



Board Meeting

November 13, 2020
Knoxville, Tennessee



President's Report

JEFF LYASH
President and CEO

Service

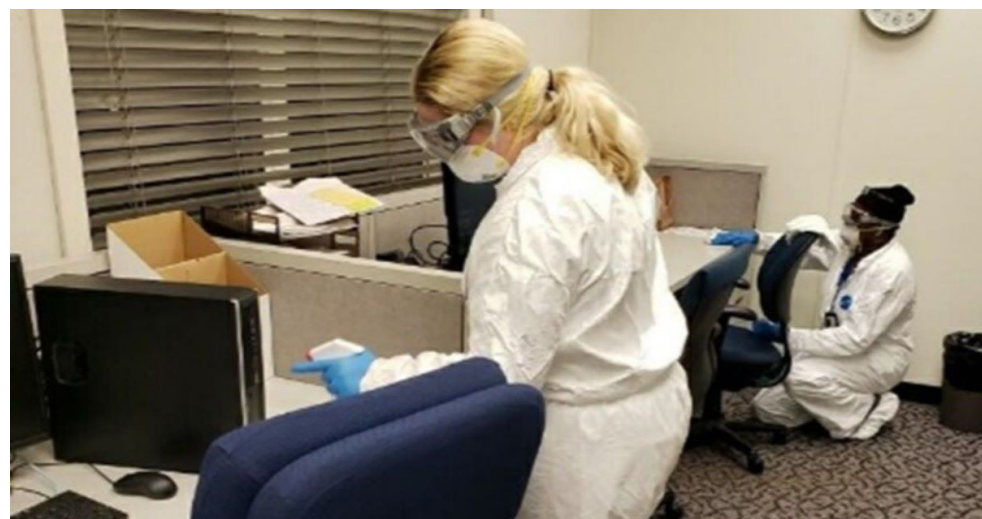
Our Mission

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



President's Report

JEFF LYASH
President and CEO



Operational Performance

Two Major Tornadoes

Restored Service
Safely and Efficiently

Employees Averted

\$1 Billion
in Flood Damages

Nation's

2nd Largest
Transmission System

In high voltage lines among U.S. utilities

Safely Completed

Three Nuclear Refueling Outages

Top-Quartile Nuclear Performance

99.999%

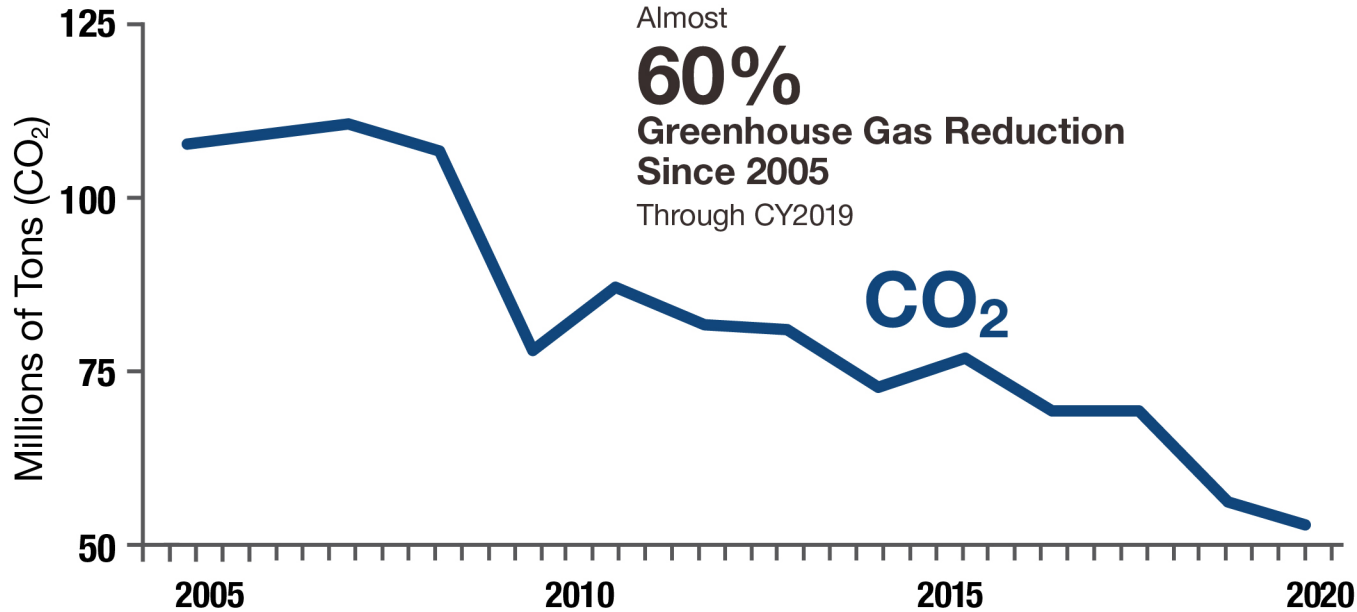
Reliability

Since 2000

Coal, Gas & Hydro Plants

Improved Performance

Operational Performance



Operational Performance

Recognized as

Top 10
by National Renewable
Energy Laboratory

Expect to Add

7,000 – 10,000 MW
Of Solar By 2040

Last Year, Created or Retained

67,000 Jobs
\$8.6 Billion
Capital Investments

Solar Energy Capacity
Growth Rate Nearly

70%
Operating/contracted
Over FY19

Hydro Operations

12%
of Total Power Supply

Financial Performance

Sustained Annual Operating
Cost Reductions of

\$800 Million
Since 2017

Reduced Debt By

\$6 Billion
Over Past 7 Years

**2.5% Pandemic
Relief Credit**

Effective Rates

**Flat, Stable
and Low**

Invested Over

\$15 Billion
Over Past 7 Years

142 Long-Term Partners

**5.5% Lower
Energy Costs**
Over Past Two Years

COVID-19 Response

\$200 Million
Pandemic Relief Credit
2.5% Rate Credit

**Regulatory Relief
and Flexibility**
for Local Power Companies

Community Care Fund
More Than
\$4 Million
in Matching Funds Disbursed

Investing Additional
\$2 Million
Community Care Fund

Investing More Than
\$10 Million
In Back-to-Business
Incentive Program

Valley Partners

Long-Term Partners

142 LPCs

93% of LPCs

*As of 11/1/20

Multiple Benefits Including

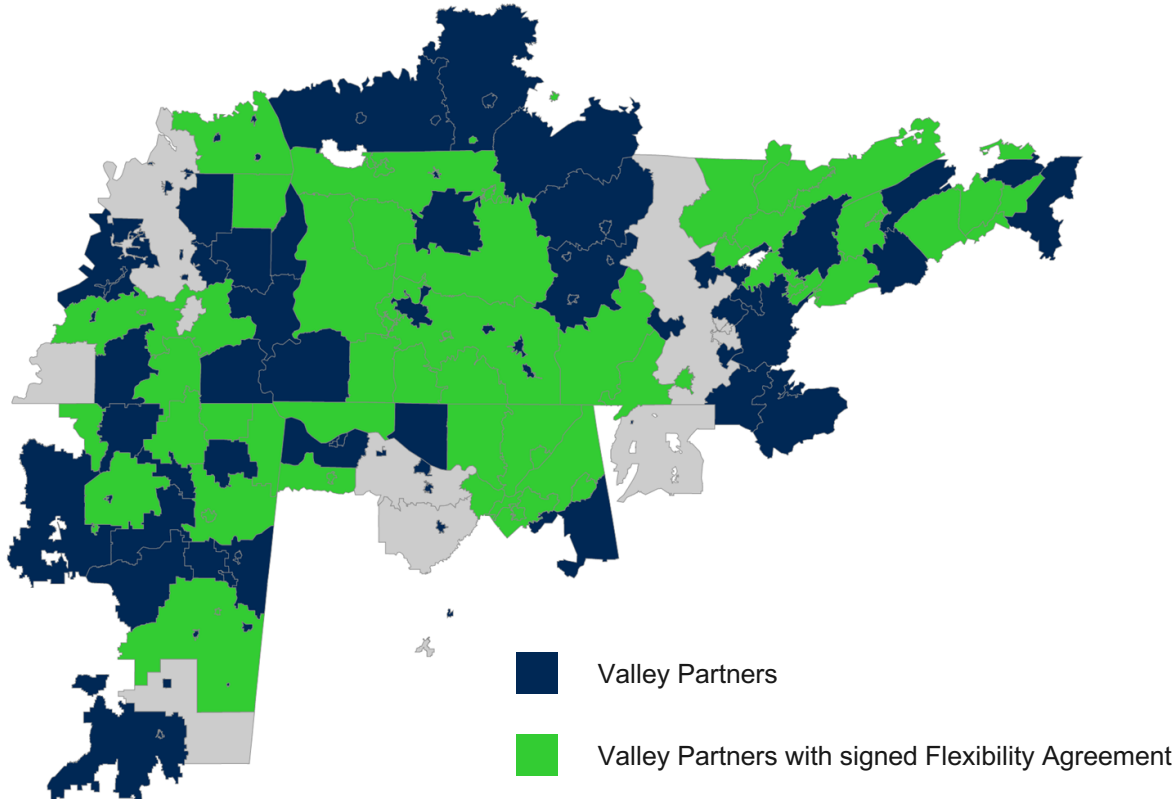
Self Generation

3.1% Bill Credit

**20-Year
Commitment**

To Plan and Work Together

Valley Partner Flexibility Option



Memphis

We Invest Over
\$71 Million
In Memphis Community Annually

Committed to Investing
\$100 Million
Over Next 10 Years

Benefits Worth More Than
\$2 Billion
In Value to Memphis

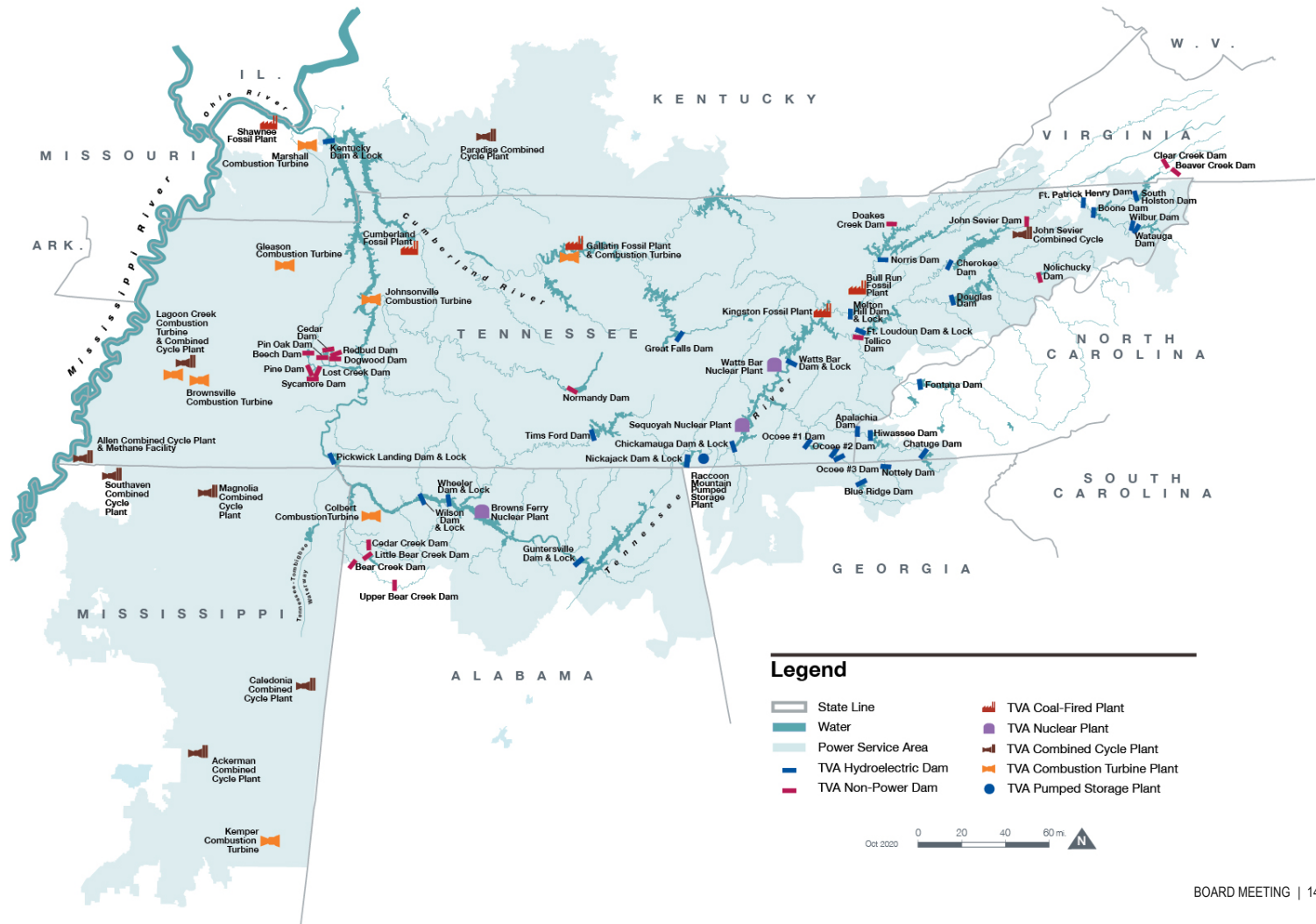
With MLGW, Created or Retained

40,000 Jobs
\$5.4 Billion

Capital Investments In Just the Past 8 Years

**Port Development
Project**

Worth Billions in Economic Activity



Values

Safety

We are uncompromising in our commitment to the safety and well-being of our teammates and the communities we serve

Integrity

We are honest and straightforward – always doing the right thing

Inclusion

We treat everyone with dignity and respect – emphasizing inclusion by welcoming each person's individuality so that we can all reach our full potential, and

Service

We are proud to be of service in the communities in which we live, work and play.

