469	33,718
Proprietary Capital	6,104	7,203	8,420	9,133	10,283	12,254	11,462	12,850	14,412	16,104
Total Liabilities & Proprietary Capital	\$ 45,596	\$ 48,745	\$ 50,494	\$ 50,017	\$ 48,667	\$ 49,813	\$ 48,116	\$ 48,128	\$ 48,881	\$ 49,822

Summary

- Incremental fuel cost savings
- Incremental O&M efficiencies
- Provides \$2 billion in new capital investment
- No base rate increase
- Achieves debt reduction goal

A background image showing a close-up of two people in business attire. One person is holding a tablet, and the other is holding a pen, suggesting a collaborative work environment. The image is slightly blurred, focusing attention on the text.

FY30 Strategic Financial Plan

FY30 Strategic Financial Plan

A plan that is flexible in aligning customer preferences and TVA's mission

Maintain rates as low as feasible

- Stable wholesale rate
- Lower rates for long-term partners
- Modernized pricing structure

Stabilize debt at \$18-20B range

- Achieve \$21.8B debt goal
- Achieve 50/50 or better capitalization structure
- Flatten debt at \$18B based on long-term partner participation

Balance commitments with obligations

- Deploy partnership proposal to achieve longer customer commitments
- Higher funding confidence for other obligations

Maintain \$300M cash

- Focus on treasury management
- Maintain liquidity (line of credit)

Drive efficiencies into the business

- Hold cost escalation below inflation
- Maintain fuel cost benefits of diverse portfolio
- Improve nuclear performance to reduce to fuel costs

Key Planning Assumptions

Load forecast effectively flat with some near-term growth from data center loads (0.3% CAGR)

No base rate action for FY20 forward

Continued focus on achieving O&M efficiencies to offset near-term inflation

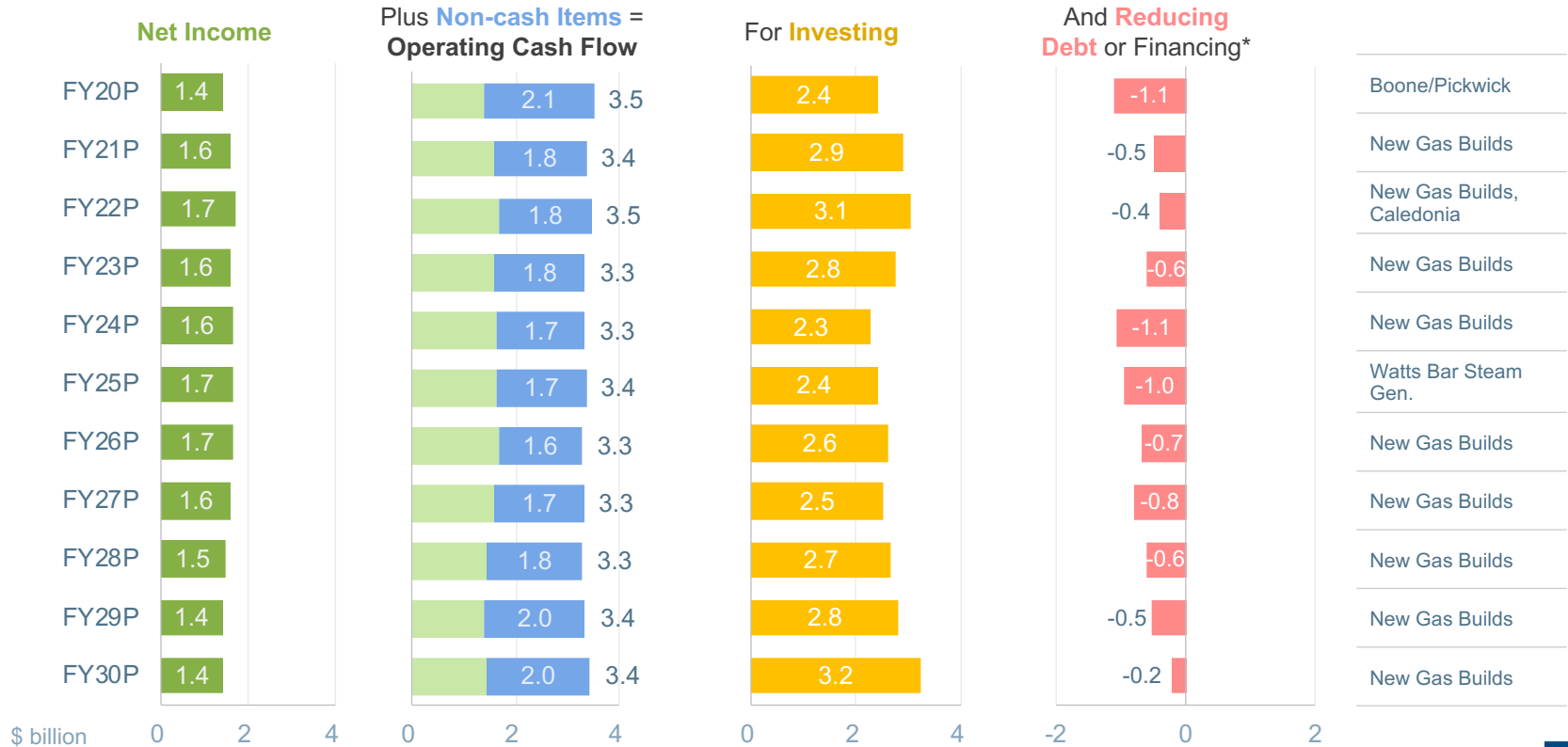
Includes additional capital consistent with FY20 Budget Power Supply Plan

