PROPOSED BOARD RESOLUTION

(Fiscal Year 2024 Budget)

WHEREAS a memorandum from the Executive Vice President and Chief Financial and Strategy Officer (CFSO), dated August 18, 2023 (Memorandum), a copy of which is filed with the records of the Board of Directors as Exhibit 08/24/23F, recommends approval of the proposed fiscal year (FY) 2024 budget and certain related items as described in the Memorandum including:

- a) Operating and capital budgets for FY 2024; and
- b) Proposed capital projects that exceed \$200 million and acquisition of land rights in connection with certain capital projects; and
- c) FY 2024 Commercial Transactions Contracting Plan; and
- d) Retaining for use in the operation of the TVA power system the entire margin of net power proceeds remaining at the conclusion of FY 2024; and
- e) Continuing to recognize certain regulatory assets and liabilities and to follow certain accounting policies; and

WHEREAS the Board of Directors previously approved TVA's use of an exemption (the End-User Exemption) from the Dodd-Frank Wall Street Reform and Consumer Protection Act's mandatory clearing requirement and TVA management has recommended that the Board of Directors extend this approval to FY 2024; and

WHEREAS as required under Section 9B of the Rules and Regulations of the TVA Retirement System (Retirement System), the Retirement System's Board of Directors has informed the Board of Directors of the minimum required FY 2024 contribution to the Retirement System; and

WHEREAS after consideration of the minimum required contribution and the amendments to the Rules and Regulations of the Retirement System that became effective on October 1, 2016, TVA management has recommended that the Board of Directors approve a \$300 million contribution to the Retirement System for FY 2024; and

WHEREAS TVA management has recommended that the Board of Directors (1) approve the final amount of tax equivalent payments to states and counties for FY 2023 and (2) authorize and direct the CFSO to make, or cause to be made, estimated tax equivalent payments to states and counties for FY 2024; and

WHEREAS a memorandum from the CFSO dated August 18, 2023, a copy of which is filed with the records of the Board of Directors as Exhibit 08/24/23F, recommends that the Board of Directors authorize TVA to issue power bonds and enter into other financing arrangements in an aggregate amount not to exceed \$4 billion during FY 2024; and

WHEREAS the Operations and Nuclear Oversight Committee (ONOC) has recommended that the Board delegate authority to the Chief Executive Officer (CEO) to submit a Construction Permit Application (CPA) for a potential advanced reactor at TVA's Clinch River site as soon as the CPA is ready for submission and all legal prerequisites have been completed, and that the CEO periodically report to ONOC on actions taken in accordance with this delegation;

Approved by TVA Board of Directors

August 24, 2023

ECM

ASSISTANT SECRETARY

BE IT RESOLVED, That the Board of Directors hereby approves the FY 2024 budget, with the condition that all revenues, as estimated in the Rate Action Revenues on Attachment 1, that are collected by TVA from a rate increase to be effective October 1, 2023, if approved by the Board, will be used to support strategic initiatives as specifically approved by the Board;

RESOLVED further, That the Board of Directors approves the budgets for the projects listed in the Memorandum's Attachment 2 and delegates to the CEO, (1) the authority to determine and appropriately certify whether all required environmental reviews under the National Environmental Policy Act and other applicable law have been completed and (2) the authority to make the final decision to proceed with an identified project subject to the budget approved by the Board of Directors and relevant Board Practices; for each capital project for which a final decision has not been made as of the date the Board approves this resolution, the CEO will inform the Board prior to making the final decision;

RESOLVED further, That the Board of Directors approves, in addition to acquisitions approved in prior budgets, acquiring the land rights associated with the transmission capital projects listed in the Memorandum's Attachment 3, including acquiring the land rights through condemnation, contingent upon the CEO's approval for those projects for which such approval is required;

RESOLVED further, That the Board of Directors approves the FY 2024 Commercial Transactions Contracting Plan attached to the Memorandum as Attachment 4, including the delegations to the CEO referenced in the Commercial Transactions Contracting Plan and the approval of a new demand management program as referenced in the Plan;

RESOLVED further, That, in accordance with Section 26 of the TVA Act, the Board of Directors approves retaining the entire margin of net power proceeds remaining at the conclusion of FY 2024 for use in the operation of the TVA power system;

RESOLVED further, That the Board of Directors approves (1) TVA's following the allowance for funds used during construction policy described in Attachment 5 of the Memorandum, (2) TVA's recognizing regulatory assets and liabilities as described in Attachment 5 of the Memorandum as such amounts are probable of collection (or probable of being refunded) in future rates, and (3) TVA's accounting for certain regulatory accounting matters as described in Attachment 5 of the Memorandum:

RESOLVED further, That the Board of Directors hereby authorizes TVA to use the End-User Exemption during FY 2024 in connection with all new and outstanding swaps as well as any amendments or modifications to new or outstanding swaps;

RESOLVED further, That the Board of Directors approves a contribution of \$300 million to the Retirement System for FY 2024 and finds this contribution to be sufficient to meet the requirements of Section 9B of the Retirement System Rules and Regulations and TVA's obligations under Section 11A of the Retirement System Rules and Regulations;

RESOLVED further, That the Board of Directors, in accordance with Section 13 of the TVA Act, hereby finally determines that the amounts set out in Attachments 6 and 7 of the Memorandum are the amounts due and payable for FY 2023 to the respective states and counties named in such schedules;

RESOLVED further, That the Board of Directors authorizes and directs the CFSO to make, or cause to be made, payments to states for FY 2024 in accordance with established procedures

on the basis of 98 percent of the estimated annual payments to states for FY 2024 and payments to counties on the basis of 100 percent of the estimated annual payments to counties for FY 2024, until the Board has made a final determination of the respective amounts due for FY 2024;

RESOLVED further, That the CFSO shall cause to be explained to the appropriate state and county officials that the payments for FY 2024 are based upon preliminary estimates and are subject to later adjustment;

RESOLVED further, That the Board of Directors (1) authorizes TVA to issue power bonds and enter into other financing arrangements in an aggregate amount not to exceed \$4 billion during FY 2024 and (2) approves the four resolutions included in Attachment 8; and

RESOLVED further, That the Board of Directors delegates authority to the CEO to submit a CPA for a potential advanced reactor at TVA's Clinch River site as soon as the CPA is ready for submission and all legal prerequisites have been completed, and that the CEO periodically report to ONOC on actions taken in accordance with this delegation.

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EXHIBIT 08/24/23F

August 18, 2023 Financial Services

Board of Directors

SUBJECT

Recommend TVA Board approval of the proposed fiscal year (FY) 2024 TVA budget and related matters described in this Memorandum.

BACKGROUND

Under Section 2(g)(1)(D) of the TVA Act, the TVA Board is required to adopt an annual budget. The FY 2024 budget, which includes an operating budget and a capital budget, is based on projected approved expenditures and includes detailed organizational inputs. The proposed budget and the related requests have been reviewed by the Audit, Finance, Risk, and Cybersecurity Committee.

ALTERNATIVES CONSIDERED

Management evaluated the spending levels and capital projects included in the FY 2024 budget request. These spending levels and projects were evaluated on the basis of their criticality to maintain the overall health of the operations of the agency and long-term benefits for the ratepayers. It was determined by management that these levels of expenditure are needed to maintain the effective operation of the agency through FY 2024.

RECOMMENDED ACTION AND POTENTIAL IMPACTS

The FY 2024 budget provides for allocation and utilization of projected revenues to recover projected costs of service. In addition, the FY 2024 budget provides for expansion and environmental capital expenditures. Attachment 1 includes the electric revenue requirements for FY 2024 for rate-setting purposes. The revenue requirements specify the power proceeds necessary to produce gross revenues sufficient to provide funds for operation, maintenance, and administration of the power system; power system projects not funded by debt; payments to states and counties in lieu of taxes; debt service on outstanding bonds; payments to the U.S. Treasury as a return on the appropriation investment; and additional margin as the Board may consider desirable for investment in power system assets, retirement of outstanding bonds in advance of maturity, and other power purposes.

Attachment 2 includes a list of capital projects that each exceed \$200 million. The identified projects would not adversely impact TVA operations, and all required program, legal, and environmental reviews have been or will be completed before final decisions to proceed with projects are made. In accordance with the TVA Board Practice, *Capital Projects Approvals*, approval of the budget authorizes approval of the specified projects and, by its approval, the Board delegates to the Chief Executive Officer (CEO) the authority (1) to determine whether all required reviews have been completed and (2) to make the final decision to proceed with an identified project subject to the budget approved by the Board. For each capital project for which

Board of Directors Page 2 August 18, 2023

a final decision has not yet been made as of the date the Board approves the proposed resolution, the CEO will inform the Board prior to making the final decision.

The new transmission projects requiring land acquisition are listed in Attachment 3. Money has been included in Transmission & Power Supply's FY 2024 budget for the portion of each listed project (and transmission projects similarly listed in prior budgets) that will be performed in FY 2024. All of the projects have gone through Transmission & Power Supply's budget approval process. Some projects will require further approval by the CEO. The Board is being asked to approve only the acquisition of the land rights associated with performing these projects, and approval to proceed with the projects themselves is contingent upon the CEO's further approval, as may be necessary. The requested approval includes acquisition of land rights associated with these projects by condemnation, if necessary.

The FY 2024 Commercial Transactions Contracting Plan (FY 2024 Contracting Plan), included in Attachment 4, which is confidential, has been reviewed by the Audit, Finance, Risk, and Cybersecurity Committee. Guidance contained in the applicable TVA Board Practice anticipates that the FY 2024 Contracting Plan will be reflected in the Board budget review and approval process. Board approval of the FY 2024 Contracting Plan as a related matter to the Board's approval of the FY 2024 budget satisfies the guidance included in this TVA Board Practice. The Contracting Plan includes certain specific delegations of authority to the CEO (1) to enter into contracts for wholesale power and energy purchases and other forward capacity agreements and (2) to enter into contractual arrangements to purchase and sell renewable energy and renewable energy certificates (RECs) in quantities sufficient to meet the needs of LPC-served and TVA directly served customers.

In accordance with the authority granted to the Board under Section 26 of the TVA Act, we recommend that the Board approve retaining for use in the operation of the TVA power system the entire margin of net power proceeds remaining at the conclusion of FY 2024.

We recommend that TVA continue its allowance for funds used during construction (AFUDC) policy as outlined in Attachment 5. In addition, we recommend that the Board approve the continued recognition of regulatory assets and regulatory liabilities as permitted under Accounting Standards Codification 980, *Regulated Operations*, and that TVA account for certain regulatory accounting matters as described in Attachment 5. Attachment 5 includes a summary of (1) TVA's AFUDC policy, (2) the regulatory assets for which we recommend future rates be established to recover such costs, and (3) the regulatory liabilities which represent amounts we recommend be refunded in future rates.

We recommend that the Board approve extending for FY 2024 the previously-approved End-User Exemption from the Dodd-Frank Wall Street Reform and Consumer Protection Act's mandatory clearing requirement.

As required under Section 9B of the Rules and Regulations of the TVA Retirement System (Retirement System), the Retirement System Board of Directors has informed the Board of Directors of the minimum required FY 2024 contribution to the Retirement System. After consideration of the minimum required contribution and the amendments to the Rules and Regulations of the Retirement System that became effective on October 1, 2016, TVA management is recommending that the Board of Directors approve a \$300 million contribution to the Retirement System for FY 2024. This contribution level is sufficient to meet the

Board of Directors Page 3 August 18, 2023

requirements of Section 9B of the Retirement System Rules and Regulations and TVA's obligations under Section 11A of the Retirement System Rules and Regulations.

In accordance with Section 13 of the TVA Act, TVA makes tax equivalent payments to the states and counties in which the power operations of TVA are carried on and in which TVA has acquired properties previously subject to state and local taxation. TVA management is recommending that the Board of Directors determine that the amounts set out in Attachments 6 and 7 are the amounts due and payable for FY 2023 to the respective states and counties named in such attachments. In addition, TVA management is recommending that the Board of Directors authorize and direct the Chief Financial and Strategy Officer to (1) make, or cause to be made, estimated tax equivalent payments to states and counties for FY 2024 in accordance with established procedures until the Board has made a final determination of the respective amounts due for FY 2024 and (2) cause to be explained to the appropriate state and county officials that the payments for FY 2024 are based upon preliminary estimates and are subject to later adjustment.

To support the financing of its power program, TVA regularly issues long-term power bonds and from time to time enters into other financing arrangements. TVA management is recommending that the Board of Directors (1) authorize TVA to issue power bonds and enter into other financing arrangements in an aggregate amount not to exceed \$4 billion during FY 2024 and (2) approve the four resolutions included in Attachment 8. The proceeds from these transactions would be used for power system purposes, such as meeting funding needs for new capital expenditures and refinancing existing debt.

The Operations and Nuclear Oversight Committee has recommended that the Board delegate authority to the CEO to submit a Construction Permit Application (CPA) for a potential advanced reactor at TVA's Clinch River site as soon as the CPA is ready for submission and all legal prerequisites have been completed with the requirement that the CEO periodically report to ONOC on actions taken in accordance with this delegation.

In summary, we recommend the Board approve the proposed FY 2024 TVA budget and related matters described in this Memorandum.

John M. Thomas, III

Executive Vice President and

Chief Financial and Strategy Officer

Attachment

Cc: Mary Margaret Painter

August 18, 2023 August 18, 2023

David Fountain Date Jeffrey J. Lyash Date

Attachment 1

FY 2024 Revenue Requirements

	(\$ million)
Base Revenues	\$8,275
Fuel Revenues	3,682
Rate Action Revenues	405
Total Electric Revenues	\$12,362
Fuel	\$4,028
O&M	3,584
Base Capital	1,434
Interest	1,117
Tax Equivalents	577
Other (Nuclear Fuel, Working Capital, Other Revenue, Non-Cash Adjustments)	530
Debt Paydown	1,092
Total TVA Revenue Requirements	\$12,362
Surplus/(Shortfall)	\$0
Expansion and Environmental Capital*	\$2,725
Debt Paydown	(1,092)
Change in Total Financing Obligations	\$1,633
*Includes Ash Remediation ARO spend	

Attachment 2

TVA Major Projects



Projects Greater than \$200 Million – Initial Approvals

\$ million

		FY23		Current Year's
Capital Expenditure	Project	and Prior	FY24	Project Total
Capacity Expansion	Allen Aeroderivative Combustion Turbines (CT)	\$0.5	\$244.3	\$351.3
	Cheatham County Energy Solution	\$1.7	\$118.9	\$1,192.7
	New Caledonia CT	\$0.1	\$48.4	\$494.9
	Kingston Energy Solution	\$4.7	\$441.6	\$2,812.0
Clean Air	Shawnee Selective Catalytic Reduction – Units 2, 3, 7, and 8*	\$106.4	\$82.4	\$240.4



^{*} Timing of annual project spend is being evaluated as project plans are finalized.

Projects Greater than \$200 Million – Prior Approvals

		\$ million			
Capital Expenditure	Project	Last Year's Project Total	FY23 and Prior	FY24	Current Year's Project Total
Ash Remediation	Allen Fossil (ALF) – East Ash Pond Complex	\$504.9	\$150.6	\$62.0	\$504.9
	Gallatin Fossil (GAF) – Ash Pond Complex Closure and Restoration	\$1,084.4	\$131.1	\$85.4	\$1,084.4
	Shawnee Fossil (SHF) – Dry Stack Final Closure	\$209.4	\$146.7	\$28.0	\$209.4
Capacity Expansion	Colbert CT	\$462.7	\$344.7	\$29.4	\$384.7
	Cumberland Energy Solution	\$1,568.7	\$262.2	\$606.7	\$2,091.7
	Johnsonville Aeroderivative CT	\$598.9	\$527.4	\$50.2	\$598.7
	Lawrence County Solar	\$423.4	\$58.9	-	\$465.3
	Paradise CT	\$505.8	\$383.2	\$29.6	\$415.6
	Project Phoenix (Shawnee Solar)	\$215.5	\$22.4	-	\$215.5
Transmission	Aurora Site Project	\$229.3	\$136.4	\$34.7	\$283.9
	New Primary Control Center	\$297.0	\$266.7	\$52.5	\$331.8
	Strategic Fiber Initiative (FY17-27)	\$300.0	\$239.0	\$31.3	\$300.0

TENNESSEE VALLEY AUTHORITY

Attachment 3

FY24 Transmission Projects Requiring Real Property Acquisition

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FY24 Real Property Acquisitions – Transmission

The following pages list projects in the Transmission and Power Supply 2024 Business Plan that may require real property acquisition with the rare potential for condemnation.