FY21 Priorities

Powerful Partnerships

Promoting progress through the shared success of our customers and stakeholders

People Advantage

Amplifying the energy, passion and creativity within us all

Operational Excellence

Building on our best-in-class reputation for reliable service and competitively priced power

Igniting Innovation

Pursuing innovative solutions for TVA and our customers and communities

Financial Strength

Investing in the future, while keeping energy costs as low as possible

Innovation

Autonomous Inspection

Drones and Robot vehicles for visual, thermal and environmental inspections

Almost

60%

Carbon-Free Generation

Wearable Technology

Alerts Employees to Safety Hazards

Construction of State-of-the-Art

System Operations Center

Fiber Optics System Battery Storage

Electric Vehicles

Transportation Sector

**A Leading Source
of CO₂**

Each Electric Vehicle

**Reduces CO₂
8,600 lb/year**

200,000 Electric Vehicles

**Save 4 Million
Metric Tons of CO₂**

**Home to 3
EV Auto Makers**

General Motors, Nissan
& Volkswagen





TENNESSEE VALLEY AUTHORITY

Extension of the Tennessee Valley Trades and Labor Council Project Maintenance and Modification Agreement

Tennessee Valley Authority (TVA) reaffirms its commitment to the continued partnership with the Tennessee Valley Trades and Labor Council (TVA-TLC) and its constituent unions.

Collectively, TVA and North American Building Trades Union (NABTU) have partnered together for over 80 years on significant projects in the Tennessee Valley. This partnership has resulted in TVA and NABTU providing the most reliable electricity and among the most affordable utility rates in the country.

In recognition of this partnership, the parties agree to extend the language of ARTICLE XXV of the Project Maintenance and Modification Agreement to the following:

This Agreement shall be in full force and effect through November 30, 2023. 8:00 (12:25) and shall continue from year to year thereafter unless the other notice of termination is given by either the Council or, with Tally concurrence, the Corporation.

Signed this 10th day of October 2020.

[Signature]
STEVE L. GILBERT
President
North American Building Trades Union

[Signature]
BRIAN R. BUCKNER
General Manager
North American Building Trades Union

[Signature]
BRANDON BISHOP
Assistant Representative
North American Building Trades Union

[Signature]
JAMES E. GILBERT
General Manager and Chief Human Resources Officer
Tennessee Valley Authority

[Signature]
JAMES E. GILBERT
General Manager and Chief Human Resources Officer
Tennessee Valley Authority

[Signature]
JAMES E. GILBERT
General Manager and Chief Human Resources Officer
Tennessee Valley Authority

NABTU TVA



Employees & Retirees



Veterans

Almost

**20% of Workforce
are Veterans**

Experience, skills and commitment

Nearly

**2,000 Veterans,
Reservists &
Active Members
of the U.S. Armed Forces**





President's Report

JEFF LYASH
President and CEO



Board Meeting

November 13, 2020
Knoxville, Tennessee



Finance, Rates, and Portfolio Committee



Financial Performance Update

JOHN THOMAS

Executive Vice President
and Chief Financial Officer

The image shows a large, modern building with a prominent blue sign on its side that reads "TVA" in white, bold, sans-serif capital letters. The building is white with blue accents. To the left of the TVA building, there is a classical stone building with columns. The sky is a clear, bright blue.

TVA

Fiscal Year 2020

(vs. budget results net of partner credits)

Net Income of \$1.5B - \$119M favorable to budget

Fuel and Purchased Power \$269M favorable to budget

Operating and Maintenance Expense \$36M favorable to budget

Interest Expense \$76M favorable to budget

Total Financing Obligations (TFO) net of cash

- \$860M favorable to budget
- \$1.6B lower than prior year
- Lowest debt level in 30 years

FY20 Summary Income Statement

\$ millions	FY20			FY19	
	Actual	Budget	Variance	Actual	'20 v '19
Total Operating Revenue	\$ 10,249	\$ 10,751	\$ (502)	\$ 11,318	\$ (1,069)
Fuel & Purchased Power	2,464	2,733	269	2,903	439
Total O&M	2,720	2,756	36	3,090	370
Taxes, Depreciation, Other	2,571	2,648	77	2,710	139
Interest	1,142	1,218	76	1,198	56
Net Income (Loss)	\$ 1,352	\$ 1,396	\$ (44)	\$ 1,417	\$ (65)
Partnership Credits	\$ 163	\$ —	\$ 163	\$ 14	\$ 149
Net Income (Loss) excluding Partnership Credits	\$ 1,515	\$ 1,396	\$ 119	\$ 1,431	\$ 84

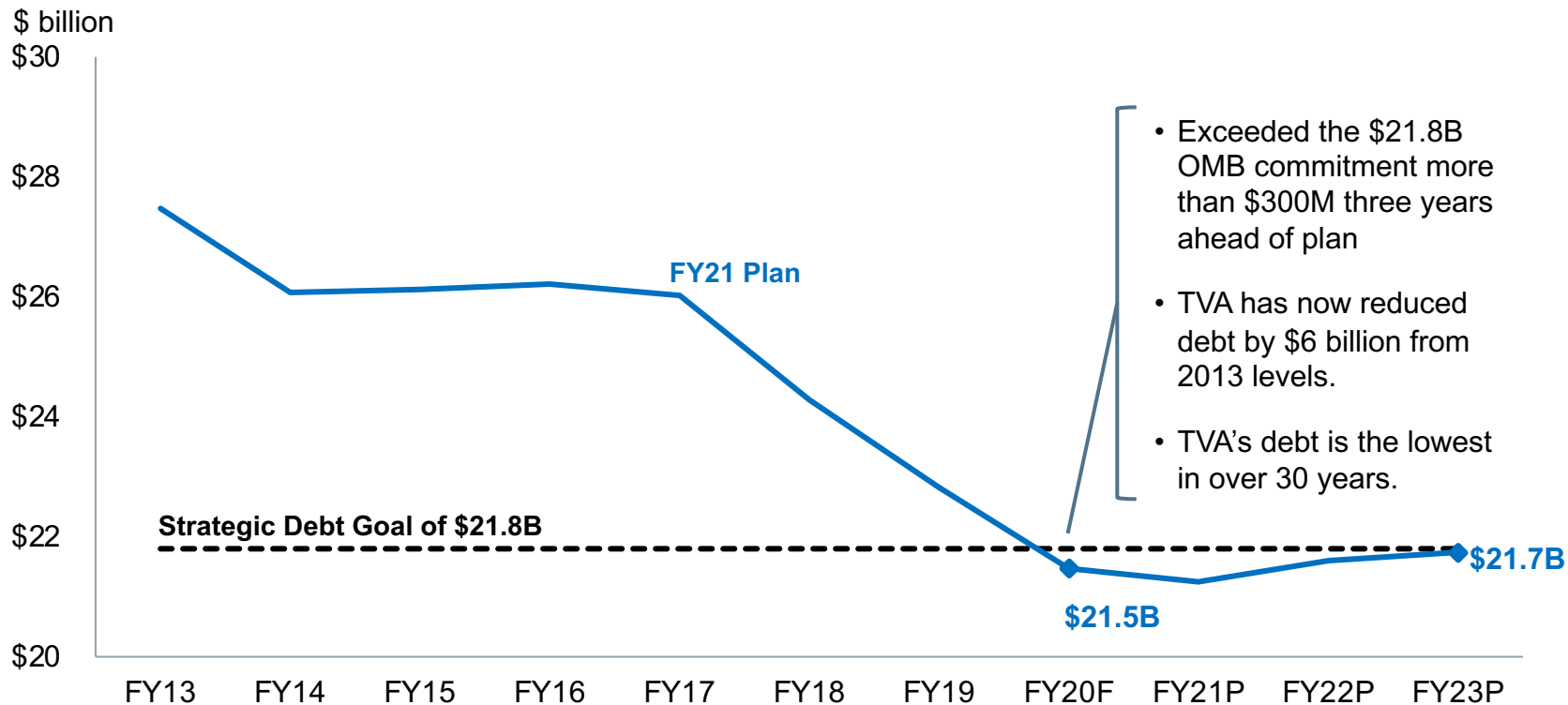
FY20 Summary Cash Flow Statement

\$ millions

	FY20			FY19	
Net Cash Provided by / (Used in)	Actual	Budget	Variance	Actual	'20 v '19
Operating Activities	\$ 3,636	\$ 3,514	\$ 122	\$ 3,720	\$ (84)
Investing Activities	(2,015)	(2,407)	392	(2,243)	228
Financing Activities	(1,422)	(1,108)	(314)	(1,477)	55
Ending Debt and Financing Obligations	\$ 21,421	\$ 21,937	\$ 516	\$ 22,818	\$ 1,397
Additional Cash Held	(198)	-	198	-	198
TFO Net of Additional Cash Held	\$ 21,223	\$ 21,937	\$ 714	\$ 22,818	\$ 1,595
Partnership Credits*	(146)	-	146	-	146
TFO Net of Additional Cash Held and Partnership Credits	\$ 21,077	\$ 21,937	\$ 860	\$ 22,818	\$ 1,741

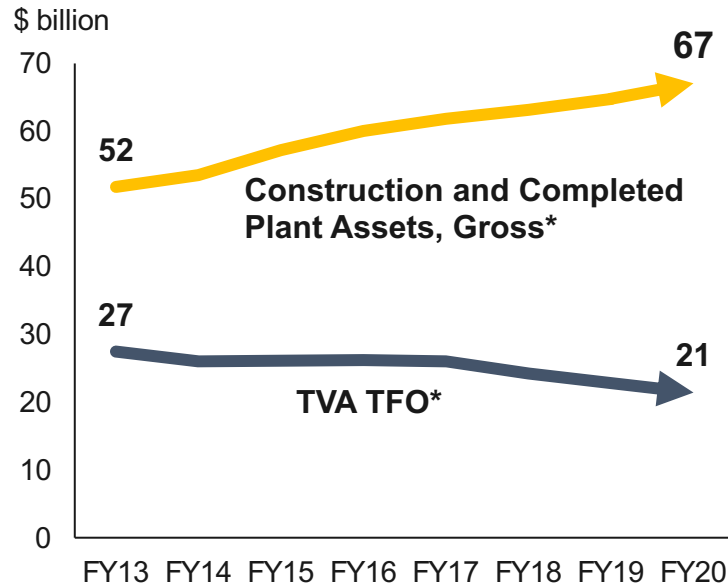
*Cash View of Partnership Credits

Total Financing Obligations

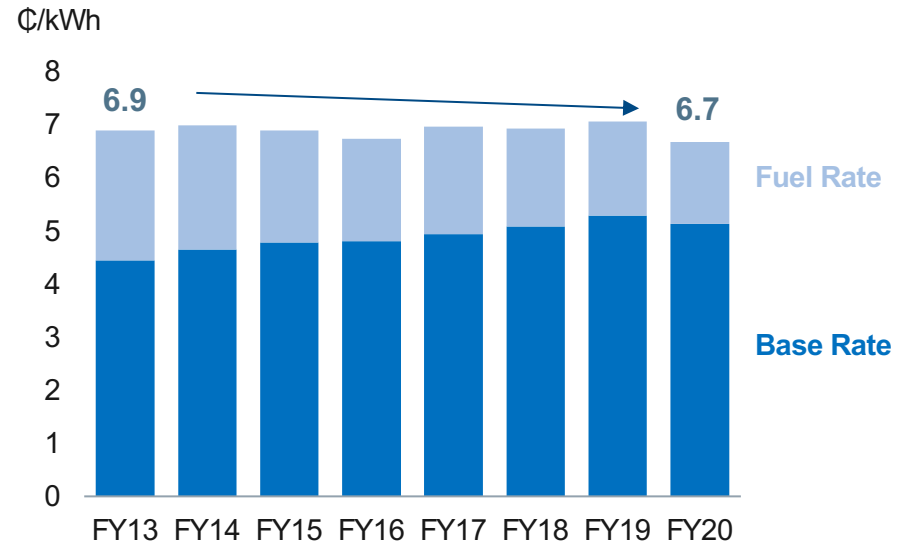


Progress on Financial Health

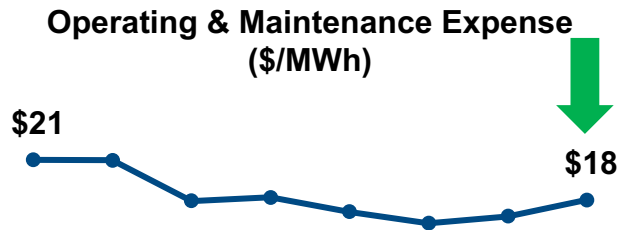
- TVA has invested over \$15 billion in its asset base, while reducing debt by \$6 billion, and reducing effective rates



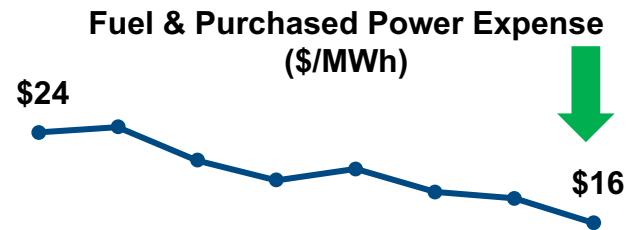
* See Regulation G Reconciliation



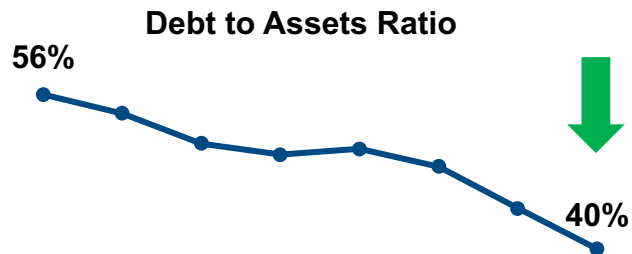
Financial Health Trends



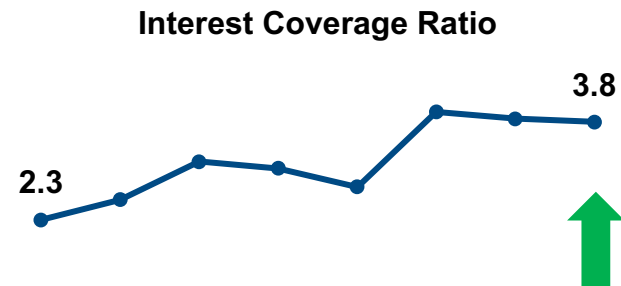
FY13 FY14 FY15 FY16 FY17 FY18 FY19 FY20



FY13 FY14 FY15 FY16 FY17 FY18 FY19 FY20



FY13 FY14 FY15 FY16 FY17 FY18 FY19 FY20



FY13 FY14 FY15 FY16 FY17 FY18 FY19 FY20

2019 Non-Fuel O&M expense is net of accelerated recovery of regulatory assets

Interest Coverage Ratio = (Net Income + Interest Expense, net + Depreciation & Amortization Expense) / (Interest Expense, gross)

Debts to Assets Ratio = Total Debt / Total Assets, where Total Debt = Short-term debt, net + Current maturities of power bonds + Current maturities of long-term debt of variable interest entities + Total Long-term debt, net

Fiscal Year 2020

Strong financial results

Improved operational efficiencies

Lower interest expense

Improved financial health

Lower rates for our customers

Performance-related savings / lower rates for 2021

~ \$200 Million

FY21 Budget

JOHN THOMAS

Executive Vice President
and Chief Financial Officer

The image shows a large, white, modern building with a prominent blue sign on its side that reads "TVA" in large, white, three-dimensional letters. The building is set against a clear blue sky. To the left of the building, a portion of a classical stone building with columns is visible. The overall scene is brightly lit, suggesting a sunny day.

