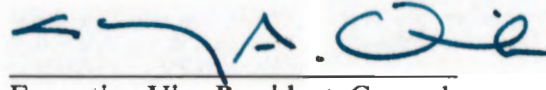


No. 19-02

Approved by the Board of Directors
at its August 22, 2019, meeting:



Executive Vice President, General
Counsel and Secretary

MINUTES OF MEETING
OF
THE BOARD OF DIRECTORS
TENNESSEE VALLEY AUTHORITY

May 9, 2019

A meeting of the Board of Directors of the Tennessee Valley Authority was held at The Warehouse, 1810 Columbia Avenue, Suite 100, Franklin, Tennessee, on May 9, 2019. The meeting was called to order at 10:00 a.m. (CDT). The meeting agenda was announced to the public on May 2, 2019. The meeting was open to public observation.

Board members in attendance were: Director and Chair Richard C. Howorth, and Directors Virginia Tyler (Gina) Lodge, Ronald A. Walter, Kenneth E. Allen, A.D. Frazier, James (Skip) Thompson, Jeff W. Smith, and John L. Ryder.

Also present were TVA officers, including Jeffrey J. (Jeff) Lyash, President and Chief Executive Officer; Sherry A. Quirk, Executive Vice President, General Counsel and Secretary; John M. Thomas, Executive Vice President and Chief Financial Officer; Michael D. (Mike) Skaggs, Executive Vice President and Chief Operating Officer; and Rebecca C. Tolene, Vice President, Supply Chain and Enterprise Improvement.

Chair Howorth presided over the meeting, which was duly called, notice to each Director having been delivered pursuant to section 1.2 of the Bylaws governing meetings of the Board of Directors of the Tennessee Valley Authority. A quorum was present.

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19-02-1. Welcome

Chair Howorth welcomed all in attendance and those watching TVA's streaming videocast. He then introduced and received comments from TVA's newly appointed Board member, John L. Ryder, and subsequently introduced and received comments from TVA's new President and Chief Executive Officer, Jeff Lyash. Chair Howorth then expressed the Board's appreciation for the hospitality received from TVA's local power partners in Middle Tennessee, and thanked the Tennessee Valley Public Power Association (TVPPA) and the Central District Manager's Association for hosting a reception and breakfast for the Board on the morning of the meeting.

Chair Howorth reported that the Board hosted its public listening session on the day before the meeting, expressed the Board's appreciation for those who spoke during the session, and announced the Board's decision to continue hosting a public listening session on the day before each public Board meeting. Chair Howorth then requested and received a report from Rebecca Tolene, Vice President, Supply Chain and Enterprise Improvement, on the themes discussed by members of the public during the May 8 listening session. Following this report

Ms. Tolene provided information on recent and upcoming opportunities for the public to provide input to TVA.

Following the completion of Ms. Tolene's report, Chair Howorth shared some thoughts on behalf of the Board regarding the issue of transparency and TVA's efforts to operate in a transparent manner. During this discussion Chair Howorth noted that no decisions affecting TVA are made at meetings of the Board's committees, and committee chairs provide reports on each committee meeting during every public Board meeting. Chair Howorth next discussed recently introduced legislation that would require TVA to allow public viewing of the Board's committee meetings. He stated that TVA will certainly implement any changes enacted by Congress, and that TVA's commitment to transparency goes beyond mere compliance with law, but further observed that the Board has concerns about allowing public viewing of TVA Board committee meetings. Chair Howorth stated that there are a number of topics associated with running a utility business that are not appropriate for public disclosure, including but not limited to, nuclear safety, cybersecurity, national security, potential staffing reductions, hiring decisions, key competitive moves, and future contract decisions. Committee meetings provide a place for Board Directors to receive briefings on ongoing matters and ask questions. Chair Howorth stated Directors need a place to have frank discussions with management and express divergent views. Chair Howorth also noted that TVA is somewhat unique compared to other governmental entities in that it has competitors, and he stated that some level of confidential discussion is critical to TVA's performance. Notwithstanding the foregoing, Chair Howorth stated that the Board hears the public's concerns being raised about transparency, intends to study those concerns, and will assess whether more can be done. Chair Howorth then requested and received remarks from Mr. Lyash on the topic of transparency, and also requested that Mr. Lyash

undertake a review of TVA’s public input opportunities and assess options for additional Board level transparency. In his remarks Mr. Lyash noted that during the review to be performed in response to Chair Howorth’s request he expects that management will find some gaps where TVA can increase transparency, and he will report any such findings to the Board for its consideration.

