

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

December 13, 2013

(Edited to remove personal information related to individual members and retirees and proprietary information.)

The regular quarterly meeting of the Board of Directors (Board) of the TVA Retirement System (System) was held on Friday, December 13, 2013, at 12:13 p.m., CST, in the Georgia Room, Embassy Suites Nashville Airport Hotel, Nashville, Tennessee.

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The following directors were present: Allen E. Stokes, Vice-Chair and Acting Chair; Brian M. Child; John M. Hoskins; James W. Hovious; Leonard J. Muzyn; Anthony L. Troyani; and Tammy W. Wilson. Also present were Patrick D. Brackett, Executive Secretary; Pamela K. Ramsey, Assistant Secretary; Eric J. Davis, Program Manager, Investment & Risk Management; W. Colby Carter, Internal Legal Counsel (via telephone); and Chris Christie and Anne Knox Averitt, Bradley Arant Boult Cummings, External Legal Counsel.

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446-1 Each director was notified in a memorandum dated November 13, 2013, of the regular quarterly meeting to be held on December 13, 2013. A copy of the notice from the Executive Secretary is filed as Exhibit 446-1.

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446-2 (A-6082). There were no items to report from the Acting Chair.

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446-3 (A-6083). Given the expiration of the term of the Director position held by Les Bays on October 31, 2013, which created a vacancy in the office of Chair of the Board, Mr. Stokes as Vice Chair and Acting Chair called for the election of a new Chair for the remainder of the current three-year term ending at the first meeting of the Board after October 31, 2014. Mr. Stokes, Mr. Troyani, and Mr. Muzyn were nominated as candidates for the office of Chair. Pursuant to the System's bylaws, the directors voted by ballot, and none of the candidates received the required four votes necessary to be elected Chair. A second round of

voting was held and again none of the candidates received the required four votes necessary, so the office of Chair remains vacant with Mr. Stokes remaining as Acting Chair. The Board discussed nominations and voting for the office of Vice Chair but no action was taken.

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446-4 (A-6084). The Executive Secretary's report included the following:

- The Executive Secretary noted that the Board had Jenna Cullins, a partner with Hewitt EnnisKnupp, perform fiduciary education and governance training on October 31, 2013, in Knoxville and via video conferencing for the Board members in accordance with the Board Education Policy. A copy of the fiduciary education and governance training materials is filed as Exhibit 446-4.
- The Executive Secretary informed the Board that Katherine Henry, a partner in Bradley Arant's Washington, D.C. office, is having an independent broker get quotes for the Board on fiduciary liability insurance policies and that information will be available soon for the Board to evaluate and consider.

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446-5 (A-6085). The Legal Counsel's update included the following:

- Prior to the Board meeting, Bradley Arant Boult Cummings, outside legal counsel representing the System in the current lawsuit against TVA and the System, and serving as the System's fiduciary counsel, met with the Board on issues regarding the lawsuit.
- Internal Legal Counsel informed the Board that he will be working with the System staff to file applications with the Internal Revenue Service by the end of January 2014 to request new determination letters on the qualified tax status of the retirement plans.

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446-6 (A-6086). The Board approved the minutes of Meeting No. 445 held September 12, 2013.

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446-7 (A-6087). The Board accepted the Treasurer's Report for the quarter ending September 30, 2013. A copy of the Treasurer's Report is filed as Exhibit 446-7. This report is available for review at the Retirement Services office.

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446-8 (A-6088). The Board accepted the Investment Performance Report prepared by Wilshire Associates (Wilshire) for the quarter ending September 30, 2013. A copy of the Investment Performance Report is filed as Exhibit 446-8. This report is available for review at the Retirement Services office.

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446-9 (A-6089). The Board accepted the report of retirements approved for the quarter ending September 30, 2013. A copy of the report and a copy of summary demographic information regarding retirements in the quarter are filed as Exhibit 446-9. These reports contain information on individual cases and are not available for review.

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446-10 (A-6090). The Board accepted the Investment Review for the Savings and Deferral Retirement Plan (401(k) Plan) prepared by Fidelity Investment Institutional Services Company (Fidelity) for the quarter ending September 30, 2013. A copy of the 401(k) Plan Investment Review is filed as Exhibit 446-10. This report is available for review at the Retirement Services office.