Purpose and Background

Purpose: Action Item. Seek the Finance, Rates, and Portfolio Committee's recommendation to the Board of the following FY21 budget items at the November meeting.

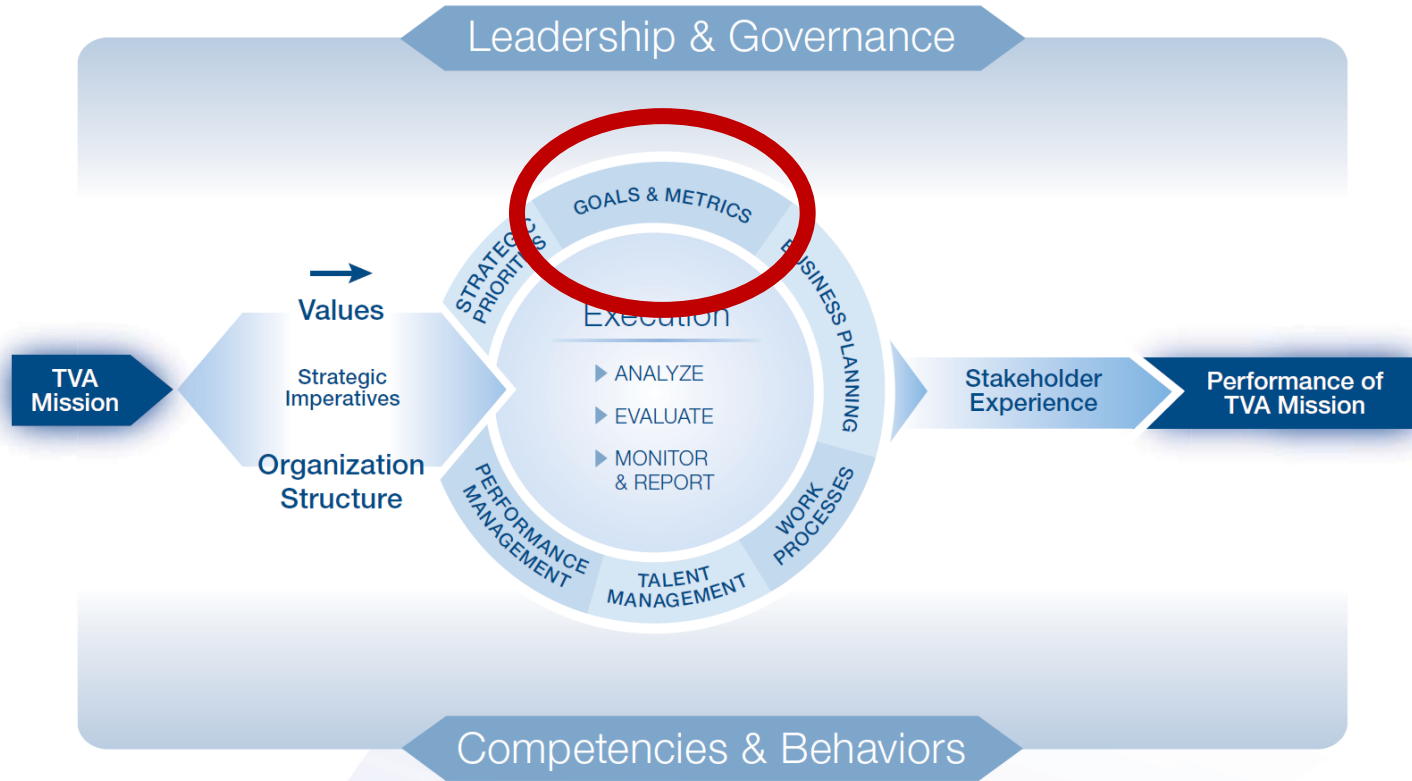
- FY21 Budget
- FY21 Commercial Transactions Contracting Authority and CEO Delegation

Background: In the first quarter, the Finance, Rates, and Portfolio Committee recommends the above listed items to the full Board for approval. A formal recommendation will be made to the Committee leading up to the November Board meeting.

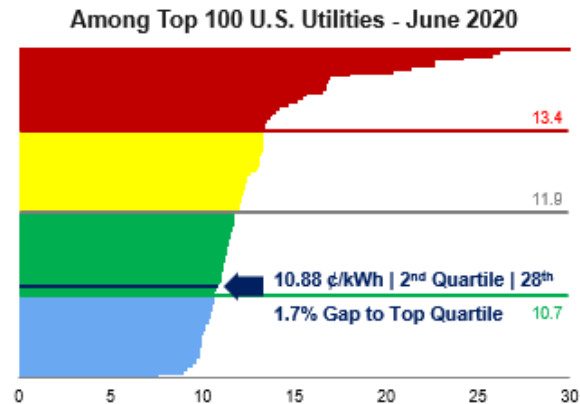
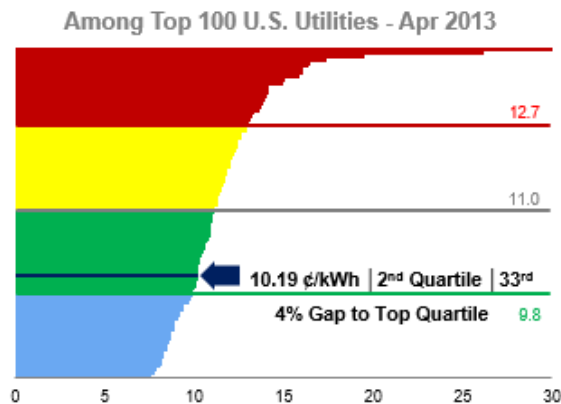
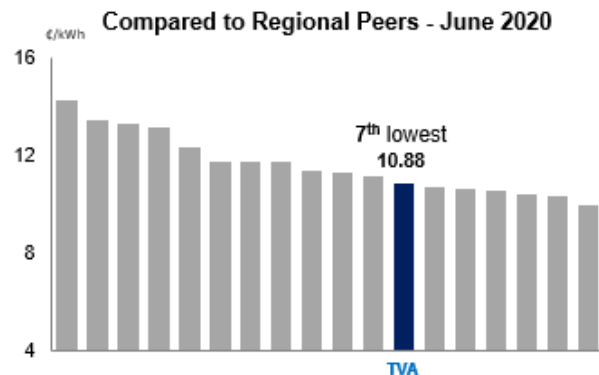
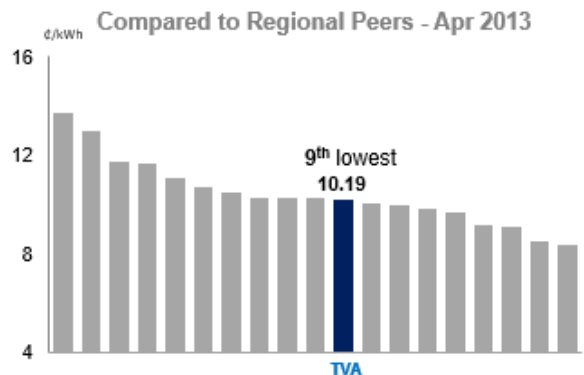
Board Approval Timeline

Topic	August Meeting	November Meeting
FY21 Budget	Approved FY21 Expenditure Authority	Request approval for complete FY21 Budget and FY21 Contracting Plan (supersedes incorporation of prior approval)
FY21 Commercial Transactions Contracting Authority and CEO Delegation	Approved FY20 Extended Contracting Plan Authority	
Projects over \$50 million	✓	No action
FY21 financing shelf for up to \$3 billion of long-term bonds and associated resolutions	✓	
Acquisition of land rights	✓	
Exemption from mandatory clearing requirement of Dodd-Frank Act	✓	
Retention of net power proceeds	✓	
Regulatory accounting	✓	
Final FY20 tax equivalent payments to the states and counties and estimated FY21 tax equivalent payments	✓	
Contribution to the TVA Retirement System	✓	

TVA's Operating Model

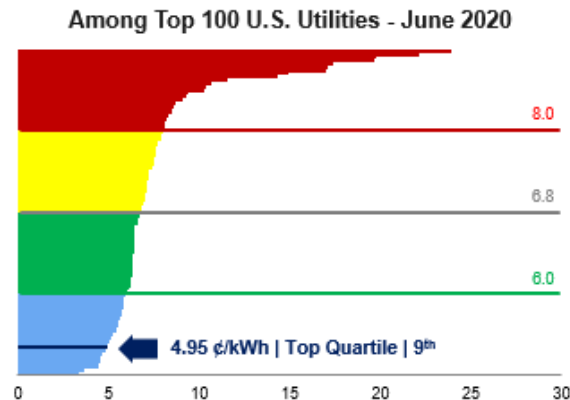
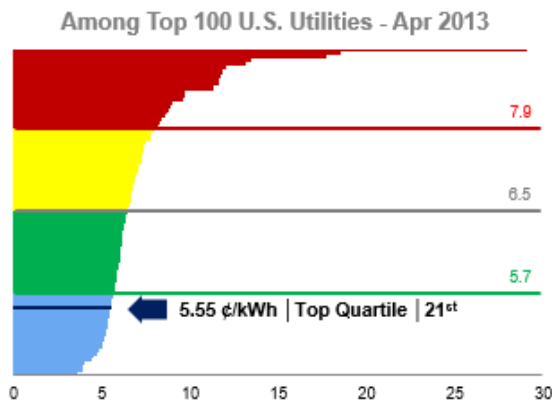
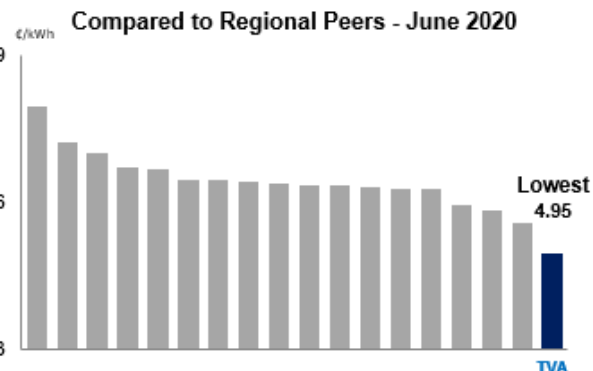
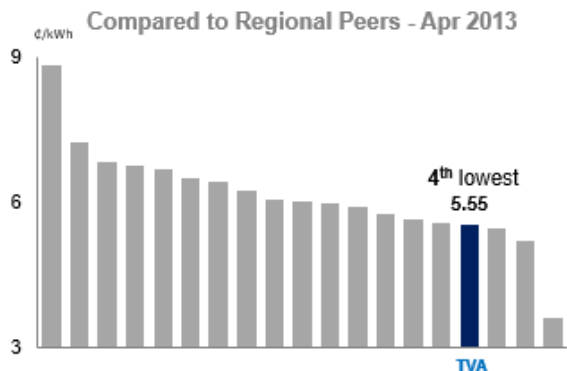