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Old Business

The Board approved the minutes of its February 14, 2019 meeting.

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New Business

19-02-2. Board Committee Appointments

The Board adopted the following resolution:

WHEREAS Section 2(g)(1) of the TVA Act requires that the Board create and maintain an “audit committee” and directs the Board to create such other committees of Board members as the Board considers to be appropriate; and

WHEREAS Section 2.1 of the Bylaws further provides that appointees for the membership of committees shall be submitted by the Chair of the Board to the Board for its approval as a single slate of appointees; and

WHEREAS the Chair hereby recommends the following slate of committee members:

Audit, Risk, and Regulation Committee
John Ryder, Chair
Kenny Allen
Gina Lodge
Skip Thompson

Nuclear Oversight Committee
Jeff Smith, Chair
Kenny Allen
A.D. Frazier

External Relations Committee

Richard Howorth, Chair
 A.D. Frazier
 John Ryder
 Jeff Smith

People and Performance Committee

Gina Lodge, Chair
 Kenny Allen, Chair-Elect
 Skip Thompson
 Ron Walter

Finance, Rates, and Portfolio Committee

Ron Walter, Chair
 A.D. Frazier, Chair-Elect
 Richard Howorth

BE IT RESOLVED, That the Board of Directors hereby approves the slate of committee members as recommended by the Chair, with said assignments to continue in place as provided in the Bylaws or until modified by further action of the Board.

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At this point Chair Howorth briefly commented on the Board's work in setting TVA's strategies and goals to serve the Valley far into the future in light of the many changes affecting the utility industry.

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19-02-3. President's Report

President and Chief Executive Officer Jeffrey J. (Jeff) Lyash briefly discussed the history of Franklin, Tennessee, and Williamson County, and stated he is proud to be part of TVA, and then discussed his first month on the job. Mr. Lyash noted that TVA's unique public power model is a strategic advantage for the people served by TVA, and he broadly discussed the reasons why that is the case. Mr. Lyash stated that after meeting its obligation to protect public and employee safety, TVA's next priority is to achieve top operational and financial performance

and to take those actions necessary to continually improve performance in light of anticipated changes in the utility market over the next decade. Mr. Lyash reported that TVA's year-to-date Fiscal Year (FY) 2019 results continue to reflect efficient operations, and he provided some examples.

At this point Mr. Lyash discussed TVA rates in the context of TVA's current efforts to finalize its FY 2020 business plan, management's efforts to meet TVA's needs for efficient operation to drive power and fuel costs down, and the need to properly resolve issues associated with coal combustion residuals (CCRs). Mr. Lyash reported that management is attempting to determine if there is an opportunity to avoid a rate increase in FY 2020.

Commenting on current performance, Mr. Lyash discussed TVA's well-balanced generation portfolio and significant reductions in emissions. He then reported on economic development efforts noting that, in the first six months of FY 2019, TVA helped create or retain 46,000 jobs in its service territory, and helped attract \$6.3 billion in capital investment. Mr. Lyash then spoke about TVA's efforts to ensure the existence of a workforce capable of performing the jobs of the future, specifically discussing TVA's support for robotics competitions and Science, Technology, Engineering, and Math (STEM) education throughout the Valley. Mr. Lyash then discussed TVA's environmental stewardship efforts, its flood control efforts during recent record rainfall, and the damage averted by those flood control efforts.

