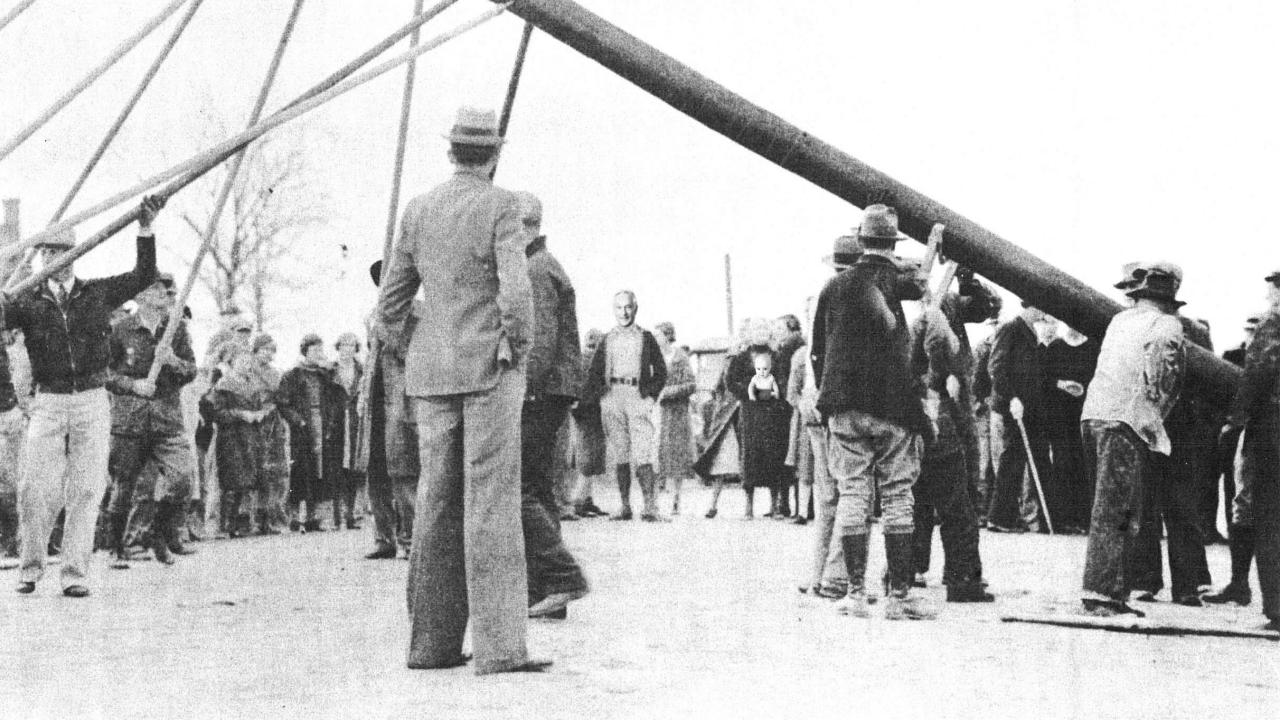


## Board Meeting

August 22, 2024 Florence, Alabama













## Board Meeting

August 22, 2024 Florence, Alabama



### Opening Remarks

Jeff Lyash
President and CEO

August 22, 2024





#### **Dave Flessner**

**Business Editor Chattanooga Times Free Press** 





















## **Energy Efficiency & Demand Response**

Helping families, schools and businesses reduce their energy use and working with businesses and industries to reduce or shift their energy use during periods of high demand.

\$1.5 Billion

**Initiative to offset** 

30% of future load growth





### Opening Remarks

Jeff Lyash
President and CEO

August 22, 2024





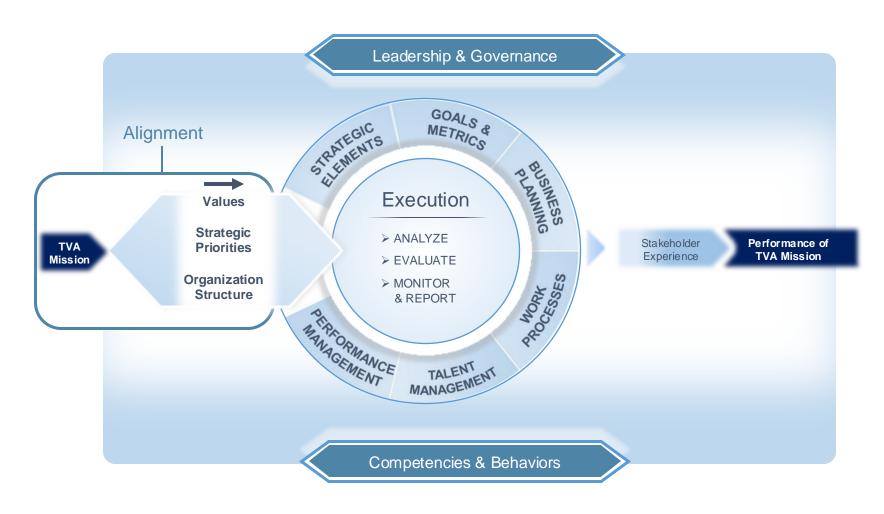
## Board Meeting

August 22, 2024 Florence, Alabama



#### **TVA's Operating Model**

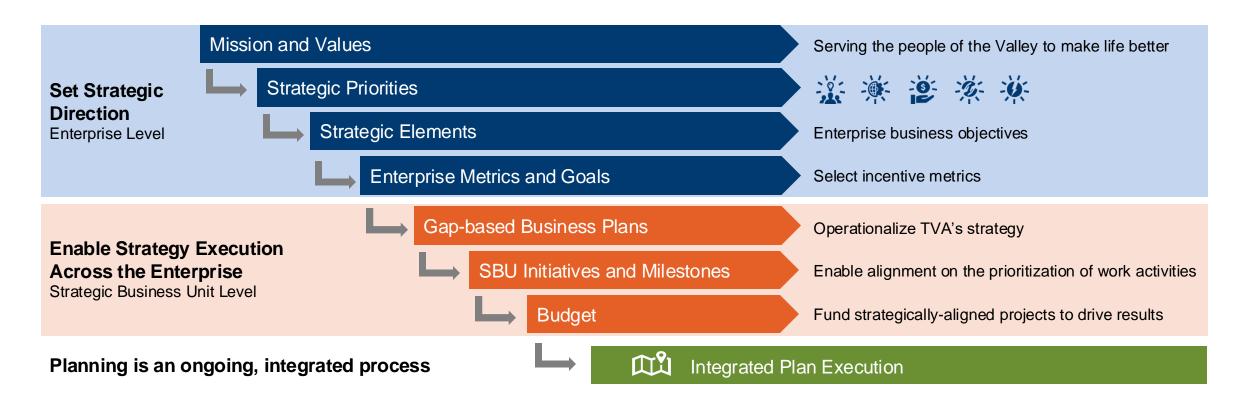
Framework governing TVA's business and operating activities





#### **Integrated Planning Process**

TVA's Integrated Planning Process Ensures Enterprise Alignment with Our Mission and Strategy







## Board Meeting

August 22, 2024 Florence, Alabama



#### **Strategic Elements**



#### People Advantage

Foster a culture that embraces, adapts quickly to, and anticipates changes needed for TVA to excel in the future public power utility marketplace

Support inclusion with diversity efforts to attract and retain the best talent for TVA

Deliver an efficient and agile HR service model that enables enterprise effectiveness

Develop the next generation of TVA leaders



#### Operational Excellence

Nation's top nuclear fleet by 2025

Achieve leading operational performance by managing the generation fleet based on the mission of each asset

- Gas and hydro to top quartile
- · Coal fleet based on end of life

Increase generation and transmission capacity while fostering excellence in project management and construction

Advance TVA's grid capabilities to increase flexibility for future additions and to meet the reliability and resiliency needs of the future

Accelerate the deployment of existing clean technologies including solar, storage, energy efficiency, and demand response



#### Financial Strength

Maintain financial health while funding TVA's energy transition

Ensure sufficient revenues to meet financial commitments (revenue requirements)

Evolve the public power model while incorporating Valley Vision 2035



#### Powerful Partnerships

Build partnerships and community connections to enable solutions

Champion the public power model through the region's energy expansion

Align with our customers and economic development agencies to target industries that are critical to the Valley's long-term success

Responsibly foster excellence in natural resource management and environmental stewardship as we transition to the energy system of the future



#### Igniting Innovation

Advance energy transformation in the Valley through leveraging technology and innovation in all our work

Refine innovation framework to align with TVA's strategic intent

Support the development of new technologies to further accelerate decarbonization and prepare to deploy commercially viable technologies





## Board Meeting

August 22, 2024 Florence, Alabama



# Operations and Nuclear Oversight Committee

Bobby Klein, Chair



## Operations Quarterly Update

Don Moul Executive Vice President & Chief Operating Officer

August 22, 2024



#### **Cheatham County Update**

#### **Completed TVA Activities**

- Notice of Intent
- Public Input on Scoping
- Scoping Report
- Precedent Agreement

#### **In-Progress TVA Activities**

- Transmission Scoping
- Developing Draft
   Environmental Impact
   Statement (EIS) including
   evaluating alternative actions
- Stakeholder Engagement
- Developing Community Benefits Plan

#### **Future TVA Activities**

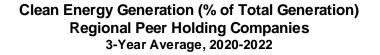
- Procurement Activities (2024)
- Publish Draft EIS & Public Comment Period (late 2025)
- Finalize & Publish EIS (mid 2026)
- Publish Record of Decision (mid/late 2026)

Any actions taken prior to the completion of the National Environmental Policy Act process will not irreversibly and irretrievably commit TVA to a particular course of action prior to a final decision.