Continue optimizing lowest variable cost dispatch and improving plant availability

Maintain targeted cash balance of \$300 million

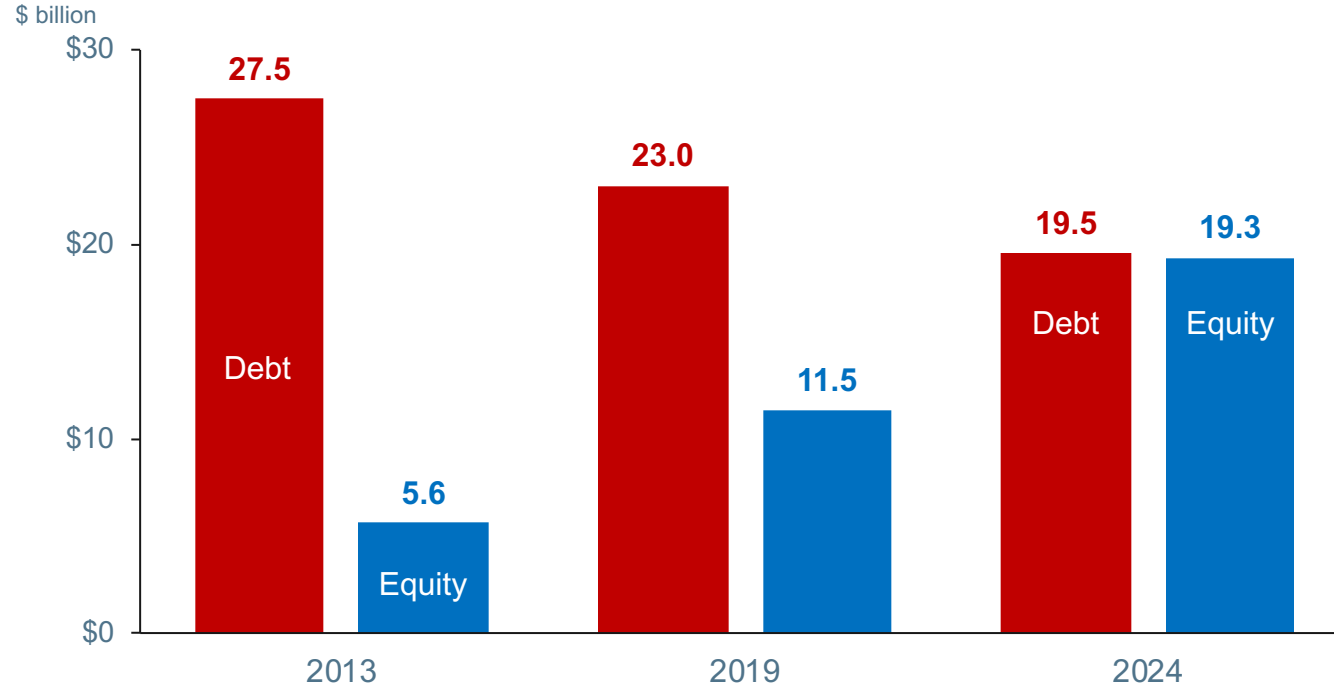
Cash Flow to Reduce Debt and Fund Capital