Mr. Lyash next raised the subject of current challenges and opportunities. He specifically mentioned managing CCRs and their associated environmental impacts, and TVA's relationships with its customers and their stakeholders. He then stated that he has appointed one executive to

focus on each of these areas and lead efforts to properly resolve or position TVA with respect to each. Joseph J. (Joe) Hoagland, Vice President, Enterprise Relations and Innovation, will lead efforts related to CCRs, and Aaron P. Melda, Vice President, Transmission Operations and Power Supply, will lead efforts to develop an integrated strategy and project plan to better coordinate TVA's efforts to strengthen relationships with the City of Memphis and Memphis, Light, Gas and Water (MLGW). Mr. Melda will also ensure that the CCRs issues at TVA's former Allen Fossil Plant site in Memphis will be coordinated with Mr. Hoagland's team to achieve the best result. Mr. Lyash added that TVA will do the right thing regarding CCRs at the Allen Fossil Plant site regardless of Memphis' decision on whether TVA will continue to provide power for its electric system. Mr. Lyash stated that TVA will use lessons learned in Memphis to help strengthen its interactions with all of the local power companies TVA serves.

Mr. Lyash next discussed steps that must be taken for TVA to achieve financial and operational excellence in the long term. He then discussed renewable energy and its place in TVA's present and future, specifically mentioning several new solar facilities in Tennessee and Alabama. Mr. Lyash stated that TVA expects to triple solar energy generation in the Valley by 2021, but added that this solar energy must be cost effective. Mr. Lyash stated that TVA's new Integrated Resource Plan (IRP) is key to making good long-term investment decisions. Mr. Lyash then discussed the new IRP, some of the priorities it expresses, and the process involved in its development.

Mr. Lyash stated that TVA must find new and better ways to achieve its priorities and improve performance as it adapts to a changing market. Mr. Lyash noted that, as of May 18, TVA will have been serving the Valley for 86 years, and stated that the current challenge is to

advance the agency's record in an industry that requires innovation and the delivery of solutions to the people it serves.

Copies of the slides used by Mr. Lyash in his report are filed with the records of the Board as Exhibit 5/9/19A.

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Following the completion of the President's Report, Mr. Lyash received comments and/or responded to questions from Directors Frazier, Walter, Allen, and Ryder.

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19-02-4. Report of the Finance, Rates, and Portfolio Committee

Director Walter, Chair of the Committee, reported the Committee met on April 17. He requested and received a report from John Thomas, Executive Vice President and Chief Financial Office, regarding Minute Item 19-02-5. Following Mr. Thomas' report on Minute Item 19-02-5, Director Walter reported that the Committee is encouraged by TVA's mid-year results. Director Walter then requested and received a report from Mike Skaggs, Executive Vice President and Chief Operating Officer, regarding Minute Item 19-02-6. Following Mr. Skaggs' report on Minute Item 19-02-6, Director Walter requested and received a report from John Thomas regarding Minute Item 19-02-7. Prior to the vote on Minute Item 19-02-7, Mr. Thomas responded to questions regarding that item posed by Director Frazier and Director Ryder.

Copies of the slides used by Mr. Skaggs in his report on Minute Item 19-02-6 are filed with the records of the Board as Exhibit 5/9/19B. Copies of the slides used by Mr. Thomas in his report on Minute Item 19-02-7 are filed with the records of the Board as Exhibit 5/9/19C.

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19-02-5. Financial Performance Update

John Thomas, Executive Vice President and Chief Financial Officer, reported on TVA's financial results for the first six months of FY 2019, starting with a review of highlights, including net income and interest expense being significantly favorable to budget. Mr. Thomas next reviewed the Summary Income Statement and the Summary Cash Flow Statement for the second quarter of FY 2019, commenting on how weather and fuel cost affected revenue, and on the effect of debt reduction on cash flow. Mr. Thomas next discussed the broad factors contributing to TVA's positive quarterly performance.

Copies of the slides used by Mr. Thomas in his report are filed with the records of the Board as Exhibit 5/9/19D.