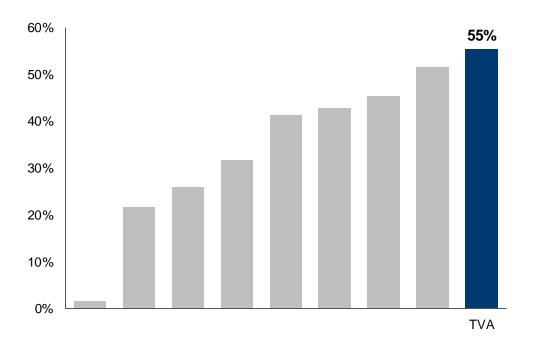


#### **Regional Peer Comparisons**

Net Generation Including Purchased Power

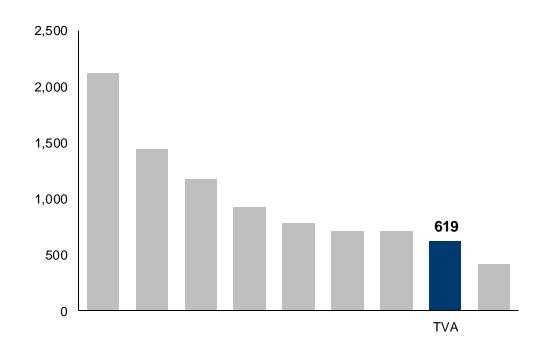






CO<sub>2</sub> Emissions Rate (Lbs/MWh) Regional Peer Holding Companies 3-Year Average, 2020-2022





Source: EEI Electric Company Carbon Emissions and Electricity Mix Reporting Database for Corporate Customers



## Operations Quarterly Update

Don Moul Executive Vice President & Chief Operating Officer

August 22, 2024



# Operations and Nuclear Oversight Committee

Bobby Klein, Chair



## Nuclear Quarterly Update

Tim Rausch
Executive Vice President and Chief Nuclear Officer

August 22, 2024



# Operations and Nuclear Oversight Committee

Bobby Klein, Chair



# Finance, Rates, and Portfolio Committee

Wade White, Chair



### Financial Update

John Thomas
Executive Vice President
Chief Financial & Strategy Officer
Financial Services



#### "Safe Harbor" Statement

This document contains forward-looking statements relating to future events and future performance. All statements other than those that are purely historical may be forward-looking statements. In certain cases, forward-looking statements can be identified by the use of words such as "may," "will," "should," "expect," "anticipate," "believe," "intend," "project," "plan," "predict," "assume," "forecast," "estimate," "objective," "possible," "probably," "likely," "potential," "speculate," the negative of such words, or other similar expressions. Although TVA believes that the assumptions underlying the forward-looking statements are reasonable, TVA does not guarantee the accuracy of these statements. Numerous factors could cause actual results to differ materially from those in the forward-looking statements, and multiple future items may depend on future TVA Board actions beyond today's meeting. For a discussion of these factors, please see the annual, quarterly, and periodic reports that TVA files with the Securities and Exchange Commission. New factors emerge from time to time, and it is not possible for management to predict all such factors or to assess the extent to which any factor or combination of factors may impact TVA's business or cause results to differ materially from those contained in any forward-looking statement. TVA undertakes no obligation to update any forward-looking statement to reflect developments that occur after the statement is made.



### Financial Update

#### **Summary of Financial Results**

For nine months ended June 30, 2024 (compared to prior year)

Lower effective power rate benefiting from system diversity and lower fuel and purchased power costs Higher base rate offset by lower fuel rate

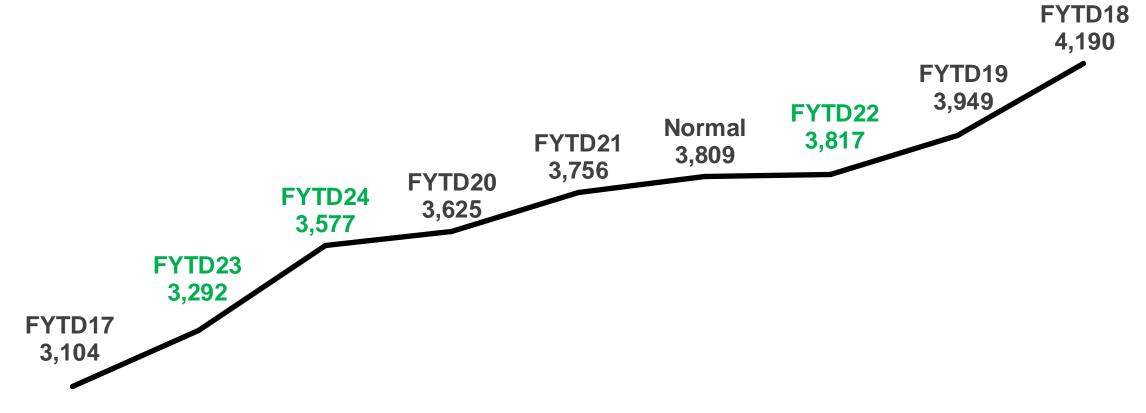
- Higher effective base rates and higher sales volume
- Offset by a 18% decrease in fuel cost recovery revenues

Higher net income from higher operating revenue



#### **Total Degree Days Below Normal**

FYTD weather was 6% below normal and 9% higher than last year



FY17 data has been adjusted to incorporate a change in TVA's current calculation of total degree days



#### **Sales and Revenue**

|  | FYTD24  | FYTD23  | Change | Percent<br>Change |
|--|---------|---------|--------|-------------------|
| Power Sales (GWh)                        | 117,313 | 112,685 | 4,628  | 4.1 %             |
|  |         |         |        |                   |
| Total Operating Revenues (\$ millions)   | \$8,798 | \$8,672 | \$126  | 1.5 %             |
| Base Revenue                             | 6,193   | 5,554   | 639    | 11.5 %            |
| Fuel Cost Recovery                       | 2,455   | 2,988   | (533)  | (17.8)%           |
|  |         |         |        |                   |
| Average Base Rate (¢/kWh)                | 5.3     | 4.9     | 0.4    | 8.2 %             |
| Average Fuel Rate                        | 2.1     | 2.7     | (0.6)  | (22.2)%           |
| Total Effective Rate*                    | 7.4     | 7.6     | (0.2)  | (2.6)%            |
| Calculations may be impacted by rounding |         |         |        |                   |