Cumulative debt reduction of \$7.0B / \$2.5B used for rate reduction

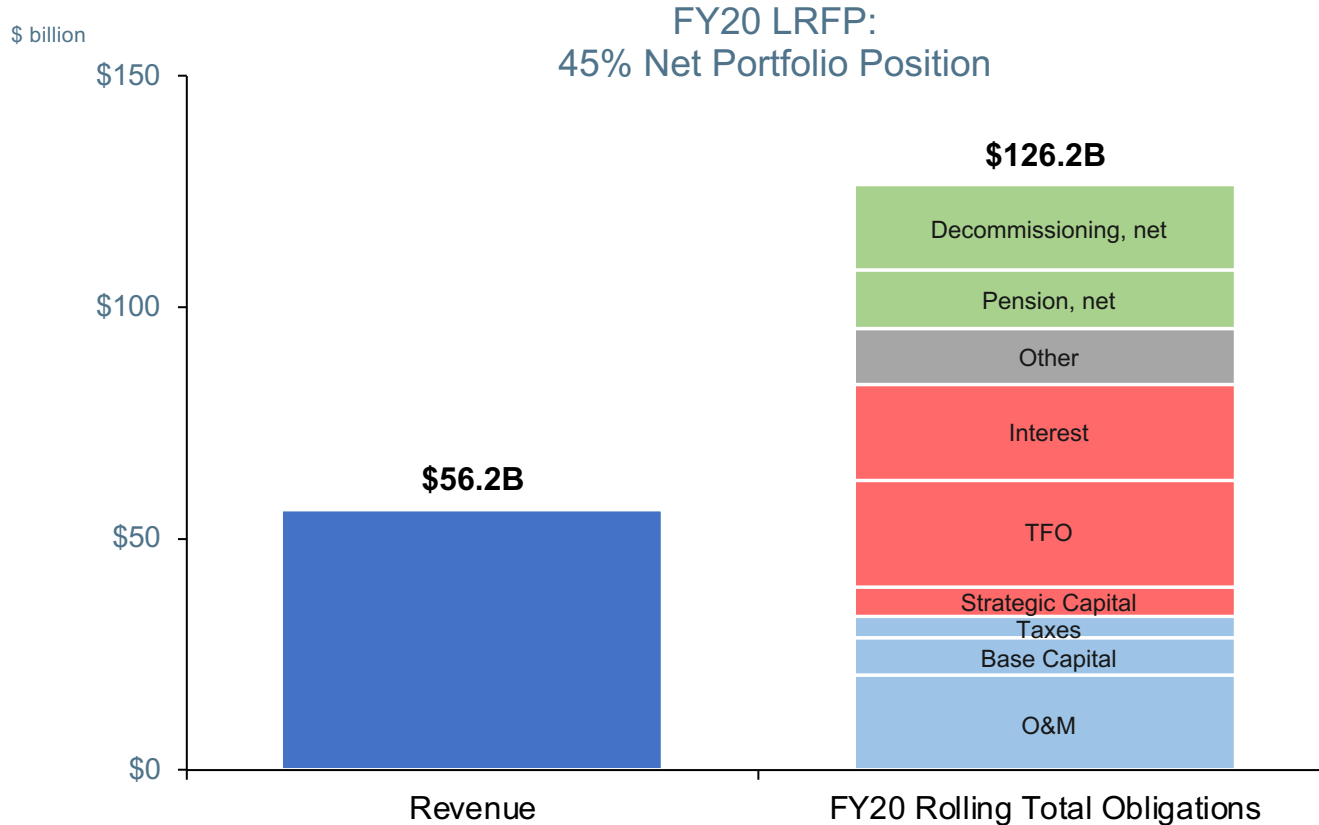


A Stronger Balance Sheet

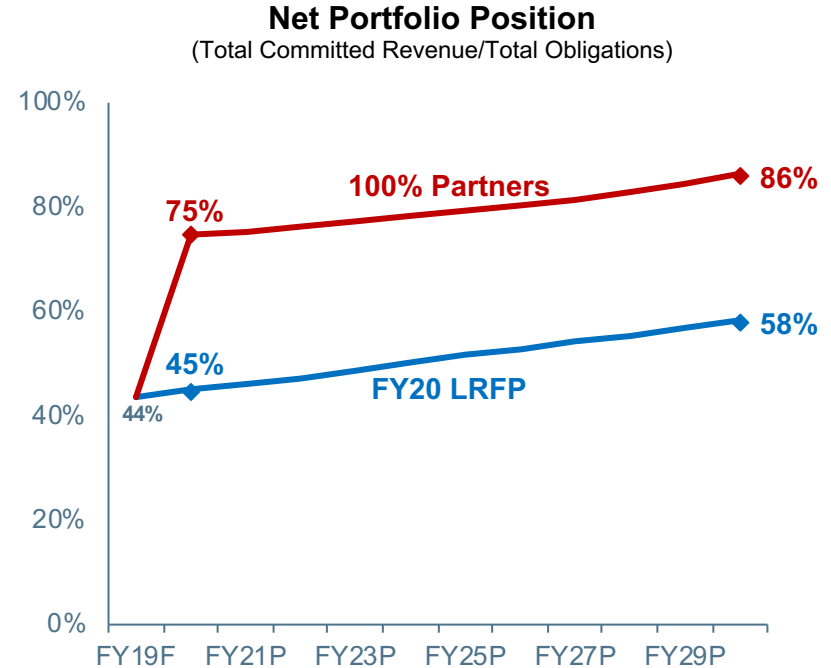
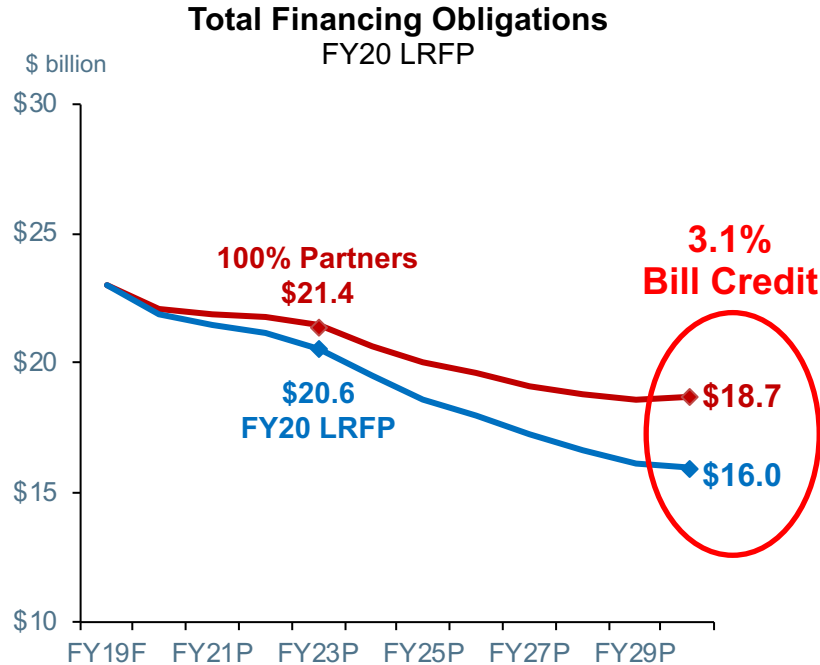
A plan that is flexible in aligning customer preferences and TVA's mission



