

No. 18-04

Approved by the Board of Directors
at its February 14, 2019, meeting:



Executive Vice President, General
Counsel and Secretary

MINUTES OF MEETING
OF
THE BOARD OF DIRECTORS
TENNESSEE VALLEY AUTHORITY

November 14, 2018

A meeting of the Board of Directors of the Tennessee Valley Authority was held in the Bancorp South Conference Center, 387 East Main Street, Tupelo, Mississippi, on November 14, 2018. The meeting was called to order at 9:30 a.m. (CST). The meeting agenda was announced to the public on November 7, 2018. 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, Eric M. Satz, Kenneth E. Allen, A.D. Frazier, James (Skip) Thompson, and Jeff W. Smith.

Also present were TVA officers, including William D. (Bill) Johnson, 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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18-04-1. Welcome

Chair Howorth welcomed those in attendance, then opened the meeting with a video link message from Mississippi's Governor, Phil Bryant. Following Governor Bryant's message Chair Howorth invited and received remarks from Tupelo, Mississippi, Mayor Jason Shelton. Following Mayor Shelton's remarks, Chair Howorth briefly discussed some aspects of Tupelo's history and its partnership with TVA, spoke about the Board's pilot public listening session held November 13, and then thanked the speakers who participated in the session and Director Satz for his leadership on how best to host the Board's listening sessions. Chair Howorth then requested and received a report from Rebecca Tolene, Vice President, Supply Chain and Enterprise Improvement, on the themes raised by speakers during the November 13 listening session. During Ms. Tolene's presentation, Mike Skaggs, Executive Vice President and Chief Operating Officer, reviewed one particular subject raised at the listening session by several family members in attendance involving routing of the proposed Oxford-Coffeeville transmission line construction.

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Old Business

The Board approved the minutes of its August 22, 2018, meeting.

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New Business**18-04-2. President's Report**

President and Chief Executive Officer William D. (Bill) Johnson expressed his pleasure at being in Tupelo, the first city to contract for TVA power, and also mentioned that TVA currently serves 13 other municipal electric systems and 14 electric cooperatives in Mississippi, including Elkhorn Electric, the first electric cooperative in the United States. Mr. Johnson then recognized 4 County Electric Power Association, discussed the accomplishments achieved during the tenure of its recently retired General Manager/Chief Executive Officer, Joe Cade, and reported that Mr. Cade's successor is Brian Clark, former Chief Financial Officer. Mr. Johnson then recognized Norma Kilgore, recently retired General Manager of Natchez Trace Electric Power Association, and reported that Ms. Kilgore's successor is Shawn Edmondson, a 20-year veteran at Natchez Trace who formerly worked as a system engineer. Mr. Johnson next recognized the eight customers in Mississippi directly served by TVA and mentioned the thousands of quality jobs provided by these customers.

Mr. Johnson discussed the strategic imperatives within which TVA operates: responsible stewardship of the region's natural resources; management of debt to enable TVA to function within its means; maintenance of power system assets reliability; and the provision of low cost electricity generated from a diverse mix of sources. He then reported on the very favorable

results of the efforts exerted by TVA employees in Fiscal Year (FY) 2018, and attributed the strong results to following TVA's long-range financial plan over the past five years.

Mr. Johnson then reported several metrics demonstrating the quality of FY 2018 performance and stated that TVA is turning its focus to further reductions in debt.

Mr. Johnson discussed TVA's generating assets and reported that more than half the electricity currently supplied by TVA is derived from clean, carbon-free sources, that CO₂ emissions are currently 50 percent below 2005 levels and on track to be 60 percent below that level within the next few years, and that reliability of energy delivery was 99.999 percent for the 18th year in a row and the best ever when measured by load not served. Mr. Johnson attributed this level of reliability to sound operation of the generation system and the skilled operation, maintenance, and expansion of the transmission system. Mr. Johnson then mentioned the transmission system expansion project currently underway in Olive Branch, Mississippi, touted the economic growth and increased reliability it will provide to the area, and reported that across the Valley TVA plans to invest approximately \$2.2 billion in transmission improvements over the next five years to support reliability and economic development.

Mr. Johnson reported that Shawnee Fossil Plant earned recognition as one of the top coal plants of the year by Power Magazine, that employees completed the first of the upgrades that will increase the capacity of Browns Ferry Nuclear Plant by 14 percent, and that Watts Bar Nuclear Plant Unit 2 was named as the 2018 Plant of the Year by Power Magazine. Mr. Johnson stated that TVA is adding cost-effective renewable energy to the region's power supply, specifically mentioning the two new solar energy installations that will be built to supply 100 percent of the energy needs of the new Facebook data center in Huntsville, Alabama, and also

making reference to the six community solar sites in the Valley and four others currently planned for completion. Following up, Mr. Johnson stated that TVA is planning to invest at least \$8 billion in renewable energy over the next 20 years, and that in FY 2018 TVA was designated among the top five green utilities for its green pricing programs by the National Renewable Energy Lab. Mr. Johnson reported that with the addition of several large natural gas combined cycle plants in the last few years, TVA now has a system that will accommodate a greater share of intermittent, renewable resources.