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19-02-6. Circuit Breaker and Disconnect Switches Contracts

The Board adopted the following resolution as recommended in a memorandum from the Executive Vice President and Chief Operating Officer, dated April 3, 2019, and filed with the records of the Board as Exhibit 5/9/19E:

WHEREAS TVA has an ongoing need to obtain circuit breakers rated 15.5kV through 550kV across the enterprise; and

WHEREAS a memorandum from the Executive Vice President & Chief Operating Officer dated April 3, 2019, and attached hereto as Exhibit 5/9/19E, recommends that the Board approve, subject to final negotiations, entry into three or more long-term (five-year initial term, with options to extend up to three additional years) blanket contracts, including contracts with ABB Inc. (ABB), Mitsubishi Electric Power Products, Inc. (MEPPI), and Siemens Industry, Inc. (Siemens) for the supply of circuit breakers rated 15.5kV through 550Kv, circuit breaker spare parts and accessories, and field maintenance, testing and installation and commissioning services (Circuit Breaker Scope), subject to a total combined spend pursuant to this approval of \$125,000,000;

BE IT RESOLVED, that, the Board approves TVA's entry into blanket contracts, including contracts with ABB, MEPPI, and Siemens, for the Circuit Breaker Scope, as recommended in the Executive Vice President & Chief Operating Officer's April 3, 2019 memorandum.

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19-02-7. Rate Change – Wholesale Grid Access Charge Adjustment

The Board adopted the following resolution as recommended in a memorandum from the Executive Vice President and Chief Financial Officer, dated April 23, 2019, and filed with the records of the Board as Exhibit 5/9/19F:

WHEREAS the terms and conditions to TVA's wholesale power contracts provide that TVA may change the rate structure "from time to time... in order to assure TVA's ability to continue to supply the power requirements of [distributors] and TVA's other customers on a financially sound basis with due regard for the primary objectives of the TVA Act, including the objective that power shall be sold at rates as low as feasible;" and

WHEREAS on May 10, 2018, the TVA Board approved a modification to the wholesale rate structure to introduce a grid access charge (Grid Access Charge) and agreed to consider approval of additional modifications that may be desired to address shifts in distributor load characteristics; and

WHEREAS since May 2018, TVA and distributors have engaged in discussions regarding procedures to adjust the quantities used to calculate the Grid Access Charge; and

WHEREAS modification is needed to amend the wholesale power rate schedules to account for changes in distributor loads that could require adjustments in the quantities used to calculate the Grid Access Charge and the risk premium applicable to distributor resale rates; and

WHEREAS staff has developed guidelines that will set forth the parameters and specific circumstances under which changes to the Grid Access Charge will occur (Guidelines for Adjustment of Grid Access Units);

WHEREAS a memorandum from the Executive Vice President and Chief Financial Officer, dated April 23, 2019, (Memorandum) a copy of which is filed with the records of the Board as Exhibit 5/9/19F, recommends that the Board approve (1) the proposed wholesale power rate schedule WS applicable to distributors where the Schedule of Rates and Charges in the power contract includes resale schedules, set forth in Attachment I; (2) the proposed wholesale power rate schedule WSA applicable to distributors where the Schedule of Rates and Charges in the power contract no longer includes resale schedules, set forth in Attachment II; (3) the Guidelines for Adjustment of Grid Access Units, set forth in Attachment III; and (4) a delegation of authority to the Chief Executive Officer (CEO) to make certain future changes to the Guidelines for Adjustment of the Grid Access Units that, in the judgment of the CEO, are necessary to equitably administer the Grid Access Charge; and

BE IT RESOLVED, That after review of said Memorandum, the Board of Directors finds it to be appropriate and in the interest of TVA to approve (1) the proposed wholesale power rate schedule WS applicable to distributors where the Schedule of Rates and Charges in the power contract includes resale schedules, set forth in Attachment I; (2) the proposed wholesale power rate schedule WSA applicable to distributors where the Schedule of Rates and Charges in the power contract no longer includes resale schedules, set forth in Attachment II; and (3) the Guidelines for Adjustment of Grid Access Units, set forth in Attachment III; and

BE IT FURTHER RESOLVED, That the CEO is authorized to make certain future changes to the Guidelines for Adjustment of the Grid Access Units that, in the judgment of the CEO, are necessary to equitably administer the Grid Access Charge.