#### **Weather Normalized FYTD24 Sales vs. Prior FYTD** (% change)

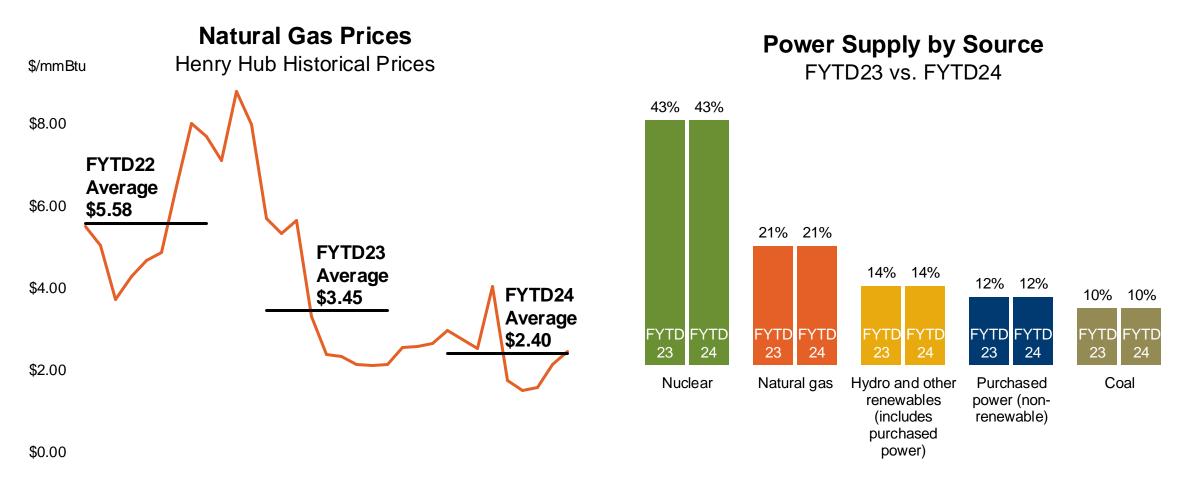




<sup>\*</sup> Excludes other revenue and off-system sales impact; total effective rate numbers based on unrounded base and fuel rates

#### **Power Supply Summary**

Benefiting from a diverse power system and lower fuel costs





#### **Q3 Summary Income Statement**

|                                |    |        | F١ | /TD24  |    | FYTD23              |    |        |                          |       |  |
|--------------------------------|----|--------|----|--------|----|---------------------|----|--------|--------------------------|-------|--|
| \$ million                     |    | Actual | ı  | Budget |    | riance<br>//(Unfav) |    | Actual | '24 v '23<br>Fav/(Unfav) |       |  |
| Base Revenue                   | \$ | 6,193  | \$ | 6,139  | \$ | 54                  | \$ | 5,554  | \$                       | 639   |  |
| Fuel Revenue                   |    | 2,455  |    | 2,565  |    | (110)               |    | 2,988  |                          | (533) |  |
| Other Revenue*                 |    | 150    |    | 128    |    | 22                  |    | 130    |                          | 20    |  |
| <b>Total Operating Revenue</b> | \$ | 8,798  | \$ | 8,832  | \$ | (34)                | \$ | 8,672  | \$                       | 126   |  |
| Fuel & Purchased Power         |    | 2,700  |    | 2,838  |    | 138                 |    | 3,079  |                          | 379   |  |
| Total O&M                      |    | 2,671  |    | 2,679  |    | 8                   |    | 2,546  |                          | (125) |  |
| Taxes, Depreciation, Other     |    | 2,017  |    | 2,177  |    | 160                 |    | 2,162  |                          | 145   |  |
| Interest                       |    | 795    |    | 827    |    | 32                  |    | 794    |                          | (1)   |  |
| Net Income (Loss)              | \$ | 615    | \$ | 311    | \$ | \$ 304              |    | 91     | \$                       | 524   |  |



<sup>\*</sup> Includes off-system sales

#### **Q3 Summary Cash Flow Statement**

| \$ million                               |              | F  | YTD24   |    | FYTD23  |    |         |    |         |  |
|--|--------------|----|---------|----|---------|----|---------|----|---------|--|
| Net Cash Provided by / (Used in)         | Actual       |    | Budget  | Va | ariance |    | Actual  | _  | 4 v '23 |  |
| Operating Activities                     | \$<br>1,939  | \$ | 1,638   | \$ | 301     | \$ | 1,776   | \$ | 163     |  |
| Investing Activities                     | (2,546)      |    | (3,270) |    | 724     |    | (2,233) |    | (313)   |  |
| Financing Activities                     | 607          |    | 1,632   |    | (1,025) |    | 457     |    | 150     |  |
| Net Change in Cash                       | \$<br>-      | \$ | -       | \$ | -       | \$ | -       | \$ | -       |  |
| Beginning Total Financing Obligations    | \$<br>20,525 | \$ | 20,599  | \$ | 74      | \$ | 20,336  | \$ | (189)   |  |
| Change in Debt and Financing Obligations | 642          |    | 1,688   |    | 1,046   |    | 497     |    | (145)   |  |
| Ending Total Financing Obligations       | \$<br>21,167 | \$ | 22,287  | \$ | 1,120   | \$ | 20,833  | \$ | (334)   |  |



#### **Recap of Financial Results**

For nine months ended June 30, 2024 (compared to prior year)

Lower effective power rate for customers

Lower fuel and energy costs offsetting base rate increase FYTD

Higher sales due to weather

Lower operating expenses

Operating cash flow remains strong

Capital plan on track - lower debt than plan due to timing



### FY25 Rate Increase



#### Recommendation

To establish rates at a level sufficient to recover expected costs, it is recommended that the Board approve a 5.25% increase to wholesale base rates for TVA FY25.



#### **Uses of FY24-25 Rate Adjustment Revenue in FY25**

|  | \$ million |
|--|------------|
| Enterprise Cost Optimization Initiative  | 361        |
| Capacity Purchase Power Agreements   | (283)      |
| Power Operations Reliability Investment  | (226)      |
| Interest Expense   | (199)      |
| Pilot and Other  | (151)      |
| Operations Workforce Optimization, Environmental Regulation, and Site Studies  | (125)      |
| Technology: Operational System Upgrades (General Ledger, Human Capital Management, Work Management), Research and Development for Carbon Capture Wells, Energy Storage, and Regional Grid Transformation | (123)      |
| Incremental Energy Efficiency and Demand Response (EEDR)   | (63)       |
| Top Nuclear Fleet Priority   | (55)       |
| Transmission Fleet Strategy  | (47)       |
| Total  | (911)      |

Cost estimates are from FY24 planning cycle.



### FY25 Budget

#### **Purpose and Background**

#### **Purpose**

Action Items. Seek Board approval of wholesale base rate adjustment of 5.25%, and seek Board approval of the following FY25 budget items:

- FY25 Budget
- FY25 Commercial Transactions Contracting Plan
- Final FY24 tax equivalent payments
- Estimated FY25 tax equivalent payments
- Projects over \$200 million
- Acquisition of Land Rights

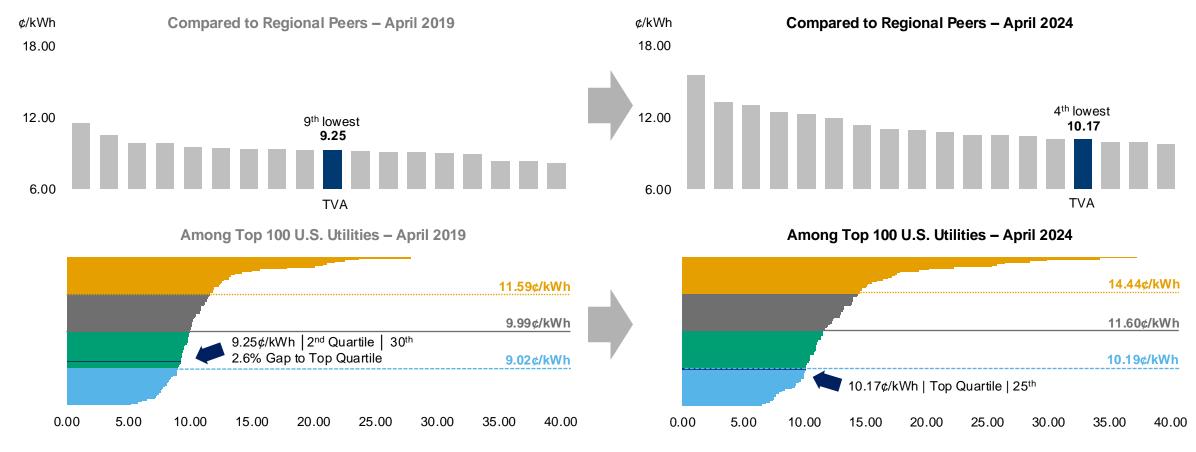
- Long-lead Procurement Contracting Authority
- Financing Shelf for up to \$4.0 billion of longterm bonds and associated resolutions
- Contribution to the Retirement System of \$300 million
- Regulatory Accounting
- Dodd-Frank End-user Exemption
- Retention of the entire margin of net power proceeds

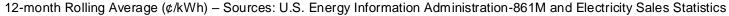
#### **Background**

In the fourth quarter, the Finance, Rates, and Portfolio Committee recommended the above listed items to the full Board for approval leading up to the August Board meeting.