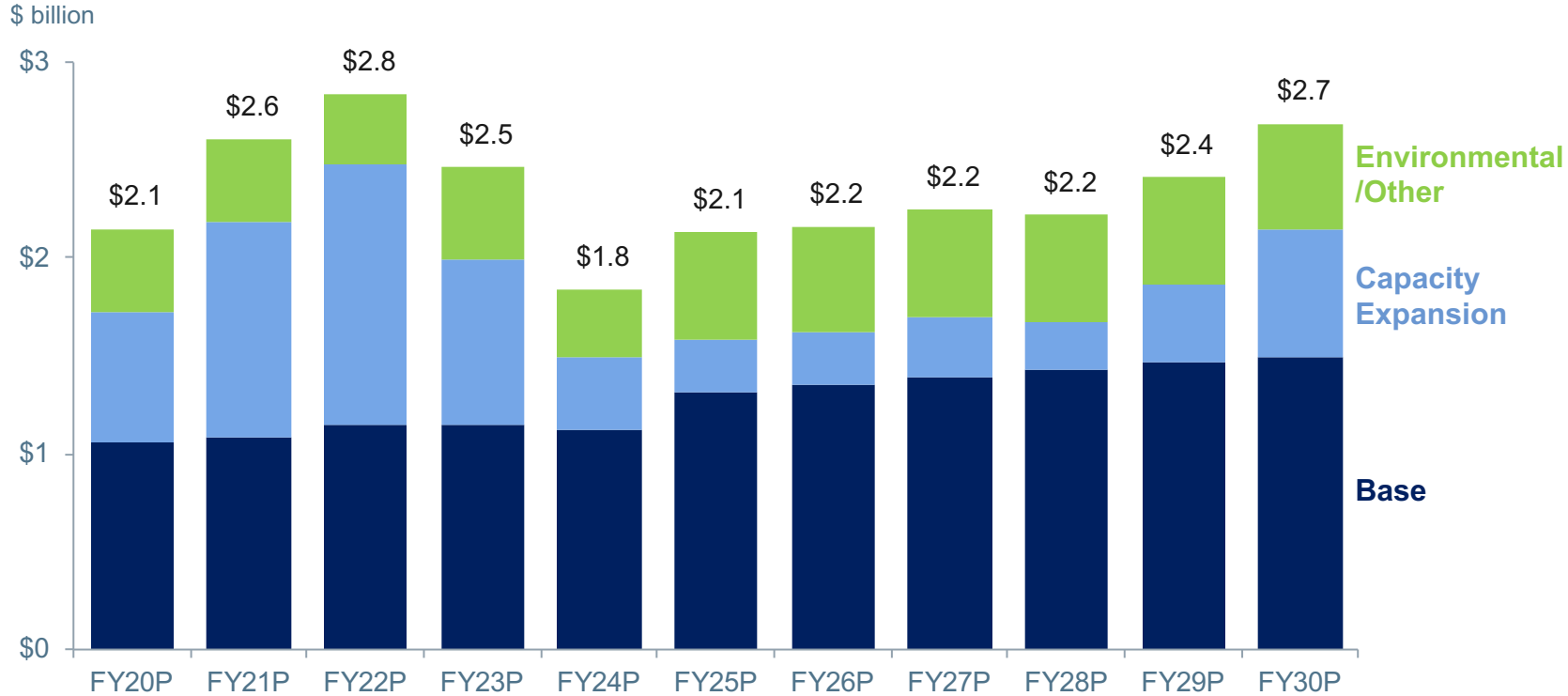
Obligations and Commitments



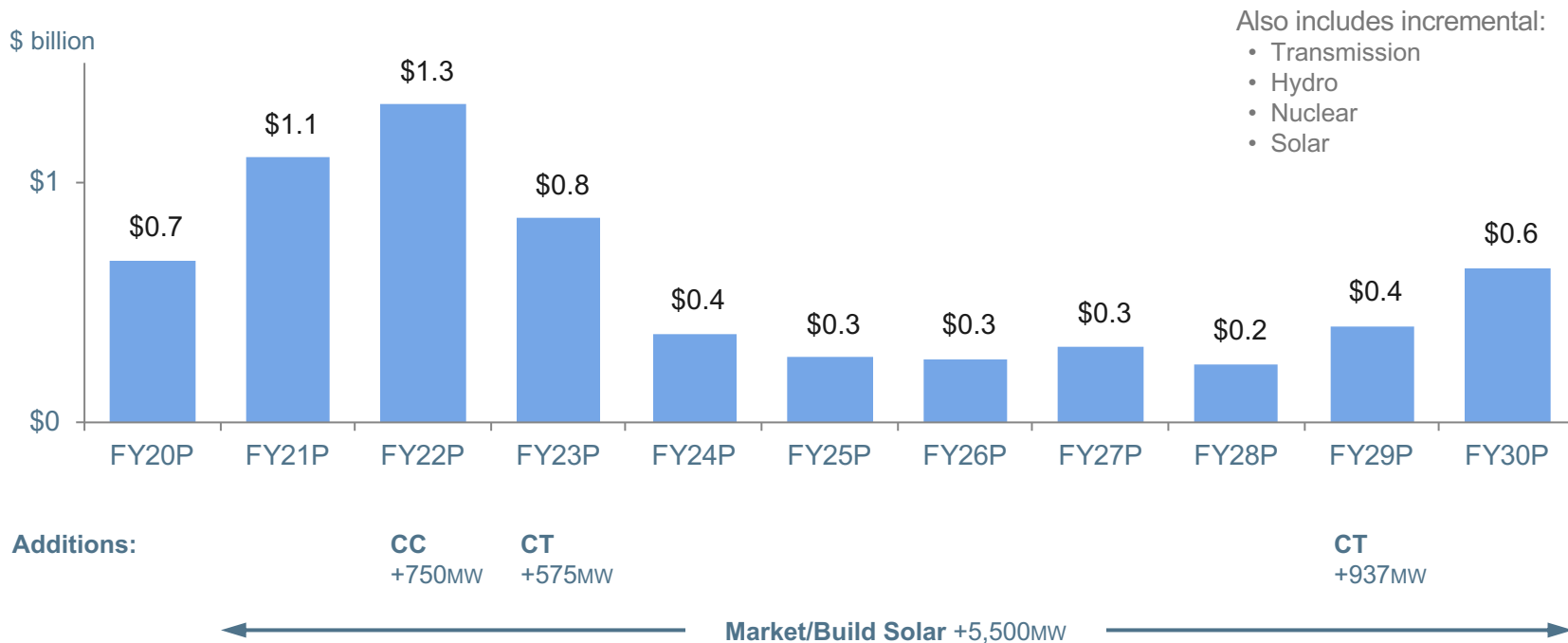
Impact on Financials of Various Adoption Scenarios