- Acquire land in fee and permanent easements for transmission line right of way, substation, and communication facilities from private property owners
 - Acquisitions support new construction and upgrades to existing transmission facilities
- Negotiate to arrive at mutually agreeable terms that are fair
 - Just and liberal compensation is based upon land appraisals performed by TVA
 - Since 1993, TVA has acquired 93% of property tracts through voluntary means
 - Voluntary acquisition rates range from a low of 87% (1995) to a high of 97% (2014)

- Proceed with condemnation when that is only option
 - Rare occurrences when TVA and the property owner cannot reach an agreement as to compensation
 - Property ownership is not clearly definable based upon property records
 - TVA President and CEO review and approval required
- Continue to negotiate with property owners to arrive at mutually agreeable acquisition terms



FY24 Real Property Acquisitions – Transmission

Investment					Investment			
Request	Project	State	County	_	Request	Project	State	County
TPS182127	Florence, AL 161-kV Reliability Project	AL	Lauderdale		TPS182417	Murfreesboro, TN 161-kV Modification	TN	Rutherford
TPS197416	Greenbrier, AL 161-kV Delivery Point	AL	Limestone		TPS184156	Knoxville, TN 161-kV Delivery Point	TN	Knox
TPS201818	Tiptonville, TN 161-kV Delivery Point	TN	Lake		TPS185427	Knoxville, TN 161-kV Delivery Point	TN	Knox
TPS202325	Clarksville, TN 161-kV Delivery Report	KY	Montgomery		TPS185849	Cleveland, TN 161-kV Delivery Point	TN	Bradley
TPS202549	Bowling Green, KY 161-kV Substation	KY	Warren		TPS191574	Tiptonville, TN 161-kV Modification	TN	Lake
TPS023221	Batesville, MS 161-kV Modification	MS	Panola		TPS197973	Murfreesboro, TN 161-kV Modification	TN	Rutherford
TPS181776	Coffeeville, MS 161-kV Modification	MS	Yalobusha		TPS199915	Dunlap, TN 161-kV Delivery Point	TN	Sequatchie
TPS181983	Starkville, MS 161-kV Modification	MS	Oktibbeha		TPS200386	Columbia, TN 161-kV Delivery Point	TN	Maury
TPS194556	Tupelo, MS 161-kV Delivery Point	MS	Lee		TPS203961	Memphis, TN 500-kV Modification	TN	Shelby
TPS194567	Philadelphia, MS 161-kV Modification	MS	Neshoba		TPS204417	Clarksville, TN 161-kV Delivery Report	TN	Montgomer
TPS182122	Jackson, TN 161-kV Modification	TN	Madison		TPS205480	Charleston, TN 161-kV Modification	TN	Bradley
TPS182125	Bristol, TN 161-kV Delivery Point	TN	Sullivan					

In general, the potential for condemnation on any project is low due to the fact that TVA makes effort to work with property owner and provide reasonable compensation for real property acquisition throughout the TVA service area.

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Attachment 4

FY24 Commercial Transactions Contracting Plan



Purpose and Background

Purpose

Action Item. Seek the Audit, Finance, Risk, and Cybersecurity Committee's recommendation to the Board for approval of the FY24 Commercial Transactions Contracting Plan; including delegating authority to the CEO to enter into Commercial Energy Agreements, Programs, or Related Contracts in any amount with energy durations of up to 20 years and terms of up to 30 years, subject to other conditions of the TVA Board Practice Commercial Energy Agreements, Programs, and Related Contracts. (This delegation would amend a delegation in the current practice to facilitate the addition of generation from projects that may take longer than five years to reach in-service status.)

Background

The FY24 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.

TENNESSEE VALLEY AUTHORITY

Contents

FY24 Portfolio Summary

Fuel and Purchased Power - Portfolio

Fuel and Purchased Power - Natural Gas

Fuel and Purchased Power - Coal

Fuel and Purchased Power - Nuclear

Fuel and Purchased Power – Purchased Power

Renewable Commercial Transactions

Renewable Energy Certificates (RECs)

Demand-side Management

Appendix



FY24 Portfolio Summary



FY24 Portfolio Summary*

Fuel and purchased power

- Expected 169,228 GWh
- \$4.0 billion fuel and purchased power
- Signing up to 7,500 MW (non-solar, -wind, or -storage) over the next three years for wholesale purchased power agreements (PPAs) to meet capacity needs

Demand-side management

- \$148.8 million Virtual Power Plant (VPP) demand response
- \$101.5 million VPP energy efficiency
- \$25.1 million community energy efficiency
- \$10.1 million clean energy services

Renewable commercial transactions

- TVA is partnering with customers to meet their longterm sustainability needs
- Signing up to 8,000 MW of solar, wind, and storage over the next three years to address system and customer needs

Other and supporting activities

- 2.5 million renewable energy certificates held in reserve to support future carbon goals
- Valley partner enhanced power supply flexibility of 800 to 2,000 MW
- Anticipating \$200 million of external funding for energy efficiency over the next three years

^{*}Approval of the Commercial Transactions Contracting Plan includes authorization for all contracts that are in substantial conformance with the Plan.



FY24 Portfolio Summary

The Commercial Transactions Contracting Plan establishes how TVA manages its portfolio to meet customer needs

Fuel and Purchased Power Costs	Total Cost (\$ million)	Total Energy (GWh)	Average Impact
Purchased Power	\$1,680	29,019	\$57.90/MWh
Natural Gas	\$1,112	38,856	\$28.62/MWh
Coal	\$726	20,427	\$35.53/MWh
Nuclear	\$346	67,558	\$5.11/MWh
Reagents, Allowances, and Hedging	\$147	_	_
Hydro	\$0	13,368	_
Total Fuel and Purchased Power	\$4,011	169,228	\$23.70/MWh

Demand-side Management Costs	Total Cost (\$ million)	Total Energy (GWh)	Average Impact
Virtual Power Plant (VPP) - Demand Response	\$149	77	_
VPP - Energy Efficiency	\$101	263	_
Community Energy Efficiency	\$25	24	_
Clean Energy Services	\$10	9	_

Natural Gas totals exclude Caledonia and Decatur

Total Cost and Average Impact columns include both Fuel Cost Adjustment (FCA)-eligible and FCA-ineligible costs

THE TENNESSEE VALLEY AUTHORITY

Fuel and Purchased Power – Portfolio



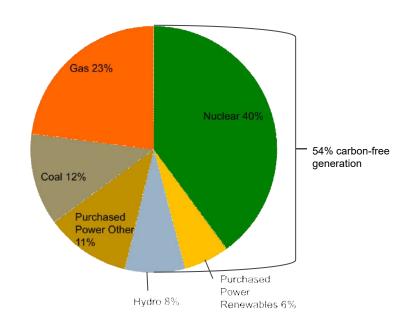
Fuel and Purchased Power Executive Summary

FY24 fuel and purchased power portfolio requires \$4.0 billion with expected 169,228 GWh of energy

- Utility-scale solar continues to integrate into TVA's portfolio as additional Green Invest power purchase agreements come online
- Purchased Power becomes a larger part of TVA's portfolio in the short- and mid-term to fill capacity gaps
- Volatility in commodity prices is leading to an increase of switching between coal and gas generation

Contracting Plan FY24 Energy

Total Energy 169,228 GWh



TENNESSEE VALLEY AUTHORITY

Generation Mix and Percent Hedged

Fuel cost is primarily impacted by volatility of natural gas prices

	FY24P		FY25I	•	FY26P	
Fuel	Generation Mix	Price Hedged	Generation Mix	Price Hedged	Generation Mix	Price Hedged
Hydro	8%	100%	7%	100%	7%	100%
Nuclear	40%	100%	39%	100%	39%	99%
Coal	12%	75%	14%	29%	14%	13%
Purchased Power – Other	12%	66%	10%	75%	11%	76%
Purchased Power – TVA-sourced Fuel*	5%	49%	6%	27%	5%	16%
Natural Gas*	23%	43%	24%	25%	24%	14%
Total/Weighted Average	100%	77%	100%	66%	100%	59%

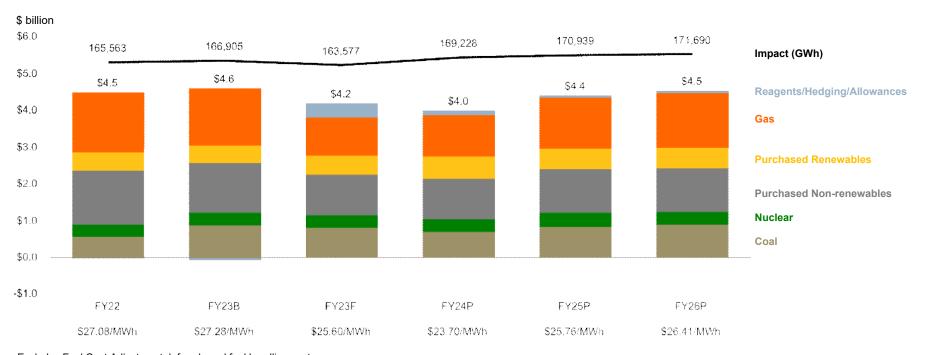
Generation mix and hedged percentages subject to change based on commodity price movements and additional fixed price transactions *Purchased Power – TVA-sourced Fuel includes tolled generation. Natural Gas includes TVA-owned generation.

Data pulled 05/24/2023



Fuel and Purchased Power Spending and Generation

Lower natural gas prices decreasing fuel and purchased power spend through FY24



Excludes Fuel Cost Adjustment deferrals and fuel handling costs



Fuel and Purchased Power – Natural Gas



Natural Gas Overview and Strategy (1/3)

Overview

Gas Services (GS) provides natural gas supply, transportation, storage, and scheduling services in order to serve the natural gas-fired generation assets of TVA.

GS also negotiates and executes commercial contracts with producers, marketers, pipelines, and storage service providers.



Natural Gas Overview and Strategy (2/3)

Risks

Natural gas is firmly a global commodity and availability/price will be heavily influenced by geopolitical risk, international supply and demand drivers, and other domestic influences which impact price volatility

Managing volumetric and price volatility

- Volumetric natural gas volatility will increase as power generation, renewables growth, and exports increase widening seasonal demand min/max needs requiring additional physical volumetric management through contracting and balancing services
- Volumetric volatility will also drive upward pressure in pricing volatility requiring hedge management to help minimize impacts to TVA's ratepayers

Execution of pipeline infrastructure projects

 Required to support new gas-fired generation assets, but opposition from environmental groups and evolving regulations could potentially limit infrastructure growth

TENNESSEE VALLEY AUTHORITY

Natural Gas Overview and Strategy (3/3)

Strategy

Proactively manage the natural gas commercial contracts to provide flexibility in meeting generation needs

Mitigate risks within volumetric and financial hedge ladder limits

Develop longer term tenors for supply surety and potentially bundle with firm transportation services

Pursue opportunities to diversify firm transportation capacity into various production basins

Utilize responsibly sourced gas (RSG) within supply strategy to promote TVA's environmental stewardship and greenhouse gas emissions as part of a cohesive carbon reduction strategy

Enter into precedent agreements to develop pipelines that are needed to execute TVA's asset strategy, including necessary cost-sharing provisions

Work with pipelines to develop new commercial services to support TVA's power generation needs



Financial Hedging Impact

Commodity price hedging reduces fuel cost and wholesale rate ranges (~one percent wholesale rate impact per ~\$120 million of fuel cost uncertainty reduction)

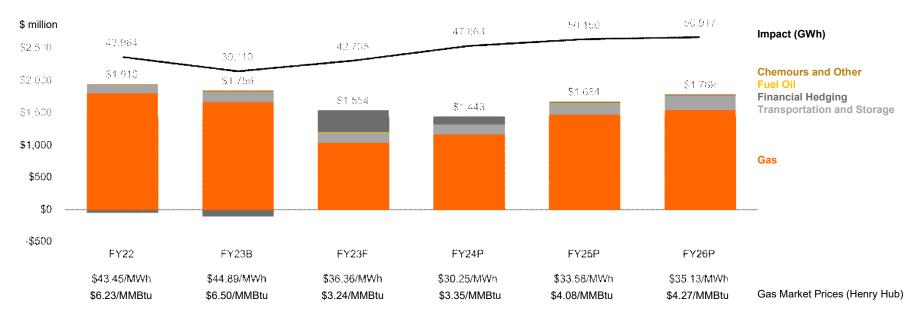
Wholesale Rate Impacts Fuel Cost Uncertainty ¢/kWh \$ million 14% 8.5 \$1,500 21% reduction reduction **Price Hedging Price Hedging** \$193 44% 1.6% **Impact** \$265 **Impact** \$1,000 reduction 0.8 2.2% 8.7% P95 Range \$272 7.4% \$500 \$1.079 P95 Range \$910 2.3% 7.5 \$513 4.3% \$0 -5.4% -7.2% P5 Range \$(286) -2.4% 7.0 \$(662) -3.0% -1.7% **Price Hedging** -1.0% P5 Range \$(895) \$(500) \$(359) \$(212) Price Hedging 6.5 \$(121) \$(1,000)S(1.500)6.0 FY24P FY25P FY26P FY25P FY26P FY24P

Price hedging impact reflects potential fuel cost reduction (90 percent confidence interval) if TVA hedged at current established Natural Gas hedge ladder limits (60 percent, 40 percent, and 25 percent for each year, respectively)

TENNESSEE VALLEY AUTHORITY

Natural Gas Cost and Impact Summary

Gas generation influenced primarily by price volatility and system load



Includes gas pipeline precedent agreements

Includes gas purchased for Caledonia and Decatur to show total gas purchases; this amount is also included in purchased power Financial hedging realized and unrealized (gain)/loss in \$ million for FY23F \$345.6, FY24P \$116.2, FY25P \$22.6, FY26P \$11.7 as of 05/25/2023

TENNESSEE VALLEY AUTHORITY

Fuel and Purchased Power – Coal



Coal Services Overview and Strategy (1/3)

Overview

Coal Services (CS) provides coal supply, transportation, reagents, fuel oil, storage, and railcar leases in order to serve the coal-fired generation assets of TVA.

CS also negotiates and executes commercial contracts with producers, marketers, railroads, barge companies, and storage service providers.



Coal Services Overview and Strategy (2/3)

Risks

Coal is firmly a global commodity and availability/price will be heavily influenced by geopolitical risk, international supply and demand drivers, and other domestic influences which impact price volatility

Manage commercial transactions to reduce price volatility and support fuel resiliency efforts

- Coal-fired generation will continue to be dispatched over other sources of generation as base load assets
- Additional storage flexibility will be required to mitigate potential supply chain disruptions and/or supplement inventories as TVA's coal generation decreases
- Reduced number of mines/sources due to decrease in U.S. coal burn will increase complexity of finding and providing coals with quality specifications/characteristics required to run TVA's units
- Manage adjustments to fuel supply chain required as the result of unit availability and run profiles change
- Significantly higher-than-forecasted burn will likely stress plant inventories, which may be further strained by Cross-State Air Pollution Rule restrictions and volatility of natural gas prices

TENNESSEE VALLEY AUTHORITY

Coal Services Overview and Strategy (3/3)

Strategy

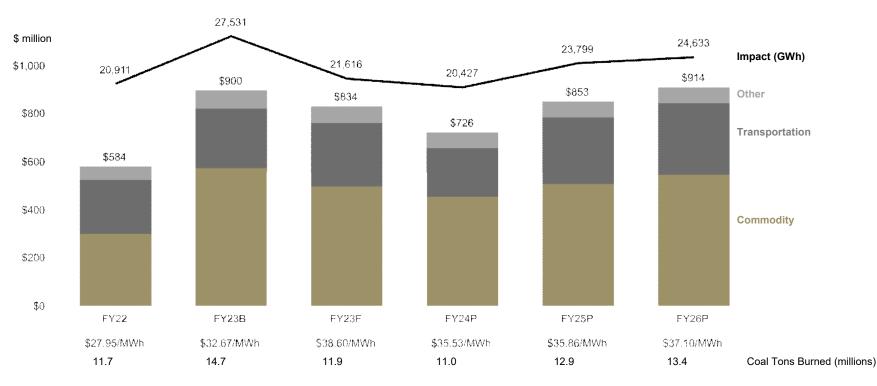
Provide excellent service to the coal-fired generation fleet in a reliable and cost-effective manner by:

- Proactively managing the coal supply commercial contracts to provide flexibility in meeting generation needs
- · Mitigating risks by securing critical supply within hedge ladder limits
- Developing longer term tenors for transportation services to provided a reliable supply chain up to the end of life of coal assets
- Pursuing opportunities to diversify coal supply through test burns to provide a resilient coal supply portfolio
- Securing critical storage flexibility to mitigate risk around generation volatility
- Providing redundancy for reagents/fuel oil and other critical elements needed to avoid single points of failure at coal facilities
- Working with barge companies to develop increased flexibility of delivery due to increased volatility of generating assets

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Coal Cost and Impact Summary

Coal generation influenced by gas prices and higher load





Fuel and Purchased Power – Nuclear



Nuclear Overview and Strategy (1/3)

Overview

TVA nuclear fuel supply has low near-term risk

- Nuclear fuel is supplied mostly by domestic sources
- Inventories physically located in the U.S. and Canada

Nuclear fuel needs

- Small amounts of new conversion needed in near term (2024-2025) to support portfolio management
- TVA's contracts and inventory of enriched uranium product (EUP) could supply fleet to 2028
- New EUP (combination of uranium and enrichment) not needed until 2028

Fleet fuel fabrication suppliers:

- · Pressurized water reactor (Sequoyah/Watts Bar): Westinghouse
- · Boiling water reactor (Browns Ferry): Framatome

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Nuclear Overview and Strategy (2/3)

Risks

Supply chain impacts from Russian war in Ukraine:

- · No direct impact on TVA: no Russian fuel exposure
- Indirect impact from higher market prices

Supplier build out: timing and cost

- Uranium miners: domestic and other
- Conversion: ConverDyn/Honeywell Metropolis restart/Orano ramp/Cameco production/new facilities in UK and China
- Enrichment: Urenco/Orano and "juniors" (GLE and Centrus): domestic vs foreign



Nuclear Overview and Strategy (3/3)

Strategy

Minimize supply risk and capture improved pricing

Potential FY24 purchases/transactions:

- Spot market/individual nuclear fuel purchase(s)/transaction(s) up to \$30 million
- Long-term nuclear fuel contract(s) up to \$750 million over the life of the contract

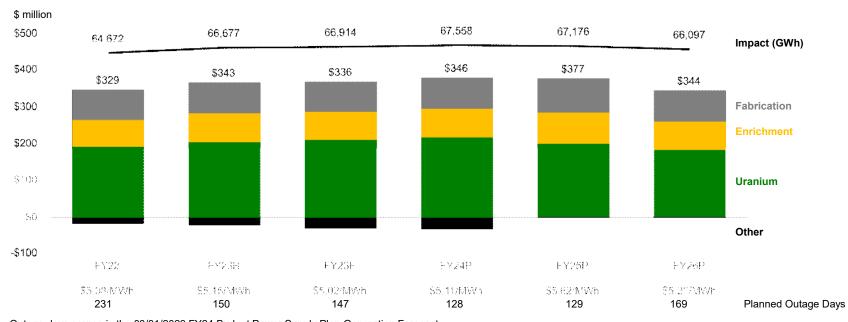
Constant market engagement

Optimize TVA portfolio



Nuclear Cost and Impact Summary

Cost and volume changes due primarily to outage days timing



Outage days source is the 03/31/2023 FY24 Budget Power Supply Plan Generation Forecast

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Fuel and Purchased Power – Purchased Power



Purchased Power Overview and Strategy (1/3)

Overview

Increased need for reliability purchases paired with tightened market conditions is driving decisions

Contracted generation assets continue to complement TVA's owned generation fleet

Solar costs are still above pre-Pandemic levels while the demand for renewables continues to increase

The Board is requested to delegate authority to the CEO to enter into Commercial Energy Agreements, Programs, or Related Contracts in any amount with energy durations of up to 20 years and terms of up to 30 years, subject to other conditions of the TVA Board Practice Commercial Energy Agreements, Programs, and Related Contracts. (This delegation would amend a delegation in the current practice to facilitate the addition of generation from projects that may take longer than five years to reach in-service status.)