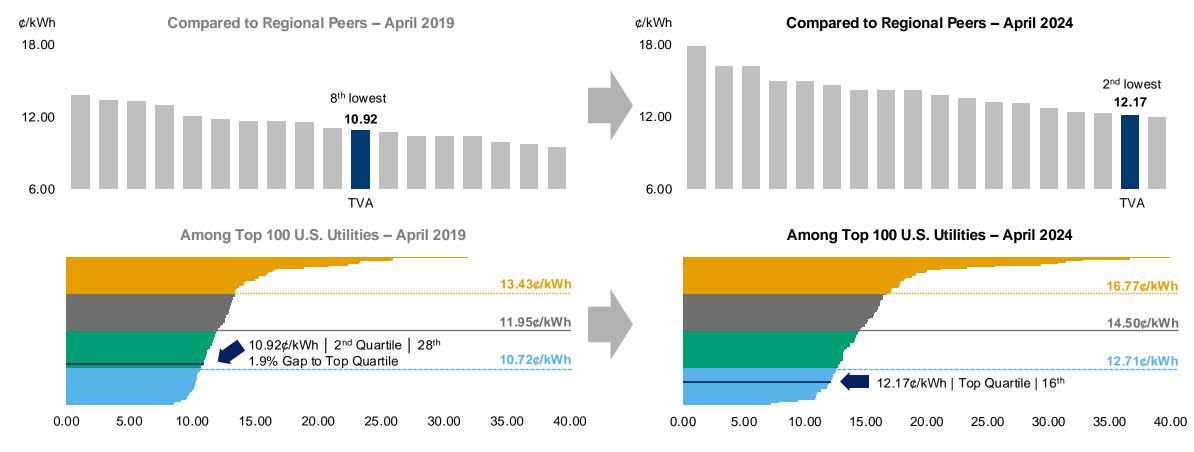
#### **Retail Rate Competitiveness**

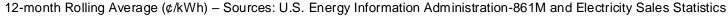






#### **Residential Rate Competitiveness**







#### **Key Planning Assumptions**

Load forecast projecting moderate growth (1.4% CAGR FY24-27, 0.7% 10-year CAGR)

Additional load growth for the foreseeable future will challenge capacity position

Continue optimizing lowest variable cost dispatch and improving plant availability

Acceleration of clean energy evolution

- 4,000 MW of solar and battery storage operating by FY29 (contract nameplate)
- 2,000 GWh of energy savings and 2,900 MW of demand response (DR) capacity by FY29

Cost Optimization designed to save approximately \$950 million from FY24 through FY26

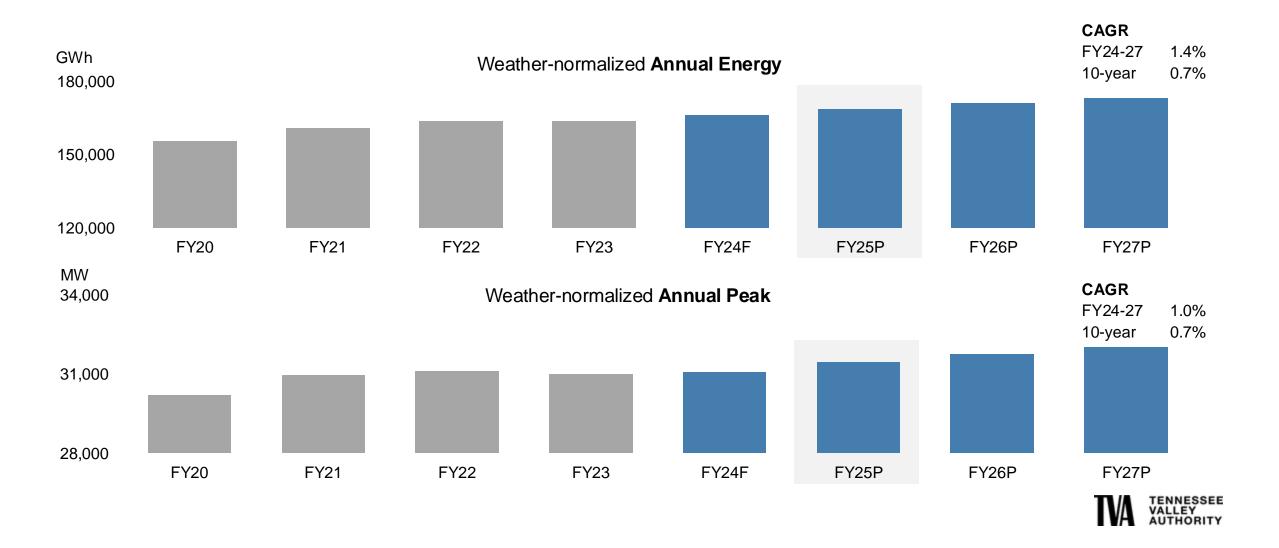
Alternative financing arrangements at Johnsonville Aero and Cumberland Combined Cycle (CC)

Statutory debt targets a maximum figure of \$28 billion

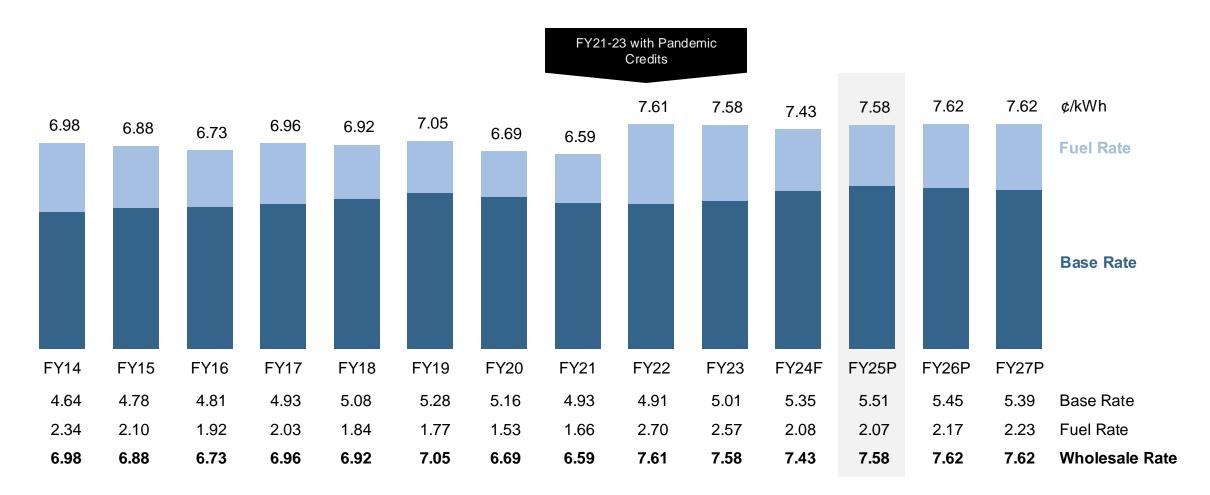
Wholesale base rate adjustment of 5.25% planned for FY25