Residential Rate Competitiveness



12-Month Rolling Average (¢/kWh) – Source: EIA-861M (formerly EIA-826) and ESS

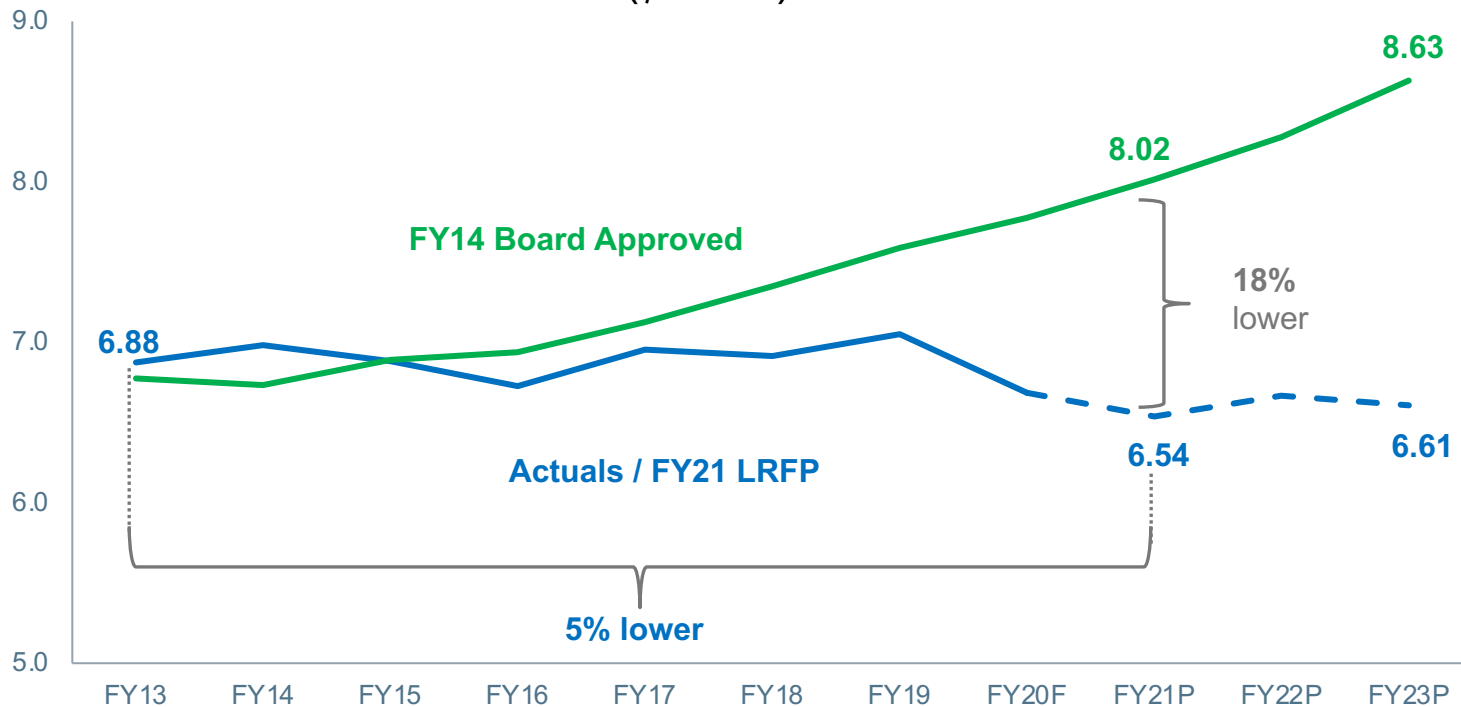
Industrial Rate Competitiveness



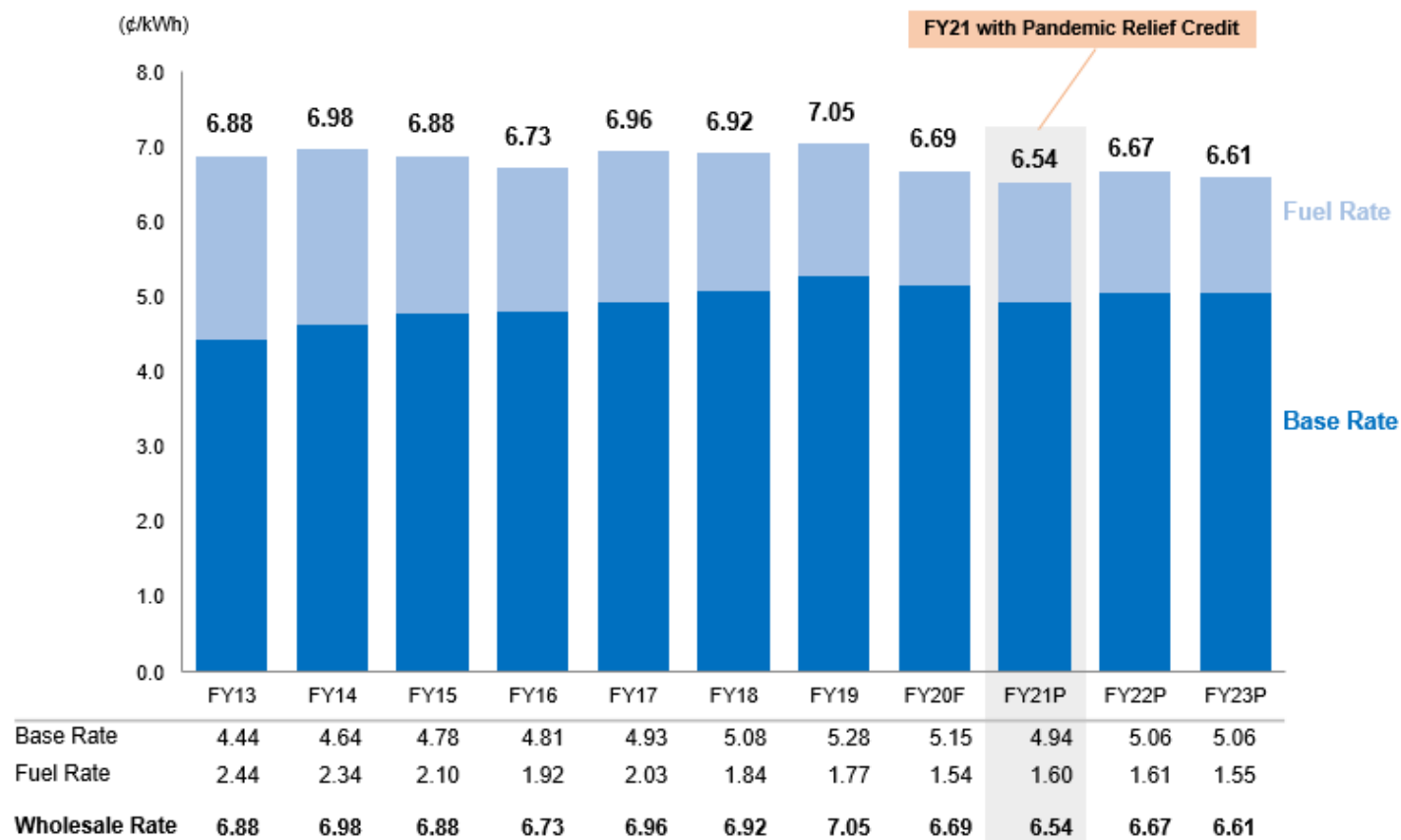
12-Month Rolling Average (¢/kWh) – Source: EIA-861M (formerly EIA-826) and ESS

Maintaining Low Rates

Wholesale Rate (¢/kWh)



Maintaining Low Rates



Key Planning Assumptions

- Load forecast lower near-term due to COVID-19 effects (0.2% 4-year CAGR), remains effectively flat long-term (0.3% 10-year CAGR)
- Pandemic relief credit of 2.5% at wholesale for FY21 (~ \$200M), no base rate actions
- Includes impact of 142 LPC partners
- Continued focus on achieving O&M efficiencies
- Includes capital consistent with FY21 Budget Power Supply Plan
- Continue optimizing lowest variable cost dispatch and improving plant availability
- Target cash balance of \$500 million for end of FY20, \$300 million FY21 forward

Summary Income Statement

Initial Estimates

\$ million	FY14	FY15	FY16	FY17	FY18	FY19	FY20B	FY20F	FY21P	FY22P	FY23P
Operating Revenue	\$ 11,137	\$ 11,003	\$ 10,616	\$ 10,739	\$ 11,233	\$ 11,318	\$ 10,751	\$ 10,206	\$ 9,962	\$ 10,325	\$ 10,490
Fuel and Purchased Power	3,824	3,394	3,090	3,160	3,022	2,903	2,733	2,471	2,557	2,615	2,635
O&M	3,341	2,838	2,842	2,604	2,598	3,090	2,756	2,741	2,946	2,981	3,037
Depreciation and Amortization	1,843	2,031	1,836	1,717	2,527	1,973	1,890	1,816	1,600	2,000	2,076
Taxes	540	525	522	525	518	541	538	518	504	491	505
Operating Expenses	9,548	8,788	8,290	8,006	8,665	8,507	7,917	7,546	7,607	8,087	8,253
Operating Income	1,589	2,215	2,326	2,733	2,568	2,811	2,834	2,660	2,355	2,238	2,237
Other Income / (Expense)	49	29	43	56	50	62	41	33	19	18	19
Other Net Periodic Benefit Cost				(758)	(256)	(258)	(261)	(253)	(264)	(270)	(190)
Interest Expense	1,344	1,347	1,371	1,346	1,243	1,198	1,218	1,141	1,100	1,068	1,076
AFUDC Borrowed Funds	(175)	(214)	(235)	-	-	-	-	-	-	-	-
Net Interest Expense	1,169	1,133	1,136	1,346	1,243	1,198	1,218	1,141	1,100	1,068	1,076
Net Income	\$ 469	\$ 1,111	\$ 1,233	\$ 685	\$ 1,119	\$ 1,417	\$ 1,396	\$ 1,299	\$ 1,010	\$ 918	\$ 990

Summary Cash Flow Statement

Initial Estimates

\$ million	FY14	FY15	FY16	FY17	FY18	FY19	FY20B	FY20F	FY21P	FY22P	FY23P
Cash Flows from Operating Activities	\$ 2,980	\$ 3,315	\$ 3,042	\$ 2,728	\$ 3,938	\$ 3,720	\$ 3,514	\$ 3,578	\$ 2,707	\$ 2,856	\$ 2,850
Cash Flows from Investing Activities	(2,756)	(3,585)	(3,113)	(2,536)	(2,269)	(2,243)	(2,407)	(2,020)	(2,649)	(3,176)	(2,956)
Cash Flows from Financing Activities	(1,326)	70	71	(191)	(1,658)	(1,477)	(1,107)	(1,357)	(258)	320	106
Beginning Cash Balance*	1,602	500	300	300	300	299	300	299	500	300	300
Net Change in Cash*	(1,102)	(200)	-	-	(1)	-	-	201	(200)	-	-
Ending Cash Balance*	500	300	300	300	299	299	300	500	300	300	300
Restricted Cash Balance	31	26	10	11	23	23	22	22	22	22	22
Ending Total Cash Balance	\$ 531	\$ 326	\$ 310	\$ 311	\$ 322	\$ 322	\$ 322	\$ 522	\$ 322	\$ 322	\$ 322

*Excluding restricted cash

Summary Balance Sheet

Initial Estimates

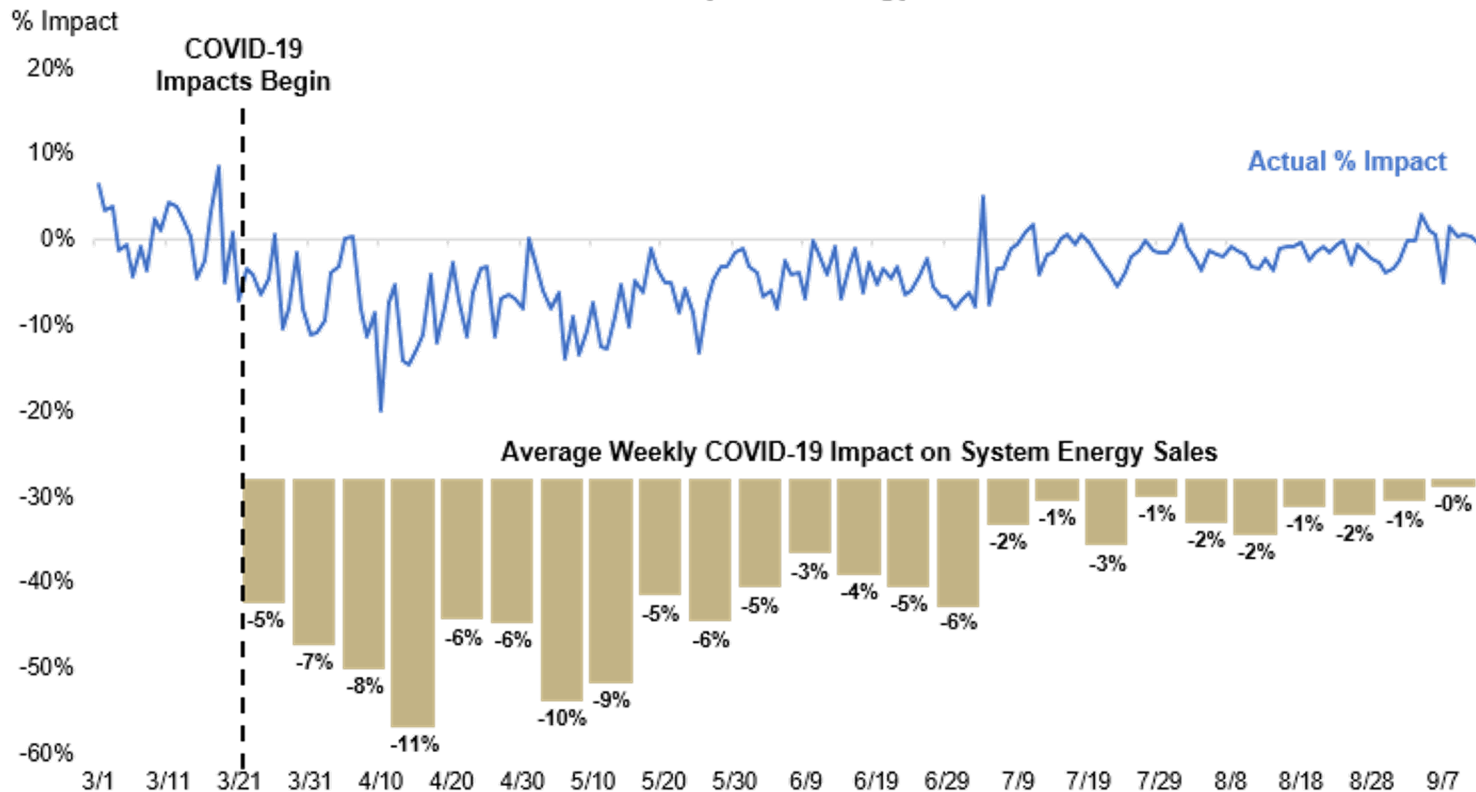
\$ million	FY14	FY15	FY16	FY17	FY18	FY19	FY20B	FY20F	FY21P	FY22P	FY23P
Assets:											
Current Assets	\$ 3,788	\$ 3,506	\$ 3,644	\$ 3,446	\$ 3,417	\$ 3,278	\$ 3,177	\$ 3,182	\$ 3,062	\$ 3,133	\$ 3,162
Property, Plant and Equipment	30,350	32,407	34,043	34,947	35,414	35,133	35,338	35,139	35,745	36,571	37,051
Investments	1,981	2,011	2,257	2,603	2,862	2,968	2,949	3,039	3,248	3,455	3,669
Regulatory and Other Long-Term Assets	9,477	10,821	10,550	9,021	6,974	9,088	6,664	10,748	10,334	9,826	9,393
Total Assets	45,596	48,745	50,494	50,017	48,667	50,467	48,128	52,108	52,389	52,985	53,275
Liabilities and Capitalization:											
Short-Term Debt	596	1,034	1,407	1,998	1,216	922	675	111	986	1,438	1,147
Current Maturities of Long-Term Debt	1,032	32	1,555	1,728	1,032	1,030	1,862	1,776	1,028	29	1,022
Other Current Liabilities	2,821	2,869	2,900	2,675	2,606	2,360	2,427	2,867	2,679	2,704	2,681
Other Liabilities	11,816	13,757	14,064	13,045	12,223	14,347	11,503	15,500	15,002	14,285	13,479
Long Term Debt	23,227	23,850	22,148	21,438	21,307	20,183	18,811	19,003	18,924	19,849	19,284
Total Liabilities	39,492	41,542	42,074	40,884	38,384	38,842	35,278	39,257	38,619	38,305	37,613
Proprietary Capital	6,104	7,203	8,420	9,133	10,283	11,625	12,850	12,851	13,770	14,680	15,662
Total Liabilities and Proprietary Capital	\$ 45,596	\$ 48,745	\$ 50,494	\$ 50,017	\$ 48,667	\$ 50,467	\$ 48,128	\$ 52,108	\$ 52,389	\$ 52,985	\$ 53,275