Purchased Power Overview and Strategy (2/3)

Risks

Available transmission continues to be limited which impacts TVA's ability to fill the system position shortfall Continued concern about contracted solar resources being delayed or not coming online TVA's processes are not sufficiently agile to timely integrate increased volumes of solar and storage Market for short- and mid-term deals are limited



Purchased Power Overview and Strategy (3/3)

Strategy

Contract for available off-system generation and transmission to meet mid-term system position shortfalls and optimize availability of outage windows for TVA asset improvements

Optimize and obtain transmission to ensure a high level of deliverability/reliability

Optimize TVA's generation portfolio with economic purchases and sales

Continue to monitor and manage the operations/financial performance of existing PPA assets

Evaluate options to increase tie line capacity for existing or new interfaces

Transform TVA's transmission interconnection processes to increase speed to market

Evaluate and optimize near-term trading windows to align with peer utilities

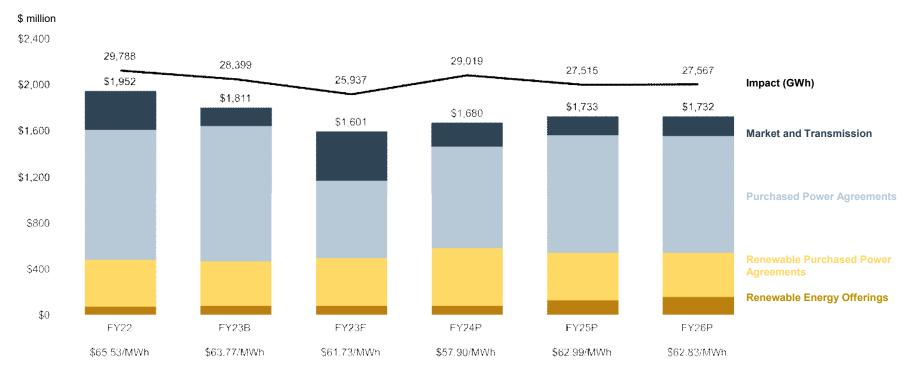
Utilize the Southeast Energy Exchange Market (SEEM) to optimize intra-hour trading*

*On July 14, 2023, the U.S. Court of Appeals for the District of Columbia Circuit revoked FERC's approval of SEEM and sent the matter back to FERC for additional proceedings.



Purchased Power Cost and Impact Summary

Declining gas prices driving purchased power costs down through FY24





Renewable Commercial Transactions



Renewable Energy Overview and Strategy (1/2)

Overview

TVA expects to add 10,000 MW of solar by 2035, of which 3,166 MW are currently operating or committed

TVA released a carbon-free energy request for proposals in summer 2022 and plans to pursue all viable (determined by TVA) solar, solar paired storage, and stand-alone storage projects from this RFP

The Commercial Transactions Contracting Plan delegates authority to the CEO to enter into contractual arrangements to purchase and sell renewable energy in quantities sufficient to meet the needs of customers

Risks

Costs remain high due to supply chain constraints, global conflict, and Department of Commerce investigation Current timeline between solar contracts being signed and projects coming online

Generation portfolio must evolve to integrate significant intermittent energy and maintain system reliability Lack of dedicated resources to address current backlogs and forthcoming increased workload

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Renewable Energy Overview and Strategy (2/2)

Strategy

Deliver renewable solutions that economically meet system needs and consumer demand

Enhance the pipeline of third-party and TVA-directed utility-scale solar and storage

Transition Green Invest renewable program from being customer-driven to system need-driven

Develop plan to transition renewable product portfolio to a carbon-oriented products portfolio

Grow renewable contract oversight to ensure timely completion of projects

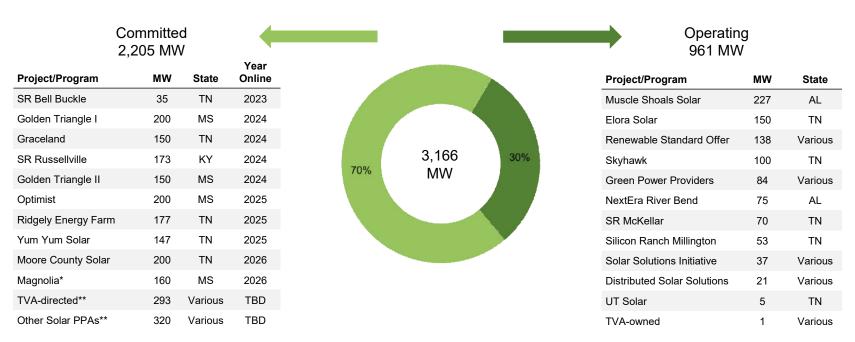
Transform TVA's transmission interconnection processes to enable speed to market of solar projects as well as other generation sources

Add up to 8,000 MW of solar and storage over the next few years to address system and customer needs



Solar Portfolio Update

3,166 MW of operating and committed solar



^{*}Committed for development

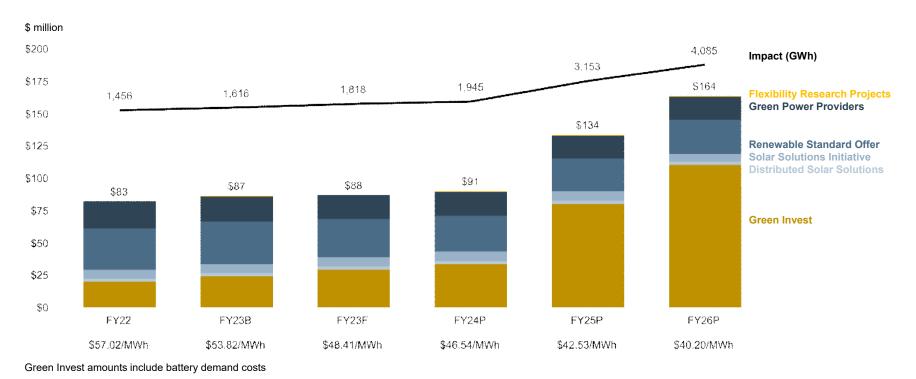
As noted during the public Board meeting, some of TVA's committed solar is subject to completion of necessary environmental reviews and other actions

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^{**}In development

Renewables Cost and Impact Summary

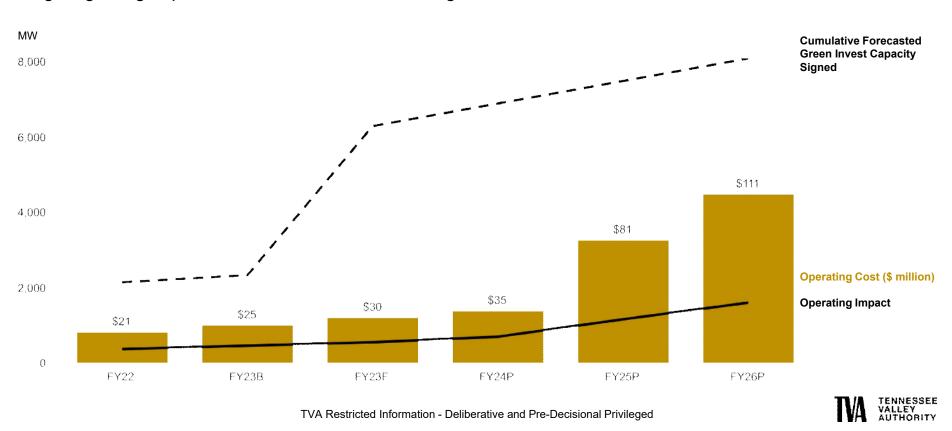
\$/MWh decrease through FY26 as Green Invest becomes a larger portion of the generation





Green Invest and Future Solar Portfolio

Targeting to sign up to 8,000 MW of solar and storage



Renewable Energy Certificates (RECs)



RECs Overview and Strategy (1/2)

Overview

In alignment with TVA's REC Strategy, RECs are retired for the following uses:

- North Carolina Renewable Energy and Energy Efficiency Portfolio Standard (NC REPS) Compliance: TVA maintains compliance with NC REPS on behalf of the four LPCs with service areas in North Carolina
- Customer Solutions: Solutions offered to meet customer renewable needs (i.e., Green Switch, Green Flex, Green Invest, and others)
- Market Opportunities: Optimizing TVA's REC portfolio by selling RECs on the market (i.e., Bishop Hill REC sales)
- TVA General Customer Claim:
 - TVA holds a portion of its REC portfolio in reserve for potential retirement against its generation mix, if needed to support meeting future carbon goals
 - TVA general customer claim reduced 2022 carbon emissions by 3.5%



RECs Overview and Strategy (2/2)

Risks

Compliance with NC REPS

The North Carolina Utilities Commission legislated new requirements in December 2022

Datacenter load has increased TVA's North Carolina sales by ~45%, further driving up compliance obligations

Existing North Carolina REC supply is not enough to meet increased compliance requirements

Current market availability to purchase additional North Carolina RECs is limited

Strategy

Explore North Carolina REC opportunities (no energy) for projects in construction phase

Evolve Green Invest REC pricing strategy to align with procurement opportunities from the 2022 carbon-free RFP

Evaluate future opportunities to transition retail-facing and small-scale renewable programs to LPCs



REC Uses and Revenue Summary

The increase in both expected RECs used for customer solutions and expected revenue is largely driven by solutions for Green Invest customers and the planned expansion of the Green Flex program



Demand-side Management



Demand-side Management

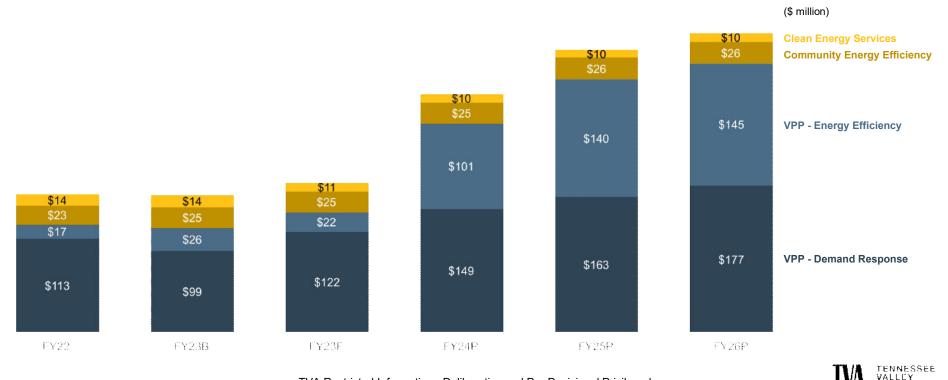
Provide demand management and clean energy services through partnerships with LPCs and end-use customers to benefit the system and make life better for the people of the Valley

Lines of Effort	Goal	Impact by 2035
Develop and maintain the Virtual Power Plant (VPP) Balance system needs by lowering costs, shaping energy usage, and increasing capacity	Clean, reliable, low-cost power	4,700 GWh of energy savings and 2,600 MW of demand reduction
Optimize Community Energy Efficiency Maintain impactful energy equity programs in the Valley	 Reduced energy bills for low-income and underserved communities Increased brand equity 	\$200 million energy expense savings for low-income communities
Promote Clean Energy Services Provide programs and services to meet increased consumer demand for clean energy, electric vehicle, and resiliency-based offerings	 Alignment with TVA strategic direction Trusted energy advisor recognition 	More than 10 million tons of CO ₂ reduced



Demand-side Management Portfolio Summary

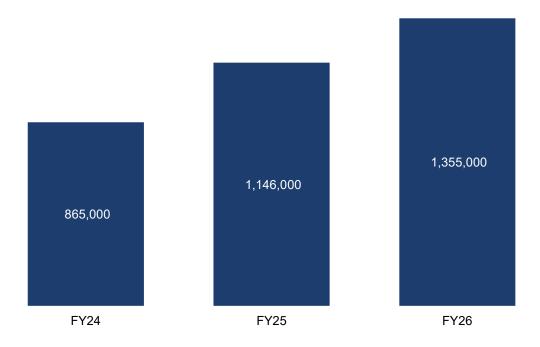
Expand EE and DR programs to help offset additional capacity needs in the future



Demand-side Management Carbon Reductions

Demand-side management programs in FY24-26 are expected to reduce lifetime CO₂ by three million tons

CO₂ Reductions by Demand-side Management (tons)





Demand-side Management – VPP-Demand Response



VPP-Demand Response Overview and Strategy (1/3)

Overview

Provide system reserves and operational flexibility through end-use or LPC-level curtailments with consistently higher event performance than planned (103% rolling 12-month average)

Reduce TVA system costs by lowering system demand rather than purchasing high-cost power or constructing generating facilities

Participating customers benefit from lower power bills and more competitive rates, while serving as a carbonfree resource

Ensures funds stay in the Valley with TVA's participants, instead of going to out-of-Valley entities for purchased power



VPP-Demand Response Overview and Strategy (2/3)

Risks

Market for demand response (DR) from large loads may become saturated and hamper growth

Do not have real world knowledge of DR price elasticity and what price levels may grow DR impacts

Alignment to new Public Utility Regulatory Policies Act (PURPA) guidance and standards

Current valuation compared to a combustion turbine may be outdated and is not aligned to new asset types (i.e., battery storage), current market conditions, and high growth targets

New participant performance may not match high levels of existing, mature portfolio



VPP-Demand Response Overview and Strategy (3/3)

Manage peak load growth and improve system capacity position up to 1,000 MW

Grow Existing Programs

Continue recruitment of untapped existing industrial, commercial, and federal end-use customers

Develop offers to recruit additional curtailment rights from existing program participants

Ensure existing participants continue participation and high performance

Optimize legacy Voltage Optimization programs to meet future needs and sunset outdated contracts

Create New Programs

Explore and create load management programs for residential market and internet-connected technologies

Develop and test LPC-level DR aggregation programs

Implement programs from distributed back-up generation and resiliency assets

Ensure DR options are integrated into the economic development process (i.e., transmission agreements and ED incentive contracts)

Develop next generation Interruptible Power program



VPP-Demand Response Cost and Impact Summary

Grow demand response by up to 1,000 MW to reduce additional capacity needs



Frequency and Interruptible Power Seasonal Offer MW impacts not included in totals; costs are included



Demand-side Management – VPP-Energy Efficiency



VPP-Energy Efficiency Overview and Strategy (1/3)

Overview

Cost effectively meet system energy and reliability requirements in a manner that is financially sound and balances risks and costs

Reduces residential, commercial, industrial, and federal participants' energy bills while also providing the Valley with a least-cost resource

Expand program offerings to deliver increased energy efficiency

Support customers meeting energy and climate goals, promoting environmental stewardship and aligning to TVA's future carbon goals



VPP-Energy Efficiency Overview and Strategy (2/3)

Risks

TVA's sustained effort and long-term funding for energy efficiency (EE) expansion activities; market needs stability and trust to hit 10-year targets

Costs of equipment are increasing faster than electricity rates, and delivery times have drastically increased, resulting in a decreased perception of ROI

Inconsistent offering of programs and engagement has led to weakened relationships with customers, contractors, and vendors

Additional resources may be required by TVA and contractor staff to reach targeted goals

Change in the Administration could either increase or lessen existing and future sustainability goals for business, industry, and federal customers



VPP-Energy Efficiency Overview and Strategy (3/3)

Strategy

Lower energy use and Valley's carbon footprint through a diversified portfolio of economic EE programs

Reintroduce and grow residential programs to encourage energy savings in new and existing homes

Expand business and industry energy efficiency programs to untapped B&I market sectors with a focus on low-cost, high volumes to help TVA system needs

Develop and promote program offerings to commercial and industrial customers, including audits, behavioral programs (SEM), and incentives, to increase energy efficiency and reduce carbon emissions in the Valley

Leverage partnerships and external funding to grow available resources and reach for EE programs

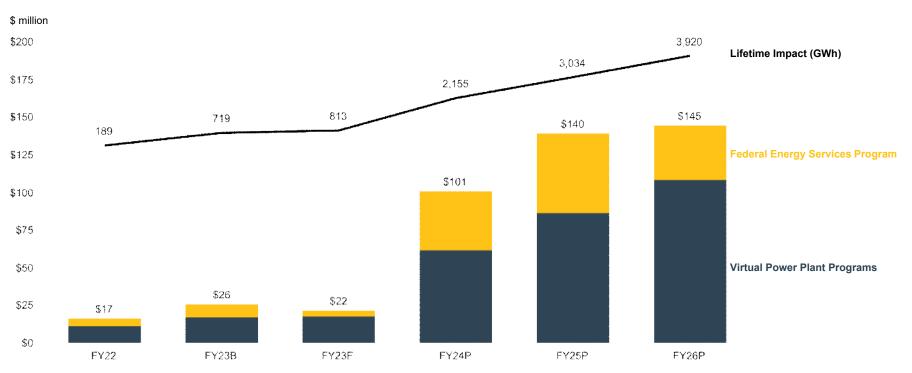
Leverage TVA's economies of scale and existing program platforms to promote quality offerings at a lower cost than individual LPC programs and to identify increased co-branding opportunities

