

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-K

(MARK ONE)
 ANNUAL REPORT PURSUANT TO
SECTION 13, 15(d), OR 37 OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended September 30, 2023

OR
 TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from _____ to _____



Commission file number 000-52313
TENNESSEE VALLEY AUTHORITY
(Exact name of registrant as specified in its charter)

A corporate agency of the United States created by an act of Congress
(State or other jurisdiction of incorporation or organization)

62-0474417
(IRS Employer Identification No.)

400 W. Summit Hill Drive
Knoxville, Tennessee
(Address of principal executive offices)

37902
(Zip Code)

(865) 632-2101
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
N/A	N/A	N/A

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.
Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13, Section 15(d), or Section 37 of the Act.
Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13, 15(d), or 37 of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.
Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).
Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer Emerging growth company Smaller reporting company
Non-accelerated filer Accelerated filer

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements.

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b).

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).
Yes No

Estimated aggregate market value of the common equity held by non-affiliates of TVA at March 31, 2023: N/A

Number of shares of common stock outstanding at November 13, 2023: N/A

investing in its existing nuclear assets and working to renew its nuclear generation fleet licenses. TVA has been implementing the Hydro Life Extension Program with a focus on improving the availability and flexibility of the hydroelectric fleet and exploring new hydroelectric pumped-storage power to support the grid. It is also investing in research and development for technology around hydrogen fuel and carbon capture, utilization, and storage. In 2022, the Inflation Reduction Act of 2022 ("Inflation Reduction Act") was signed into law, which makes certain tax-exempt entities, including TVA, eligible for a direct-pay option for certain tax credits that encourage investment in clean energy, in some circumstances. TVA is currently exploring funding opportunities of various types, including opportunities involving pumped-storage, solar, carbon capture, hydrogen, and transmission, among others; however, this exploration does not guarantee that TVA or its partners will receive any funds. See *Research and Development* below, Item 1A, Risk Factors — *Operational Risks*, and Part II, Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations — *Key Initiatives and Challenges — Optimum Energy Portfolio*.

Power generating facilities operated by TVA at September 30, 2023, included three nuclear sites, 17 natural gas and/or oil-fired sites, four coal-fired sites, 29 conventional hydroelectric sites, one pumped-storage hydroelectric site, one diesel generator site, and nine operating solar installations. See Item 2, Properties — *Generating Properties — Net Capability* for a discussion of the units at these facilities. TVA also acquires power under PPAs of varying durations, including short-term contracts of less than 24-hours in duration. See *Power Purchase and Other Agreements* below.

The following table shows TVA's generation and purchased power by generating source as a percentage of all electric power generated and purchased (based on kilowatt hours ("kWh")) for the periods indicated:

Total Power Supply by Generating Source
For the years ended September 30

Generation Resource ⁽¹⁾	2023	2022	2021
Nuclear	42%	39%	41%
Natural gas and/or oil-fired	22%	22%	21%
Coal-fired	13%	13%	15%
Hydroelectric	8%	8%	10%
Purchased power	15%	18%	13%

Note

(1) TVA's non-hydro renewable resources from TVA facilities are less than one percent for all periods shown, and therefore are not represented on the table above. Purchased power contains the majority of non-hydro renewable energy supply. TVA sells the RECs resulting from some of its purchased power to certain customers. See Part II, Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations — *Key Initiatives and Challenges — Optimum Energy Portfolio — Renewable Power Purchase Agreements*.

While TVA continues down the path of reducing power generation from carbon-emitting sources, there will be fluctuations in usage due to electricity demands. Also, TVA continues to make operational decisions to keep the system reliable and to deliver low-cost energy.

Nuclear

At September 30, 2023, TVA had three nuclear sites consisting of seven units in operation. The units at Browns Ferry Nuclear Plant ("Browns Ferry") are boiling water reactor units, and the units at Sequoyah Nuclear Plant ("Sequoyah") and Watts Bar Nuclear Plant ("Watts Bar") are pressurized water reactor units. Operating information for each of these units is included in the table below.

TVA Nuclear Power
At September 30, 2023

Nuclear Unit	Summer Net Capability (MW)	Net Capacity Factor for 2023 (%)	Date of Expiration of Operating License
Browns Ferry Unit 1	1,227	90.0	2033
Browns Ferry Unit 2	1,208	89.2	2034
Browns Ferry Unit 3	1,227	90.3	2036
Sequoyah Unit 1	1,152	88.0	2040
Sequoyah Unit 2	1,140	89.4	2041
Watts Bar Unit 1	1,157	88.0	2035
Watts Bar Unit 2	1,121	100.0	2055

Nuclear Fleet License Extensions. TVA is seeking to renew all nuclear generation units' licenses for an additional 20 years. The first license renewal application is expected to be submitted to the Nuclear Regulatory Commission ("NRC") in January 2024 for the three units at Browns Ferry. See Part II, Item 7, Management's Discussion and Analysis of Financial