COVID-19 Impact Summary

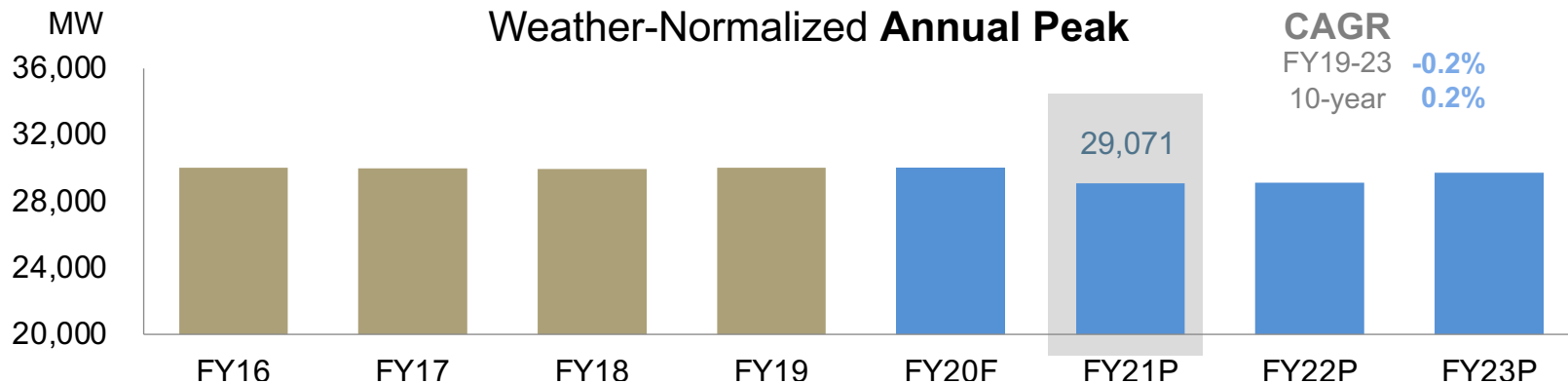
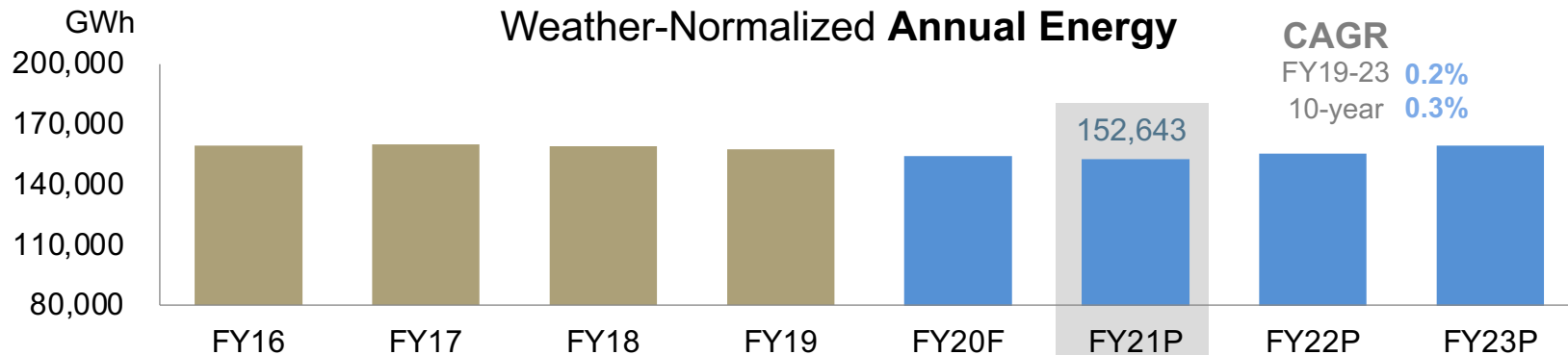
- Beyond weather, TVA energy demand is dependent on key variables such as unemployment and regional business operations
- Decision to defer budget approval based on extreme uncertainty in spring around drivers of load projections
- TVA system energy dropped 10% below expected levels in April, but has gradually improved
- Several key industrial sectors have returned to near-normal operating levels since onset of pandemic
- Uncertainties still exist around many health and economic factors going into FY21

Weekly Energy Sales Appear to be Recovering

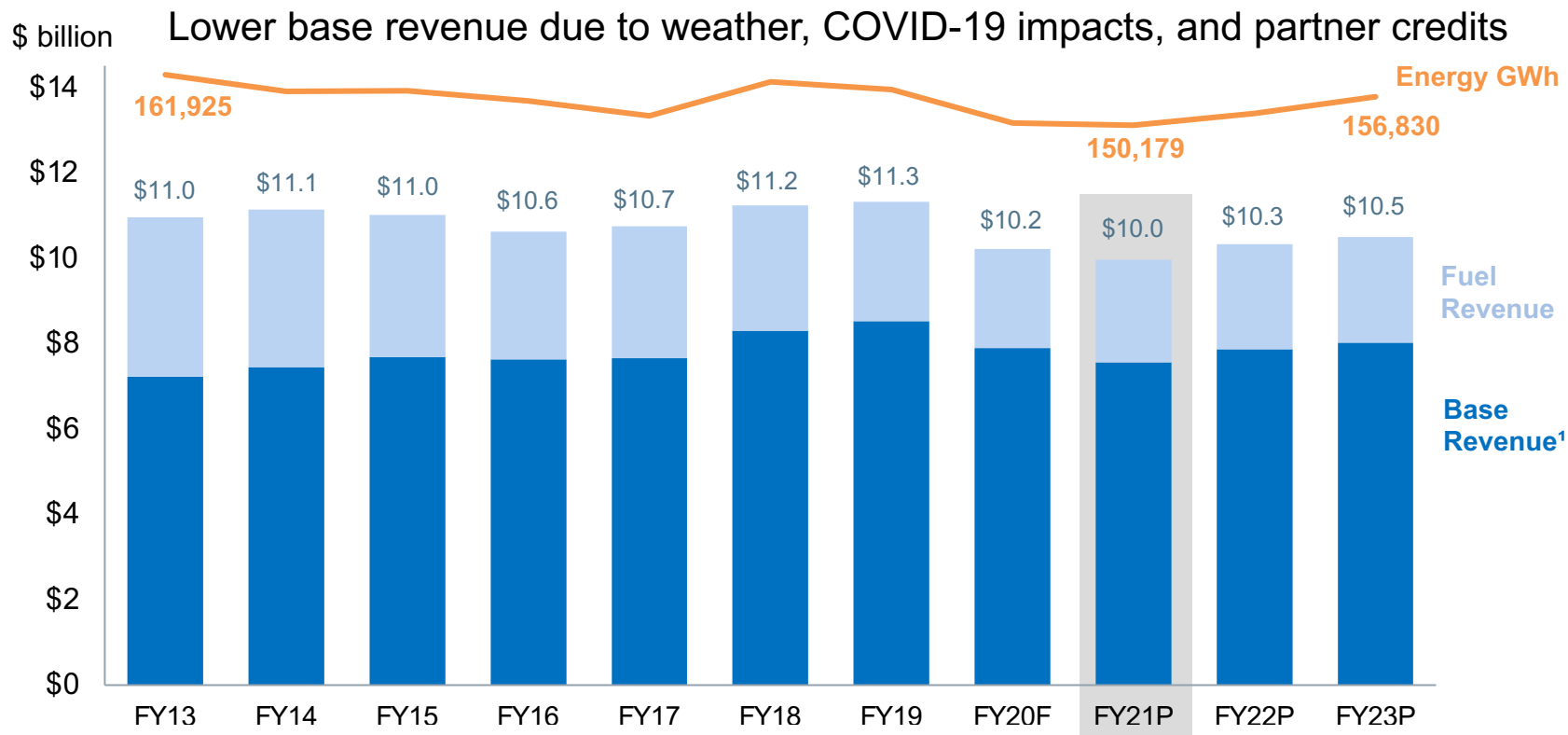
Total TVA System Energy Sales



Energy and Peak

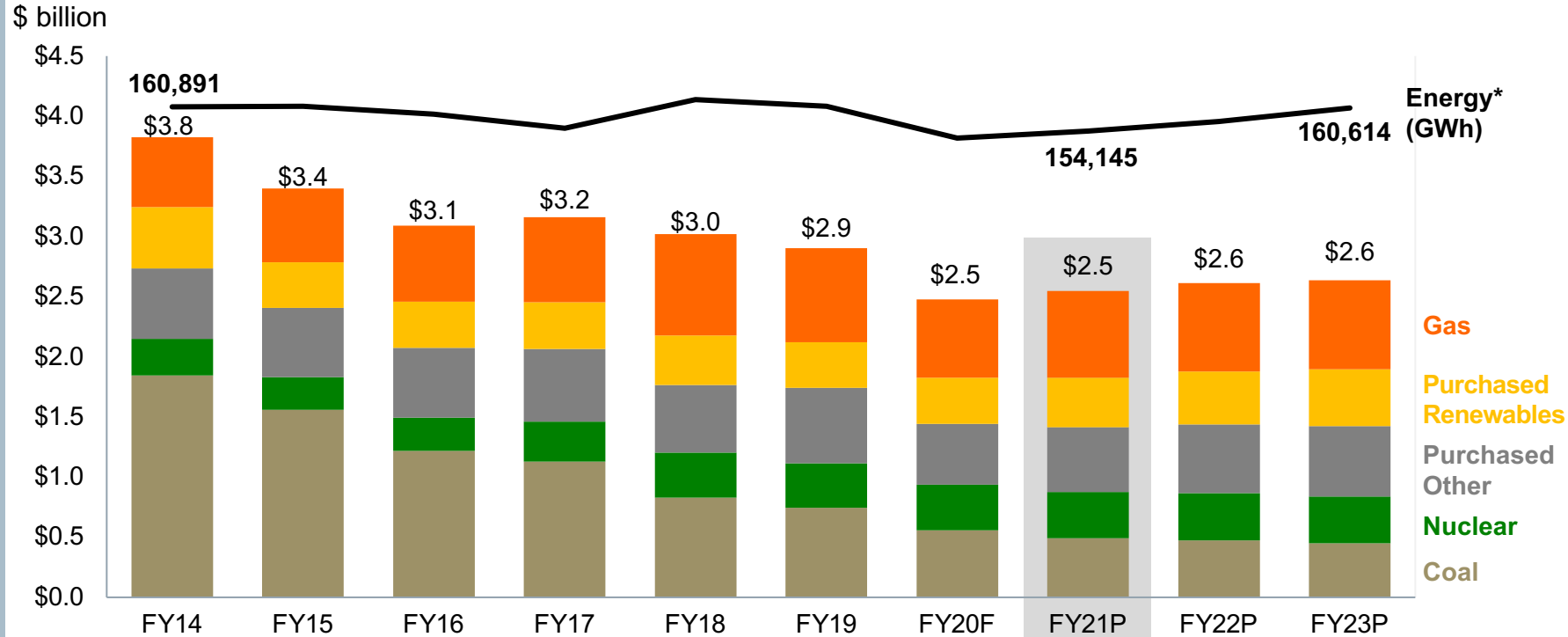


Operating Revenue



¹ Base Revenue includes "Other" revenue

Fuel and Purchased Power



*Energy includes hydroelectric generation

Purpose and Background

Purpose: Action Item. The FY21 Commercial Transactions Contracting Plan is the basis for approving the commercial transactions portion of the annual budget and becomes the foundation for the delegated authority under which the CEO, executives, and staff execute fuel, power purchase, and commercial transaction contracts.

