MINUTES OF MEETING

THE BOARD OF DIRECTORS OF

THE TENNESSEE VALLEY AUTHORITY RETIREMENT SYSTEM

September 29, 2022

The regular quarterly meeting of the Board of Directors (Board) of the TVA Retirement System (TVARS or System) was held on Thursday, September 29, 2022, at 1:09 p.m., EDT, at the TVA Chattanooga Office Complex, MR 1S 202, Chattanooga, Tennessee.

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The following directors were present: Brian M. Child, Chair; Samuel J. DeLay, Vice-Chair; Michael L. Belcher; Marilyn G. Brown; Eric J. Davis; James W. Hovious (via WebEx); and Tina R. Wallace. Also present were Mark N. Meigs, Executive Secretary; William B. Jenkins, Jr., Assistant Secretary; Sally R. Weber, Manager, Retirement Operations; Brent B. Roberts, Manager, Financial Reporting; Veenita Bisaria, Manager, Investment & Risk Management; Chris A. Stinnett, Sr. Analyst, Investment & Risk Management; and W. Colby Carter, Managing Counsel.

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496-1 Each director was notified in a memorandum dated September 8, 2022, of the regular quarterly meeting to be held on September 29, 2022. A copy of the notice from the Executive Secretary is filed as Exhibit 496-1.

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496-2 (A-6922). The Chair's report included the following:

- The Chair shared how good it was for the Board members and System staff to meet in person for the first time in $2\frac{1}{2}$ years.
- The Chair recognized Jim Hovious for his service as a Director over the last 9 years and all that has been accomplished with the Board and System over those years of service.
- The Chair welcomed Michael Blakely as a new Board member beginning November 1, 2022. Mr. Blakely attended and observed the Board's committee meetings as a Director-Elect.

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496-3 (A-6923). The Executive Secretary's report included the following:

- The Executive Secretary also recognized Director Hovious for his service on the Board and welcomed Michael Blakely as a new Director.
- The Executive Secretary provided System staffing updates and welcomed two new staff members in August Caitlyn Holder in the Retirement Operations group and Zack Wallace in Financial Reporting group.
- Information was provided on the work to move pension payees that still receive paper checks to direct deposition and that this number is now below 100 payees.
- Information was provided on employee and retiree events, education, and support provided by System staff during the quarter.
- The December Board meeting is scheduled for Wednesday, December 14 in-person in Chattanooga with the Investment Committee meeting scheduled.

A copy of the Executive Secretary's report is filed as Exhibit 496-3.

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496-4 (A-6924). For the Legal Update, Managing Counsel informed the Board that the TVA Board at its August meeting approved a \$300 million contribution to TVARS for FY 2023. A copy of the Legal Update is filed as Exhibit 496-4.

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496-5 (A-6925). As set out in the 2022 Board-approved election schedule, the window ended July 5 for TVARS to accept nominations to run in the election to be an elected member of the Board for the three-year term beginning November 1, 2022, through October 31, 2025. Only one nomination petition for Michael Blakely was received for this year's election. Accordingly, on July 27, 2022, the Board approved the following resolution by notational vote:

WHEREAS, under Section 3(2) of the TVA Retirement System (TVARS) Rules and Regulations, as the term of office of each of the three Directors of the TVARS Board of Directors (TVARS Board) elected by the members of TVARS expires, an election is held by TVARS for the purpose of electing a successor from candidates who are nominated by a petition subscribed to by not less than 25 members of TVARS;

WHEREAS, pursuant to the election schedule approved by the TVARS Board at its June 13, 2022, quarterly meeting, the deadline was Tuesday, July 5, 2022, for the submission of nominating petitions to TVARS to run in the election to be an elected member of the TVARS Board for the three-year term beginning November 1, 2022, through October 31, 2025;

WHEREAS, only one nomination petition has been received by TVARS for this year's election and such nomination is for Michael Anthony Blakely II.

WHEREAS, under Section 3(2) of the TVARS Rules and Regulations, which governs elections, appointments, and selection of Directors on the TVARS Board, it states the following:

In the event only one person is duly nominated for the directorship to be filled, the board may declare such nominee elected without the necessity of formal balloting by the membership.

WHEREAS, the TVARS Board desires to make such a declaration for this Director seat on the TVARS Board and believes this is an appropriate, prudent, and cost-efficient course of action to take as provided for under Section 3(2) of the TVARS Rules and Regulations given that there is only one nomination for the directorship for an election that requires a simple majority of votes cast by TVARS members;

NOW, THEREFORE, BE IT RESOLVED, that, in accordance with the authority of the TVARS Board in Section 3(2) of TVARS Rules and Regulations and in light of the fact that only one nomination was received by TVARS for the Director seat, the TVARS Board hereby declares that Michael Anthony Blakely II is elected as a Director of the TVARS Board for the three-year term beginning November 1, 2022, through October 31, 2025.