Review real-time program performance in FY23 and FY24 and adjust incentive rates, program rules, offerings, and marketing strategies as TVA experiences re-entry into the market

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VPP-Energy Efficiency Cost and Impact Summary

Energy Efficiency expansion starting in FY24 decreases additional capacity needs in the future





Demand-side Management – Community Energy Efficiency

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Community EE Overview and Strategy (1/3)

Overview

Improve energy equity and fulfill TVA Board commitments through reducing energy expenses in underserved communities at least \$200 million by 2027

Federal mandates through Justice 40 and the Equity Order require U.S. agencies to engage in programming for underserved communities. TVA equity programs already in place target market segments that were traditionally underserved and unable to benefit from utility energy programs

Address energy equity disparities through inclusive energy programming focused on expanding partnerships, improving program access, and catalyzing investment in healthy, resilient communities where all community members can benefit from TVA resources

These programs contribute to the 10-year GWh targets



Community EE Overview and Strategy (2/3)

Risks

External pressures for TVA to do more energy equity beyond current levels without adequate resources

Reducing equity programs will impact TVA's ability to meet energy efficiency targets and its North Star equity targets

Failure to meet political and stakeholder requirements if funding levels drop (Justice 40 and Equity Order)

If financial resources are reduced, TVA would not be able to take advantage of certain federal Infrastructure Investment and Jobs Act (IIJA) and Inflation Reduction Act (IRA) funding

TVA has longer-term commitments with LPCs and stakeholders to match funding for programs

Equity programs competing against other funding needs could result in inconsistent funding levels and inconsistent messaging with communities, which could drive down participation and trust



Community EE Overview and Strategy (3/3)

Strategy

Maintain impactful energy equity programs in the Valley and enable deployment of federal funding

Provide support and improve energy equity for underserved communities and residents through Home Uplift, School Uplift, and Small Business Uplift

Maintain energy efficiency programs, and promote incentives, with a focus on underserved federal opportunity zones and Justice 40 tracts

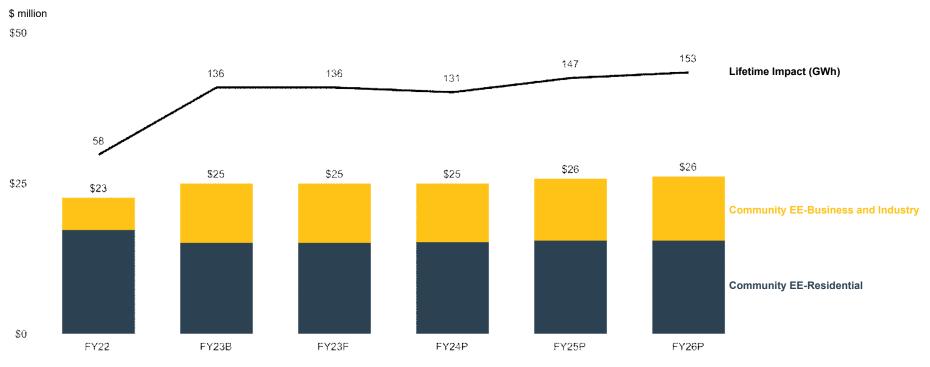
Promote the Federal Energy Services Program (FESP) to federal facilities in underserved communities to increase energy efficiency and reduce carbon emissions in the Valley

Partnering with state energy offices, LPCs, and others to leverage recent federal funding, estimated at over \$200 million (IIJA and IRA), could create additional opportunities to expand program impacts



Community EE Cost and Impact Summary

Improve energy equity by reducing energy expenses in underserved communities by \$200 million by 2027



Demand-side Management – Clean Energy Services



Clean Energy Services Overview and Strategy (1/3)

Overview

Implement TVA electric vehicle (EV) commitments that remove market barriers of EV infrastructure, vehicle availability, supportive policies, and consumer education

Complete Fast Charge Network by FY26

Promote efficient electrification and load management of fleets with a focus on providing consultation, information, and expertise

Develop resiliency strategy and program offerings for distributed assets that benefit the grid

Encourage electric or other technologies that support TVA's commitment to community decarbonization and management of system peaks



Clean Energy Services Overview and Strategy (2/3)

Risks

Large-scale and rapid adoption of heavy-duty electric transportation (long-haul trucking, etc.) that require high kW charging and system upgrades

Cost barriers and supply chain issues in charging equipment

Alignment to new PURPA guidance and standards

Management of distributed assets may be hampered due to costs, technology availability, and distribution system constraints

Accelerated electric system growth from customers implementing electric technologies to reduce their carbon impacts

Market misunderstanding around growth of off-peak, carbon-efficient loads



Clean Energy Services Overview and Strategy (3/3)

Strategy

Position TVA and LPCs as innovative leaders in providing clean energy services that enable EV strategies, optimize system benefits, maximize distributed resiliency assets, and reduce carbon

Partner with LPCs, Valley auto manufacturers, and stakeholders on EV initiatives to remove market barriers, implement a foundational charging network, reduce system impacts, and develop EVs as grid assets

Develop resiliency programs that utilize distributed assets, like back-up generation and battery storage, to maximize system capacity and energy benefits, while supporting customer desire for more resilient facilities

Align offerings to ensure multiple needs are met, including carbon reduction, innovation goals, TVA brand lift, and strategic partnership development

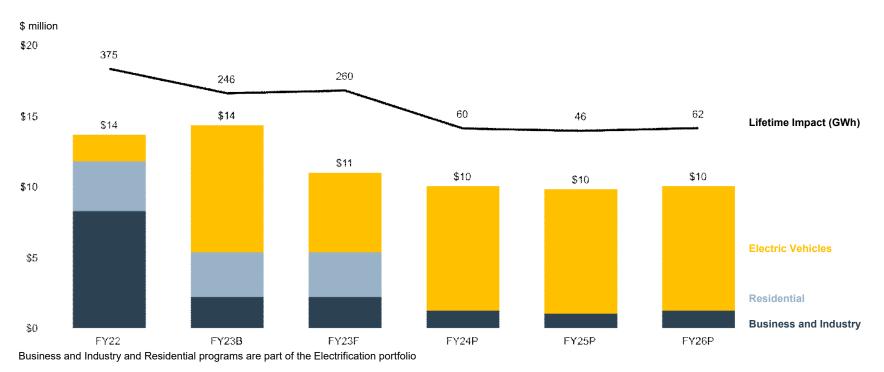
Leverage TVA's cleaner generation portfolio to support Valley decarbonization

Develop new resiliency, EV load management, and vehicle-to-grid offerings to optimize system benefits and maximize distributed assets

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Clean Energy Services Cost and Impact Summary

Clean Energy spend primarily targeting Electric Vehicle programs to decrease Valley carbon emissions in the transportation sector





Demand-side Management – External Funding



External Funding Overview and Strategy (1/2)

Overview

Opportunity for partnerships with federal, state and local government offices/agencies to help realize infrastructure improvements, while achieving TVA's energy efficiency and carbon goals

TVA will partner with State Energy Offices (SEO), LPCs, and others to leverage recent federal funding, estimated at over \$250 million (IIJA and IRA) to supplement TVA energy programs

Risks

Without TVA program platforms, the Valley may not be able to take full advantage of federal funding

The market may not respond to incentives at levels needed to achieve targets

Market saturation of electric heat is high in the Valley; current rules only allow for gas to electric replacement

Industrial sector has long lead times and quick deadlines can create barriers

Complexity gaining access to funding in states where TVA only serves a portion of the market

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External Funding Overview and Strategy (2/2)

Strategy

Work closely with SEOs to discuss strategies where TVA could serve as implementer of rebate funds, saving money and increasing administrative burden

Create a more consistent approach for access to funding that unlocks opportunities for everyone (with additional focus for underserved communities)

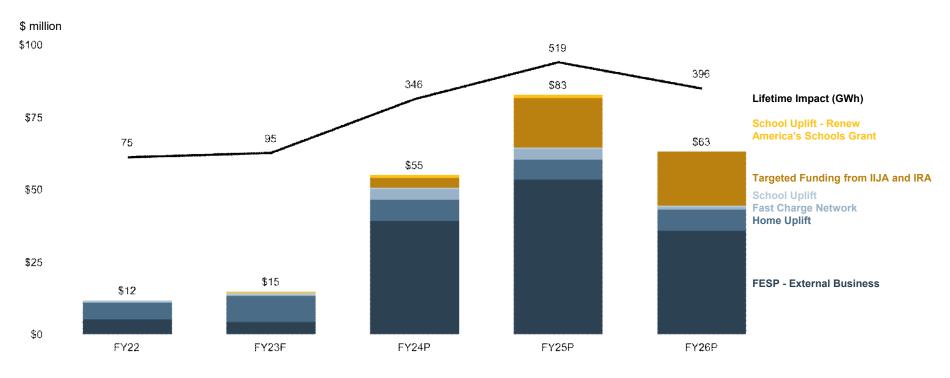
TVA in discussions with Tennessee SEO to administer residential energy rebates (~\$160M) and IIJA Revolving Loan Fund (RLF) grant for residential and commercial loans

TVA will continue to leverage existing relationships to support federal funding, such as: TVA's contractor network, third-party implementers and engineering consulting in partnership with LPCs



External Funding and Impact – Energy Efficiency

Anticipating \$200 million in external funds for Energy Efficiency work in the Valley over the next three years





Appendix



Appendix Items

Contracting Plan Conformance

Colors of Money

Fuel and Purchased Power FCA-Ineligible Costs

Commodity Prices

Spending and Revenue Trends

Additional Audit, Finance, Risk, and Cybersecurity Committee Slides



Contracting Plan Conformance

A contract is considered substantially in conformance with the Contracting Plan if any of the following apply:

- The contract expenditures for FY24, along with expenditures under other contracts of the same type, are within the applicable budget amount(s) set forth in the FY24 Contracting Plan;
- The contract implements a project, program, or activity set forth in the FY24 Budget, including the FY24 Contracting Plan, provided that it does not exceed any Board-approved budgetary or other limitations (e.g., volumes, MWs) for such project, program, or activity;
- The contract supports TVA's forecasted generation system demand as stated in the FY24 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 expenditures or volumes from those set forth in the FY24 Contracting Plan); or
- The contract supports TVA's demand-side management strategies, and the expenditures are funded through internal savings and use processes.

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

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Colors of Money

\$ million	FCA Eligibility	FY22	FY23B	FY23F	FY24P	FY25P	FY26P
Natural Gas	Eligible	\$1,591.9	\$1,510.1	\$1,003.6	\$1,085.1	\$1,353.2	\$1,466.2
	Ineligible	\$36.2	\$47.6	\$28.2	\$27.1	\$28.6	\$29.3
Coal	Eligible	\$563.9	\$877.3	\$810.9	\$701.2	\$830.1	\$889.9
	Ineligible	\$20.6	\$22.3	\$23.4	\$24.6	\$23.4	\$23.9
Nuclear	Eligible	\$326.0	\$340.3	\$333.5	\$343.4	\$374.8	\$341.3
	Ineligible	\$2.6	\$3.0	\$2.4	\$2.1	\$2.5	\$2.4
Purchased Power	Eligible	\$1,695.7	\$1,420.7	\$1,304.0	\$1,215.7	\$1,150.9	\$1,147.5
	Ineligible	\$256.2	\$390.4	\$297.1	\$464.6	\$582.4	\$584.6
Hedging and Allowances	Eligible	\$(9.0)	\$(57.8)	\$383.7	\$147.3	\$57.8	\$48.6
	Ineligible	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Fuel and Purchased	Eligible	\$4,168.5	\$4,090.5	\$3,835.7	\$3,492.7	\$3,766.8	\$3,893.5
Power Total	Ineligible	\$315.5	\$463.3	\$351.2	\$518.4	\$636.8	\$640.2
Base Revenue Offset	Ineligible	\$109.7	\$116.1	\$98.3	\$133.2	\$149.6	\$168.7
O&M Routine	Ineligible	\$49.7	\$38.5	\$75.8	\$110.8	\$133.1	\$151.0
O&M Projects	Ineligible	\$1.9	\$1.5	\$1.6	\$2.1	\$2.1	\$2.2
External Business	Ineligible	\$5.3	\$8.7	\$4.4	\$39.4	\$53.5	\$36.0

Fuel and Purchased Power Total excludes reagents costs

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Fuel and Purchased Power FCA-Ineligible Costs (1/2) (Impacts Base Rates)

		FY22	FY23B	FY23F	FY24P	FY25P	FY26P
Purchased Power	Capacity (Contracted and Forecasted)	4,502	4,233	4,952	4,797	3,592	3,142
(MW)	Capacity (Additional Capacity Assumptions in Generation Plan)*	_	1,274	1,376	600	2,100	2,100
	Capacity (Mid-term and Outage Optimization)	_	_	_	800	900	1,000
	Total Purchased Power (MW)	4,502	5,507	6,328	6,197	6,592	6,242
Purchased Power	Capacity Cost (Contracted and Forecasted)	\$141.4	\$142.0	\$140.3	\$166.3	\$105.8	\$90.9
(\$ million)	Capacity Cost (Additional Capacity Assumptions)*	\$0.0	\$136.4	\$27.5	\$31.7	\$125.2	\$152.5
	Capacity Cost (Mid-term and Outage Optimization)	\$0.0	\$0.0	\$0.0	\$55.7	\$88.1	\$69.3
	Transmission Cost (Contracted and Forecasted)	\$101.8	\$94.3	\$104.4	\$124.1	\$74.1	\$76.3
	Transmission Cost (Additional Capacity Assumptions)*	\$0.0	\$0.0	\$10.0	\$25.5	\$98.7	\$118.5
	Transmission Cost (Mid-term and Outage Optimization)	\$0.0	\$0.0	\$0.0	\$44.8	\$73.9	\$57.0
	Property Tax on Caledonia	\$5.0	\$4.4	\$6.1	\$5.2	\$5.2	\$5.2
	Power Wind Curtailment	\$7.0	\$10.3	\$6.8	\$7.7	\$7.8	\$7.9
	Renewable Energy Certificate Expense	\$1.0	\$3.1	\$2.0	\$3.6	\$3.7	\$7.1
	Total Purchased Power FCA-Ineligible	\$256.2	\$390.4	\$297.1	\$464.6	\$582.4	\$584.6

^{*}Represents additional capacity and related costs on potential PPAs transacted upon in response to system position.

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Fuel and Purchased Power FCA-Ineligible Costs (2/2) (Impacts Base Rates)

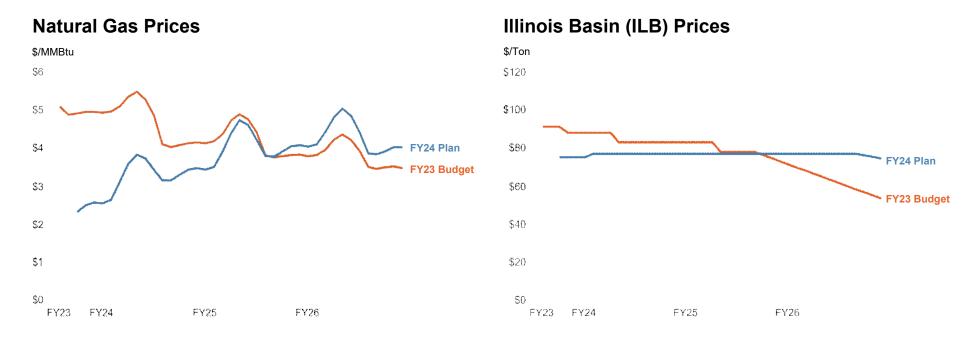
		FY22	FY23B	FY23F	FY24P	FY25P	FY26P
Gas (\$ million)	Gas Storage	\$15.2	\$19.0	\$20.1	\$21.7	\$21.8	\$22.2
	Gas Sampling	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2
	Internal Freight on Oil Transfers	\$0.0	\$0.0	\$0.4	\$0.0	\$0.0	\$0.0
	Chemours Expense	\$20.7	\$28.4	\$7.6	\$5.1	\$6.5	\$6.8
	Total Gas FCA-Ineligible	\$36.2	\$47.6	\$28.2	\$27.1	\$28.6	\$29.3
Coal (\$ million)	Coal, Transportation, and Limestone Settlements/Liquidated Damages	\$3.3	\$3.1	\$3.6	\$3.0	\$1.8	\$2.4
	Railcar Maintenance/Storage/Lease	\$15.2	\$16.1	\$17.3	\$19.3	\$19.3	\$19.3
	Sampling/Internal Transportation	\$2.1	\$3.0	\$2.5	\$2.3	\$2.2	\$2.2
	Total Coal FCA-Ineligible	\$20.6	\$22.3	\$23.4	\$24.6	\$23.4	\$23.9
Nuclear (\$ million)	Total Nuclear FCA-Ineligible	\$2.6	\$3.0	\$2.4	\$2.1	\$2.5	\$2.4
Total	Total FCA-Ineligible (\$ million)	\$315.5	\$463.3	\$351.2	\$518.4	\$636.8	\$640.2
	FCA-Ineligible \$/MWh	\$1.91	\$2.78	\$2.15	\$3.06	\$3.73	\$3.73

\$/MWh is based on GWh referenced on the "Portfolio Spending Trends" page

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Commodity Prices

FY24 Plan reflects lower commodity prices through FY25



FY23 Budget prices as of 05/05/2022 and FY24 Plan prices as of 05/01/2023.