Background: Whether a contract is in substantial conformance with the Contracting Plan is an important element in determining the required level of authority to approve the contract.

- A contract is considered to be substantially in conformance with the Contracting Plan if the contract supports TVA's forecasted generation system demand as initially stated in the Contracting Plan and in periodic revisions to TVA's generation plan.
- Periodic revisions to TVA's generation plan include, but are not limited to, fleet unit availability, fleet dispatch economics, weather and/or other factors that may result in deviation of commodity volumes at the time the Contracting Plan was developed.

In addition, all fuel and power purchase contracts must be in conformance with TVA's hedge ladders and policies that address risk, including counterparty credit and performance risk and commodity risk.

Commercial Transactions Contracting Plan (FY21 Portfolio Summary)

FUEL AND PURCHASED POWER



Expected 154,145 GWh in FY21



\$2.5B FY21 Budget



FY21 Portfolio generation and spend affected by the economic impact of COVID-19 as recovery continues



3,300 MW delegation in FY21 for Wholesale Purchased Power (PPAs)

DEMAND-SIDE MANAGEMENT



\$92M Demand Response FY21 Budget



\$20M Electrification FY21 Budget



\$25M Energy Efficiency FY21 Budget



\$8M Innovation FY21 Budget

CUSTOMER-FACING COMMERCIAL TRANSACTIONS



TVA is partnering with datacenter and other customers to meet their long-term sustainability needs



1,600 MW delegation in FY21 for Green Invest contracts



300 MW delegation for Flexibility Research Project contracts



Valley Partner Enhanced Power Supply Flexibility of 800 to 2,000 MW

OTHER AND SUPPORTING ACTIVITIES



3.5M RECs held in reserve to support future carbon goals



\$3.5M in revenue expected for existing Dark Fiber in FY21



\$12M in Federal Energy Services Program costs in FY21



Exploring valley sites for potential TVA solar development to meet system and specific customer needs

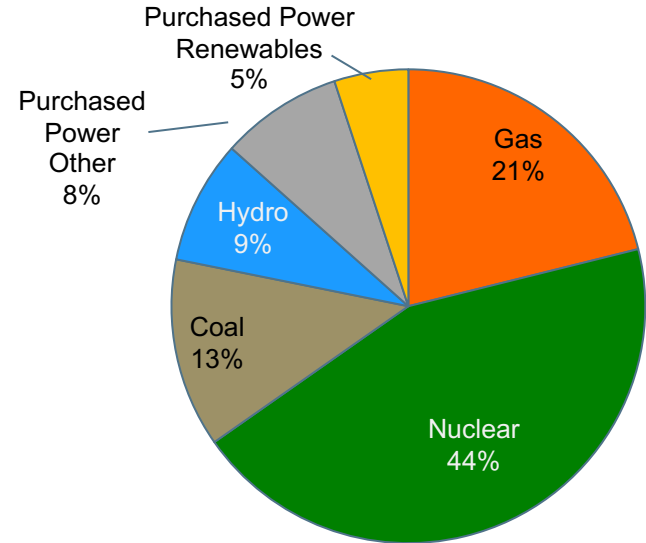
Fuel and Purchased Power Summary

FY21 Fuel and Purchased Power portfolio requires \$2.5B with expected 154,145 GWh of energy

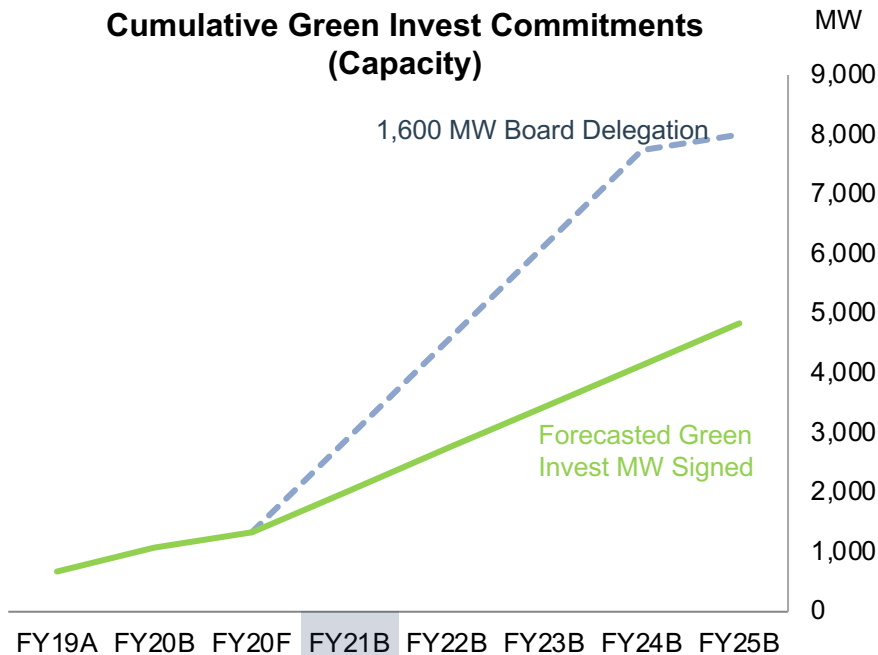
Strategic objectives: Manage price and volumetric risks to mitigate financial and operational impacts

- Respond to changes in demand by maintaining and improving fuel and portfolio flexibility in a cost-effective manner
- Align renewable purchases to consumer demand
- Optimize TVA's portfolio with economic purchases and sales
- Continue managing emergent risks, such as weather, commodity prices, supply and COVID-19 impacts

Contracting Plan FY21 Energy Total Energy 154,145 GWh



Customer-Facing Commercial Transactions (Green Invest Portfolio)



- Customer demand driving increase in solar in the near-term
- Green Invest agreements signed in FY21 forecasted to be operational in FY24

*1,600 MW Board delegation per year up to 8,000 MW in total

Demand-Side Management

Annually, TVA's Energy Services and Programs, in close partnership with LPCs, directly benefit more than 100,000 residents, businesses and industries across the Valley. The FY21 strategies for these portfolios are:

Demand Response

- Manage system peaks and reliability
- Embrace new technology and innovation
- Maintain strong partnerships and performance

Energy Efficiency

- Focus on low-income communities
- Provide energy advice and education to all consumers
- Direct efforts toward schools and public sector

Electrification

- Promote electric technologies that help the Valley recover from COVID-19
- Grow TVA revenue while reducing carbon impact
- Facilitate economic growth in underserved communities

Electric Vehicles and Innovation

- Launch electric transportation initiatives
- Position TVA and LPCs as innovative EV leaders
- Improve consumer awareness and education around EVs
- Harness big data and customer analytics

Commercial Transactions Contracting Plan

Delegations of Authority

- The FY21 Commercial Transactions Contracting Plan is the basis for approving the commercial transactions portion of the annual budget and becomes the foundation for the delegated authority under which the CEO, executives, and staff execute fuel, purchased power, and commercial transaction contracts.
- The Plan delegates authority from the Board to the CEO to enter into
 1. forward capacity agreements with delivery terms of up to 20 years, limited to 3,300 MWac in the aggregate; and
 2. to enter into contractual arrangements to purchase and sell renewable energy and renewable energy certificates in quantities sufficient to meet the needs of Local Power Company-served and TVA directly served customers up to 1,600 Mwac
- The plan is approved as part of the FY21 Budget cycle.

Purpose and Background

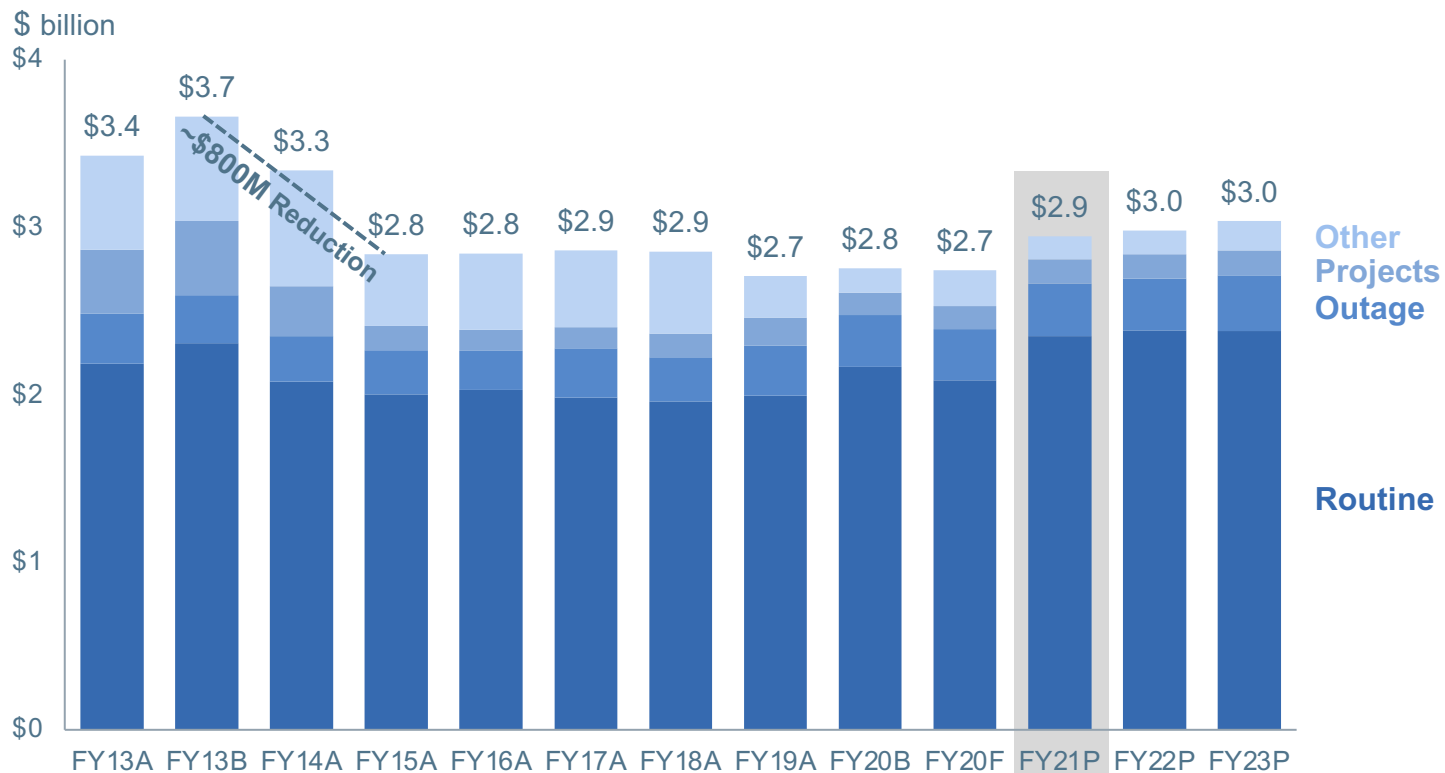
Purpose: Provide the Board visibility into procurement contract spend and anticipated approvals for FY21, which would have previously been approved by the Board prior to delegation to the CEO.

Background: On October 24, 2019, the Board approved a new Board Practice revising the existing delegation to the Chief Executive Officer (CEO) for approval of procurement contracts.

The approval restated the CEO's existing authority to approve any contract to implement Board-approved programs and capital projects; delegates authority to the CEO to approve procurement contracts which are to be funded through Board-approved annual budgets; preserves the current limitation that CEO-approved fuel contracts either be in conformance with the Board-approved annual contracting plan or not exceed \$50 million in contract amount.

The Board Practice aligns with neighboring utility peers.