Mr. Johnson next discussed TVA's programs to recognize the success of Valley businesses in reducing their carbon footprints and the large industries served by TVA that make exceptional efforts to reduce carbon emissions and improve the environment. He then specifically mentioned the Resolute Forest Products locations in Grenada, Mississippi, and Calhoun, Tennessee, reporting that both locations earned TVA's Leadership Circle award. Mr. Johnson stated that businesses served by local power companies in the Valley are also working to reduce their emissions, and specifically mentioned Mississippi State University, served by Starkville Utilities, and Roxell USA, served by Northcentral Electric Power Association.

Mr. Johnson discussed operation of the Tennessee River system for flood control, power, navigation, recreation, water supply, and protection of aquatic life and also noted recent economic development achievements in the Valley. Mr. Johnson then discussed TVA's efforts to encourage small and diverse business in the Valley, reporting that TVA spent more than \$800 million with small business and more than \$400 million with diverse business, and that SBC

Instrument & Control in Corinth, Mississippi, was recognized as TVA's Diverse Supplier of the Year.

Mr. Johnson discussed TVA's competition with other utilities and corporations for the talent needed to perform the functions critical to its mission. He stated that TVA employee compensation is based on results, and a portion of each employee's pay is at-risk each year and disbursed only if results meet or exceed specific, pre-determined business goals. Mr. Johnson then recommended, based on outstanding results in FY 2018, that employees' collective performance be recognized with established pay for performance awards and a corporate multiplier of 1 in the Winning Performance Team Incentive Plan and Executive Annual Incentive Plan programs. He then requested that the Board also approve his recommendation with regard to the Executive Long-Term Incentive Program.

Mr. Johnson expressed TVA's appreciation for the service of military veterans, members of the National Guard, and members of the military reserves, then discussed the value to TVA of the leadership skills and experience of TVA employees who are members of these groups. He reported that in FY 2018 TVA was named one of the top ten military friendly employers in the nation for the second year in a row, and discussed the role of the TVA Veterans Association in assisting with TVA's support of veterans and members of the National Guard and military reserves. At this point Mr. Johnson requested that all veterans, active National Guard, and active military reserve members present stand, after which he led a round of applause in appreciation of the service provided by these individuals. Following this appreciation, Dan Callahan of the Department of Defense (DOD) Committee for Employer Support of the Guard and Reserve,

presented DOD's Extraordinary Employee Support Award to Chair Howorth, who accepted on behalf of TVA.

At this point Mr. Johnson announced that he will be retiring from TVA during the upcoming year after the Board has completed its search for his replacement. He then thanked the Board for providing him with the opportunity to serve and was given a standing ovation by all present.

Copies of the slides used by Mr. Johnson in his report are filed with the records of the Board as Exhibit 11/14/18A.

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Following the completion of the President's Report, Chair Howorth, on behalf of the Board, expressed appreciation for Mr. Johnson's leadership, the accomplishments achieved during his tenure at TVA, the relationships fostered during that tenure between TVA and its customers, stakeholders, and ratepayers, and for Mr. Johnson's willingness to remain through the period of selection and orientation of his successor.

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18-04-3. Report of the Finance, Rates, and Portfolio Committee

Director Walter, Chair of the Committee, reported the Committee met on October 24. He then requested and received a report from John Thomas, Executive Vice President and Chief Financial Officer, regarding Minute Item 18-04-4. Following Mr. Thomas' report, Director

Walter congratulated TVA on FY 2018's extraordinary financial performance, discussed the focus of TVA employees and the collaborative efforts with customers and stakeholders required to achieve these types of results, and stated that TVA can only deliver power economically and reliably on a consistent and stable basis under sound financial conditions. Director Walter then reported that during its most recent meeting, the Committee reviewed progress on implementation of the wholesale rate change approved during the Board's May 2018, meeting and that many local power companies have started to adjust their retail rates. Director Walter reported that management provided the Committee with an update on the 2019 Integrated Resources Plan, and stated the Committee is pleased with progress to date and looks forward to receiving a draft next spring. Director Walter stated the Committee also conducted a year-end review of its work during FY 2018 to ensure it is focused on oversight and will continue to fulfill its responsibilities.

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18-04-4. Financial Performance Update

John Thomas, Executive Vice President and Chief Financial Officer, reported on TVA's financial performance during FY 2018. Mr. Thomas reviewed FY 2018 financial highlights and characterized FY 2018 as a very strong year for TVA. Upon completion of Mr. Thomas's presentation, Director Smith requested an explanation of the affect FY 2018's favorable financial results will have on rates, and Mr. Thomas responded that due to fuel savings, lower operating expenses, and a lower debt level, the effective rate for customers in FY 2018 was lower than the effective rate in FY 2017.

Copies of the slides used by Mr. Thomas in his report are filed with the records of the Board as Exhibit 11/14/18B.