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19-02-8. Report of the Audit, Risk, and Regulation Committee

Director Thompson, Chair of the Committee, reported the Committee met April 18 for regular quarterly discussions, and again on April 30 to review TVA's quarterly filing with the Securities and Exchange Commission on Form 10-Q. At the April 18 meeting, staff briefed the Committee on a number of topics, including operational and regulatory assurance, and the status of ongoing litigation. The Committee also received an update on cybersecurity. Management provided a review of its ongoing efforts to ensure a professional and respectful workplace.

Director Thompson stated the Board and TVA's leadership team are committed to fostering a work environment that encourages employees to raise concerns, and the Committee asked management to measure against peer performance on this issue and to benchmark best practices. The Committee received a quarterly update on ongoing audits and investigations from Jill Matthews, Acting Inspector General, and her staff. Director Thompson stated the Committee appreciates the work of Ms. Matthews and her team, and noted that TVA's Office of Inspector General has been named as one of the best places to work in the federal government for 4 years in a row.

Director Thompson then reported that the Committee continued its discussion with management about the involvement of local power companies in providing broadband, and stated TVA is supportive of efforts to improve broadband connectivity and to modernize the infrastructure of the electric system. Director Thompson noted that TVA will review requests from local power companies to invest in broadband development in order to ensure adequate ratepayer protection.

Director Thompson stated that the Committee met in executive session with John Nastopoulos and George Ambler with Ernst & Young (E&Y), TVA's external auditor, and with Dwain Lanier, Vice President, Operational and Regulatory Assurance. The Committee is satisfied that both groups were provided with the appropriate independence to perform their oversight responsibilities.

Director Thompson stated several written reports were provided to the Committee on enterprise risk. The Committee also received a status report on the pilot program to provide

electric vehicle charging rates, minutes of TVA's Disclosure Control Committee meetings, and a quarterly regulatory assurance report on local power company rates.

Director Thompson reported that the Committee's April 30 meeting was held by conference call, and during the meeting the Committee reviewed TVA's quarterly 10-Q report to the SEC. TVA staff briefed the Committee on the report and E&Y provided an assessment of TVA's financial reporting process. Director Thompson stated the 10-Q report for TVA's second quarter was filed with the SEC on May 2.

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19-02-9. Report of the Nuclear Oversight Committee

Director Smith, Chair of the Committee, reported the Committee met at Sequoyah Nuclear Plant on April 11, at which time Tim Rausch, Senior Vice President and Chief Nuclear Officer, provided a report on overall safety culture and the status of TVA's nuclear fleet. Director Smith stated one of the most important things the Committee is focused on is trying to improve overall performance by paying attention to staff and human performance issues. The Committee reviewed the status and progress being made on a series of improvement initiatives promulgated by Mr. Rausch and his team, and Director Smith stated the Committee continues to challenge Mr. Rausch and his team to ensure those initiatives are appropriately aggressive but not so aggressive as to cause any unintended consequences. Director Smith reported that Mr. Lyash attended the Committee's meeting and it was beneficial to have his perspective and experience in nuclear issues added to the discussions.

Director Smith stated that one of the most interesting issues the Committee asked management to report back on is how much additional power TVA can derive from its existing nuclear fleet. The Committee wants to understand what that would involve and when the additional power would be available. Director Smith stated management will report back on this matter soon.

During its meeting the Committee received an update on progress at each of TVA's nuclear plants. Mr. Rausch and his team also reported on pending regulatory issues, concerns, and upgrades. Director Smith then reported that the extended power uprate at Browns Ferry Nuclear Plant, when completed later this year, will add 465 MW of capacity to the TVA system, equal to approximately one-half of a traditional nuclear plant. Director Smith stated this is another example of TVA employees accomplishing an incredibly difficult task without fanfare or notoriety.