O&M Expense

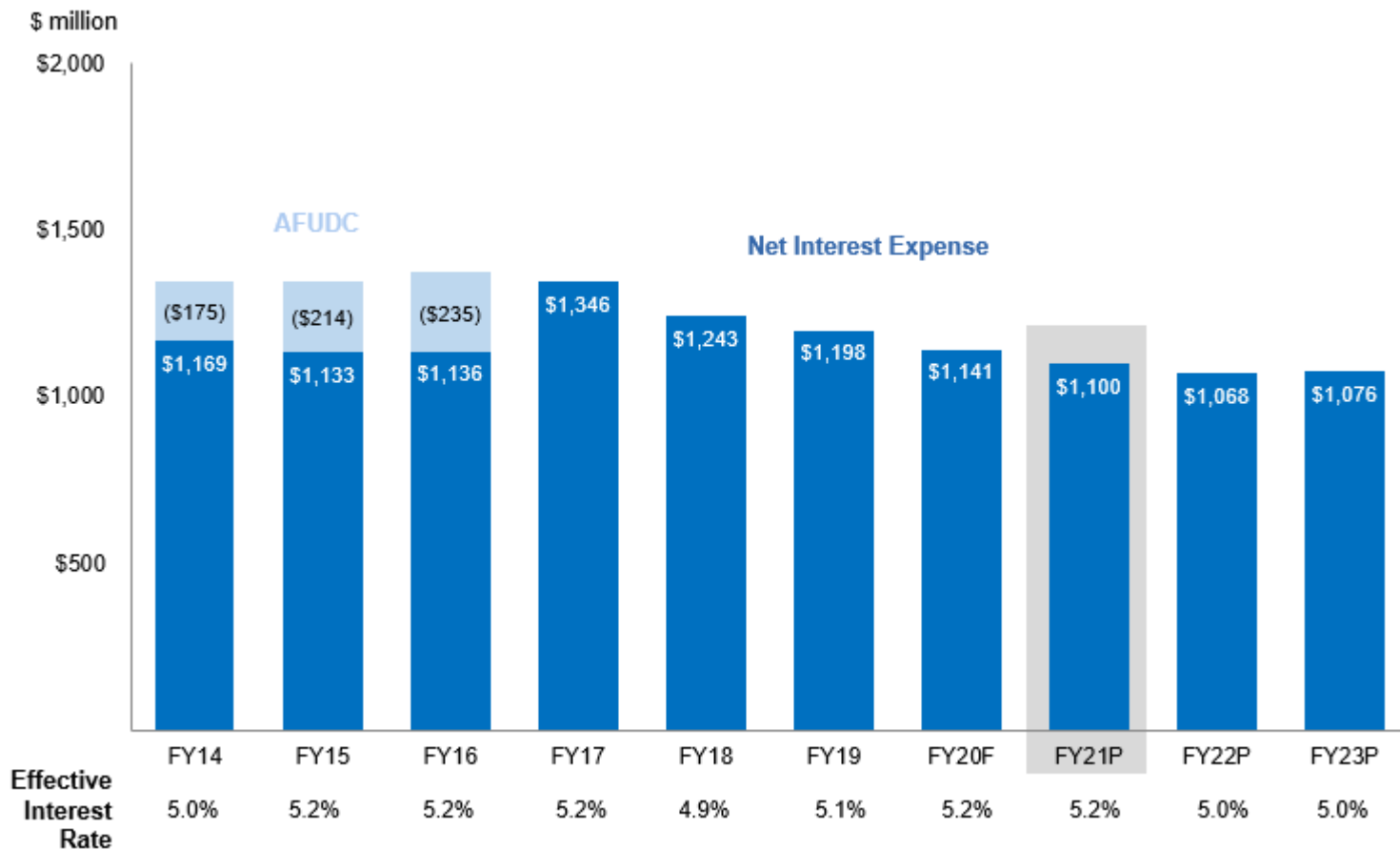


Excludes additional items

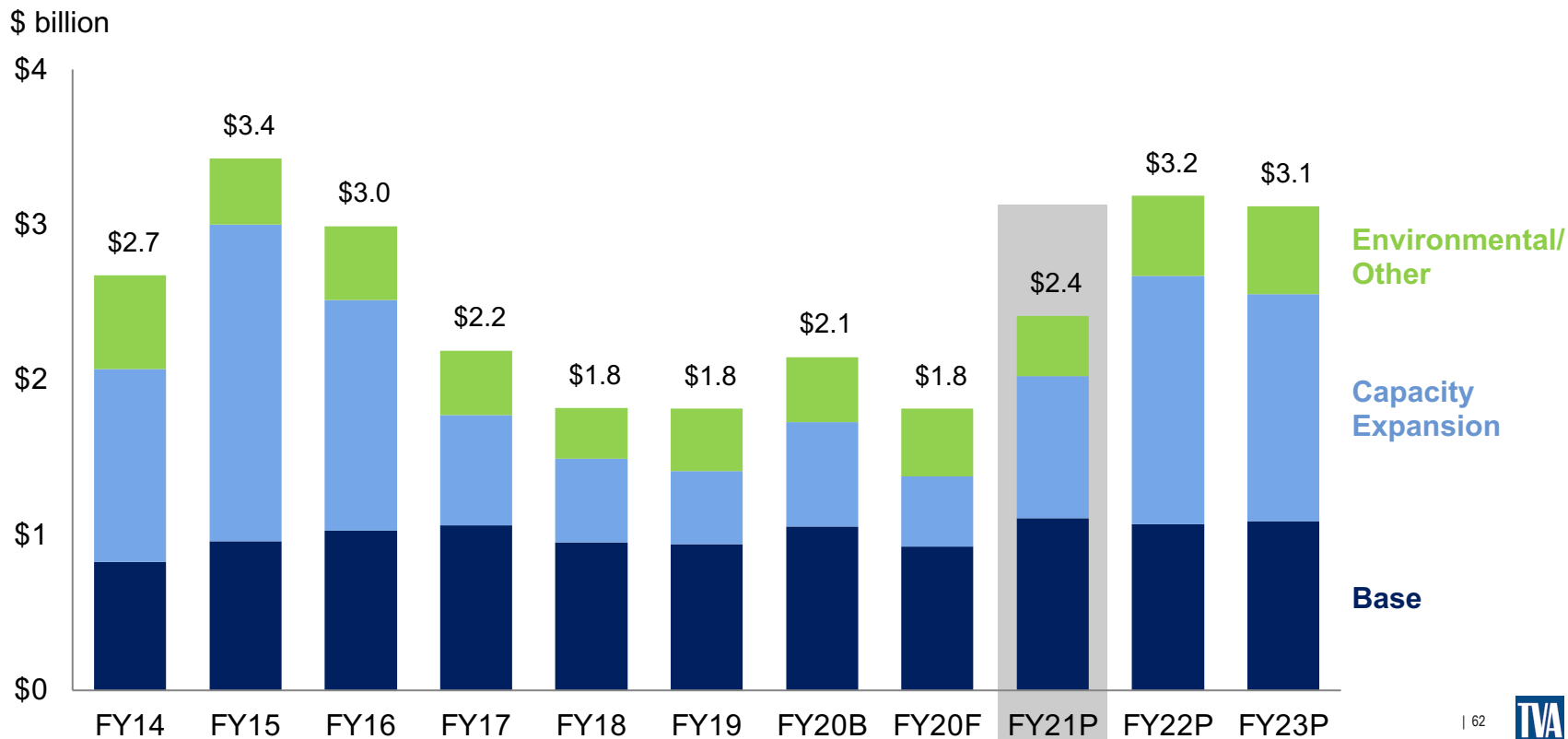
Tax Equivalents by State

\$ millions	FY19 Final	FY20 Final	Delta
Tennessee	\$ 367	\$ 373	\$ 6
Alabama	86	88	2
Mississippi	42	43	1
Kentucky	39	34	(5)
Georgia	9	9	-
North Carolina	3	3	-
Virginia	1	1	-
Illinois	1	1	-
Total Payments	\$ 548	\$ 552	\$ 4
FCA Adjustment	(7)	(24)	(17)
Total Expense	\$ 541	\$ 528	\$ (13)

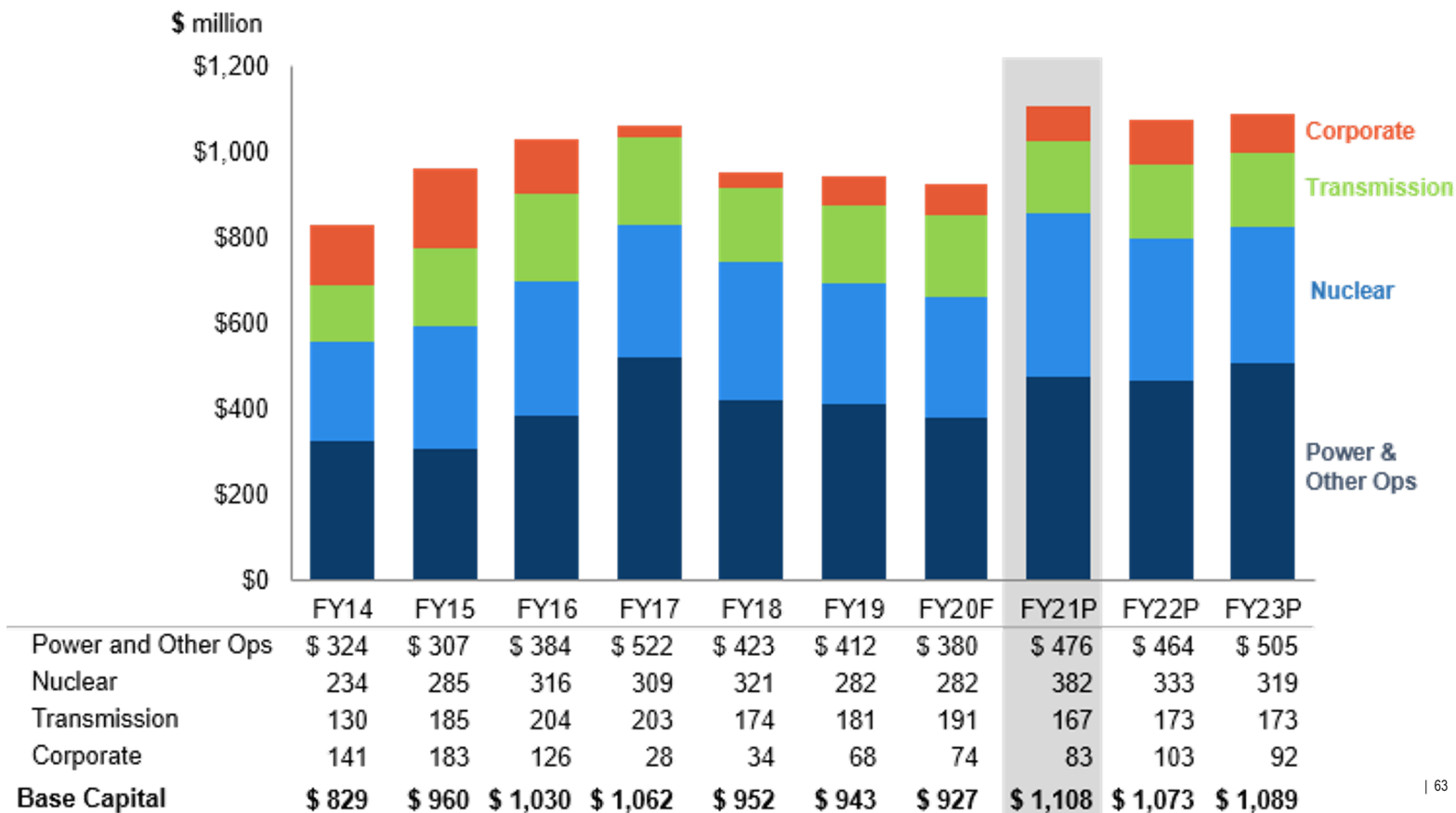
Interest Expense



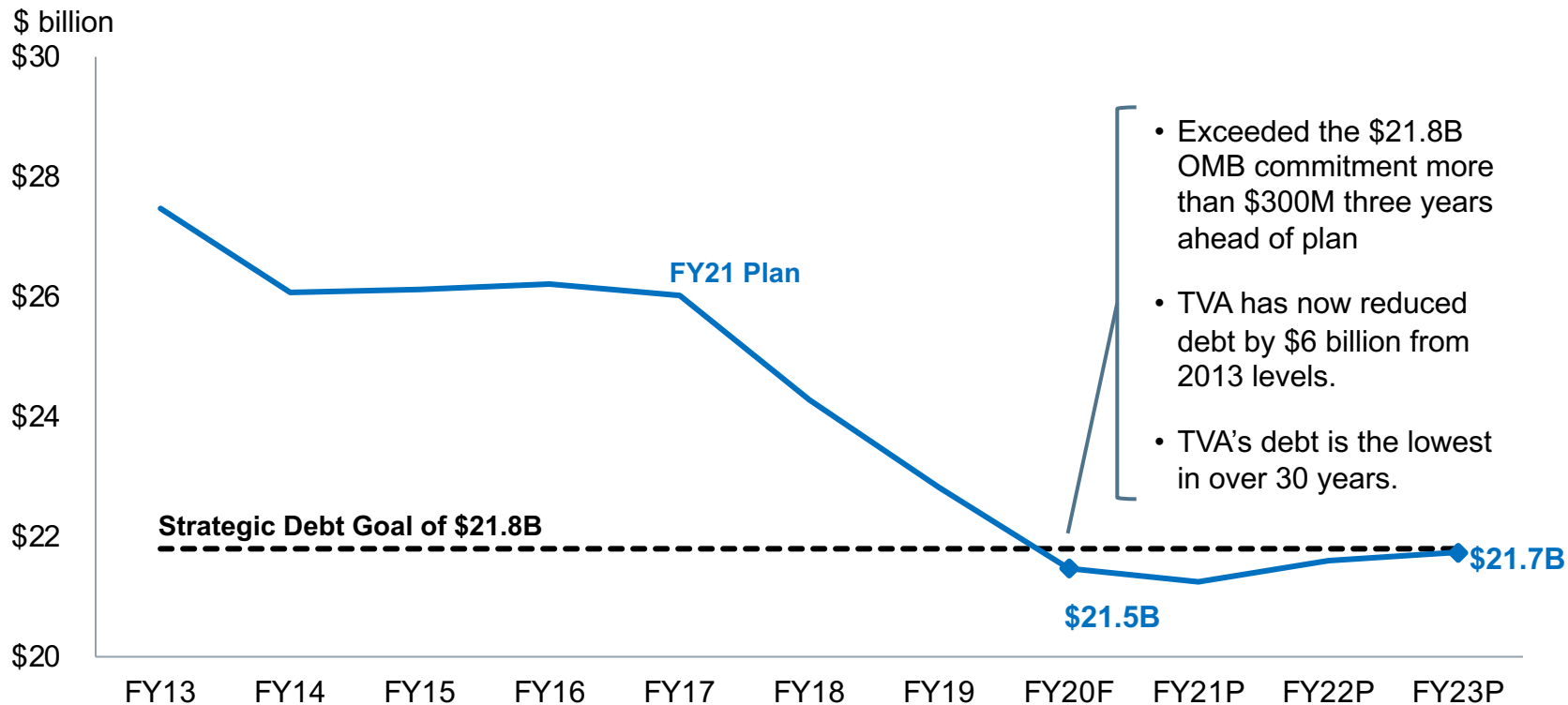
Capital Expenditures



Base Capital



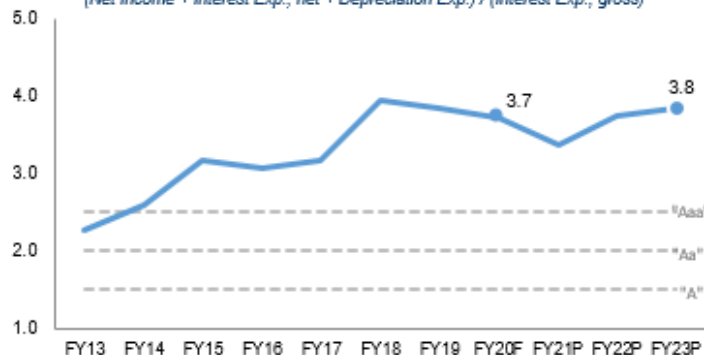
Total Financing Obligations



Financial Health – Ratios

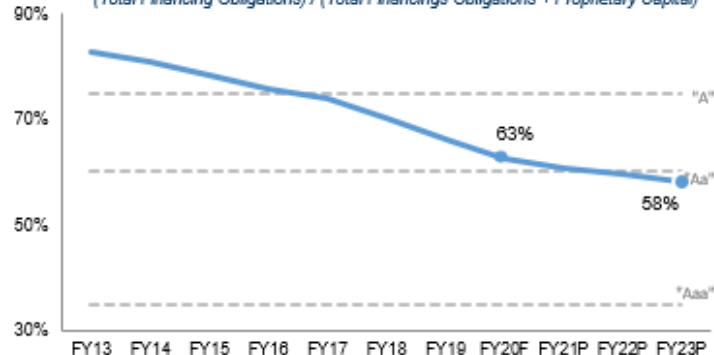
Interest Coverage ↑ Good

$(\text{Net Income} + \text{Interest Exp., net} + \text{Depreciation Exp.}) / (\text{Interest Exp., gross})$