TENNESSEE VALLEY AUTHORITY

Portfolio Spending Trends (1/2)

		FY22	FY23B	FY23F	FY24P	FY25P	FY26P
Natural Gas (Owned Assets)	\$ million	\$1,628.0	\$1,557.7	\$1,031.8	\$1,112.2	\$1,381.8	\$1,495.5
	Generation (GWh)	36,259	32,260	35,806	38,856	40,523	41,574
	Unit Price (\$/MWh)	\$44.90	\$48.29	\$28.82	\$28.62	\$34.10	\$35.97
Coal	\$ million	\$584.5	\$899.5	\$834.3	\$725.8	\$853.4	\$913.9
	Generation (GWh)	20,911	27,531	21,616	20,427	23,799	24,633
	Unit Price (\$/MWh)	\$27.95	\$32.67	\$38.60	\$35.53	\$35.86	\$37.10
Nuclear	\$ million	\$328.6	\$343.3	\$335.9	\$345.5	\$377.3	\$343.7
	Generation (GWh)	64,672	66,677	66,914	67,558	67,176	66,097
	Unit Price (\$/MWh)	\$5.08	\$5.15	\$5.02	\$5.11	\$5.62	\$5.20
Purchased Power	\$ million	\$1,951.9	\$1,811.1	\$1,601.1	\$1,680.3	\$1,733.3	\$1,732.1
	Generation (GWh)	29,788	28,399	25,937	29,019	27,515	27,567
	Unit Price (\$/MWh)	\$65.53	\$63.77	\$61.73	\$57.90	\$62.99	\$62.83
Hydro (Owned Assets)	Generation (GWh)	13,934	12,039	13,305	13,368	11,926	11,819
Reagents and Allowances	\$ million	\$38.1	\$44.3	\$38.1	\$31.1	\$35.3	\$37.0
Hedging (Gain)/Loss	\$ million	\$(47.1)	\$(102.1)	\$345.6	\$116.2	\$22.6	\$11.7

TENNESSEE VALLEY AUTHORITY

Portfolio Spending Trends (2/2)

		FY22	FY23B	FY23F	FY24P	FY25P	FY26P
Totals	\$ million	\$4,484.0	\$4,553.7	\$4,186.9	\$4,011.0	\$4,403.6	\$4,533.7
	Generation (GWh)	165,563	166,905	163,577	169,228	170,939	171,690
	Unit Price (\$/MWh)	\$27.08	\$27.28	\$25.60	\$23.70	\$25.76	\$26.41



Natural Gas Spending Trends (1/2)

		FY22	FY23B	FY23F	FY24P	FY25P	FY26P
Owned Assets (Excluding	Commodity Volume (MMBtu)	295,538	230,401	270,038	285,643	298,487	305,105
Hedging)	Generation (GWh)	36,259	32,260	35,806	38,856	40,523	41,574
	Commodity Expense (\$ million)	\$1,481.6	\$1,382.1	\$873.8	\$955.4	\$1,209.5	\$1,274.4
	Firm Transportation Expense (\$ million)	\$109.1	\$124.1	\$116.7	\$127.7	\$141.8	\$190.0
	Storage Expense (\$ million)	\$15.2	\$19.0	\$20.1	\$21.7	\$21.8	\$22.2
	Fuel Oil (\$ million)	\$1.1	\$3.9	\$13.1	\$1.9	\$1.9	\$1.9
	Sampling (\$ million)	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2
	Internal Freight on Oil Transfers (\$ million)	\$0.0	\$0.0	\$0.4	\$0.0	\$0.0	\$0.0
	Chemours Expense (\$ million)	\$20.7	\$28.4	\$7.6	\$5.1	\$6.5	\$6.8
	Total Cost (\$ million)	\$1,628.0	\$1,557.7	\$1,031.8	\$1,112.2	\$1,381.8	\$1,495.5
	Unit Price (\$/MWh)	\$44.90	\$48.29	\$28.82	\$28.62	\$34.10	\$35.97
Tolled Assets (Excluding	Commodity Volume (MMBtu)	57,138	48,212	49,909	63,606	67,977	65,853
Hedging)	Generation (GWh)	7,706	6,850	6,929	9,007	9,627	9,343
	Commodity Expense (\$ million)	\$319.6	\$291.5	\$167.8	\$210.9	\$271.0	\$273.2
	Firm Transportation Expense (\$ million)	\$9.7	\$8.5	\$8.5	\$8.5	\$8.5	\$8.5
	Total Cost (\$ million)	\$329.3	\$300.0	\$176.2	\$219.4	\$279.5	\$281.7
	Unit Price (\$/MWh)	\$42.73	\$43.80	\$25.43	\$24.36	\$29.03	\$30.15



Natural Gas Spending Trends (2/2)

		FY22	FY23B	FY23F	FY24P	FY25P	FY26P
Hedging (Gain)/Loss	Owned Assets Hedging (Gain)/Loss (\$ million)	\$(37.7)	\$(81.7)	\$276.5	\$93.0	\$18.0	\$9.3
	Tolled Assets Hedging (Gain)/Loss (\$ million)	\$(9.4)	\$(20.4)	\$69.1	\$23.2	\$4.5	\$2.3
	Total Hedging (Gain)/Loss (\$ million)	\$(47.1)	\$(102.1)	\$345.6	\$116.2	\$22.6	\$11.7
Gas Fuel Expense Total	Commodity Volume (MMBtu)	352,676	278,613	319,947	349,249	366,464	370,958
(Including Hedging)	Generation (GWh)	43,964	39,110	42,735	47,863	50,150	50,917
	Total Cost (\$ million)	\$1,910.2	\$1,755.6	\$1,553.6	\$1,447.8	\$1,683.8	\$1,788.9
	Unit Price (\$/MWh)	\$43.45	\$44.89	\$36.36	\$30.25	\$33.58	\$35.13



Coal Spending Trends and Reagents

		FY22	FY23B	FY23F	FY24P	FY25P	FY26P
Coal	Generation (GWh)	20,911	27,531	21,616	20,427	23,799	24,633
	Commodity Expense (\$ million)	\$302.7	\$575.8	\$502.2	\$457.8	\$509.7	\$548.9
	Transportation Expense (\$ million)	\$224.0	\$248.8	\$261.4	\$201.5	\$276.9	\$297.8
	Other Expense (\$ million)	\$57.9	\$74.9	\$70.8	\$66.4	\$66.8	\$67.2
	Total Cost (\$ million)	\$584.5	\$899.5	\$834.3	\$725.8	\$853.4	\$913.9
	Unit Price (\$/MWh)	\$27.95	\$32.67	\$38.60	\$35.53	\$35.86	\$37.10
Reagents and Allowances	Coal Reagents and Allowances (\$ million)	\$34.8	\$41.3	\$35.5	\$28.6	\$32.6	\$34.2
	Gas Reagents (\$ million)	\$3.3	\$3.0	\$2.6	\$2.5	\$2.7	\$2.8
	Total Reagents and Allowances (\$ million)	\$38.1	\$44.3	\$38.1	\$31.1	\$35.3	\$37.0



Nuclear Spending Trends

	FY22	FY23B	FY23F	FY24P	FY25P	FY26P
Generation (GWh)	64,672	66,677	66,914	67,558	67,176	66,097
Fabrication Expense (\$ million)	\$81.9	\$84.0	\$82.3	\$84.6	\$92.4	\$84.2
Enrichment Expense (\$ million)	\$74.8	\$76.7	\$75.4	\$77.6	\$84.7	\$77.1
Uranium Expense (\$ million)	\$190.9	\$204.6	\$210.2	\$216.3	\$197.7	\$180.0
Other Expense (\$ million)	\$(19.0)	\$(22.0)	\$(32.0)	\$(33.0)	\$2.5	\$2.4
Total Cost (\$ million)	\$328.6	\$343.3	\$335.9	\$345.5	\$377.3	\$343.7
Unit Price (\$/MWh)	\$5.08	\$5.15	\$5.02	\$5.11	\$5.62	\$5.20



Purchased Power Spending Trends

		FY22	FY23B	FY23F	FY24P	FY25P	FY26P
Purchased Power	Generation (GWh)	19,377	18,833	15,283	17,597	16,011	15,538
Agreements	Unit Price (\$/MWh)	\$58.11	\$62.46	\$44.07	\$49.99	\$63.56	\$65.14
	Total Cost (\$ million)	\$1,126.0	\$1,176.4	\$673.6	\$879.7	\$1,017.7	\$1,012.1
Renewable	Generation (GWh)	7,228	6,560	6,895	8,198	7,072	6,666
Purchased Power Agreements	Unit Price (\$/MWh)	\$56.34	\$58.64	\$60.14	\$60.94	\$58.75	\$58.17
	Total Cost (\$ million)	\$407.2	\$384.7	\$414.6	\$499.6	\$415.5	\$387.8
Renewable	Generation (GWh)	1,456	1,616	1,818	1,945	3,153	4,085
Energy Offerings	Unit Price (\$/MWh)	\$57.02	\$53.82	\$48.41	\$46.54	\$42.53	\$40.20
	Total Cost (\$ million)	\$83.0	\$87.0	\$88.0	\$90.5	\$134.1	\$164.2
Market and	Generation (GWh)	1,727	1,390	1,941	1,279	1,279	1,279
Transmission	Unit Price (\$/MWh)	\$194.38	\$117.34	\$218.90	\$164.53	\$129.69	\$131.35
	Total Cost (\$ million)	\$335.8	\$163.1	\$424.9	\$210.5	\$165.9	\$168.1
Purchased	Generation (GWh)	29,788	28,399	25,937	29,019	27,515	27,567
Power Expense Total	Unit Price (\$/MWh)	\$65.53	\$63.77	\$61.73	\$57.90	\$62.99	\$62.83
	Total Cost (\$ million)	\$1,951.9	\$1,811.1	\$1,601.1	\$1,680.3	\$1,733.3	\$1,732.1



Renewables Spending Trends (1/2)

		FY22	FY23B	FY23F	FY24P	FY25P	FY26P
Green Power	Generation (GWh)	149	174	157	174	174	174
Providers (GPP)	Unit Price (\$/MWh)	\$139.80	\$109.88	\$116.92	\$104.25	\$102.60	\$101.70
	Total Cost (\$ million)	\$20.8	\$19.1	\$18.4	\$18.1	\$17.8	\$17.7
Renewable Standard Offer (RSO)	Generation (GWh)	469	457	419	375	333	333
	Unit Price (\$/MWh)	\$67.88	\$72.11	\$71.63	\$73.76	\$76.13	\$79.09
,	Total Cost (\$ million)	\$31.9	\$32.9	\$30.0	\$27.7	\$25.3	\$26.3
Solar Solutions	Generation (GWh)	60	62	72	62	62	62
Initiative (SSI)	Unit Price (\$/MWh)	\$117.02	\$115.63	\$100.44	\$116.73	\$111.47	\$98.14
	Total Cost (\$ million)	\$7.1	\$7.2	\$7.3	\$7.2	\$6.9	\$6.1
Distributed Solar	Generation (GWh)	35	34	35	34	34	34
Solutions (DSS)	Unit Price (\$/MWh)	\$69.70	\$71.55	\$71.02	\$72.38	\$73.23	\$74.10
	Total Cost (\$ million)	\$2.4	\$2.5	\$2.5	\$2.5	\$2.5	\$2.6



Renewables Spending Trends (2/2)

		FY22	FY23B	FY23F	FY24P	FY25P	FY26P
Flexibility Research Projects (FRP) - Solar	Generation (GWh)	0	7	4	7	7	7
	Unit Price (\$/MWh)	\$0.00	\$57.14	\$6.13	\$57.06	\$57.90	\$58.75
	Total Cost (\$ million)	\$0.0	\$0.4	\$0.0	\$0.4	\$0.4	\$0.4
Green Invest	Generation (GWh)	742	881	1,132	1,293	2,543	3,474
	Unit Price (\$/MWh)	\$28.09	\$28.21	\$26.43	\$26.77	\$31.90	\$31.99
	Total Cost (\$ million)	\$20.9	\$24.9	\$29.9	\$34.6	\$81.1	\$111.2
Total Renewable	Generation (GWh)	1,456	1,616	1,818	1,945	3,153	4,085
Energy Offerings	Unit Price (\$/MWh)	\$57.02	\$53.82	\$48.41	\$46.54	\$42.53	\$40.20
	Total Cost (\$ million)	\$83.0	\$87.0	\$88.0	\$90.5	\$134.1	\$164.2



Green Invest

	FY22	FY23B	FY23F	FY24P	FY25P	FY26P
Impact (GWh)	742	881	1,132	1,293	2,543	3,474
Impact (MW)	377	472	562	708	1,166	1,610
Impact - Year Signed (MW)	2,139	200	4,160	600	600	600
Total Cost (\$ million)	\$20.9	\$24.9	\$29.9	\$34.6	\$81.1	\$111.2
Average Costs (\$/MWh)	\$28.09	\$28.21	\$26.43	\$26.77	\$31.90	\$31.99
Cumulative Impact (MW) by Year Signed	2,139	2,339	6,299	6,899	7,499	8,099

Impact - Year Signed volume for FY22 above includes FY22 and prior years

TENNESSEE VALLEY AUTHORITY

Demand-side Management Spending Trends (1/4)

		FY22	FY23B	FY23F	FY24P	FY25P	FY26P
VPP-Demand Response							
Interruptible	Impact (MW)	1,319	1,510	1,515	1,455	1,455	1,455
	Total Cost (\$ million)	\$107.7	\$93.1	\$93.1	\$99.7	\$99.8	\$99.8
Interruptible Power Seasonal Offer	Impact (MW)	0	0	876	876	876	876
	Total Cost (\$ million)	\$0.0	\$0.0	\$22.9	\$22.9	\$22.9	\$22.9
Peak Power Partners	Impact (MW)	56	76	57	60	62	62
(EnelX and 7SPC)	Total Cost (\$ million)	\$3.1	\$4.1	\$4.0	\$3.4	\$3.4	\$3.5
Frequency	Impact (MW)	599	599	599	599	599	599
(Instantaneous Response)	Total Cost (\$ million)	\$1.8	\$1.8	\$1.8	\$1.8	\$1.8	\$1.8
EPA	Impact (MW)	179	91	88	24	0	0
	Total Cost (\$ million)	\$0.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Demand Response Expansion	Impact (MW)	0	0	0	400	700	900
	Total Cost (\$ million)	\$0.0	\$0.0	\$0.0	\$20.9	\$34.8	\$48.7
Total VPP-Demand Response	Impact (MW)	1,554	1,677	1,660	1,939	2,217	2,417
	Total Cost (\$ million)	\$112.9	\$99.1	\$121.8	\$148.8	\$162.7	\$176.6

Instantaneous Response and Interruptible Power Seasonal Offer MW Impact not included in totals; costs are included

TENNESSEE VALLEY AUTHORITY

Demand-side Management Spending Trends (2/4)

		FY22	FY23B	FY23F	FY24P	FY25P	FY26P
VPP - Energy Efficiency							
VPP - Residential	Lifetime Impact (GWh)	30	120	123	197	194	196
	Total Cost (\$ million)	\$5.8	\$4.8	\$4.8	\$5.2	\$5.3	\$5.4
VPP - Business and Industry	Lifetime Impact (GWh)	126	573	501	798	788	985
	Total Cost (\$ million)	\$2.8	\$8.9	\$9.1	\$13.6	\$13.4	\$16.3
VPP - Internal Energy Management	Lifetime Impact (GWh)	23	22	22	25	25	25
	Total Cost (\$ million)	\$2.1	\$1.9	\$1.9	\$2.4	\$2.5	\$2.6
VPP - EPA	Lifetime Impact (GWh)	10	4	168	0	0	0
	Total Cost (\$ million)	\$1.0	\$1.9	\$1.8	\$1.9	\$1.9	\$1.9
Federal Energy Services Program	Total Cost (\$ million)	\$5.3	\$8.7	\$4.4	\$39.4	\$53.5	\$36.0
Energy Efficiency Expansion	Lifetime Impact (GWh)	0	0	0	1,135	2,027	2,714
	Total Cost (\$ million)	\$0.0	\$0.0	\$0.0	\$39.0	\$63.3	\$82.7
Total VPP - Energy Efficiency	Lifetime Impact (GWh)	189	719	813	2,155	3,034	3,920
	Total Cost (\$ million)	\$17.1	\$26.2	\$22.0	\$101.5	\$139.9	\$144.9

THE TENNESSEE VALLEY AUTHORITY

Demand-side Management Spending Trends (3/4)

		FY22	FY23B	FY23F	FY24P	FY25P	FY26P
Community Energy Efficiency							
Community Energy Efficiency -	Lifetime Impact (GWh)	39	65	65	56	55	54
Residential	Total Cost (\$ million)	\$17.3	\$15.2	\$15.2	\$15.4	\$15.6	\$15.7
Community Energy Efficiency - Business and Industry	Lifetime Impact (GWh)	19	71	71	74	92	99
	Total Cost (\$ million)	\$5.5	\$9.9	\$9.9	\$9.7	\$10.2	\$10.6
Total Community Energy Efficiency	Lifetime Impact (GWh)	58	136	136	131	147	153
	Total Cost (\$ million)	\$22.7	\$25.1	\$25.1	\$25.1	\$25.8	\$26.3



Demand-side Management Spending Trends (4/4)

		FY22	FY23B	FY23F	FY24P	FY25P	FY26P
Clean Energy Services							
Business and Industry	Lifetime Impact (GWh)	194	84	127	58	42	53
	Total Cost (\$ million)	\$8.3	\$2.2	\$2.2	\$1.3	\$1.1	\$1.3
Residential	Lifetime Impact (GWh)	181	146	132	0	0	0
	Total Cost (\$ million)	\$3.5	\$3.2	\$3.2	\$0.0	\$0.0	\$0.0
Electric Vehicles	Lifetime Impact (GWh)	0	16	1	2	4	9
	Total Cost (\$ million)	\$1.9	\$9.0	\$5.7	\$8.8	\$8.8	\$8.8
Totals	Lifetime Impact (GWh)	375	246	260	60	46	62
	Total Cost (\$ million)	\$13.8	\$14.4	\$11.1	\$10.1	\$9.9	\$10.1
		FY22	FY23B	FY23F	FY24P	FY25P	FY26P
VPP - Demand Response	Total Cost (\$ million)	\$112.9	\$99.1	\$121.8	\$148.8	\$162.7	\$176.6
VPP - Energy Efficiency	Total Cost (\$ million)	\$17.1	\$26.2	\$22.0	\$101.5	\$139.9	\$144.9
Community Energy Efficiency	Total Cost (\$ million)	\$22.7	\$25.1	\$25.1	\$25.1	\$25.8	\$26.3
Clean Energy Services	Total Cost (\$ million)	\$13.8	\$14.4	\$11.1	\$10.1	\$9.9	\$10.1
Total	Total Cost (\$ million)	\$166.5	\$164.8	\$180.0	\$285.5	\$338.3	\$357.9

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RECs Revenue and Spending Trends (1/2)

		FY22	FY23B	FY23F	FY24P	FY25P	FY26P
NC REPS	RECs to be Purchased Unbundled from Energy	25,000	25,656	35,656	36,582	36,582	36,582
Compliance	Cost of RECs Purchased (\$ million)	\$0.1	\$0.1	\$0.5	\$0.6	\$0.6	\$0.6
	Avg Unbundled REC Purchase Price (\$/REC)*	\$4.35	\$4.74	\$13.72	\$17.35	\$17.35	\$17.35
	RECs to be Used	55,216	65,567	63,360	77,728	77,728	77,728
	Revenue (\$ million)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
	Avg REC Sales Price (\$/REC)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Customer	RECs to be Purchased Unbundled from Energy	0	0	0	0	0	0
Solutions	Cost of RECs Purchased (\$ million)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
	Avg Unbundled REC Purchase Price (\$/REC)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	RECs to be Used	1,472,209	2,069,184	1,270,318	2,589,586	2,777,437	4,234,380
	Revenue (\$ million)	\$4.4	\$5.3	\$3.2	\$6.7	\$6.9	\$10.3
	Avg REC Sales Price (\$/REC)	\$3.02	\$2.55	\$2.51	\$2.57	\$2.49	\$2.44

^{*}This line represents the average unbundled REC purchase price for all technology types. Expected unbundled REC purchase price for swine RECs is \$125/REC, for poultry RECs is \$90/REC, and for biomass RECs is \$0.50/REC.



