

Meeting No. 467

MINUTES OF MEETING
OF THE BOARD OF DIRECTORS
RETIREMENT SYSTEM OF THE TENNESSEE VALLEY AUTHORITY

March 6, 2017

The regular quarterly meeting of the Board of Directors (Board) of the TVA Retirement System (System) was held on Monday, March 6, 2017, at 2:36 p.m., CST, at the TVA Nashville corporate offices, Highland Ridge Tower, 535 Marriott Drive, OCP 6 602, Nashville, Tennessee.

* * *

The following directors were present: Anthony L. Troyani, Vice Chair; Brian M. Child; James W. Hovious; Leonard J. Muzyn (via telephone); Wilson Taylor III; and Tammy W. Wilson. Allen E. Stokes, Chair, was not present. Also present were Patrick D. Brackett, Executive Secretary; William B. Jenkins, Jr., Assistant Secretary; Sally R. Weber, Manager, Retirement Operations; Veenita Bisaria, Manager, Investment & Risk Management; Chris A. Stinnett, Sr. Analyst, Investment & Risk Management; W. Colby Carter, Senior Counsel, Retirement Benefits & Compliance (via telephone); and Vincent V. Sands, Board Adviser.

* * *

467-1 Each director was notified in a memorandum dated February 24, 2017, of the regular quarterly meeting to be held on March 6, 2017. A copy of the notice from the Executive Secretary is filed as Exhibit 467-1.

* * *

467-2 (A-6408). The Vice Chair commended the System staff on the excellent job in processing voluntary reductions-in-force and handling this additional workload.

* * *

467-3 (A-6409). The Executive Secretary informed the Board that, as previously communicated, Jeanna Cullins, Partner with Aon Hewitt Investment Consulting (AHIC), would conduct Board and staff fiduciary and governance training immediately after the Board meeting.

* * *

467-4 (A-6410). Senior Counsel informed the Board that the United States District Court's opinion and order in the lawsuit, granting TVA's Motion for Summary Judgment dismissing the remaining claims, had been provided to them previously by Chris Christie of Bradley Arant Boult Cummings. Senior Counsel updated the Board on the process for and status of the proposed amendments to provide election options for cash balance participants.

* * *

467-5 (A-6411). The Board approved the minutes of Meeting No. 466 held December 8, 2016, by a vote of 6 to 0 with Director Stokes not present.

* * *

467-6 (A-6412). The Board accepted the Treasurer's Report for the quarter ended December 31, 2016. A copy of the Treasurer's Report is filed as Exhibit 467-6.

* * *

467-7 (A-6413). The Board accepted the Investment Performance Report prepared by Wilshire Associates Incorporated (Wilshire) for the quarter ended December 31, 2016. A copy of the Investment Performance Report is filed as Exhibit 467-7.

* * *

467-8 (A-6414). The Board accepted the report of retirements approved for the quarter ended December 31, 2016. A copy of the report is filed as Exhibit 467-8.

* * *

467-9 (A-6415). The Board accepted the quarterly review for the TVA Savings and Deferral Retirement Plan (401(k) Plan) prepared by Fidelity Investment Institutional Services Company (Fidelity) for the quarter ended December 31, 2016. A copy of the 401(k) Plan quarterly review is filed as Exhibit 467-9.

* * *

467-10 (A-6416). The Investment Committee report consisted of the item reported below at A-6417, and of the following items:

- The Board was provided and took note of the quarterly report on manager compliance with investment guidelines. A copy of the report, dated December 31, 2016, is filed as Exhibit 467-10(a).
- The Board was provided and took note of information regarding investment manager asset transfers during the fourth quarter of 2016. A copy of this information is filed as Exhibit 467-10(b).
- The Board was provided and took note of information on due diligence meetings and conference calls between System staff and investment managers and service providers for the period December 2016 through February 2017. A copy of the information is filed as Exhibit 467-10(c).
- The Board was provided an update on the funded status of the System through December 31, 2016. A copy of the report is filed as Exhibit 467-10(d).
- The Board reviewed and discussed the quarterly 401(k) Plan Discussion Guide from AHIC covering the following: asset allocation, performance of the investment funds in the 401(k) Plan's lineup, manager and fee updates, and managed account overview and education. A copy of the AHIC 401(k) Plan Discussion Guide is filed as Exhibit 467-10(e).
- The Board was provided and discussed with Wilshire and System investment staff information on the following System portfolios: a high yield fixed income portfolio managed by Oaktree Capital Management; a domestic small cap equity portfolio managed by Fisher Investments; a domestic small cap equity portfolio managed by

Neuberger Berman; and a global TIPS portfolio managed by Bridgewater Associates. A copy of this Investment Manager Product Discussion List is filed as Exhibit 467-10(f).

- The Board was provided an update on Wilshire's 10-year forward-looking capital market assumptions and the investment characteristics of the System's current asset allocation policy based on Wilshire's new capital market assumptions. A copy of this information from Wilshire is filed as Exhibit 467-10(g).
- The Board was provided a benchmark analysis of fees paid to System investment managers. A copy of the analysis by Wilshire is filed as Exhibit 467-10(h).
- The Board was provided a report from System investment staff regarding the private credit markets and private credit investment strategies, including potential strategic allocations to the various segments. A copy of the report is filed as Exhibit 467-10(i).
- The Board was provided a report from Wilshire analyzing the System's global equity investments and structure with the goal of improving the efficiency of the portfolio and optimizing the various allocations within the total global equity portfolio. A copy of the report is filed as Exhibit 467-10(j).
- The Board was provided and took note of net internal rate of return (net IRR) performance information as of September 30, 2016, for all of the funds in the System's private markets portfolio (private equity, private real estate, and private real assets) compared to both vintage year IRRs for each fund and public market equivalent annualized performance. A copy of the report from Wilshire is filed as Exhibit 467-10(k).
- The Board was provided a proposed fee and services agreement from AHIC to continue the relationship for 401(k) Plan investment consulting services. A copy of the proposed agreement is filed as Exhibit 467-10(l).
- The Board was provided a notification from BlackRock of certain changes to the underlying investments of the Target Retirement Portfolios utilized in the 401(k) Plan. A copy of the notification is filed as Exhibit 467-10(m).
- The Board was provided notice of an investment guideline change for the TCW core fixed income account. A copy of the amended guidelines is filed as Exhibit 467-10(n).
- The Board was provided information by the System staff on the sale of Aon Hewitt's recordkeeping business to the Blackstone Group, a private equity firm, which the staff confirmed will not involve Aon Hewitt's services provided to the System in recordkeeping the cash balance accounts. A copy of this information is filed as Exhibit 467-10(o).

- The Board was provided information on the upcoming annual Wilshire consulting client conference. In addition, in accordance with the Board's travel policy, the Board accepted the payment of expenses from Wilshire for any Board members and System staff who attend the Wilshire consulting client conference and any events integral to the conference. A copy of the information regarding the conference is filed as Exhibit 467-10(p).
- The Board was provided an update on the System's investment in the Huff Alternative Fund and the liquidation of the remaining securities and other investment holdings of the Fund. A copy of the update is filed as Exhibit 467-10(q).
- The Board was provided an update on the organizational changes occurring over time at Bridgewater Associates, one of the System's investment managers. A copy of the update is filed as Exhibit 467-10(r).

* * *

467-11 (A-6417). On February 21, 2017, the Investment Committee met and discussed with Wilshire and the System investment staff reallocation of the System's portfolio to the new asset allocation weights within the public real assets bucket, reducing exposure to Master Limited Partnerships (MLPs) and commodities, and increasing exposure to Treasury Inflation Protected Securities (TIPS) and global Real Estate Investment Trust Securities (REITS). Upon the recommendation of Wilshire and the Investment Committee, the Board approved a plan to reallocate assets from MLPs and commodities to TIPS and REITs over three quarters beginning in March 2017 with a goal to be invested at target weights by September 30, 2017, the end of the fiscal year. A copy of the Wilshire analysis to the Board on this action dated February 21, 2017, is filed as Exhibit 467-11.