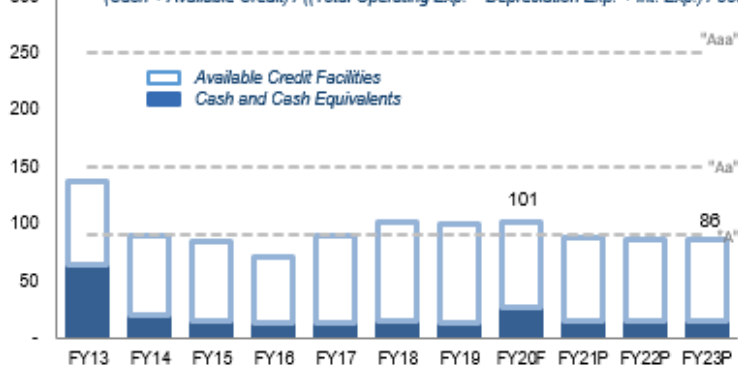
Debt to Total Capital ↓ Good

$(\text{Total Financing Obligations}) / (\text{Total Financing Obligations} + \text{Proprietary Capital})$



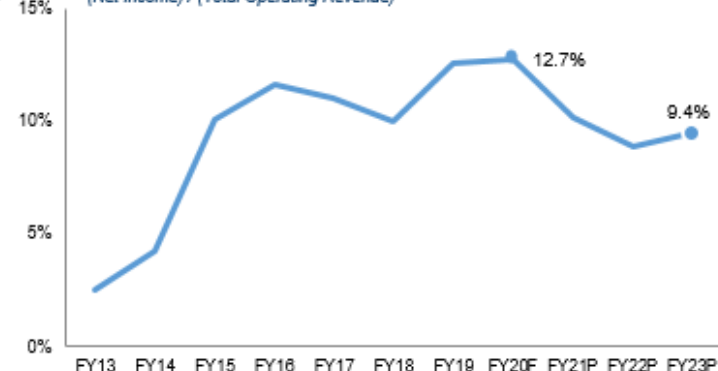
Days Liquidity Ratio ↑ Good

$(\text{Cash} + \text{Available Credit}) / ((\text{Total Operating Exp.} - \text{Depreciation Exp.} + \text{Int. Exp.}) / 365)$



Return on Sales Ratio ↑ Good

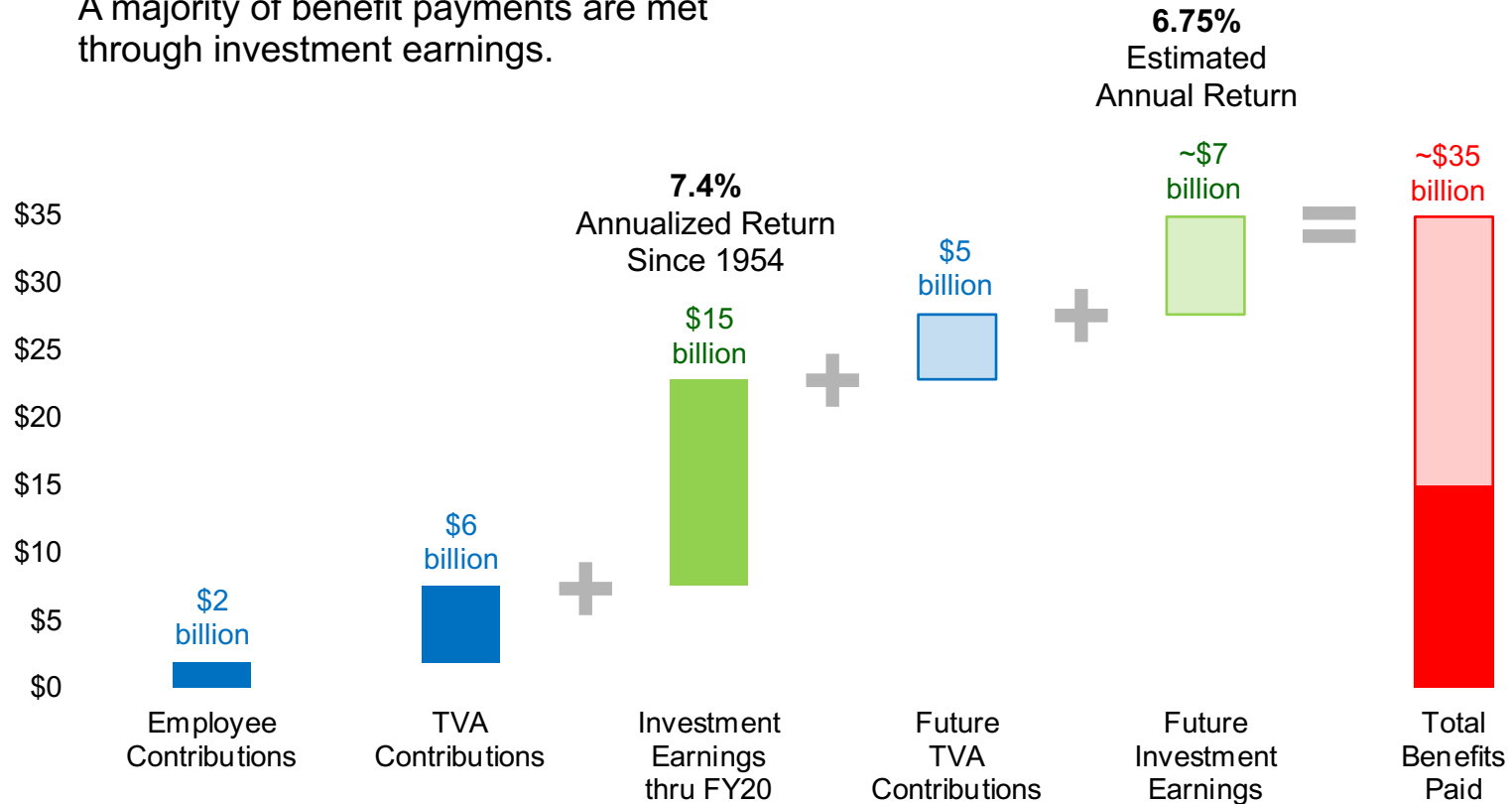
$(\text{Net Income}) / (\text{Total Operating Revenue})$



Note: The \$500 million one-time, discretionary contribution to the pension in FY17 has been excluded from all income statement ratio components

Retirement System Performance

A majority of benefit payments are met through investment earnings.



Actuals results reflected through 9/30/20

Revenue Requirements

\$ million	<i>Initial Estimates</i>				
	FY20B	FY20F	FY21P	FY22P	FY23P
<u>Revenue Forecast</u>					
Fuel	2,733	2,471	2,557	2,615	2,635
O&M	2,756	2,741	2,946	2,981	3,037
Base Capital	1,055	927	1,108	1,073	1,089
Interest	1,218	1,141	1,100	1,068	1,076
Tax Equivalents	538	518	504	491	505
Debt Paydown	2,170	2,421	1,329	1,762	1,892
Other	124	(161)	275	204	125
Total TVA Revenue Requirements	\$ 10,594	\$ 10,058	\$ 9,819	\$ 10,194	\$ 10,359
Base Revenues	8,002	7,742	7,627	7,735	7,884
Fuel Revenues	2,592	2,316	2,401	2,459	2,475
Rate Action Revenues	-	-	-	-	-
Pandemic Relief Credit	-	-	(209)	-	-
Total Electric Revenues	\$ 10,594	\$ 10,058	\$ 9,819	\$ 10,194	\$ 10,359
Surplus / (Shortfall)	-	-	-	-	-
Strategic Capital	1,093	877	1,303	2,114	2,030
Cash on Hand	-	201	(200)	-	-
Debt Paydown	(2,170)	(2,421)	(1,329)	(1,762)	(1,892)
Change in TFO	\$ (1,077)	\$ (1,343)	\$ (226)	\$ 352	\$ 138

Meeting Financial Objectives

Lower effective rates on strong financial performance

Stronger public power model with 142 LPC partners

Achieved \$21.8 billion debt goal three years early

Improving financial health despite COVID-19 impacts

\$200M of performance-related savings to be returned to customers in FY21

Recommendation

Approve the following:

- FY21 Budget
- FY21 Commercial Transactions Contracting Authority and CEO Delegation



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 light-colored shirt. Their right hand is holding a silver pen, poised to write on a document. The background is slightly blurred, showing more of the person's attire and the document they are working on.

Electric Vehicle Market Opportunities

JOE HOAGLAND

Vice President
Innovation & Research

Transformative Innovation Initiatives



Storage Integration

- Implement a long-term strategy to integrate energy storage into the electric grid



Electric Vehicle Evolution

- Accelerate the TN Valley EV market to create load growth and benefits for Valley communities



Grid Transformation

- Develop an interconnected, intelligent grid to support a dynamic and flexible energy network



Connected Communities

- Expand smart technologies with communities to efficiently manage energy and services



Advanced Nuclear Solutions

- Explore advanced technology, cost sharing, and risk reduction



Decarbonization Options

- Reduce and offset carbon emissions via emerging technologies

Electric Vehicles Market Opportunity

Electric Vehicles: Transportation electrification presents a substantial opportunity for utilities



Lead the Charge – innovation leadership, driving sustainability



Reduce the largest source of CO₂ – and other air pollutants



Attract economic development prospects – EV production and suppliers



Grow sales – largest electrification opportunity



Balance the power system – off-peak charging helping keep rates low

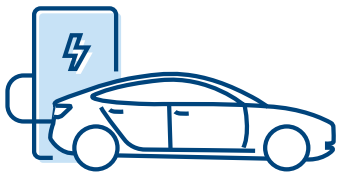


Invest locally – economic benefits of more locally produced fuel

The growing EV market is a significant opportunity for TVA and the Valley as a whole

TVA's Approach to Electric Vehicles

Accelerate EV adoption through partnerships to remove key market barriers



Charging Infrastructure
Availability



EV Availability
and Offerings



Innovative and
Supportive Policies



Consumer
Awareness

Removing market barriers in key areas

TVA is working with stakeholders to make these initiatives
available throughout the Valley region

A close-up photograph of a person's hands in a business setting. The person is wearing a dark blue suit jacket and a light-colored shirt. Their right hand is holding a silver pen, poised to write on a document. The background is slightly blurred, showing other parts of the suit and the document. The overall tone is professional and business-oriented.

Electric Vehicle Charging – Policy and Pricing

DOUG PERRY

Senior Vice President
Commercial Energy Solutions

Background

Pricing and policy updates will provide a foundation for supporting more rapid adoption of EVs in the Valley.

This item will enable resale of electricity supporting fair, consistent, and transparent pricing for high-power charging stations and consumers.

Current rate schedules are not well designed for high-power charging customer characteristics and result in prohibitive costs which hinder EV adoption.

TVA seeks to enable LPCs to provide non-discriminatory electric service pricing for EV charging through a straightforward wholesale EV high-power charger rate on a per kWh basis.

Summary

This item authorizes:

- Contract updates to allow conditional resale of electricity for transportation
- Creation of EV charging wholesale and retail rate classifications
- A wholesale EV high-power charging rate
- TVA staff to take further actions to implement EV policy and pricing



Finance, Rates, and Portfolio Committee





People and Performance Committee





Audit, Risk, and Regulation 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 light-colored shirt. Their right hand is holding a silver pen, poised to write on a document. The background is slightly blurred, showing more of the person's attire and the document they are working on.

Extension of Pandemic Relief Delegation (Expedited Revenue Rate Actions for LPCs)

JEANNETTE MILLS

Executive Vice President
and Chief External Relations Officer

Expedited Process for LPC Revenue Actions

The World Health Organization declared COVID-19 to be a pandemic and global public health emergency.

The TVA Board approved a process to enable LPCs to take swift local revenue-related rate actions to ensure their financial integrity on March 25, 2020.

The process includes a waiver of the required financial analysis under the Board-approved Revised Rate Review Process.

Due to the unpredictability of the financial impact of COVID-19, management requests an extension of authority delegated to the CEO to approve regulatory changes related to LPC revenue-related rate actions.

The extension is for six months through June 2021 and is consistent with other extensions of TVA pandemic-related programs.

Proposed Board Action

Staff proposes that the TVA Board extend authority delegated to the CEO to approve regulatory changes related to LPC revenue-related rate actions to June 30, 2020, subject to the process parameters set forth in the previously approved March 25 memorandum.



Audit, Risk, and Regulation Committee





Nuclear Oversight Committee



External Relations Committee





Board Meeting

November 13, 2020
Knoxville, Tennessee



Board Meeting

November 13, 2020
Knoxville, Tennessee