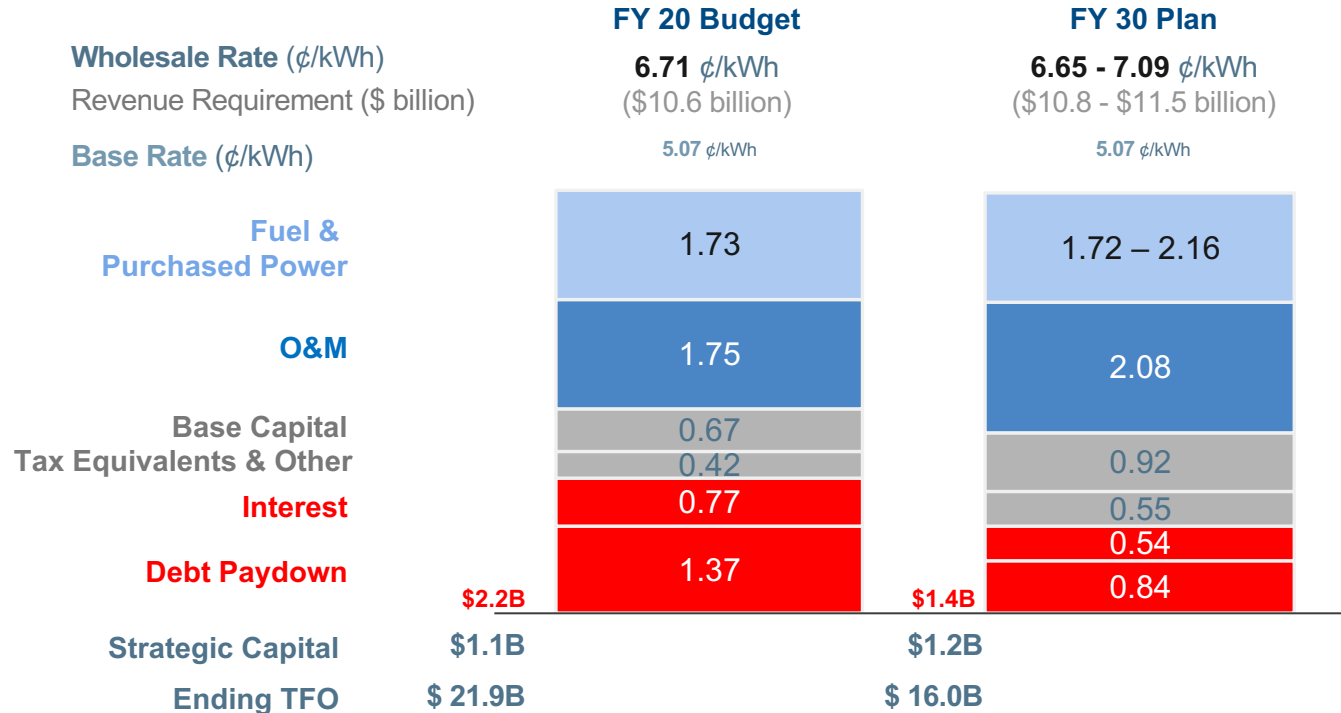
Capital Expenditures



Capacity Expansion Capital



Non-Fuel Rate Revenue Requirements Effectively Flat



Revenue Requirements

\$ millions

	FY20P	FY21P	FY22P	FY23P	FY24P	FY25P	FY26P	FY27P	FY28P	FY29P	FY30P
Revenue Forecast											
Fuel	2,733	2,713	2,733	2,913	2,975	2,987	3,016	3,089	3,187	3,381	3,512
O&M	2,756	2,865	2,828	2,905	2,967	3,030	3,113	3,163	3,291	3,354	3,382
Base Capital	1,055	1,081	1,152	1,143	1,119	1,319	1,353	1,389	1,427	1,461	1,496
Interest	1,218	1,183	1,160	1,108	1,095	1,064	998	966	944	923	889
Tax Equivalents	538	526	526	535	540	540	543	547	552	562	570
Debt Paydown	2,170	1,973	2,053	1,877	1,744	1,727	1,438	1,612	1,369	1,444	1,362
Other	124	211	162	368	457	233	508	280	384	254	334
Total TVA Revenue Requirements	\$ 10,594	\$ 10,552	\$ 10,614	\$ 10,849	\$ 10,897	\$ 10,900	\$ 10,969	\$ 11,046	\$ 11,154	\$ 11,379	\$ 11,545
Base Revenues	8,002	7,977	8,008	8,047	8,030	8,019	8,025	8,015	8,023	8,051	8,081
Fuel Revenues	2,592	2,575	2,606	2,802	2,867	2,881	2,944	3,031	3,131	3,328	3,464
Rate Action Revenues	-	-	-	-	-	-	-	-	-	-	-
Total Electric Revenues	\$ 10,594	\$ 10,552	\$ 10,614	\$ 10,849	\$ 10,897	\$ 10,900	\$ 10,969	\$ 11,046	\$ 11,154	\$ 11,379	\$ 11,545
Surplus / (Shortfall)	-	-	-	-	-	-	-	-	-	-	-
Strategic Capital	1,093	1,522	1,684	1,317	719	808	806	854	789	947	1,189