#### **Energy Sales and Peak Demand**

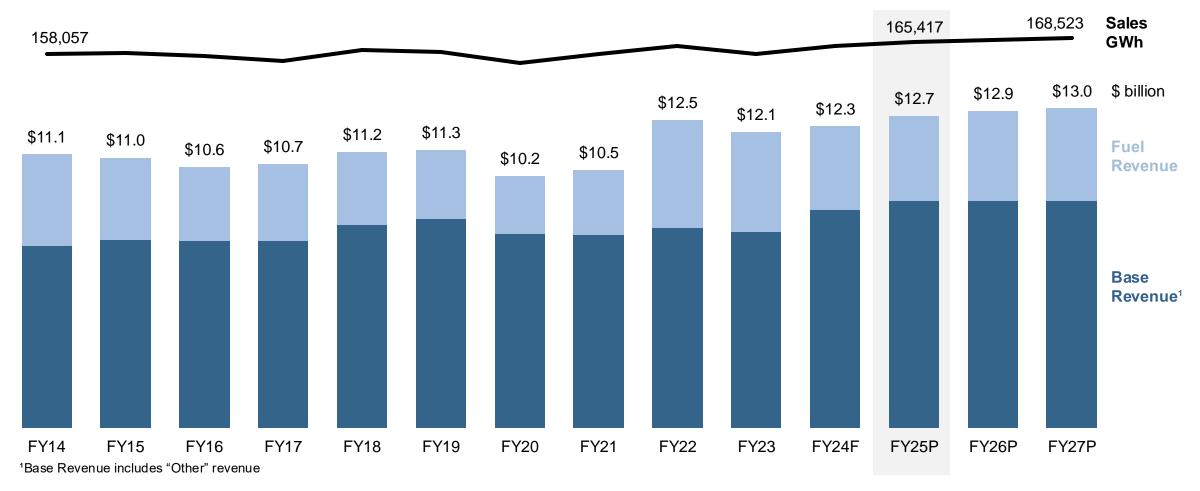


#### **Base and Fuel Rate**



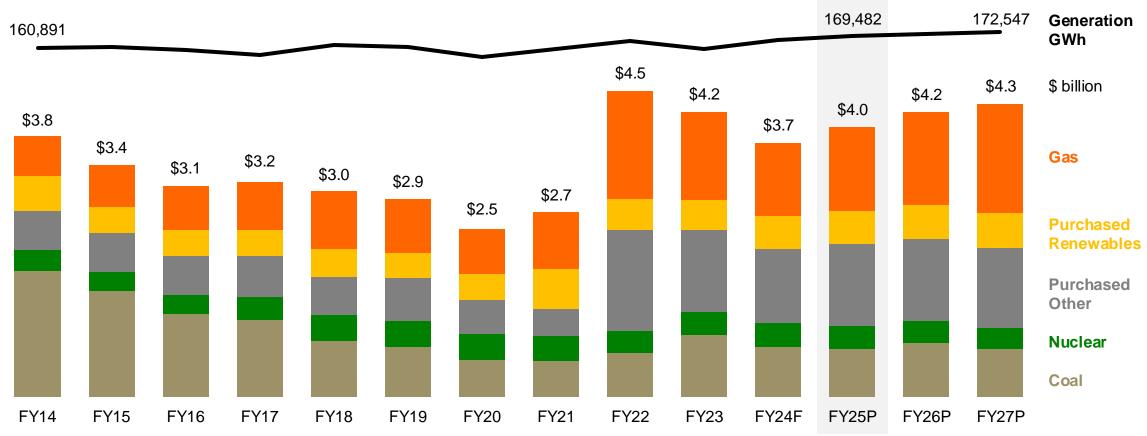


#### **Operating Revenue**





#### **Fuel and Purchased Power**



Totals include fuel cost adjustment (FCA) deferrals and fuel handling costs but exclude reagents. FY24F represents FY24 July FCA, FY25-FY27P represent FY24 June FCA.



#### **Generation Mix and Percent Hedged**

Fuel cost is primarily impacted by volatility of natural gas prices

|   | FY2            | 5P           | FY26           | SP .         | FY27P          |              |  |  |
|---|----------------|--------------|----------------|--------------|----------------|--------------|--|--|
| Fuel  | Generation Mix | Price Hedged | Generation Mix | Price Hedged | Generation Mix | Price Hedged |  |  |
| Hydro   | 7%             | 100%         | 7%             | 100%         | 7%             | 100%         |  |  |
| Nuclear   | 39%            | 100%         | 39%            | 100%         | 39%            | 100%         |  |  |
| Purchased Power                                 | 9%             | 81%          | 9%             | 84%          | 10%            | 85%          |  |  |
| Coal  | 15%            | 59%          | 16%            | 27%          | 14%            | 9%           |  |  |
| Purchased Power - TVA-sourced Fuel <sup>1</sup> | 6%             | 33%          | 5%             | 20%          | 5%             | 13%          |  |  |
| Natural Gas <sup>1</sup>                        | 24%            | 27%          | 23%            | 16%          | 26%            | 9%           |  |  |
| Total/Weighted Average                          | 100%           | 71%          | 100%           | 63%          | 100%           | 58%          |  |  |

Generation mix and hedged percentages subject to change based on commodity price movements and additional fixed price transactions <sup>1</sup>Purchased Power – TVA-sourced Fuel includes tolled generation; Natural Gas includes TVA-owned generation.

Data pulled 04/25/2024



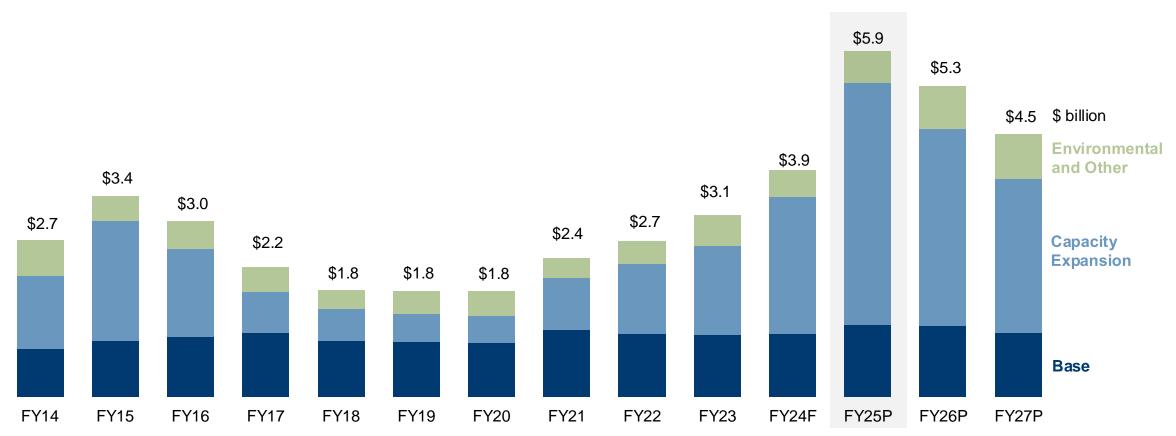
#### **O&M Expense**







#### **Capital Expenditures**



Includes assumptions for potential projects that may have not yet received required internal TVA approvals and are subject to various legal requirements before they may be presented for approval. Totals include ARO and decommissioning costs but exclude nuclear fuel capital expenditures.



#### Capital Projects Specified by Line Item in Budget (New)

#### \$ million

|                     |   | FY24      |        |               |
|---------------------|---|-----------|--------|---------------|
| Capital Expenditure | Project   | and Prior | FY25   | Project Total |
| Capacity Expansion  | Lagoon Creek Combustion Turbines (CT) Expansion | \$0.0     | \$31.0 | \$430.0       |