Director Smith stated that he and Director Allen have taken the opportunity when the Committee meets to get out into TVA's nuclear plants and interact with working staff in a manner unrestrained by management. Director Smith stated he feels good after speaking with plant employees because they are transparent and unafraid to tell Directors about their concerns. Director Smith emphasized how important this is in a nuclear culture.

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Following the completion of Director Smith's report, Director Lodge requested and Director Smith provided more specific information on the nature of the interactions he has with

TVA's nuclear plant employees while on site. After Director Smith responded, Director Lodge requested and received comments on the same issue from Mr. Lyash.

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19-02-10. Report of the People and Performance Committee

Director Lodge, Chair of the Committee, reported the Committee met on April 18 and spent time reviewing TVA's year-to-date performance against goals set at the beginning of the fiscal year. The Committee also received an operational performance update from Mike Skaggs, Executive Vice President and Chief Operating Officer. In addition, the Committee received annual updates on employee benefit costs, labor relations, and safety, and was pleased to learn that TVA's healthcare plan is more effectively managed and provides greater value per dollar spent than the average corporate healthcare plan. Director Lodge noted that the number of reportable safety incidents has trended down since 2015, but added that work remains as TVA strives to achieve its goal of an accident-free workplace. The labor relations update focused on TVA's strong relationships with employee unions, and specifically discussed the many improvements accomplished through the union-employee led program, Code of Excellence, since its FY 2018 adoption. The Committee also discussed peer group benchmarking and a proposed compensation plan update with its independent consultant, FW Cook. In addition, Director Lodge stated that the Committee reviewed draft corporate goals for FY 2020.

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Following the completion of Director Lodge's report, Director Allen requested and received comments from Mr. Lyash on his impressions regarding the safety culture at TVA.

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19-02-11. Report of the External Relations Committee

Director Frazier, Chair of the Committee, reported the Committee met on April 18 and received updates on communications and marketing, community engagement, customer engagement, and government relations. Director Frazier discussed TVA's community engagement activities, touching on TVA's support for STEM education, assistance in humanitarian projects such as food banks and disaster relief, TVA's Investment Challenge program, and TVA support for robotics programs. With regard to customer engagement, Director Frazier specifically mentioned TVA's flexibility pilot project approved at the Board's February 14, 2019, meeting, as well as TVA's outreach to Memphis in association with the Allen Fossil Plant CCR concerns and the review undertaken by Memphis of whether it will continue to obtain its wholesale power from TVA. Director Frazier characterized TVA's government relations efforts as considerable, noting that the work is more challenging recently due to all of the newly elected members of Congress and state legislatures.

Director Frazier congratulated TVA's River Operations team for work well done during recent record rainfall in the Valley. While significant flooding did occur, February rainfall was more than two and one-half times the normal amount, and the diligence of TVA River Operations employees helped prevent approximately \$1.6 billion of flood damage.

Director Frazier stated the Committee discussed the format of the Board's listening sessions, and he expressed support for the new format in stating that the Board cannot listen to

the issues raised by speakers without having time to reflect on those issues before making decisions. Director Frazier then stated the Committee received reports on the activities of TVA's federal advisory committees, the Regional Resource Stewardship Council (RRSC) and the Regional Energy Resource Council (RERC), and he reported that on May 8 the RRSC recognized the work of TVA River Operations during the recent flooding by presenting them with a resolution of appreciation. Director Frazier thanked the RRSC for recognizing TVA's work, and he also thanked TVA's many partners for helping mitigate the impact of record-breaking rainfall.

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Before adjourning the meeting, Chair Howorth noted that this was the last meeting where he would be acting as Board Chair, made remarks on his tenure as Chair, and offered thanks to the many people at TVA who assist and support the Board. Chair Howorth's remarks were followed by comments from the other Directors.

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The meeting was adjourned at 11:36 a.m. (CST).