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446-11 (A-6091). The Investment Committee report consisted of the items reported below at A-6092 and A-6093, and of the following items:

- Upon the recommendation of the Investment Committee, the Board voted to amend the fee agreement to the System's tail-risk hedging portfolio managed by Pacific Investment Management Company (PIMCO) reducing fees by approximately 30%. A copy of the revised PIMCO tail-risk hedging fee agreement is filed as Exhibit 446-11(a).
- The Board was provided and took note of the quarterly report on manager compliance with investment guidelines. A copy of the report, dated September 2013, is filed as Exhibit 446-11(b).
- The Board was provided and took note of information regarding investment manager asset transfers for the fiscal year 2013. A copy of this information is filed as Exhibit 446-11(c).
- The Board was provided and took note of information on due diligence meetings and conference calls between System staff and investment managers during the fourth quarter of 2013. A copy of the information is filed as Exhibit 446-11(d).
- The Board was provided and took note of a staff report on quarterly economic indicators. A copy of the report is filed as Exhibit 446-11(e).

- The Board was provided and took note of a report giving the status and performance of the System's asset allocation to its "Tail Risk" strategy managed by PIMCO. A copy of this report is filed as Exhibit 446-11(f).
- The Board was provided an update on the funded status of the System as of November 15, 2013. A copy of the report is filed as Exhibit 446-11(g).
- The Board was provided information from Wilshire on a proposed commitment schedule to new private equity investments and an analysis by Wilshire comparing direct and fund-of-fund investment strategies to private equity. A copy of the Wilshire presentations is filed as Exhibit 446-11(h).
- The Board was provided and took note of the quarterly analysis of 401(k) Plan investment options with respect to the Plan's watch list criteria. A copy of this information is filed as Exhibit 446-11(i).

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446-12 (A-6092). Following a discussion, and upon the recommendation of Wilshire and the Investment Committee, the Board voted to approve a revised Investment Policy Statement incorporating changes to the strategic asset allocation policy mix as presented by Wilshire to the Board. A copy of Wilshire's presentation and the revised Investment Policy Statement is filed as Exhibit 446-12.

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446-13 (A-6093). Upon the recommendation of the Investment Committee, the Board voted to approve, and authorized the Executive Secretary to execute, a contract with Wilshire for investment consulting services for the period January 1, 2014, through December 31, 2014. A copy of the contract is filed as Exhibit 446-13.

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446-14 (A-6094). The Retirement Committee report consisted of items reported below at A-6095, A-6096, A-6097, A-6098, and A-6099 and of the following items:

- The Board was provided and took note of the quarterly report on System communications, including TVARA website update, TVARA news article, TVARA meetings, TVARA chapter president bulletins, TVARS website updates, TVA Today articles, and additional communication initiatives. A copy of the Quarterly Communication Update is filed as Exhibit 446-14(a).

- The Board was presented with additional information from potential 401(k) Plan consultants regarding fees for customized target date fund services. A copy of this information is filed as Exhibit 446-14(b).
- The Board was provided an update on TVA's PLUS human resources system project with respect to TVARS data and records.

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446-15 (A-6095). The Board approved the calculation of a 1.53% cost-of-living allowance (COLA) increase in the monthly pension and supplemental benefits payable to eligible retirees and beneficiaries in accordance with the System Rules. The COLAs are effective with the January 2014 payments as provided for in sections 6I, 7L and 18C3 of the System Rules. A copy of the COLA calculation is filed as Exhibit 446-15.

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446-16 (A-6096). The Board approved the calculation of a 6% annual interest rate credit to participants' accounts in the Cash Balance Benefit Structure for calendar year 2014 in accordance with the System Rules. Under section 7C3 of the System Rules, this interest rate credit is calculated as the greater of (i) the percentage change in the Consumer Price Index plus 3 percent (not to exceed 10 percent unless approved by the System Board and TVA) or (ii) 6 percent. The relevant CPI increase of 1.53% plus 3% equaled 4.53%. A copy of the Cash Balance annual interest rate calculation is filed as Exhibit 446-16.