* * *

467-12 (A-6418). The Retirement Committee report consisted of items reported below at A-6419, and A-6420, and of the following items:

- The Board met with Fidelity Investments, the trustee and record-keeper for the 401(k) Plan, to review information regarding utilization of the 401(k) Plan by System

members. The information included data such as participation rates, deferral and contribution rates, and asset allocation. The information also included projected income replacement by members at a plan level. A copy of the 401(k) Plan review information is filed as Exhibit 467-12(a).

- The Board met with Mercer Human Resource Consulting (Mercer), the System's actuary, to review and discuss assumptions to be used in the System's long-term forecast study to be performed by Mercer. The study is estimated to be completed by May 31, 2017. A copy of Mercer's long-term forecast study review and the assumptions to be used is filed as Exhibit 467-12(b).
- The Board was provided and discussed with Senior Counsel proposed amendments to the TVARS Rules and Regulations and the 401(k) Plan Provisions that would be a part of an IRS Private Letter Ruling request, which would allow those System members with cash balance accounts and benefits to elect to receive future retirement benefits through the 401(k) Plan only and also allow them to transfer their cash balance account value to the 401(k) Plan. The Board was also provided an implementation timeline developed by the System staff for the rollout of this election option. A copy of the proposed amendments and implementation timeline is filed as Exhibit 467-12(c).

* * *

467-13 (A-6419). After discussion and upon the recommendation of the Retirement Committee and Executive Secretary, the Board voted to approve using Bank of New York Mellon (BNY Mellon) for defined benefit plan disbursement services and authorized the Executive Secretary to execute any documents required to implement. BNY Mellon is the System's trustee and custodian and as part of providing disbursement services will also provide a secure internet portal where retirees may view pay and deductions, make changes to their address and federal withholding. BNY Mellon's disbursement services group will also provide a call center that retirees could utilize in processing these changes. A copy of the memo from the Executive Secretary to the Board, along with the fee schedule for these disbursement services, estimated overall cost, and an implementation plan, is filed as Exhibit 467-13.

* * *

467-14 (A-6420). On August 8, 2016, the Board approved amendments implementing benefit changes with an effective date of October 1, 2016. The amendments approved by the Board inadvertently changed the basis for compounding cash balance interest credits from annually to monthly for participants who first became members of the System on or after January 1, 1996. The actual recordkeeping for cash balance interest credits is being done correctly with compounding on an annual basis. In order to correct this language in the TVARS Rules, the System Board approved the following resolution and amendment to correctly compound interest credits annually for these participants:

NOW, THEREFORE, BE IT RESOLVED, Section 7C3 of the Rules and Regulations of the TVA Retirement System is amended to delete the language marked through and to add the language underlined as follows:

SECTION 7

7. Cash Balance Benefit Structure

C. Accounts and Credits to Accounts

3. Interest-Based Credits to Accounts

a. Cash Balance Participants Who First Became Members of the System Prior to January 1, 1996

As of the last day of each month beginning after December 31, 1995, and before the date distribution of benefits to or on behalf of a Participant or retiree commences under section 7D, the Account of each Cash Balance Participant shall be credited with an amount determined by multiplying the monthly interest rate by the Participant's Account balance as of the previous January 1 plus any pay-based credits since that time.