RECs Revenue and Spending Trends (2/2)

		FY22	FY23B	FY23F	FY24P	FY25P	FY26P
Market	RECs to be Purchased Unbundled from Energy	0	0	0	0	0	0
Opportunities	Cost of RECs Purchased (\$ million)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
	Avg Unbundled REC Purchase Price (\$/REC)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	RECs to be Used	541,207	589,505	589,505	680,691	614,728	616,778
	Revenue (\$ million)	\$12.2	\$6.2	\$14.6	\$8.3	\$7.5	\$7.5
	Avg REC Sales Price (\$/REC)	\$22.50	\$10.46	\$24.76	\$12.23	\$12.23	\$12.23
TVA General	RECs to be Purchased Unbundled from Energy	0	0	0	0	0	0
Customer Claim	Cost of RECs Purchased (\$ million)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
	Avg Unbundled REC Purchase Price (\$/REC)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	RECs to be Used	3,699,930	2,500,000	3,587,441	2,500,000	2,500,000	2,500,000
	Revenue (\$ million)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
	Avg REC Sales Price (\$/REC)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Totals	RECs to be Purchased Unbundled from Energy	25,000	25,656	35,656	36,582	36,582	36,582
	Cost of RECs Purchased (\$ million)	\$0.1	\$0.1	\$0.5	\$0.6	\$0.6	\$0.6
	Avg Unbundled REC Purchase Price (\$/REC)	\$4.35	\$4.74	\$13.72	\$17.35	\$17.35	\$17.35
	RECs to be Used	5,768,562	5,224,256	5,510,624	5,848,005	5,969,893	7,428,886
	Revenue (\$ million)	\$16.6	\$11.4	\$17.8	\$15.0	\$14.4	\$17.9



Evolving Generation Needs

System position driving the need for additional capacity in the near term

Market drivers

- Load growth driven by direct serve customer growth, economic development, and residential sector
- Significant impacts to volume, price, and schedule for planned and forecasted solar and battery installations
- Decrease in commodity prices through FY24, but increasing prices in FY25 and beyond
- · Limited availability of off-system transmission

TVA response

- Sign up to 8,000 MW of solar and battery purchased power agreements (PPAs) over the next three years
- Invest in economical energy efficiency programs that reduce capacity expansion needs
- Manage peak load growth and improve system capacity position by growing Demand Response (DR) up to 1,000 MW
- Execute short- and mid-term power supply contracts to shore up short-term capacity gaps
- Implement hedging program to reduce price volatility and ensure fuel supply reliability to plants

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Natural Gas Financial Hedging

Financial Hedging Program reduces fuel cost uncertainty within risk limits and monitoring

- · Currently utilizing International Swaps and Derivatives Association (ISDA) agreements
- Collateral thresholds limit TVA's credit exposure
- Liquidity risk primarily exists only in the event of a TVA downgrade in credit rating

Risk oversight and monitoring

- Reduction in fuel cost uncertainty and exposure monitoring informs program sizing and potential expansion
- Potential future exposure stresses pricing assumptions over horizon of the portfolio (90 percent confidence interval)
- Monitoring mark-to-market exposure by counterparty limits concentration risk and collection of collateral



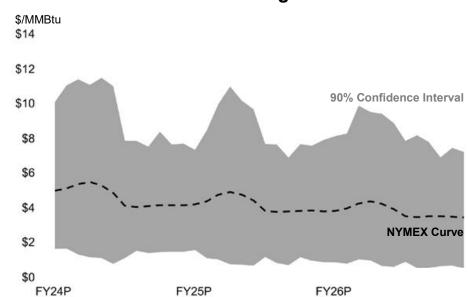
Natural Gas Price Volatility

FY24 Plan reflects reduced volatility in gas prices

FY24P Natural Gas Price Range

\$/MMBtu \$12 \$10 \$8 \$6 \$4 \$2 NYMEX Curve \$2 \$0 FY24P FY25P FY26P

FY23B Natural Gas Price Range



NYMEX curve shown as of 05/01/2023 (FY24P) and 05/05/2022 (FY23B)

TENNESSEE VALLEY AUTHORITY

Solar Market Update

Managing the complexities of the speed of solar growth and emerging market risks

Global growth and TVA customer demand

- Increased customer demand to meet renewable commitments
- · Additional growth of solar projects could impact time between signing solar contracts and projects coming online

Supply chain constraints

- · Prices for commodities, labor, and project components remain elevated while demand is still outpacing supply
- Trade policy issues around Chinese dominated supply chain continue to create supply uncertainty and price pressure

IRA Impacts

- IRA extends tax credits with incentives for prevailing wages and apprenticeship programs, domestic content, and energy communities
- Domestic manufacturing/supply chain and labor markets will take years to catch up with domestic demand



TVA Restricted Information - Deliberative and Pre-Decisional Privileged

Demand-side Management

Develop and maintain the virtual power plant (VPP)

- Balance system needs by lowering costs, shaping energy usage, and increasing capacity
- 4,700 GWh of energy savings and 2,700 MW of demand reduction by 2035

Optimize community energy efficiency (EE)

- Maintain impactful energy equity programs in the Valley
- \$200 million energy expense savings for low-income communities by 2027

Promote clean energy services

- Provide programs and services to meet increased consumer demand for clean energy, electric vehicle, and resiliencybased offerings
- More than 10 million tons of CO₂ reduced by 2035



TVA Restricted Information - Deliberative and Pre-Decisional Privileged

Current External Funding – Energy Efficiency

Leverage current external funding to promote EE programs in the Valley

- Existing EE programs anticipated to utilize \$14 million of external funding in FY23
- Home Uplift partnerships with LPCs have resulted in uplifting nearly 5,000 homes with participants saving an average of \$380 per year since the program's inception
- · Utilize state funds to expand fast charge electric vehicle infrastructure in the Valley
- Federal Energy Services Program (FESP) expected to grow over the next three years with additional projects



External Funding Additional Opportunities

Legislation has created additional funding opportunities for the energy industry

IIJA - \$1.2 trillion

Key priorities:

- · Transportation infrastructure
- · Power infrastructure
- Broadband
- · Public transit and electric vehicles
- Cyber, climate resiliency
- · Environmental justice

IRA - \$369 billion

Key priorities:

- · Reducing emissions
- Clean energy infrastructure
- Energy efficiency
- · Clean energy manufacturing
- Environmental justice
- Renewables



TVA Additional Federal Funding Actions

TVA eligibility of federal funds

- TVA hasn't historically been eligible for federal funding, but is directly eligible in the IIJA and IRA legislation
- Eligible for some federal grants, tax credits, and loans

Established Federal Funding Project Management Office (FFPMO)

- Currently pursuing 18 opportunities, representing \$2.2 billion of potential federal cost share for TVA and partners
- · Partnering with Valley stakeholders, including LPCs, communities, educational institutions, and others

Pursue federal funds to grow reach of EE programs

- IIJA and IRA provide access for up to \$250 million
- Current EE programs give TVA a platform to deploy these funds through existing programs
- TVA is not required to match federal funding, allowing for expanded reach of EE without additional expenses



TVA Restricted Information - Deliberative and Pre-Decisional Privileged

Attachment 5

FY 2024 Allowance for Funds Used During Construction, Regulatory Assets and Liabilities, and Regulatory Accounting Policies

TVA may capitalize interest on eligible projects as allowance for funds used during construction (AFUDC), based on the average interest rate of TVA's outstanding debt. Eligible projects have (1) an expected total project cost of \$1.5 billion or more and (2) an estimated construction period of at least 3 years in duration. For fiscal year 2024, TVA will not apply AFUDC to any projects, and such interest expense that would have been capitalized will be collected currently in rates.

Recurring regulatory assets and liabilities shall be recognized related to the following amounts for which the timing of recognition under accounting principles generally accepted in the United States (U.S. GAAP) differs from recognition of such amounts in TVA's rates:

- Retirement Benefit Plans Deferred Costs/(Credits) Pension and post-retirement
 amounts related to unrecognized service costs/(credits), unrecognized net actuarial
 losses/(gains), and adjustments to the pension funded status are deferred and
 recognized as regulatory assets or liabilities. Deferred amounts are recovered and
 amortized into future rates over the remaining service period of the plans' active
 participants.
- Nuclear decommissioning costs Deferred charges related to the legal obligations recorded for future decommissioning of nuclear long-lived assets are probable of recovery through future nuclear decommissioning trust investment earnings, recovery in rates of debt-financed expenditures made for nuclear decommissioning obligations, or recovery in rates of contributions made into the nuclear decommissioning trust, if necessary. TVA recovers in rates an amount determined by the average life of debt financed to fund nuclear decommissioning expenditures.
- Non-nuclear decommissioning costs Deferred charges related to the legal obligations recorded for future decommissioning of non-nuclear long-lived assets are probable of recovery through future asset retirement trust investment earnings, recovery in rates of debt-financed expenditures made for non-nuclear decommissioning obligations, and recovery in rates of contributions made into the asset retirement trust. TVA recovers in rates an amount determined by the average life of debt financed to fund non-nuclear decommissioning expenditures, and contributions to the asset retirement trust intended to fund the cost of non-nuclear decommissioning expenditures.
- Unrealized gains or losses on interest rate derivatives Unrealized gains or losses
 on interest rate derivatives are deferred, and realized gains or losses are included in
 rates when the contracts settle. A portion of certain unrealized gains and losses will be
 amortized into earnings over the remaining lives of the contracts.
- Unrealized gains and losses on commodity derivatives Unrealized gains or losses on commodity derivatives are deferred, and realized gains or losses are included in rates as the contracts settle and the actual fuel costs are recognized in fuel expense.

- Fuel cost adjustment Amounts in the fuel cost adjustment regulatory accounts
 represent over-collections or under-collections that have not yet been refunded or
 recovered in rates as well as amounts that will be paid to the states for tax equivalents.
 These amounts are collected or refunded in subsequent months' fuel rate adjustments.
- Debt reacquisition costs Amounts related to debt reacquisition costs, call premiums, or other related costs are recovered on a straight-line basis over the weighted average life of the company's debt portfolio.
- Retirement removal costs (non-legally required costs) Retirement removal costs, net of related salvage proceeds, are capitalized as incurred and recovered in rates over one year subsequent to project completion.
- **Deferred lease asset and other financing obligation asset costs** Certain lease and other financing obligation costs are deferred and recovered in rates over the respective arrangement terms as lease or other financing obligation payments are made.
- Environmental agreements Amounts associated with the environmental agreements entered into with the EPA and with Alabama, Kentucky, North Carolina, Tennessee, the Sierra Club, the National Parks Conservation Association, and Our Children's Earth Foundation are included in rates as project payments are made and project costs are expensed.
- Costs associated with compliance with an order, regulation, settlement, or lawsuit, or costs associated with environmental remediation activities Certain amounts associated with compliance with an order, regulation, settlement, or lawsuit, or certain costs associated with environmental remediation activities, including but not limited to those involving environmental cleanup activities and ground water activities, may be deferred as a regulatory asset. These deferred costs will be recovered in rates as costs are incurred or based on the average life of debt financed to fund actual expenditures. Material events to be recovered under this approval will be reported to the Audit, Finance, Risk, and Cybersecurity Committee and/or the full Board prior to the issuance of TVA's quarterly or annual financial statements.

Attachment 6

Report on Fiscal Year 2023 Final Payments Under Section 13 of the TVA Act

Attached for the consideration of the Board are the recommended final tax equivalent payment schedules for fiscal year 2023, along with other recommendations relating to the payment schedule that would be implemented by the Proposed Board Resolution.

On July 28, 2022, the Board authorized monthly payments to states during fiscal year 2023 at 98 percent of one-twelfth of the estimated allocation to each state. The states have received equal monthly payments at this rate beginning in October 2022. The Proposed Board Resolution would ensure that the total amount of the payments that the states receive in fiscal year 2023 conform to the total amount payable, as calculated based upon audited financial data.

TVA is directed by Section 13 of the TVA Act to pay five percent of its gross proceeds from the sale of power (less off-system sales, sales to federal agencies, and power used by TVA) to states and counties where its power operations are carried on or in which it has acquired properties previously subject to state and local taxation. TVA's payments to the states are determined by the following formula:

- (1) 50 percent is derived from the ratio of the book value of TVA power properties and reservoir properties allocated to power located within each state compared to the book value of all such TVA properties; and
- (2) 50 percent is derived from the ratio of gross proceeds from power sales in each state compared to TVA's total gross proceeds from power sales.

Within the allocation formula, certain criteria are used in the determination of TVA power properties and reservoir properties allocated to power. Coal rights held by TVA are treated as purchased power property. For single-use hydro projects, 100 percent of the land acquired for reservoir purposes has been assigned to power. For multipurpose hydro projects preceding Melton Hill, 42 percent of the cost of reservoir land has been allocated to power. In the cases of Melton Hill, Tellico, Nickajack, and Tims Ford, the power proportion is 35 percent, 21 percent, 12 percent, and 6 percent, respectively, with the exception of the downstream flowage rights accompanying Tims Ford Reservoir, which have been assigned 100 percent to power.

Section 13 of the TVA Act also notes that TVA is required to make direct payments to counties in an amount equal to the two-year average of county ad valorem property taxes (including taxes levied by taxing districts within the respective counties) upon power property and reservoir lands allocable to power. The two-year average payment amount is typically calculated based upon the last two years during which the property was privately owned and operated. All direct payments made to counties within a state will be deducted from the payment otherwise due to the state under the provisions of the TVA Act.

Section 15d(g) of the TVA Act provides that the payment under Section 13 due to a state where a power generating or related facility operated by TVA under a lease or lease-purchase agreement ("Leased Facility") is located shall be reduced by the amount which is determined or estimated by the Board to result from holding the Leased Facility or from selling electric energy generated from the Leased Facility to the extent that taxes or tax equivalents are paid by the owners (or others) on account of the Leased Facility. All direct payments made to counties

within a state under Section 15d(g) will be deducted from the payment otherwise due to the state under the provisions of the TVA Act.

After payments are calculated and allocated to the applicable counties, the remaining portion of the tax equivalent payments allocated to each state are distributed to the state by TVA in equal monthly installments. Each state then distributes its tax equivalent payments based upon the individual state's distribution methodology, as dictated by state legislation. TVA has no direct participation in the allocation or distribution of the overall state payments.

Calculation Details

The aggregate final payments for fiscal year 2023 were approximately \$611 million. The total payments were distributed among the eight state governments and their counties as shown below.

Final Fiscal Year 2023								
State	State Allocations	County Direct Payments	Payments Related to Leases	Total Payments				
Alabama	\$ 97,772,163	\$ 42,961	-	\$ 97,815,124				
Georgia	10,054,093	54,182	-	10,108,275				
Illinois	369,347	58,193	-	427,540				
Kentucky	39,583,144	422,417	-	40,005,561				
Mississippi	28,487,256	17,346,741	1,317,596	47,151,593				
North Carolina	3,932,267	7,212	-	3,939,479				
Tennessee	406,668,904	3,372,832	-	410,041,736				
Virginia	1,281,330	1,291	-	1,282,621				
Total	\$ 588,148,504	\$ 21,305,829	\$ 1,317,596	\$ 610,771,929				

During fiscal year 2023, direct ad valorem payments to counties of approximately \$21.3 million will be paid on power property purchased and operated by TVA and on that portion of land acquired for reservoir purposes allocated or estimated to be allocable to power. In addition, the payment to the State of Mississippi in fiscal year 2023 was offset by approximately \$1.3 million, which represents a portion of the tax payments associated with a facility that TVA leases in Lowndes County, Mississippi.

Recommended Board Actions

1. Finalization of Tax Equivalent Payments for Fiscal Year 2023

On July 28, 2022, the Board authorized monthly payments during fiscal year 2023 at 98 percent of one-twelfth of the estimated allocation to each state. The states have received equal monthly payments at this rate beginning in October 2022. The Proposed Board Resolution would ensure that the total amount of the payments that the states receive in fiscal year 2023 conform to the total amount payable, as calculated based upon audited financial data.