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446-17 (A-6097). The Board discussed and approved a tentative schedule and locations for the Board meetings to be held in calendar year 2014. This tentative schedule is filed as Exhibit 446-17.

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446-18 (A-6098). The Acting Chairman's recommendations for the Board's standing and special committee members were deferred to a later meeting.

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446-19 (A-6099). After discussion, and upon the recommendation of the Retirement Committee, the Board voted to adopt amendments to the Actuarial Assumptions in the Appendix to the Rules and Regulations of the System (System Rules) for service and disability retirements on or after February 1, 2014. The Board previously approved these changes to the actuarial assumptions used in the valuation of the System's liability and benefit calculations based on the results of an experience study performed by Mercer, the System's actuary (see Minute Entries 445-17 and 445-18). Accordingly, the Board took the following action:

BE IT RESOLVED, That Sections 1 and 2 of the Actuarial Assumptions in the Appendix to the Rules and Regulations of the TVA Retirement System are amended to add the language underlined as follows:

APPENDIX TO THE RULES AND REGULATIONS OF THE
TVA RETIREMENT SYSTEM

Actuarial Assumptions

Certain benefit payments are calculated on the basis of actuarial assumptions, mortality tables, and interest rates. The following have been adopted by the board. The board may change these assumptions, tables, and rates from time to time.

1. The mortality tables for service retirements are based on the 1971 Group Annuity Mortality Table rated back one year (hereinafter referred to as service mortality tables) and the mortality tables for disability retirements are based on the Society of Actuaries Disability Exposure Table Ultimate 1985 rated back six years (hereinafter referred to as disability mortality tables). Effective for service retirements on or after January 1, 2003, the mortality table used shall be the 1983 Group Annuity Mortality Table (references to service mortality tables for service retirements on or after that date shall be deemed as references to this table). Effective for disability retirements on or after January 1, 2003, the mortality table used shall be the 1983 Group Annuity Mortality Table, set forward eight years (references to disability mortality tables for disability retirements on or after that date shall be deemed as references to this table). Effective for service retirements on or after April 1, 2009, the mortality table used shall be the Combined Healthy RP-2000 Mortality Table without a collar adjustment (references to service mortality tables for service retirements on or after that date shall be deemed as references to this table). Effective for disability retirements on or after April 1, 2009, the mortality table used shall be the Combined Healthy RP-2000 Mortality Table without a collar adjustment, with a set forward that is ten years before age 70, grades down to six years from age 70 to age 73, is six years from age 73 to age 79, grades down to zero years from age 80 to age 85, and is zero above age 85 (references to disability mortality tables for disability retirements on or after that date shall be deemed as references to this table). Effective for service retirements on or after February 1, 2014, the mortality table used shall be the Combined Healthy RP-2000 Mortality Table without a collar adjustment, projected with Scale AA to 2022 (references to service mortality tables for service retirements on or after that date shall be deemed as references to this table). Effective for disability retirements on or after February 1, 2014, the mortality table used shall be the Combined Healthy RP-2000 Mortality Table without a collar adjustment, projected with Scale AA to 2022, with a set forward that is 20 years until age 55, decreasing from 20 years to 10 years from age 55 to 65, remaining 10 years from age 65 to age 75, decreasing from 10 years to zero between ages 75 and 85 and staying zero after age 85 (references to disability mortality tables for disability retirements on or after that date shall be deemed

as references to this table). Such service mortality tables and disability mortality tables, as heretofore defined, are used as the bases for determining various benefit computation factors and rates of contribution by TVA; provided, however, that for the purposes of applying the limits on benefits set forth in section 415(b) of the Internal Revenue Code, the mortality table used shall be the table prescribed by the Secretary of the Treasury in Revenue Ruling 95-6, as it may be amended or superseded. Provided, further, that effective as to distributions with annuity starting dates on or after December 31, 2002, notwithstanding any other plan provisions to the contrary, the applicable mortality table used for the purposes of adjusting any benefit or limitation under section 415(b)(2)(B), (C), or (D) of the Internal Revenue Code as set forth in section 17 of the Rules and Regulations is the table prescribed in Rev. Rule 2001-62. Provided, further, that effective as to distributions with annuity starting dates in plan years that begin on or after January 1, 2008, notwithstanding any other plan provisions to the contrary, the mortality table used for the purposes of adjusting any benefit or limitation under section 415(b)(2)(B), (C), or (D) of the Internal Revenue Code as set forth in section 17 of the Rules and Regulations is the applicable mortality table under section 417(e) of the Internal Revenue Code as prescribed and published by Internal Revenue Service guidance or regulations applicable to section 417(e).