Cash on Hand	-	-	-	-	-	-	-	-	-	-	-
Debt Paydown	(2,170)	(1,973)	(2,053)	(1,877)	(1,744)	(1,727)	(1,438)	(1,612)	(1,369)	(1,444)	(1,362)
Change in TFO	\$ (1,077)	\$ (451)	\$ (369)	\$ (560)	\$ (1,025)	\$ (919)	\$ (632)	\$ (758)	\$ (580)	\$ (497)	\$ (173)

Summary Income Statement

\$ millions	FY20P	FY21P	FY22P	FY23P	FY24P	FY25P	FY26P	FY27P	FY28P	FY29P	FY30P
Operating Revenue	\$ 10,751	\$ 10,708	\$ 10,760	\$ 10,992	\$ 11,040	\$ 11,043	\$ 11,113	\$ 11,189	\$ 11,298	\$ 11,523	\$ 11,689
Fuel & Purchased Power	2,733	2,713	2,733	2,913	2,975	2,987	3,016	3,089	3,187	3,381	3,512
O&M	2,756	2,865	2,828	2,905	2,967	3,030	3,113	3,163	3,291	3,354	3,382
Depreciation & Amortization	1,890	1,645	1,689	1,840	1,753	1,750	1,796	1,840	1,858	1,929	2,003
Taxes	538	526	526	535	540	540	543	547	552	562	570
Operating Expenses	7,917	7,749	7,776	8,193	8,235	8,307	8,468	8,639	8,888	9,226	9,467
Operating Income	2,834	2,959	2,984	2,799	2,805	2,736	2,645	2,550	2,410	2,297	2,222
Other Income / (Expense)	(220)	(207)	(125)	(99)	(60)	(22)	18	23	(11)	25	100
Interest Expense	1,218	1,183	1,160	1,108	1,095	1,064	998	966	944	923	889
AFUDC Borrowed Funds	-	-	-	-	-	-	-	-	-	-	-
Net Interest Expense	1,218	1,183	1,160	1,108	1,095	1,064	998	966	944	923	889
Net Income	\$ 1,396	\$ 1,569	\$ 1,699	\$ 1,592	\$ 1,650	\$ 1,650	\$ 1,665	\$ 1,607	\$ 1,455	\$ 1,399	\$ 1,433