A copy of the Board's notational voting is filed as Exhibit 496-5.

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496-6. As a part of the Consent Agenda, the Board approved the minutes for the meeting reported below in A-6926, and accepted the reports as of June 30, 2022, listed below in A-6927, A-6928, A-6929, and A-6930.

- A-6926 Meeting No. 495 held June 13, 2022
- A-6927 Treasurer's Report (filed as Exhibit 496-6(a))
- A-6928 Investment Performance Report prepared by Wilshire Advisors LLC (Wilshire) (filed as Exhibit 496-6(b))
- A-6929 Report of retirements approved (filed as Exhibit 496-6(c))
- A-6930 Quarterly review for the TVA Savings and Deferral Retirement Plan (401(k) Plan) prepared by Fidelity Investments Institutional Services Company (Fidelity) (filed as Exhibit 496-6(d))

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496-7 (A-6931). The Retirement Committee report consisted of the items reported below at A-6932 and A-6933, and of the following items:

- Prior to the meeting, Director Belcher presented to the Board proposals to consider increasing the cost-of-living adjustment (COLA) for eligible retirement benefits and the interest crediting rates for cash balance participants above the caps in recognition that inflation is at record levels. After a discussion, the Board agreed to discuss again at meeting set up by the Executive Secretary in November following the final CPI-U numbers used by the System to calculate these benefits. A copy of the materials presented by Director Belcher to the Board is filed as Exhibit 496-7(a).
- Prior to the meeting, Brent Roberts, Manager, Financial Reporting, updated the Board on the completion of the process correcting Variable Annuity benefit payments following the adjustment of credits this summer from the annual actuarial valuation.
- As a part of continuous improvement in employee retirement education and support, the Board was provided information on a new information and education handout developed by the System staff for employees who are called to military service and return to TVA. This handout, which will be placed on the TVARS website as well as TVA employee benefit materials in People Gateway, provides information on their TVARS retirement benefits during their military service and instruction on how to

take advantage of additional contribution and match opportunities in the 401(k) Plan after their return. In addition, the System staff is working with the military and veteran's employee resource group to present on retirement benefits and with TVA human resources to provide an improved experience on benefits for employees who are going to and returning from military service. A copy of the military service retirement benefits handout is filed as Exhibit 496-7(b).

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496-8 (A-6932). Prior to the meeting, the Board discussed the System's actuarial valuation assumptions with Mercer, which included the assumed rate of return on investments of the System's assets, the assumed rate of inflation, interest crediting rates, the cash balance benefit cash out election rate, and the mortality tables and improvement scales used for liability valuation and minimum contribution requirements. After discussion, upon the recommendation of the Retirement Committee and Mercer, the Board voted to approve the actuarial assumptions to be used in the valuation of the System's liability valuation and minimum contribution calculation as of September 30, 2022. The actuarial assumptions approved by the Board include the following: (a) an increase in the assumed rate of return on investments of the System's assets from 5.75% to 6.5% based on the System's asset allocation policy and Mercer's updated capital market assumptions; (b) a higher assumed rate of inflation of 5% for 2023 with a scaled down series of assumed rate of inflation amounts over the following years to reach a long-term average of 2.5%; (c) cash balance benefit cash out election rate of 20% based on actual participant experience, consistent with the previous year; (d) for the base mortality table, the Pri-2012 mortality based on the System's experience moving from a "headcount-weighted" approach to a "benefits-weighted" approach; and (e) for the mortality improvement scale, the updated MSS-2022 scale developed by Mercer based on Social Security data and Mercer research. A copy of Mercer's actuarial assumptions review presentation dated September 29, 2022, is filed as Exhibit 496-8.

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496-9 (A-6933). Upon the recommendation of the Retirement Committee, the Board approved a 3-year renewal of Mercer's Statement of Work to provide actuarial services to the System for fiscal years 2022, 2023, and 2024. A copy of Mercer's new Statement of Work is filed as Exhibit 496-9.

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496-10 (A-6934). The Audit Committee report consisted of the following items:

- Prior to the meeting, Bill Jenkins, Assistant Secretary and Manager, Retirement Applications, reviewed and discussed with the Board the annual Cybersecurity Review of TVARS and the retirement plans performed by the System staff. A copy of the TVARS Cybersecurity Review dated September 29, 2022, is filed as Exhibit 496-10.
- Prior to the meeting, the TVARS financial reporting staff updated the Board on the status of the current Service Organization Control (SOC1) audit being performed by Crowe LLP.

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496-11 (A-6935). The Election Committee report consisted of the item reported above at A-6925 and a discussion on the current election process and promotion of candidates.

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496-12 (A-6936). The Investment Committee report consisted of the item reported below at A-6937, and of the following items:

- The Board was provided and took note of information regarding asset allocation and investment manager asset transfers during the second quarter of 2022. A copy of the information is filed as Exhibit 496-12(a).
- The Board was provided and took note of information on due diligence meetings between TVARS staff and investment managers and service providers for the period June 2022 through September 2022. A copy of the information is filed as Exhibit 496-12(b).