2. The service and disability mortality tables are modified to produce benefit computation factors which same factors apply to both male and female members and beneficiaries and derivation of such factors reflect past and anticipated experience and are weighted based on various selections by male and female members. Effective for retirements on or after January 1, 2003, the tables referred to in section 1 above shall be blended with 80 percent of the male mortality and 20 percent of the female mortality except that (a) for option 1 retirements (life annuity with full cash refund) the tables shall be blended with 65 percent of the male mortality and 35 percent of the female mortality, however, effective for retirements on or after February 1, 2014, for option 1 retirements (life annuity with full cash refund) the tables referred to in section 1 above shall be blended with 55 percent of the male mortality and 45 percent of the female mortality and (b) for option 2 retirements (100 percent joint and survivor), option 3 retirements (50 percent joint and survivor), and option 4 retirements (miscellaneous options), the tables shall be blended with 90 percent of the male mortality and 10 percent of the female mortality.

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446-20 (A-6100). The Election Committee had no items to report.

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446-21 (A-6101). The Audit Committee report consisted of the items reported below at A-6102 and A-6103, and of the following items:

- The Board was provided and took note of the System Board's travel expenses for the previous quarter.
- 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 information on the audit timeline for the System and the 401(k) Plan by Crowe Horwath, the System's external auditor, and E.H. Johnson & Company, the System's internal auditor. On December 12, a phone conference with Crowe Horwath was held to discuss progress and status of the audit.
- The Board was provided an update on the status of the TVA Office of Inspector General's review of TVA's pension risk and communications and information exchanges between TVARS and the OIG. A copy of this information is filed as Exhibit 446-21.

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446-22 (A-6102). After discussion, and upon the recommendation of the Audit Committee, the Board accepted the Service Organization Control (SOC1) Report for the System for the period August 1, 2012, to July 31, 2013, prepared by E.H. Johnson & Company, P.C., the System's internal auditor. The Audit Committee met with E.H. Johnson & Company, P.C., on December 6, 2013, to go through the report in detail. A copy of the SOC1 Report is filed as Exhibit 446-22.

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446-23 (A-6103). After discussion, and upon the recommendation of the Audit Committee, the Board approved a Succession Planning Policy. A copy of the Succession Planning Policy is filed as Exhibit 446-23.

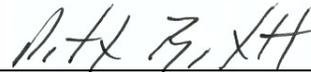
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446-24 (A-6104). The special committee created by the Board to look at the System's governance and structure reported to the Board on conversations and meetings with TVA regarding various options to address the independence of the System, including a meeting by Jeanna Cullins of Hewitt EnnisKnupp with TVA management. Following discussion, the special committee recommended requesting and entering into a loaned employee arrangement with TVA for all TVA employees working for the System. Following the special committee's recommendation, the Board voted 4-3 to request entering into a loaned employee arrangement with TVA for TVA employees working for the System and delegated to the Executive Secretary the authority to take any actions necessary to effectuate the request and agreement, including the use of the outside counsel to negotiate the agreement. Directors Hovious, Muzyn, Stokes, and Troyani voted in favor of the approval, and Directors Child, Hoskins, and Wilson voted against the approval. A copy of information regarding the meetings between TVARS and TVA on

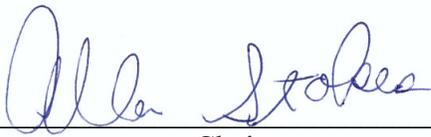
this matter and the draft request letter and draft loaned employee agreement is filed as Exhibit 446-24.

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The meeting was adjourned at 12:38 p.m., CST.



Executive Secretary



Chair