Summary Cash Flow Statement

\$ millions	FY20P	FY21P	FY22P	FY23P	FY24P	FY25P	FY26P	FY27P	FY28P	FY29P	FY30P
Cash Flows from Operating Activities	\$ 3,514	\$ 3,364	\$ 3,454	\$ 3,344	\$ 3,342	\$ 3,359	\$ 3,290	\$ 3,314	\$ 3,287	\$ 3,354	\$ 3,445
Cash Flows from Investing Activities	(2,407)	(2,883)	(3,054)	(2,753)	(2,285)	(2,407)	(2,625)	(2,520)	(2,670)	(2,818)	(3,226)
Cash Flows from Financing Activities	(1,107)	(481)	(400)	(591)	(1,057)	(952)	(665)	(794)	(617)	(536)	(219)
Net Change in Cash	-	-	-	-	-	-	-	-	-	-	-
Beginning Cash Balance	300	300	300	300	300	300	300	300	300	300	300
Ending Cash Balance	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300

Summary Balance Sheet

\$ millions	FY20P	FY21P	FY22P	FY23P	FY24P	FY25P	FY26P	FY27P	FY28P	FY29P	FY30P
Assets:											
Current Assets	\$ 3,177	\$ 3,171	\$ 3,166	\$ 3,228	\$ 3,284	\$ 3,302	\$ 3,338	\$ 3,367	\$ 3,407	\$ 3,477	\$ 3,536
Property, Plant & Equipment	35,338	36,268	37,328	38,008	38,339	38,796	39,435	39,950	40,542	41,141	42,029
Investments	2,949	3,013	3,077	3,136	3,194	3,251	3,295	3,348	3,398	3,449	3,501
Regulatory and Other Long-Term Assets	6,664	6,429	6,251	6,024	5,821	5,690	5,587	5,473	5,309	5,172	5,062
Total Assets	48,128	48,881	49,822	50,396	50,638	51,039	51,655	52,138	52,656	53,239	\$54,128
Liabilities & Capitalization:											
Short-Term Debt	675	1,826	2,056	2,066	2,099	1,261	2,039	2,343	2,096	1,905	2,291
Current Maturities of Long-Term Debt	1,862	1,030	530	1,030	52	1,880	1,530	304	278	1,030	530
Other Current Liabilities	2,427	2,285	2,289	2,248	2,206	2,243	2,222	2,242	2,262	2,307	2,334
Other Liabilities	11,503	11,096	10,685	10,277	9,951	9,601	9,220	8,848	8,486	8,138	7,755
Long Term Debt	18,811	18,232	18,158	17,086	16,998	15,079	14,011	14,168	13,853	12,787	12,719
Total Liabilities	35,278	34,469	33,718	32,707	31,306	30,064	29,022	27,905	26,975	26,167	25,629
Proprietary Capital	12,850	14,412	16,104	17,689	19,332	20,975	22,633	24,233	25,681	27,072	28,499
Total Liabilities & Proprietary Capital	\$48,128	\$48,881	\$49,822	\$50,396	\$50,638	\$51,039	\$51,655	\$ 52,138	\$ 52,656	\$ 53,239	\$ 54,128

Meeting Financial Objectives

Flat Base Rate for 10 years

Inflationary increases in O&M and Base Capital

Funds solar and natural gas capacity expansion

Funds coal combustion residuals (CCR)

Reduces Debt to \$16.0 billion

- \$18.7 with 100% long-term partners

Fuel (natural gas prices)

- Opportunity to hedge risk

Recommendation

Approve the following:

- FY20 Budget, including:
 - Commercial Transactions Contracting Plan
 - Projects over \$50 million
 - Land Condemnations
 - Regulatory Accounting
 - Final FY19 and begin estimated FY20 Section 13 Tax Equivalent Payments
- No base rate adjustment
- \$2.0 billion of long-term bonds



Finance, Rates, and Portfolio Committee



A blurred background image showing several people in business attire sitting around a table, holding pens and looking at documents, suggesting a professional meeting or conference.