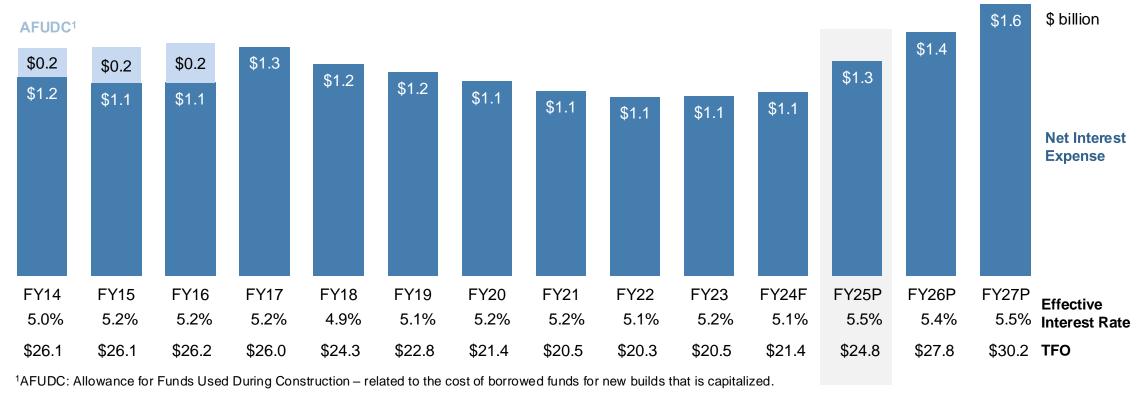


#### **Total Financing Obligations (TFO)**



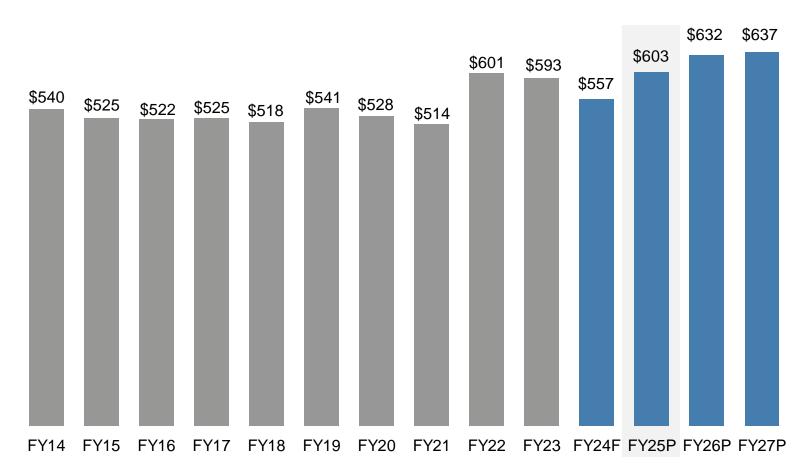


#### **Interest Expense**





#### **Tax Equivalents**



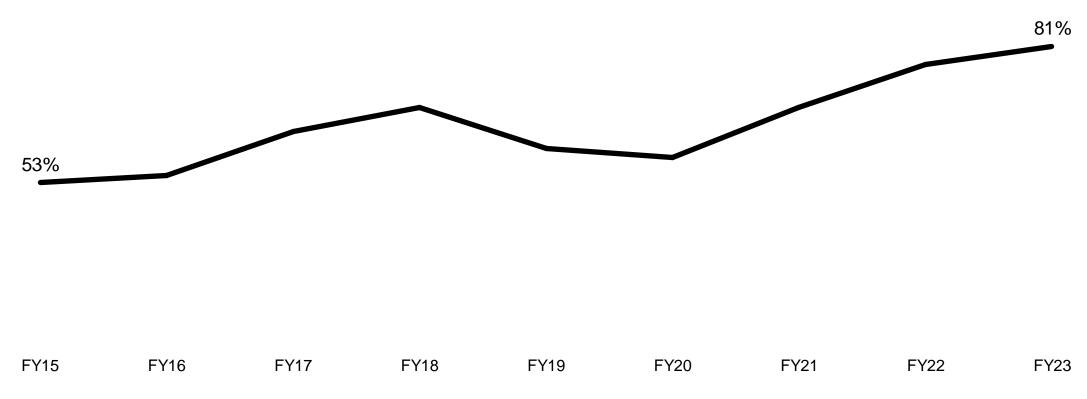
Tax Equivalent – Final Payments by State

| \$ million              | FY23  | FY24  | Delta   |
|-------------------------|-------|-------|---------|
| Tennessee               | \$410 | \$394 | \$ (16) |
| Alabama                 | 98    | 93    | (5)     |
| Mississippi             | 47    | 46    | (1)     |
| Kentucky                | 40    | 40    | -       |
| Georgia                 | 10    | 9     | (1)     |
| North Carolina          | 4     | 4     | -       |
| Virginia                | 1     | 1     | -       |
| Illinois                | 1     | 1     | -       |
| Final Payments          | \$611 | \$588 | \$ (23) |
| Fuel Cost<br>Adjustment | (18)  | (31)  | (13)    |
| Total Expense           | \$593 | \$557 | \$ (36) |



#### **Pension Status Improvement**

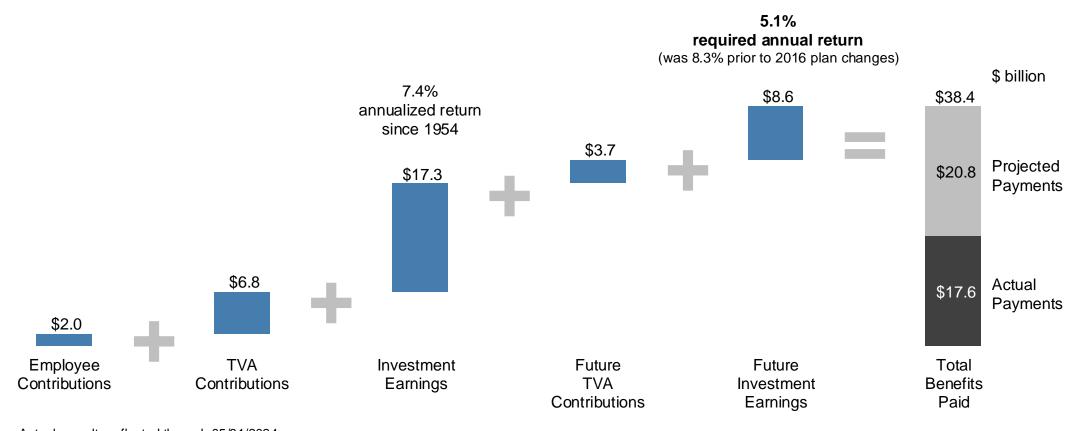
Funded status has improved since FY15 and remains on track to reach 100% by 2036 target date

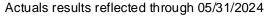




#### **Retirement System Performance**

Historical return levels are not required to meet remaining projected pension payments.







#### **Revenue Requirements**

| \$ million  | FY24F   | FY25P     | FY26P        | FY27P        |
|---|---------|-----------|--------------|--------------|
| Base Revenues   | 8,712   | 8,615     | 8,596        | 8,582        |
| Fuel Revenues   | 3,387   | 3,433     | 3,636        | 3,761        |
| Rate Action Revenues  | -       | 495       | 498          | 500          |
| Total Electric Revenues \$                                      | 12,099  | \$ 12,543 | \$<br>12,730 | \$<br>12,843 |
|   |         |           |              |              |
| Fuel  | 3,745   | 3,955     | 4,172        | 4,294        |
| Operating and Maintenance                                       | 3,607   | 3,926     | 3,915        | 3,748        |
| Base Capital  | 1,070   | 1,234     | 1,218        | 1,094        |
| Interest  | 1,078   | 1,262     | 1,430        | 1,597        |
| Tax Equivalents   | 557     | 603       | 632          | 637          |
| Other   | 154     | 256       | 309          | 510          |
| Total Operational Spend \$                                      | 10,211  | \$ 11,236 | \$<br>11,676 | \$<br>11,880 |
| Debt Paydown \$   | 1,888   | \$ 1,307  | \$<br>1,054  | \$<br>963    |
| Expansion and Environmental Capital <sup>1</sup> Change in Cash | 2,798   | 4,663     | 4,087<br>-   | 3,382        |
| Debt Paydown  | (1,888) | (1,307)   | (1,054)      | (963)        |
| Change in TFO \$  | 910     | \$ 3,356  | \$<br>3,033  | \$<br>2,419  |
| Ending TFO Balance  | 21,434  | 24,790    | 27,823       | 30,242       |
| Change in Statutory Debt  | 347     | 3,414     | 3,093        | 433          |
| Ending Statutory Debt Balance                                   | 19,880  | 23,294    | 26,387       | 26,820       |

<sup>&</sup>lt;sup>1</sup>Includes Ash Remediation and Asset Retirement Obligation (ARO) spend

Includes assumptions for potential projects that may have not yet received required internal TVA approvals and are subject to various legal requirements before they may be presented for approval



#### **Summary Income Statement**

| \$ million                        | FY19      | FY20      | FY21      | FY22      | FY23      | FY24F     | FY25P     | FY26P     | FY27P     |
|-----------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Operating Revenue                 | \$ 11,318 | \$ 10,249 | \$ 10,503 | \$ 12,540 | \$ 12,054 | \$ 12,281 | \$ 12,712 | \$ 12,902 | \$ 13,019 |
|                                   |           |           |           |           |           |           |           |           |           |
| Fuel and Purchased Power          | 2,903     | 2,464     | 2,721     | 4,488     | 4,182     | 3,745     | 3,955     | 4,172     | 4,294     |
| Operating and Maintenance         | 3,090     | 2,720     | 2,890     | 2,986     | 3,372     | 3,607     | 3,926     | 3,915     | 3,748     |
| Depreciation and Amortization     | 1,973     | 1,826     | 1,533     | 2,054     | 2,213     | 2,146     | 2,313     | 2,441     | 2,477     |
| Taxes                             | 541       | 528       | 514       | 601       | 593       | 557       | 603       | 632       | 637       |
| Operating Expenses                | 8,507     | 7,538     | 7,658     | 10,129    | 10,360    | 10,055    | 10,797    | 11,160    | 11,156    |
| Operating Income                  | 2,811     | 2,711     | 2,845     | 2,411     | 1,694     | 2,226     | 1,915     | 1,742     | 1,863     |
| Other Income / (Expense)          | 62        | 36        | 13        | 7         | 61        | 73        | 48        | 45        | 40        |
| Other Net Periodic Benefit Cost   | (258)     | (253)     | (258)     | (258)     | (199)     | (96)      | (80)      | (91)      | (86)      |
| Interest Expense                  | 1,198     | 1,142     | 1,088     | 1,052     | 1,056     | 1,078     | 1,262     | 1,430     | 1,597     |
| AFUDC <sup>1</sup> Borrowed Funds | -         | -         | -         | -         | -         | -         | -         | -         | -         |
| Net Interest Expense              | 1,198     | 1,142     | 1,088     | 1,052     | 1,056     | 1,078     | 1,262     | 1,430     | 1,597     |
| Net Income                        | \$ 1,417  | \$ 1,352  | \$ 1,512  | \$ 1,108  | \$ 500    | \$ 1,125  | \$ 621    | \$ 266    | \$ 220    |

<sup>&</sup>lt;sup>1</sup>AFUDC: Allowance for Funds Used During Construction - related to the cost of borrowed funds for new builds that is capitalized.