The monthly interest rate shall be a percentage equal to one-twelfth of the annual cash balance interest rate. The annual cash balance interest rate shall be determined by the Board effective January 1 of each year and shall be a percentage equal to the percent increase of the 12-month

average of the Consumer Price Index for All Urban Consumers (CPI-U) for the period ending the previous October 31 over the preceding 12-month period, plus three percent (3%). Provided, however, that the annual interest rate shall not be less than six percent (6%) nor exceed ten percent (10%) except that the Board may, with the approval of TVA, apply an annual interest rate greater than ten percent (10%) for any year.

b. Cash Balance Participants Who First Became Members of the System On or After January 1, 1996

(i) Prior to October 1, 2016

As of the last day of each month beginning after December 31, 1995, and before the date distribution of benefits to or on behalf of a Participant or retiree commences under section 7D, the Account of each Cash Balance Participant shall be credited with an amount determined by multiplying the monthly interest rate by the Participant's Account balance as of the previous January 1 plus any pay-based credits since that time.

The monthly interest rate shall be a percentage equal to one-twelfth of the annual cash balance interest rate. The annual cash balance interest rate shall be determined by the Board effective January 1 of each year and shall be a percentage equal to the percent increase of the 12-month average of the Consumer Price Index for All Urban Consumers (CPI-U) for the period ending the previous October 31 over the preceding 12-month period, plus three percent (3%). Provided, however, that the annual interest rate shall not be less than six percent (6%) nor exceed ten percent (10%) except that the Board may, with the approval of TVA, apply an annual interest rate greater than ten percent (10%) for any year.

(ii) On or after October 1, 2016

As of the last day of each month beginning on or after October 1, 2016, and before the date distribution of benefits to or on behalf of a Participant or retiree commences under section 7D, the Account of each Cash Balance Participant shall be credited with an amount determined by multiplying the monthly interest rate by the Participant's Account balance as of the ~~end of the previous month~~ previous January 1 plus any pay-based credits since that time.

The monthly interest rate shall be a percentage equal to one-twelfth of the annual cash balance interest rate. The annual cash balance interest rate shall be determined by the Board effective January 1 of each year and

shall be a percentage equal to the percent increase of the 12-month average of the Consumer Price Index for All Urban Consumers (CPI-U) for the period ending the previous October 31 over the preceding 12-month period, plus two percent (2%). Provided, however, that the annual interest rate shall not be less than the System's assumed rate of investment return minus two percent (2%) nor greater than the System's assumed rate of investment return minus one-half percent (0.5%), except that the Board may, with the approval of TVA, apply an annual interest rate greater than this maximum for any year.

* * *

467-15 (A-6421). The Election Committee report consisted of the item reported below at A-6422.

* * *

467-16 (A-6422). Upon the recommendation of the Election Committee, the Board voted to approve an election services contract with Election America to conduct the 2017 Board election and authorized the Executive Secretary to execute a contract based on the cost estimates provided. A copy of the services to be provided and estimated costs is filed as Exhibit 467-16.

* * *

467-17 (A-6423). The Audit Committee report consisted of the following items:

- The Board was provided a copy of the Fiduciary Liability Insurance Policy application filed in 2016 and was informed that this policy would expire on May 20, 2017, requiring notational approval before the next regular quarterly meeting in June in order to renew this policy. A copy of the 2016 application is filed as Exhibit 467-17(a).
- The Board was provided an update on the 2016 fiscal year end audit by the System's auditor, Crowe Horwath, via teleconference.
- Following the meeting, the Board members and System staff participated in fiduciary and governance training conducted by Jeanna Cullins, Partner with AHIC. A copy of the training information is filed as Exhibit 467-17(b).

- The Board discussed proposed amended and restated TVARS Bylaws and draft Committee Charters with the Board's governance consultant, Jeanna Cullins, Partner, AHIC. A copy of the proposed amended and restated Bylaws and draft Committee Charters is filed as Exhibit 467-17(c).
- The Board was provided and took note of a summary of charges on the System's credit card for the previous quarter.
- The Board was provided and took note of the System Board's travel expenses for the previous quarter.

* * *

The meeting was adjourned at 2:48 p.m., CST.



Executive Secretary



Chair