2. Estimation of Tax Equivalent Payments for Fiscal Year 2024

The Proposed Board Resolution would authorize TVA to make estimated payments in fiscal year 2024 in accordance with established procedures until the Board makes a final determination of the amounts due for fiscal year 2024. The estimated payments for fiscal year 2024 will be based on 98 percent of the estimated annual payments to states for fiscal year 2024 (to allow for accounting adjustments) and 100 percent of the estimated annual payments to counties for fiscal year 2024, subject to such adjustments during the fiscal year as may be necessary to make the respective sums of the payments conform to the total amounts finally determined to be payable for fiscal year 2024.

Attachment 7

Report on Fiscal Year 2023 Final Payments Under Section 13 of the TVA Act

TENNESSEE VALLEY AUTHORITY

Payments to Individual Counties-Year Ending September 30, 2023

Schedule 5 Final

		Annual	Kentucky		Annual	Mississippi		Annual	Tennessee		Annual	Tennessee		Annual	Tennessee		Annual
Alabama		Amount	(Cont.)		Amount	(Cont.)		Amount	(Cont.)		Amount	(Cont.)		Amount	(Cont.)		Amount
Cherokee	s	313	Fulton	s	834	Noxubee	\$	498	Cocke	s	6.826 *	Lincoln		2.794 *	Van Buren	s	10.393
Colbert	٠	3.594 *	Graves	•	3.457	Oktibbeha	Φ	2.484	Coffee	Φ	2,063	Loudon	*	19.859 *	Warren	٩	37.011 *
DeKalb		1.181 *	Harlan		2,437	Prentiss		1,282	Crockett		180	Madison		1,539	Washington		5.864 *
Franklin		685	Henderson		168	Tippah		430	Davidson		10,047	Marion		67,041 *	Wayne		18,761 *
Jackson		9.278 *	Hickman		709	Tishomingo		2,466	Decatur		9,355	Marshall		6,945	Weakley		524,299
Lauderdale		5.585 *	Livingston		383	Union		203	DeKalb		107	Maury		9,360	White		31,835
Lawrence		2,909 *	Logan		5.737 *	Webster		717 *	Dickson		1,357	McMinn		35,704 *	Williamson		5,128
Limestone		4.119 *	Lyon		523	Winston		1,465	Dyer		207	McNairy		2,506	Wilson		7,058
Madison		5.618 *	Marshall		389,613 *	Yalobusha		8	Fayette		119	Meigs		4,566 *	Total	s	3,372,832
Marshall		6,262 *	McCracken		1,683 *	Total	s -	17,346,741	Franklin		10,215 *	Monroe		29,638 *		-	-1-1-1
Morgan		3,417 *	Simpson		460		_		Gibson		106	Montgomery		763	Virginia		
Total	s	42,961	Todd		3,798	North Carolina			Giles		2,142	Moore		2,190 *	Washington	- \$	1,291 *
			Trigg		1,087	Avery	- \$	297	Grainger		5,629 *	Morgan		24 *	Total	\$	1,291
Georgia			Union		3,428 *	Cherokee		1,644 *	Greene		14,775	Obion		185			
Fannin	\$	53,093	Warren		3,471	Clay		985 *	Grundy		2,202	Perry		3,562 *	GRAND TOTAL:		
Towns		438 *	Webster		608	Graham		494 *	Hamblen		2,556 *	Polk		111,173 *			
Union		237 *	Total	\$	422,417	Swain		3,792 *	Hamilton		1,203,390 *	Putnam		1,070	150 Counties	\$	21,305,829
Walker		414				Total	\$	7,212	Hancock		140	Rhea		6,349 *			
Total	\$	54,182					_		Hardin		4,083 *	Roane		68,322 *			
			Mississippi			Tennessee			Hawkins		4,566 *	Robertson		686			
Illinois			Alcorn	\$	4,198	Anderson	\$	33,349 *	Haywood		381,504	Rutherford		15,233			
Franklin	\$	49,272	Benton		3,761,298	Bedford		5,526	Henderson		364 *	Scott		90			
Hamilton		8,921	Chickasaw		1,409	Benton		7,320 *	Henry		4,673 *	Sequatchie		3,021			
Total	\$	58,193	Choctaw		5,013,996	Bledsoe		15,985	Hickman		12,805	Sevier		8,963 *			
			Clay		3,959	Blount		13,279 *	Houston		1,046 *	Shelby		38,739			
Kentucky	_		Desoto		8,490,664	Bradley		30,181 *	Humphreys		11,244 *	Smith		2,498			
Allen	\$	25	Itawamba		158	Campbell		13,388 *	Jefferson		13,297 *	Stewart		1,749 *			
Barren		9	Lee		4,782	Cannon		7,175	Johnson		2,430 *	Sullivan		5,905 *			
Bell		139	Lowndes		53,901	Carroll		12 *	Knox		390,741 *	Sumner		3,551			
Caldwell		153	Marshall		47	Carter		30,813 *	Lauderdale		1,041	Tipton		1,486			
Calloway		3,716 *	Monroe		1,769	Cheatham		1,108	Lawrence		2,290	Unicoi		493 *			
Christian		2,414	Neshoba		1,006	Claiborne		1,976 *	Lewis		10,275	Union		4,595 *			

*Includes reservoir land.

Attachment 8

August 18, 2023 Financial Services

Board of Directors

SUBJECT

The Executive Vice President and Chief Financial and Strategy Officer (CFSO) recommends that the Board authorize TVA to issue power bonds and enter into other financing arrangements in an aggregate amount not to exceed \$4,000,000,000 during fiscal year 2024 by approving:

- A proposed supplemental resolution authorizing the issuance of up to \$4,000,000,000 in power bonds in fiscal year 2024 (Resolution #1),
- Proposed Board resolutions that would, after completion of the steps described in the Oversight Reports section of this memorandum:
 - ✓ Approve the amendment of any previously issued supplemental resolution to permit the issuance of an additional installment of power bonds under such supplemental resolution (Resolution #2),
 - ✓ Authorize senior TVA officers to issue power bonds and to hedge interest rate risk and currency exchange rate risk associated with the issuance of such power bonds (Resolution #3), and
 - ✓ Authorize senior TVA officers to enter into other financing arrangements and to hedge interest rate risk and currency exchange rate risk associated with such other financing arrangements (Resolution #4).

BACKGROUND

To support the financing of its power program, TVA regularly issues long-term power bonds. From time to time, in order to provide optimal flexibility in the management of its financing program, TVA also enters into other financing arrangements. TVA anticipates issuing power bonds and entering into other financing arrangements in an aggregate amount of up to \$4,000,000,000 during fiscal year 2024. The proceeds from these transactions would be used for power system purposes, such as meeting funding needs for new capital expenditures and refinancing existing debt.

Board approval of the issuance of power bonds is required by the Basic Tennessee Valley Authority Power Bond Resolution. The power bonds may be issued as a new series of power bonds or as an additional installment to a previously issued series of power bonds.

In addition to issuing power bonds, TVA may enter into other financing arrangements in order to provide optimal flexibility in the management of TVA's power program. These other financing arrangements may include, but are not limited to, lease and lease-purchase agreements

Board of Directors Page 2 August 18, 2023

involving new generation facilities or new assets that are substantially related to existing facilities. Because developing and executing other financing arrangements can involve significant periods of time, TVA may not complete all of these arrangements by the end of the fiscal year in which they were initiated; however, as long as all of the steps described in the Oversight Reports section of this memorandum have been completed with respect to an arrangement by September 30, 2024, TVA may complete such an arrangement after September 30, 2024.

The related resolution provides additional details regarding the various types of other financing transactions that TVA could consider and is designed to be broad enough to provide TVA the flexibility to enter into the various types of other financing transactions as needed from time to time, and yet specific enough to clearly authorize the many various arrangements that TVA would need to enter into to complete such transactions.

Under certain conditions, TVA may elect to hedge interest rate risk or currency exchange rate risk associated with the issuance of power bonds or the execution of other financing arrangements. These hedges would be entered into during fiscal year 2024 but may be utilized in connection with transactions that are completed after fiscal year 2024.

ALTERNATIVES CONSIDERED

Board approval for power bond issuances and other financing arrangements could be obtained on a case-by-case basis or in the recommended shelf format that covers TVA's expected needs through the end of fiscal year 2024. Periods of up to three months typically elapse between Board meetings, and financial markets can be volatile. The shelf format provides the flexibility for TVA to issue power bonds and enter into other financing arrangements when financial market conditions are favorable for TVA.

RECOMMENDED ACTION AND POTENTIAL IMPACTS

The CFSO is asking the Board to approve this memorandum's four companion resolutions.

OVERSIGHT REPORTS

Notification of the Audit, Finance, Risk, and Cybersecurity Committee (or successor committee), as well as the agreement of both the Chief Executive Officer and CFSO, would be obtained for the issuance of new power bonds, the issuance of an additional installment of existing power bonds, the execution of other financing arrangements, or the execution of interest rate or currency exchange rate hedges in connection with the issuance of power bonds or the execution of other financing arrangements.

Board of Directors Page 3 August 18, 2023

SPECIAL CONSIDERATIONS

The total amount of bonds and other financing arrangements that TVA can collectively issue or enter into under the four companion resolutions is limited to \$4,000,000,000.

John M. Thomas, III
Executive Vice President and

Chief Financial and Strategy Officer

Attachments

Resolution #1

PROPOSED SUPPLEMENTAL RESOLUTION

(FY 24 Financial Shelf – Issuance of up to \$4,000,000,000 of Tennessee Valley Authority Power Bonds)

BE IT RESOLVED by the Board of Directors of the Tennessee Valley Authority (the "Corporation") as follows:

ARTICLE I

AUTHORITY, DEFINITIONS, AND STATUS

SECTION 1.1. <u>Authority</u>. This Supplemental Resolution is adopted, and the Bonds to be issued hereunder are authorized, pursuant to the provisions of (a) the Tennessee Valley Authority Act of 1933, as amended, and (b) the Basic Tennessee Valley Authority Power Bond Resolution adopted by the Corporation on October 6, 1960, as amended by an Amendatory Resolution on September 28, 1976, and by the Second Amendatory Resolution and the Third Amendatory Resolution on October 17, 1989, and by the Fourth Amendatory Resolution on March 25, 1992 (as so amended, the "Resolution").

The Bonds issued pursuant to this Supplemental Resolution may be issued as Book-Entry Bonds in accordance with the Book-Entry Procedures and a Fiscal Agency Agreement (the "Fiscal Agency Agreement") dated as of October 7, 1997, as may be amended from time to time, between the Corporation and the Federal Reserve Banks, as fiscal agents (together, the "Fiscal Agent"), or such Bonds may be issued as Certificated Bonds, and such Certificated Bonds shall be executed on behalf of TVA by a Designated Officer (as defined in Section 2.2 of this Supplemental Resolution)—or such officer's duly authorized representative—whose signature may be manual or facsimile.

SECTION 1.2. <u>Definitions</u>. All terms which are defined in the Resolution shall have the same meanings in this Supplemental Resolution. The term "New Power Bonds" shall mean the Bonds authorized by this Supplemental Resolution.

SECTION 1.3. <u>Supplemental Resolution to Constitute a Contract</u>. In consideration of the purchase and acceptance of the New Power Bonds by those who shall hold them from time to time, this Supplemental Resolution, including all terms and conditions set out in the Officer's Certificate as described in Section 2.1 below, shall constitute a contract between them and the Corporation. The covenants and agreements of the Corporation contained in this Supplemental Resolution shall be for the equal benefit, protection, and security of all holders of New Power Bonds.

ARTICLE II

AUTHORIZATION OF NEW POWER BONDS

SECTION 2.1. <u>Principal Amount, Establishment of Terms</u>. There is hereby authorized for the purpose of providing capital for the Corporation in order to assist in financing the Corporation's Power Program (including refunding of Evidences of Indebtedness issued for such purposes) one or more series of New Power Bonds in the aggregate principal amount of up to \$4,000,000,000. That amount may be reduced by the sum of (a) the amount of other power financings commenced during fiscal year 2024 as described in the resolution of the Board of Directors of the Corporation ("Board") entitled "FY 24 Financial Shelf - Execution of Other Financing Arrangements," and (b) the amount of power bonds issued under the resolution of the Board entitled "FY 24 Financial Shelf – Reopening of Existing Power Bonds."

The New Power Bonds must be issued on or before September 30, 2024, and may be (a) issued as Book-Entry Bonds (in which case the Book-Entry Procedures shall be applicable thereto) or (b) issued as Certificated Bonds. The terms and conditions of the New Power Bonds of each series shall be established in accordance with the provisions of Section 2.2 of this Supplemental Resolution and set forth in an Officer's Certificate, prior to the issuance of New Power Bonds of each series. Such terms and conditions of the New Power Bonds of each series, subject to any limitation set out in this Supplemental Resolution, may include:

- (a) the title of the New Power Bonds of such series (which shall distinguish the New Power Bonds of such series from Bonds of all other series);
- (b) the aggregate principal amount of the New Power Bonds of such series which may be issued and delivered pursuant to this Supplemental Resolution;
- (c) the date or dates on which the principal of the New Power Bonds of such series is payable;
- (d) the rate or rates at which the New Power Bonds of such series shall bear interest or the method by which such rate or rates shall be determined, whether the rate shall be fixed or floating, the date from which such interest shall accrue, and the interest payment dates on which such interest shall be payable;
- (e) the currency in which the New Power Bonds of such series shall be denominated;
- (f) in the case of Certificated Bonds, designation of any paying agent, listing agent, or transfer agent therefore (which may be the Corporation);
- (g) in the case of Certificated Bonds, the form and method of issuance and transfer of any New Power Bonds of such series;
- (h) in the case of Certificated Bonds, the designation of a depository for the New Power Bonds of such series;

- (i) designation of the New Power Bonds of such series as Book-Entry Bonds or Certificated Bonds;
- (j) the period or periods within which, the price or prices at which, and the terms and conditions upon which New Power Bonds of such series may be redeemed at the option of the Corporation; and
- (k) any other terms or conditions of such series (which terms and conditions shall not be inconsistent with the provisions of the Resolution or this Supplemental Resolution).

All New Power Bonds of any one series shall be substantially identical except as to denomination and except as may otherwise be provided in or pursuant to this Supplemental Resolution and set forth in such Officer's Certificate.

The terms and conditions of each series of New Power Bonds shall be established as provided in Section 2.2 of this Supplemental Resolution. In the case of Certificated Bonds, the New Power Bonds of such series shall be substantially in the form established by the Designated Officer in the Officer's Certificate.

SECTION 2.2. Designated Officers.

- (a) The terms and conditions of each series of New Power Bonds shall be established by a designated officer of the Corporation (the "Designated Officer") appointed by this Supplemental Resolution and shall be set forth in an Officer's Certificate executed by the Designated Officer.
- (b) The Designated Officers are the Chief Financial and Strategy Officer and the Treasurer of the Corporation. Either of the Designated Officers is authorized to exercise any of the power and authority delegated herein to the Designated Officers.
- (c) A Designated Officer may at any time on or prior to September 30, 2024, specify and determine the terms and conditions of the New Power Bonds of one or more series to be issued under this Supplemental Resolution and the terms and conditions of the sale of such New Power Bonds as permitted to be specified in Section 2.1 of this Supplemental Resolution, provided that:
 - (i) the aggregate principal amount of all New Power Bonds of all series issued hereunder on or prior to September 30, 2024, shall not exceed the amount authorized by this Supplemental Resolution (including any New Power Bonds of any series issued in future installments pursuant to Section 2.3 of this Supplemental Resolution);
 - (ii) the Maturity Date (the date on which the principal and any accrued and unpaid interest shall be due on any such series of Bonds issued hereunder) of the New Power Bonds of each series shall not be more than 50 years from the date of issuance thereof; and

(iii) the maximum effective interest cost on the New Power Bonds of each series having fixed interest rates shall not exceed 10 percent per annum, and the sale price of the New Power Bonds of each series shall not be less than 90 percent of the principal amount.

(d) The Designated Officers are authorized, separately or jointly, in the name and on behalf of the Corporation, to take any and all such actions and to do, or authorize to be done, all such things as the Designated Officers may deem necessary or appropriate to effectuate the issuance and sale of New Power Bonds under this Supplemental Resolution including, but not limited to, amending this Supplemental Resolution for the purpose of issuing a future installment of New Power Bonds as set forth in Section 2.3 hereof.

SECTION 2.3. New Power Bonds Issuable in Installments. Notwithstanding any limitations established pursuant to Sections 2.1 and 2.2 of this Supplemental Resolution relating to the aggregate principal amount of any series of New Power Bonds or the date by which New Power Bonds must be issued, New Power Bonds of each series may be issued in one or more future installments of such series as determined to be appropriate by a Designated Officer.

If so provided in an amendment to this Supplemental Resolution, the aggregate principal amount of such future installments, together with all series initially issued hereunder, may exceed \$4,000,000,000, and the future installments may be issued after September 30, 2024. For the avoidance of doubt, the amendment to this Supplemental Resolution (a) pursuant to Section 7.2(d) of the Resolution, shall not require the consent of holders of Bonds and (b) if within the then-current authorization of the Board for principal amount and time of issuance, shall not require approval of the Board.

New Power Bonds of any series issued in future installments shall be identical in all respects with New Power Bonds of such series initially issued pursuant to Sections 2.1 and 2.2 of this Supplemental Resolution (with any appropriate related changes, including changes in the issue date, issue price, and interest commencement date).

SECTION 2.4. <u>Interest, Maturity, and Place of Payment</u>. Payments of principal (and premium, if any) and interest on the New Power Bonds will be made on the applicable payment dates to holders of the New Power Bonds (as described in Section 9.8 of the Resolution), which are holders as of the close of business on the Business Day preceding such payment dates, by credit of the payment amount to holders' accounts at the Federal Reserve Banks in accordance with the Book-Entry Procedures in the case of Book-Entry Bonds, unless otherwise specified in the Officer's Certificate. Such payments for Certificated Bonds shall be made in the manner described in the Officer's Certificate. Interest payable on New Power Bonds of each series shall be computed on the basis of a 360-day year of twelve 30-day months, unless otherwise specified in the Officer's Certificate.