#### **Summary Cash Flow Statement**

| \$ million   | FY19        | FY20        | FY21        | FY22        | FY23        | FY24F       | FY25P       | FY26P       | FY27P       |
|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|  |             |             |             |             |             |             |             |             |             |
| Operating Cash Flow                                  | \$<br>3,720 | \$<br>3,636 | \$<br>3,256 | \$<br>2,948 | \$<br>2,872 | \$<br>2,868 | \$<br>2,419 | \$<br>2,275 | \$<br>2,162 |
| Investing Cash Flow                                  | (2,243)     | (2,015)     | (2,338)     | (2,663)     | (2,994)     | (3,707)     | (5,663)     | (5,194)     | (4,465)     |
| Financing Cash Flow                                  | (1,477)     | (1,422)     | (921)       | (283)       | 123         | 839         | 3,244       | 2,919       | 2,303       |
| Net Change in Cash                                   | -           | 199         | (3)         | 2           | 1           | -           | -           | -           | -           |
|  |             |             |             |             |             |             |             |             |             |
| Beginning Cash Balance                               | 299         | 299         | 500         | 497         | 499         | 500         | 500         | 500         | 500         |
| Ending Cash Balance                                  | 299         | 500         | 497         | 499         | 500         | 500         | 500         | 500         | 500         |
| Restricted Cash Balance                              | 23          | 21          | 21          | 21          | 21          | 21          | 20          | 20          | 20          |
| Ending Total Cash Balance                            | \$<br>322   | \$<br>521   | \$<br>518   | \$<br>520   | \$<br>521   | \$<br>521   | \$<br>520   | \$<br>520   | \$<br>520   |
|  |             |             |             |             |             |             |             |             |             |
|  |             |             |             |             |             |             |             |             |             |
| Debt Amortization (20-year paydown)                  | 1,214       | 1,141       | 1,071       | 1,027       | 1,017       | 1,027       | 1,071       | 1,240       | 1,391       |
| Base Capital   | 943         | 926         | 1,146       | 1,081       | 1,065       | 1,070       | 1,234       | 1,218       | 1,094       |
| Nuclear Fuel Capital                                 | 474         | 342         | 354         | 283         | 273         | 289         | 265         | 216         | 231         |
| Total  | \$<br>2,631 | \$<br>2,409 | \$<br>2,571 | \$<br>2,391 | \$<br>2,355 | \$<br>2,386 | \$<br>2,570 | \$<br>2,674 | \$<br>2,716 |
|  |             |             |             |             |             |             |             |             |             |
| Operating Cash Flow, net of debt                     | \$<br>1,089 | \$<br>1,227 | \$<br>685   | \$<br>557   | \$<br>517   | \$<br>482   | \$<br>(151) | \$<br>(399) | \$<br>(554) |
| amortization, base capital, and nuclear fuel capital |             |             |             |             |             |             |             |             |             |
| nuclear ruer capital                                 |             |             |             |             |             |             |             |             |             |

Includes assumptions for potential projects that may have not yet received required internal TVA approvals and are subject to various legal requirements before they may be presented for approval.



#### **Summary Balance Sheet**

| \$ million                                       | FY19      | FY20      | FY21      | FY22      | FY23      | FY24F     | FY25P     | FY26P     | FY27P     |
|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Assets:  |           |           |           |           |           |           |           |           |           |
| Current Assets                                   | \$ 3,278  | \$ 3,246  | \$ 3,498  | \$ 3,974  | \$ 3,666  | \$ 3,754  | \$ 3,968  | \$ 4,184  | \$ 4,395  |
| Property, Plant and Equipment                    | 35,133    | 35,579    | 36,464    | 36,860    | 37,482    | 38,925    | 42,157    | 44,666    | 46,297    |
| Investments                                      | 2,968     | 3,198     | 4,053     | 3,671     | 4,123     | 4,781     | 5,078     | 5,374     | 5,699     |
| Regulatory and Other Long-term Assets            | 9,088     | 10,802    | 8,441     | 6,683     | 6,073     | 5,689     | 5,559     | 5,428     | 5,049     |
| Total Assets                                     | 50,467    | 52,825    | 52,456    | 51,188    | 51,344    | 53,149    | 56,762    | 59,652    | 61,440    |
| Liabilities and Capitalization:                  |           |           |           |           |           |           |           |           |           |
| Short-term Debt                                  | 922       | 57        | 780       | 1,172     | 432       | 800       | 1,486     | 1,449     | 1,502     |
| Current Maturities of Long-term Debt             | 1,030     | 1,787     | 1,028     | 29        | 1,022     | 1,022     | 1,370     | 1,020     | 1,272     |
| Other Current Liabilities                        | 2,360     | 2,867     | 3,171     | 3,444     | 3,419     | 3,435     | 3,438     | 3,494     | 3,509     |
| Other Liabilities                                | 14,347    | 16,178    | 14,549    | 12,244    | 11,638    | 11,976    | 11,611    | 11,144    | 12,318    |
| Long-term Debt                                   | 20,183    | 19,004    | 18,463    | 18,794    | 18,777    | 18,741    | 21,075    | 24,511    | 24,597    |
| Total Liabilities                                | 38,842    | 39,893    | 37,991    | 35,683    | 35,288    | 35,974    | 38,980    | 41,618    | 43,198    |
| Proprietary Capital                              | 11,625    | 12,932    | 14,465    | 15,505    | 16,056    | 17,175    | 17,782    | 18,034    | 18,242    |
| Total Liabilities and Proprietary Capital        | \$ 50,467 | \$ 52,825 | \$ 52,456 | \$ 51,188 | \$ 51,344 | \$ 53,149 | \$ 56,762 | \$ 59,652 | \$ 61,440 |
| Ending TFO (Total Financing Obligations) Balance | \$ 22,818 | \$ 21,421 | \$ 20,543 | \$ 20,336 | \$ 20,525 | \$ 21,434 | \$ 24,790 | \$ 27,823 | \$ 30,242 |
| Debt / Total Capital Ratio <sup>1</sup>          | 66%       | 62%       | 59%       | 57%       | 56%       | 56%       | 58%       | 61%       | 62%       |

<sup>&</sup>lt;sup>1</sup>Calculated as the ending TFO balance / (TFO plus Proprietary Capital)

Includes assumptions for potential projects that may have not yet received required internal TVA approvals and are subject to various legal requirements before they may be presented for approval.



#### Recommendation

To establish rates at a level sufficient to recover expected costs, it is recommended that the Board approve a 5.25% increase to wholesale base rates for TVA FY25.



#### Recommendation

#### Recommend the Board approve the FY25 Budget and following related items:

- FY25 Commercial Transactions Contracting Plan
- Final FY24 tax equivalent payments
- Estimated FY25 tax equivalent payments
- Projects over \$200 million
- Acquisition of Land Rights

- Long-lead Procurement Contracting Authority
- Financing Shelf for up to \$4.0 billion of longterm bonds and associated resolutions
- Contribution to the Retirement System of \$300 million
- Regulatory Accounting
- Dodd-Frank End-user Exemption
- Retention of the entire margin of net power proceeds



# Finance, Rates, and Portfolio Committee

Wade White, Chair



# People and Governance Committee

Brian Noland, Chair



# External Stakeholders and Regulation Committee

Beth Harwell, Chair



### TVA Aquatic Plant Management

Don Moul Executive Vice President & Chief Operating Officer

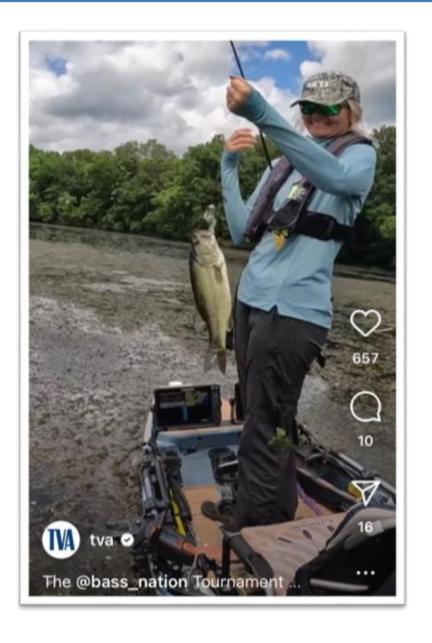
August 22, 2024



#### **Managing Competing Demands**









#### TVA's Integrated Aquatic Plant Management Approach

#### 2020 Natural Resource Plan

- Nuisance & Invasive Species Management
- Public Outreach & Information
- Ecotourism