Long-Term Partnership Option

DOUG PERRY

Vice President, Commercial Energy Solutions

Benefits of the Public Power Model

Energy & Capacity



- Affordable, reliable energy
- Capacity to meet peak demand

Transmission & System Optimization



- Robust, resilient transmission
- System balancing
- Benefits of scale

Jobs & Investment



- Job creation
- Attracting new companies
- Local business growth
- Site development

The Valley Public Power Model, which serves as the foundation for the relationship between TVA and Local Power Companies, is unique and has an enduring legacy of improving life in the Tennessee Valley region

Opportunities

Opportunities identified by Local Power Companies:

- Long term rate stability
- Protecting the public power model
- Flexibility to meet end-use customer needs
- Planning participation

Opportunities identified by TVA:

- Inconsistent contract length v. asset obligations
- Stronger partnership
- New Long Range Financial Plan

Long-Term Partnership Option

Standard Elements:

- Long-term commitment
- Partnership credit
- Flexibility
- Rate adjustment protection
- Other mutual defaults & remedies
- Planning partners

Recommendation

The Board is requested to:

- 1) Approve implementation of a standard long-term agreement reflecting the partnership elements
- 2) Delegate authority to the Chief Executive Officer to implement and change, with oversight, the Standard Elements for such agreements



Finance, Rates, and Portfolio Committee





Administration of TVA's Large Generator Interconnection Procedures

MIKE SKAGGS

Executive Vice President and COO

Purpose

Requesting TVA Board approval for delegating authority to the Chief Executive Officer for administering and amending procedures governing the process for interconnecting large generating facilities – those larger than 20 megawatts – to the TVA transmission system

Large Generator Interconnection Procedures

- Interconnection procedures allow for the safe and reliable connection of generation to TVA's transmission system.
- Industry standards and regulatory requirements are quickly changing.
- Delegation for administering large generator interconnection procedures to TVA's Chief Executive Officer will streamline the process and response timeliness.
- New agreements executed under the delegation will be provided to the Finance, Rates, and Portfolio Committee at least annually.

Recommendation

Recommend the TVA Board approve delegating authority to the Chief Executive Officer for administering and amending procedures governing the process for interconnecting large generating facilities to the TVA transmission system



Audit, Risk, and Regulation Committee





External Relations Committee





Nuclear Oversight Committee



People and Performance Committee



Corporate Goals

JOHN THOMAS

Executive Vice President
and Chief Financial Officer



Fiscal Year 2020 Performance Goals

Approve goals for:

- **Annual Incentive Program (Winning Performance):**
Designed to promote teamwork, motivate and reward employees for achieving annual goals
- **Long-Term Incentive Plan (LTIP):**
Designed to support achievement of long-term strategic goals

FY20 Winning Performance Design

- Corporate Multiplier between 0 and 1.0
- Board defines key performance measures aligned to strategic imperatives for Corporate Multiplier
- Board / CEO qualitatively assess performance compared to targets to determine final multiplier
- CEO establishes enterprise measures
- Board uses judgment in all aspects of corporate performance

Winning Performance Scorecard

FY20 Corporate Multiplier

Aligns to People, Financial, and Stewardship Strategic Imperatives Outlined by Board

Measure	Target
Safe Workplace	◆ ————— 0 ————— ◆
Financial Health	
Operating Cash Flow	◆ ————— Business Plan ————— ◆
Net Income	◆ ————— Business Plan ————— ◆
Total Financing Obligations	◆ ————— Business Plan ————— ◆
Jobs Created / Retained	◆ ————— 50,000-75,000 ————— ◆
Board Level Significant Events	◆ ————— 0 ————— ◆

Note: Corporate Multiplier measures include only a target; CEO / Board will assess performance above or below target

Long-Term Incentive Plan (LTIP)

FY20 - FY22 LTIP Cycle Scorecard measures:

- Non-Fuel Delivered Cost of Power
- Load Not Served
- INPO Index
- External Measures:
 - Media Tone
 - Stakeholder Survey
 - Customer Loyalty

FY20 - FY22 LTIP Scorecard

Measure	Weight	Threshold	Target	Stretch
Non-Fuel Delivered Cost of Power (FY20 – FY22 avg.)	40%	BP + 4%	Business Plan	BP - 4%
Load Not Served (FY20 – FY22 avg.)	30%	4.8	3.9	3.5
INPO Index (FY22)	15%	94.3	96.2	97.7
External Measures (FY20 – FY22 avg.)	15%	77.2	80.0	82.8

Recommendation

FY20 Winning Performance

- Approve strategic measures and targets in Corporate Multiplier

Long-term Incentive Plan

- Approve FY20 – FY22 LTIP cycle scorecard and targets



People and Performance Committee





Board Meeting

August 22, 2019
Knoxville, Tennessee

Committee Membership

Audit, Risk, and Regulation Committee

John Ryder, Chair
Kenny Allen
Gina Lodge
Skip Thompson

External Relations Committee

Richard Howorth, Chair
A.D. Frazier
John Ryder
Jeff Smith

Finance, Rates, and Portfolio Committee

Ron Walter, Chair
A.D. Frazier, Chair-Elect
Richard Howorth
Bill Kilbride

Nuclear Oversight Committee

Jeff Smith, Chair
Kenny Allen
A.D. Frazier
Bill Kilbride

People and Performance Committee

Gina Lodge, Chair
Kenny Allen, Chair-Elect
Skip Thompson
Ron Walter



Board Meeting

August 22, 2019
Knoxville, Tennessee