In any case in which an interest payment date, redemption date, or the Maturity Date is not a Business Day, payment of interest or principal (and premium, if any), as the case may be, shall be made on the next succeeding Business Day with the same force and effect as if made on such interest payment date, redemption date, or the Maturity Date, unless otherwise specified in the Officer's Certificate. The term "Business Day" shall mean any day other than (a) a Saturday or Sunday or (b) a day on which banking institutions in New York City are

authorized or required by law or executive order to be closed, unless otherwise specified in the Officer's Certificate.

ARTICLE III

DESCRIPTION OF NEW POWER BONDS

SECTION 3.1. <u>General Description</u>. In the case of Book-Entry Bonds, the New Power Bonds of each series will be issued and maintained and shall be transferable and exchangeable only in accordance with the Book-Entry Procedures on the book-entry system of the Federal Reserve Banks in minimum principal amounts set forth in the Officer's Certificate for such series of New Power Bonds.

In the case of Certificated Bonds, except as otherwise permitted in the Officer's Certificate referred to in Section 2.1 above, the New Power Bonds of each series may be issued, may be maintained, and may be transferable and exchangeable in accordance with the procedures of the depository, if any, named in the Officer's Certificate referred to in Section 2.1 above or as otherwise provided in such Officer's Certificate.

The New Power Bonds of each series will not be obligations of, nor will payment of the principal thereof or interest thereon be guaranteed by, the United States of America. Such principal and interest will be payable solely from the Corporation's Net Power Proceeds.

SECTION 3.2. <u>Holders of New Power Bonds</u>. In the case of Book-Entry Bonds, the New Power Bonds of each series may be held of record only by depository institutions (as such term is defined in the Book-Entry Procedures). In the case of Certificated Bonds, the New Power Bonds of each series may be held of record only by the depository designated in the Officer's Certificate or as otherwise provided in the Officer's Certificate. Such depository entities shall be deemed to be the holders of the New Power Bonds for all purposes of the Resolution and this Supplemental Resolution.

SECTION 3.3. <u>Recital</u>. The New Power Bonds of each series shall be issued, and shall be deemed to contain a recital that they are issued, pursuant to Section 15d of the Act.

SECTION 3.4. <u>Global Securities</u>. In the case of Certificated Bonds, the New Power Bonds of such series may be represented by one or more global securities ("Global Securities") registered in the name of a depository nominee for the accounts of participants. Such Global Security or Securities of each series shall be delivered to such depository (the "Depository"), or a nominee or custodian thereof. Arrangements for any such Global Security or Securities will be as provided for in the Officer's Certificate referred to in Section 2.1 of this Supplemental Resolution.

SECTION 3.5. <u>Certificate of Authentication</u>. In the case of Certificated Bonds, New Power Bonds, including any Global Securities representing such New Power Bonds, shall contain the following certificate of authentication:

This is one of the Tennessee Valley Authority Power Bonds described in the Basic Resolution and is a Tennessee Valley Authority Power Bond authorized by the Supplemental Resolution.

Ву		
	Authorized Officer	

Tennessee Valley Authority

SECTION 3.6. <u>Transfer of New Power Bonds</u>. In the case of Certificated Bonds, the New Power Bonds of such series issued may be transferred in such manner as described in the Officer's Certificate referred to in Section 2.1 of this Supplemental Resolution; provided, however, any such New Power Bonds may be transferred only for registered Certificated Bonds and may not be transferred for coupon Certificated Bonds.

ARTICLE IV

FISCAL AGENT

SECTION 4.1. <u>Designation of Fiscal Agent</u>. In the case of Book-Entry Bonds, the Federal Reserve Banks are hereby designated as Fiscal Agent for the New Power Bonds of each series, subject to all the provisions of the Book-Entry Procedures, the Resolution, and this Supplemental Resolution.

ARTICLE V

PUBLIC LAW NO. 105-62

SECTION 5.1. <u>Public Law No. 105-62</u>. Each holder of the New Power Bonds of each series, by such holder's acceptance thereof, shall thereby acknowledge and accept that, notwithstanding any language in the Resolution, any action that the Corporation may take pursuant to the paragraph captioned "TENNESSEE VALLEY AUTHORITY" in Title IV of the Energy and Water Development Appropriations Act, 1998, Pub. L. No. 105-62, 111 Stat. 1320, 1338 (1997) (such paragraph being hereinafter referred to as the "Appropriations Act Paragraph"), including, but not limited to, any use of revenues by the Corporation from its Power Program for "essential stewardship activities," as such term is used in the Appropriations Act Paragraph, shall not be considered an Event of Default or breach of any provision of the Resolution. The Appropriations Act Paragraph states:

For the purpose of carrying out the provisions of the Tennessee Valley Authority Act of 1933, as amended (16 U.S.C. ch. 12A), including hire, maintenance, and operation of aircraft, and purchase and hire of passenger motor vehicles, \$70,000,000, to remain available until expended, of which \$6,900,000 shall be available for operation, maintenance, surveillance, and improvement of Land Between the Lakes; and for essential stewardship activities for which appropriations were provided to the Tennessee Valley Authority in Public Law 104-206, such sums as are necessary in fiscal year 1999 and thereafter, to be derived only from one or more of the following sources: nonpower fund balances and collections; investment returns of the nonpower program; applied programmatic savings in the power and nonpower programs; savings from the suspension of bonuses and awards; savings from reductions in memberships and contributions; increases in collections resulting from nonpower activities, including user fees; or increases in charges to private and public utilities both investor and cooperatively owned, as well as to direct load customers: Provided, That such funds are available to fund the stewardship activities under this paragraph, notwithstanding sections 11, 14, 15, 29, or other provisions of the Tennessee Valley Authority Act, as amended, or provisions of the TVA power bond covenants: Provided further, That the savings from, and revenue adjustments to the TVA budget in fiscal year 1999 and thereafter shall be sufficient to fund the aforementioned stewardship activities such that the net spending authority and resulting outlays for these activities shall not exceed \$0 in fiscal year 1999 and thereafter.

Resolution #2

PROPOSED BOARD RESOLUTION

(FY 24 Financial Shelf - Reopening of Existing Power Bonds)

RESOLVED, That the Board of Directors hereby approves the amendment of any previously issued Supplemental Resolution and any related resolutions to permit the potential issuance during fiscal year 2024 of an additional installment of power bonds under such previously issued Supplemental Resolution and hereby authorizes the Chief Financial and Strategy Officer and the Treasurer, separately or jointly, to execute any such amendments, as long as (1) (a) the Audit, Finance, Risk, and Cybersecurity Committee (or successor committee) is notified of the issuance of the new power bonds and (b) both the Chief Executive Officer and the Chief Financial and Strategy Officer approve the issuance of such bonds and (2) the amount of new power bonds issued pursuant to this resolution, together with (a) the amount of bonds issued pursuant to the Supplemental Resolution entitled "FY 24 Financial Shelf – Issuance of up to \$4,000,000,000 of Tennessee Valley Authority Power Bonds," and (b) the amount of other power financings commenced during fiscal year 2024 as described in the resolution of the Board of Directors entitled "FY 24 Financial Shelf - Execution of Other Financing Arrangements," shall not exceed \$4,000,000,000.

Resolution #3

PROPOSED BOARD RESOLUTION

(FY 24 Financial Shelf - Issuance of Bonds, Execution of Interest Rate and Currency Exchange Rate Hedges)

RESOLVED, That in connection with the issuance of Tennessee Valley Authority Power Bonds as authorized by the Supplemental Resolution entitled "FY 24 Financial Shelf – Issuance of up to \$4,000,000,000 of Tennessee Valley Authority Power Bonds" (the "Supplemental Resolution"), the Board of Directors hereby authorizes senior TVA officials to take the following actions as long as (1) the Audit, Finance, Risk, and Cybersecurity Committee (or successor committee) is notified of the issuance of the new power bonds and (2) both the Chief Executive Officer and the Chief Financial and Strategy Officer approve the issuance of such bonds:

The Chief Financial and Strategy Officer, the Treasurer, and their respective duly authorized representatives, or any one or more of them, are hereby authorized, individually or jointly, to (1) approve and execute underwriting agreements or subscription agreements with such underwriters or managers and incorporating such terms and conditions (not inconsistent with the Supplemental Resolution) as any such authorized individual may determine to be appropriate; (2) approve and issue invitations for bids for the purchase of bonds, accept and reject bids received, and execute any bond purchase contracts, incorporating such terms and conditions (not inconsistent with the Supplemental Resolution) as any such authorized individual may determine to be appropriate; (3) approve and execute documents for the listing of bonds authorized by the Supplemental Resolution on the New York Stock Exchange and other exchanges as any such authorized individual may determine to be appropriate: (4) in the case of Certificated Bonds, approve arrangements and execute documents for the issuance of bonds through the use of The Depository Trust Company or any other depository that any such authorized individual may determine to be appropriate; (5) approve and execute any agreement with any paying agent, listing agent, global agent, or transfer agent as any such authorized individual may determine to be appropriate; (6) in the case of Certificated Bonds, execute and deliver bonds authorized by the Supplemental Resolution; and (7) approve and sign any offering circulars or any offering circular supplements or amendments as may be utilized in connection with the sale of any bonds authorized by the Supplemental Resolution;

The Chief Financial and Strategy Officer, the Treasurer, and their respective duly authorized representatives, or any one or more of them, are hereby authorized, individually or jointly, to hedge interest rate risk and currency exchange rate risk in connection with the issuance of the Tennessee Valley Authority Power Bonds authorized by the Supplemental Resolution (even if the new bonds are not issued in fiscal year 2024) using swaps, options, futures, or Treasury locks, or any combination of these instruments, as long as (1) these instruments are standard in the industry and (2) prior to using these instruments, (a) the Audit, Finance, Risk, and Cybersecurity Committee (or successor committee) is notified of the use of such instruments and (b) both the Chief Executive Officer and the Chief Financial and Strategy Officer approve using such instruments;

The Chief Financial and Strategy Officer, the Treasurer, the Controller, the General Counsel, and the Director, Commercial Law, and their respective duly authorized representatives, or any one or more of them, are hereby authorized to execute and

deliver, separately or jointly, and under the seal of TVA, or otherwise as may be required, all other such instruments, documents, and certificates, receive and make all such payments, and do all such other acts and things as in their opinion or in the opinion of any of them may be necessary or appropriate in order to complete the issuance of the Tennessee Valley Authority Power Bonds authorized by the Supplemental Resolution and to hedge interest rate risk or currency exchange rate risk associated with the issuance of such power bonds.

Resolution #4

PROPOSED BOARD RESOLUTION

(FY 24 Financial Shelf - Execution of Other Financing Arrangements)

RESOLVED, That the Board of Directors hereby authorizes TVA to enter into other financing arrangements in an amount that, when combined with the power bonds issued under the Supplemental Resolution entitled "FY 24 Financial Shelf – Issuance of up to \$4,000,000,000 of Tennessee Valley Authority Power Bonds," and the power bonds issued under the resolution of the Board of Directors entitled "FY 24 Financial Shelf – Reopening of Existing Power Bonds," does not exceed \$4,000,000,000, as long as on or prior to September 30, 2024, (1) the Audit, Finance, Risk, and Cybersecurity Committee (or successor committee) is notified of the arrangement and (2) both the Chief Executive Officer and the Chief Financial and Strategy Officer approve entering into the arrangement;

RESOLVED further, That such other financing arrangements may include, but are not limited to, lease, lease-leaseback, lease-purchase, power purchase, and similar agreements involving new generation facilities or new assets that are substantially related, as well as electricity prepayments, which arrangements and related authorizations are described in more detail below:

Lease-Purchase Financing Arrangements

The lease-purchase financing arrangements may include, but are not limited to, transactions whereby TVA sells new generation facilities or portions thereof, or new assets that are substantially related to existing facilities, to third-party lessor(s) and TVA leases such assets from such third-party lessor(s) for a term upon the expiration of which such facility or asset may be returned to TVA;

in connection with these arrangements, TVA may also enter into construction agreements pursuant to which TVA may agree to complete construction and start-up and test such facilities or assets for a fixed or capped price, or on a cost, cost-plus, or other basis, and by deadlines to be agreed under such agreements;

the lease-purchase arrangements may also contain terms, conditions, and covenants related to the ownership, operation, and maintenance of such facility or assets as well as events of default and remedies during the term thereof;

such lease-purchase arrangements may also include provisions related to early buyout, end-of-term purchase options, and termination purchase options upon the occurrence of various events at a price that may be pre-determined or may be the fair-market value or other value at such time as TVA may agree;

TVA's rent payments under such lease-purchase arrangements may be fixed or variable and may be in amounts sufficient to cover any debt service or equity returns of such third-party lessor(s); and

such lease-purchase arrangements may contain such other terms and conditions as may be appropriate for such transactions at such time;

Lease, Lease-Lease, and Sale-Lease Financing Arrangements

The lease, lease-lease, and sale-lease financing arrangements may include, but are not limited to, transactions whereby TVA leases or sells a generation facility or portion thereof, or new assets that are substantially related to existing facilities, to third-party lessor(s) for value and leases such facilities or assets from such lessor(s) for a term that may be for a period less than the expected useful life of the facility or asset;

in connection with these arrangements, TVA may also enter into construction agreements pursuant to which TVA may agree to complete construction and start-up and test such facilities or assets for a fixed or capped price, or on a cost, cost-plus, or other basis, and by deadlines to be agreed under such agreements;

such arrangements may contain terms, conditions, and covenants related to the ownership, operation, and maintenance of such facility or assets as well as events of default and remedies;

such arrangements may also include provisions related to early buyout, end-of-term purchase options, and termination purchase options upon the occurrence of various events at a price that may be pre-determined or may be the fair-market value or other value at such time as TVA may agree;

TVA may agree under such arrangements to pay periodic rent and any payments related to the repurchase of the facility or asset and other amounts as may be provided therein; and

such arrangements may contain such other terms and conditions as may be appropriate for such transactions at such time;

Power Purchase Arrangements

The power purchase arrangements may include, but are not limited to, transactions whereby TVA sells new generation facilities or portions thereof to a third party, which facilities or portions thereof may be constructed by TVA or by third parties, including sales of in-service facilities pursuant to options granted during construction or operation, or assists in developing new generation facilities, and TVA purchases the output thereof on terms that may require TVA to make fixed or variable payments, which payments may be based on cost of service or otherwise, and may be payable without regard to whether such facilities are completed, operating, or operable;

in connection with these arrangements, TVA may also enter into construction agreements pursuant to which TVA may agree to complete construction and start-up and test such facilities or assets for a fixed or capped price, or on a cost, cost-plus, or other basis, and by deadlines to be agreed under such agreements;

such power purchase arrangements may also contain terms, conditions, and covenants related to the ownership, operation, and maintenance of such facility or assets as well as events of default and remedies;

such power purchase arrangements may also include provisions related to early buyout, end-of-term purchase options, and termination purchase options upon the occurrence of

various events at a price that may be pre-determined or may be the fair-market value or other value at such time as TVA may agree; and

such power purchase arrangements may be executed in combination with other financing arrangements;

Electricity Prepayments

The electricity prepayments may include, but are not limited to, transactions whereby customers of TVA power prepay TVA for certain electricity costs in exchange for reductions in the price that the customers pay TVA for electricity in the future, which reductions may be reflected as a credit or a discount on the customers' bill or otherwise and may be in amounts and for periods of time as agreed upon by TVA and the customers;

in connection with these arrangements, TVA may enter into commitment agreements, amend power contracts, and enter into other appropriate contractual arrangements; and

such arrangements may contain such terms and conditions as may be appropriate for such transactions at such time;

RESOLVED further, That the Board of Directors believes it is desirable for TVA to have the flexibility to enter into other financing arrangements, and that, subject to the other provisions of this resolution, the grant by the Board of Directors of authority for TVA to enter into other financing transactions should be construed broadly to permit TVA to enter into the other financing transactions in amounts and as described in this resolution or any similar transactions (including master financing facilities utilizing any one or more of these other financing arrangements) on such terms and conditions as market conditions dictate at the time of such financings;

RESOLVED further, That the Chief Financial and Strategy Officer, the Treasurer, and their respective duly authorized representatives, or any one or more of them, are hereby authorized, individually or jointly, to (1) engage advisors, appraisers, and independent engineers; (2) select equity investors and underwriters; (3) arrange for the listing of any lease debt; (4) approve offering materials; (5) execute term sheets; (6) execute transaction documents; and (7) make applications and filings in connection with the other financing arrangements;

RESOLVED further, That the Chief Financial and Strategy Officer, the Treasurer, and their respective duly authorized representatives, or any one or more of them, are hereby authorized, individually or jointly, to hedge interest rate risk and currency exchange rate risk in connection with entering into the other financing arrangements described above using swaps, options, futures, or Treasury locks, or any combination of these instruments, as long as these instruments are standard in the industry and as long as on or prior to September 30, 2024, (1) the Audit, Finance, Risk, and Cybersecurity Committee (or successor committee) is notified of the hedge and (2) both the Chief Executive Officer and the Chief Financial and Strategy Officer approve entering into the hedge;

RESOLVED further, That the Chief Financial and Strategy Officer, the Treasurer, the Controller, the General Counsel, and the Director, Commercial Law, and their respective duly authorized representatives, or any one or more of them, are hereby authorized to execute and deliver, separately or jointly, and under the seal of TVA, or otherwise as may be required, all other such instruments, documents, and certificates, receive and make all such payments, and do all such

other acts and things as in their opinion or in the opinion of any of them may be necessary or appropriate in order to complete the other financing arrangements and to hedge interest rate risk or currency exchange rate risk associated with such other financing arrangements.