#### **Partnerships**





















Engage and connect: PLIC@tva.gov

# External Stakeholders and Regulation Committee

Beth Harwell, Chair



# Audit, Risk, and Cybersecurity Committee

Michelle Moore, Chair



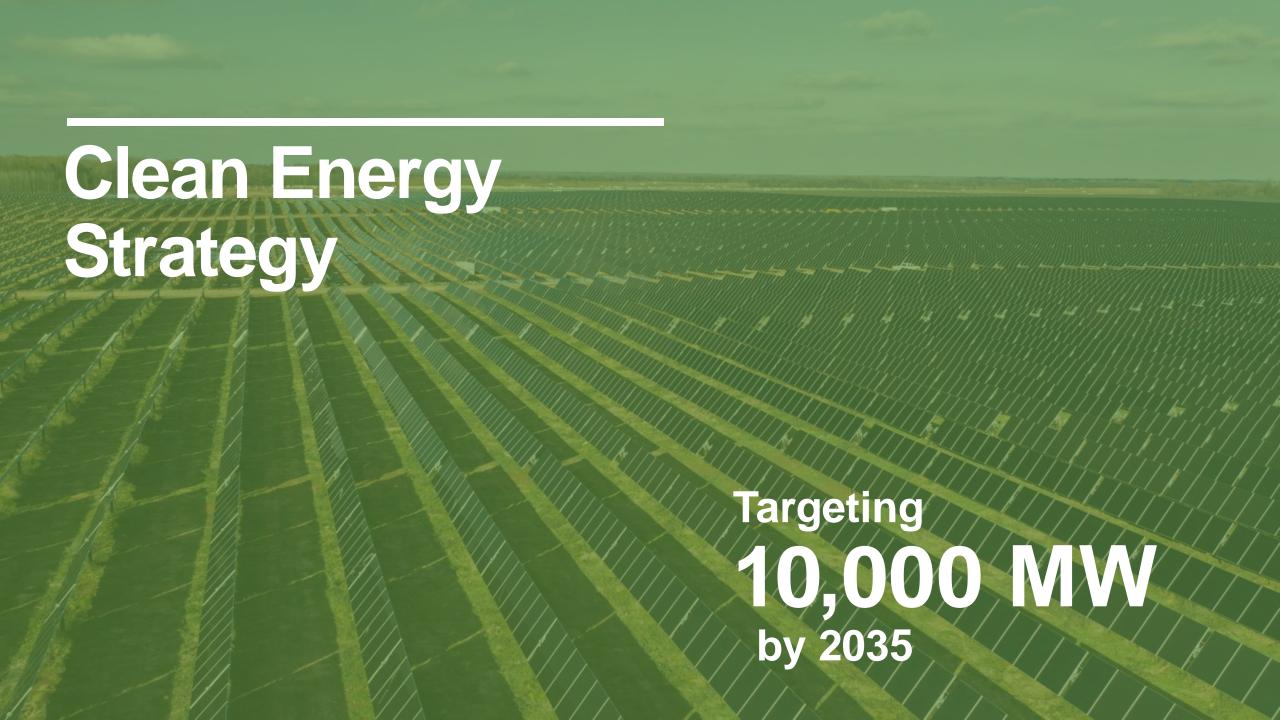
## President's Report

Jeff Lyash
President and CEO

August 22, 2024







### **Green Invest**

The Bell Buckle 35 MW Solar

The Canadaville Solar Project

16 MW Solar

The Golden Triangle II Project 150 MW Solar/50 MW Battery Storage

The Golden Triangle I Project 200 MW Solar/50 MW Battery Storage

## **Generation Flexibility**

BrightRidge
11 MW Solar

Paris Board of Public Utilities 6.75 MW Solar

Huntsville Utilities
32.5 MW Solar

Holston Electric Coop
4.8 MW Waste Ethane Gas Plan

Middle TN Electric Coop

110 MW Solar





### **TVA's Nuclear Strategy**



Preserve, extend, and optimize our existing nuclear fleet



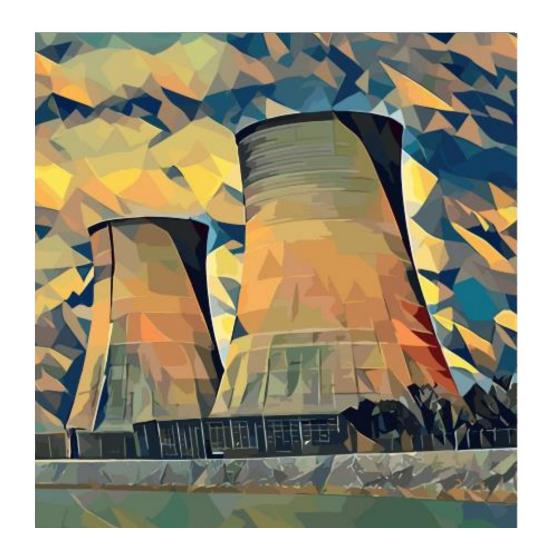
Pursue GE Hitachi BWRX-300 to develop light water small modular reactor technology (Gen III) for 2030's deployment at the Clinch River site and others



Partner and advance next generation (Gen IV) advanced nuclear technology for 2040's fit and deployment



Research and explore large gigawatts-scale nuclear options





## **Energy Efficiency & Demand Response**

Investing

\$1.5 Billion

estimated to offset

30% of future load growth

#### First 10 months

## \$170 Million

in Energy Cost Savings for Homeowners & Businesses

**Avoided nearly** 

320,000 Tons of CO<sub>2</sub>





### **Integrated Resource Plan**



#### Now's the time

The TVA Board approved the current IRP in 2019. At the time, the Board directed TVA to monitor key signposts, including demand for electricity, commodity prices, and emerging technology, to inform when the IRP should be re-evaluated and refreshed. The Board also stated the next IRP should be initiated no later than 2024.

How does resource planning work? TVA will collaborate with a wide variety of stakeholders to envision the energy resources TVA could utilize to meet future demand within a least-cost planning framework. By providing the strategic direction, the IRP serves as the foundation for the next long-range financial plan.

#### Key steps of the resource planning process include:

- Estimate future customer demand for electricity
- Define the supply of existing resources available to meet customer demand and how those available resources
- Calculate the gap between the existing resource supply and future customer demand
- Identify new energy supply resources to be considered for filling the gap
- Test different resource combinations to evaluate performance ■ Select the preferred combination of resources or target power supply mix

#### /hat will be included in e IRP?

ource planning is about optimizing the mix of future er supply resources to ensure TVA can meet the er demands of the region.

ifically, the IRP will evaluate different ways to ate power, including renewable energy options, y storage, and other generating assets as well as efficiency programs. The evaluation includes ng anticipated ongoing electrification and energy d in the region, system requirements, various f generating assets, environmental impacts.

#### IRP and the environment

As TVA, the region and the nation, march toward net-zero carbon emissions and a clean energy economy, TVA will assess the region-wide impact of the next IRP on a variety

The IRP study includes an environmental review called an Environmental Impact Statement (EIS) to address TVA's requirements under the National Environmental Policy Act (NEPA). The EIS will assess broad region-wide impacts such as air quality and climate impacts, water resources, land requirements, and socioeconomics and



#### ler engagement

ement and input is a key component of both developing the IRP as well as the NEPA (National by Act) process. Public meetings – virtual and in-person – will be scheduled over the coming months on the IRP, and a stakeholder working group has been established to work closely with TVA to

eetings will be scheduled when the draft Programmatic Environmental Impact Statement

p for information about the IRP and ways to provide public comments.

om/TVA | STVAnews | STVA

- A collaborative, external stakeholder-focused effort, working with a variety of organizations.
- A risk-informed study that assesses a wide range of potential futures.
- Provides the basis for TVA's asset strategy, including a recommended target power supply mix.



## President's Report

Jeff Lyash
President and CEO

August 22, 2024





## Board Meeting

August 22, 2024 Florence, Alabama



## TENNESSEE VALLEY AUTHORITY