- On September 28, 2022, Wilshire presented to and discussed with the Investment Committee Wilshire's new forward-looking capital markets assumptions as of June 30, 2022, which includes the assumptions for return, risk, and correlation for the major asset classes, and the impact on the TVARS portfolio assumptions based on the System's asset allocation policy. A copy of Wilshire's Capital Markets and Portfolio Assumptions report for TVARS as of June 30, 2022, is filed as Exhibit 496-12(c).
- On September 28, 2022, Wilshire presented to and discussed with the Investment Committee the risk reporting dashboard for the total investment portfolio through June 2022. A copy of Wilshire's Risk Analysis report for TVARS dated June 2022 is filed as Exhibit 496-12(d).
- On September 28, 2022, HarbourVest Partners reviewed with the Investment Committee the following: (i) the overall strategic plan and tactical plans for the Summit Hill private equity program, (ii) investment highlights within the Summit Hill private equity program, (iii) an overview of the HarbourVest Global Fund program and strategy and investment updates for the 2021 and 2022 Global Funds, and (iv) information on the tactical plan, investment pacing, and investment highlights of the System's new infrastructure and real assets program. For 2023, TVARS will pause making new commitments to these programs managed by HarbourVest, because the current allocation percentages are above the target policy percentages for the TVARS investment portfolio. A copy of the HarbourVest presentation dated September 2022 is filed as Exhibit 496-12(e).
- On September 28, 2022, Wilshire Private Markets presented information to the Investment Committee on the Summit Hill private credit and real assets funds, including performance, the strategic and tactical plans, portfolio compositions, pacing of the commitments, and investment highlights. For 2023, TVARS will pause making new commitments to the Summit Hill Credit Fund and Summit Hill Real Assets Fund, because the current allocation percentages are above the target policy percentages for the TVARS investment portfolio. A copy of the Wilshire Private Markets' presentation for the Summit Hill funds dated September 2022 is filed as Exhibit 496-12(f).
- Following the closing on July 28, 2022, of the Summit Hill Alternative Yield Fund, the System's new fund-of-one program for alternative fixed income investments managed by Wilshire Private Markets, on September 28, 2022, Wilshire Private Markets reviewed with the Investment Committee the following: (i) Fund portfolio objectives and guidelines, (ii) preliminary portfolio construction, and (iii) investments currently identified for the Fund, which will be made over the upcoming 6 to 18 months. A copy of the Wilshire Private Markets' presentation for the Summit Hill Alternative Yield Fund dated September 2022 is filed as Exhibit 496-12(g).
- On September 28, 2022, Mercer Investment Consulting, Inc., the System's defined contribution plan consultant, provided to the Investment Committee and TVARS staff the 401(k) Plan quarterly review as of June 30, 2022, covering the following: updated

committee calendar through June 2023, investment performance and expense ratio analysis of the 401(k) Plan fund line-up, information on inflation and its impact on participants and plan investments, current 401(k) Plan statistics, including an analysis of Fidelity annual fees as the provider of recordkeeping and trustee services, litigation and enforcement updates, and regulatory and legislative updates. A copy of Mercer's Q2 2022 DC Quarterly Review dated September 28, 2022, is filed as Exhibit 496-12(h).

• On September 28, 2022, Mercer Investment Consulting, Inc. provided to the Investment Committee and TVARS staff a review and analysis of Fidelity BrokerageLink, the self-directed brokerage account (SDBA) available to participants in the 401(k) Plan. This review and analysis included the following: regulatory history of SDBAs in defined contribution plans, SDBA market review, BrokerageLink participant utilization and demographics for the 401(k) Plan, BrokerageLink review, including service and fee comparison with alternative SDBA providers. A copy of Mercer's report on Self-directed brokerage accounts in defined contribution plans dated September 28, 2022, is filed as Exhibit 496-12(i).

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496-13 (A-6937). Under the System's asset allocation policy, within the Defensive-Growth Bucket, there is a 5% target to emerging market debt with an actual allocation of 3.7% as of June 30, 2022, which is currently managed by Lazard Asset Management and TCW Asset Management. On September 28, 2022, Wilshire presented to and discussed with the Investment Committee the impact of the emerging market debt portfolio on the overall portfolio return and risk expectations and options if this allocation were eliminated. At the meeting, upon the recommendation of the Investment Committee, the Board voted to terminate Lazard as an investment manager of the System and phase out the emerging markets debt allocation within the Defensive-Growth Bucket of the System's asset allocation policy. A copy of Wilshire's Emerging Markets Debt Analysis and memo on Lazard dated September 28, 2022, is filed as Exhibit 496-13.

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The meeting was adjourned at 1:28 p.m., EDT.

Executive Secretary

M.K. N. Meign

Brian M. Child

Chair