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18-04-5. Report of the People and Performance Committee

Director Lodge, Chair of the Committee, reported the Committee met on October 25, and that the main focus of the Committee was the final report regarding financial and operational performance for the fiscal year. Director Lodge concurred with Director Walter's assessment that FY 2018 was an excellent financial year for TVA, adding that this is demonstrated by the fact that TVA exceeded its goal for paying down debt. Director Lodge stated that FY 2018 financial performance was driven by strong operational performance, including a nuclear unit capacity factory and combined cycle outage rate that exceeded target goals, the best safety performance recorded since tracking began in 1985, record setting performance in transmission reliability, and helping to attract or retain over 65,000 jobs and more than \$11.3 billion in capital investment to the TVA service area.

Director Lodge stated the Committee appreciates the hard work and accomplishments of TVA employees in FY 2018, then explained that a portion of every TVA employee's compensation is at risk, and depends on whether the employee meets or exceeds performance goals established at the beginning of each year. The Committee assessed TVA's performance, and in consultation with the Chief Executive Officer determined the corporate multiplier for TVA's Winning Performance Team Incentive Plan and Executive Annual Incentive Plan programs should be set at 1, with pay to be issued per the approved metrics as the Committee

found no qualitative factors warranting a reduction in the quantitative scores. Director Lodge reported that TVA also has a set of incentives focused on longer term performance that apply to executives and officers based on metrics measuring key performance factors over a three year horizon. Wholesale rates, reliability, and external factors such as feedback from customers are among the items measured. Director Lodge stated that TVA delivered strong results in the areas measured by the longer term incentive plan and reported the Committee's recommendation to make payments under the plan at the rate of 108 percent. At this point, Director Lodge requested and received a vote by the Board on Minute Items 18-04-6, 18-04-7, and 18-04-8.

Following the votes on the foregoing items, Director Lodge reported that, working with the Board Chair and the Committee's independent adviser, the Committee also conducted its annual review of the Chief Executive Officer's performance and set his compensation structure for FY 2019. The independent adviser was engaged by the Committee to inform it of peer company practices and the general market trend. Director Lodge stated the Committee seeks to compensate fairly and competitively while recognizing the public service nature of TVA. Director Lodge reported that after reviewing TVA's performance and the benchmarking data provided by its independent adviser, the Committee recommended a 6 percent increase in the total direct compensation of the Chief Executive Officer. Director Lodge added that the Committee believes this increase is warranted given TVA's excellent financial and operational performance in FY 2018, as well as the Committee's expectation of continued financial success in FY 2019. Director Lodge then made a comparison of Chief Executive Officer pay at TVA versus that at industry peers, stating that even under the Committee's recommendation TVA would be paying its Chief Executive Officer at less than the 25th percentile for similar industry jobs. At this point, Director Lodge requested and received a vote by the Board on Minute Item

18-04-9. Following the vote on Minute Item 18-04-9, Director Lodge stated that the actions recommended by the Committee and approved during this meeting will be reflected in the 10-K report to be filed with the Securities and Exchange Commission (SEC).

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18-04-6. Winning Performance Team Incentive Plan and Executive Annual Incentive Plan Corporate Multiplier Approval for Fiscal Year 2018

The Board adopted the following resolution as recommended in a memorandum from the President and Chief Executive Officer, dated November 2, 2018, and filed with the records of the Board as Exhibit 11/14/18C:

WHEREAS in a memorandum dated November 2, 2018, a copy of which is filed with the records of the Board as Exhibit 11/14/18C (Memorandum), the Chief Executive Officer (CEO) recommended approval of TVA's Winning Performance Team Incentive Plan (WPTIP) and Executive Annual Incentive Plan (EAIP) Corporate Multiplier for FY 2018 as set out in that Memorandum and its attachment; and

WHEREAS on August 23, 2017, the TVA Board approved the WPTIP and EAIP Corporate Multiplier measures and goals for FY 2018; and

WHEREAS the People and Performance Committee has reviewed the proposed WPTIP and EAIP Corporate Multiplier for FY 2018, as described above, and recommends its approval;

BE IT RESOLVED, That the Board approves the WPTIP and EAIP Corporate Multiplier as set out in the Memorandum and its attachment effective for FY 2018.

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18-04-7. Executive Long-Term Incentive Plan Payout Approval for Cycle Ending in Fiscal Year 2018

The Board adopted the following resolution as recommended in a memorandum from the President and Chief Executive Officer, dated November 2, 2018, and filed with the records of the Board as Exhibit 11/14/18D:

WHEREAS in a memorandum dated November 2, 2018, a copy of which is filed with the records of the Board as Exhibit 11/14/18D (Memorandum), the Chief Executive Officer (CEO) recommended approval of the Long-Term Incentive Plan (LTIP) payout percentage for the cycle ending in FY 2018; and

WHEREAS on August 21, 2015, the TVA Board approved the LTIP measures and goals for the cycle ending in FY 2018; and

WHEREAS the People and Performance Committee has reviewed the LTIP payout percentage for the cycle ending in FY 2018 and recommends its approval at the percentage set forth in the Memorandum and its attachment;

BE IT RESOLVED, That, with regard to the LTIP performance cycle ending in FY 2018, the Board approves the LTIP payout percentage as set out in the Memorandum and its attachment.

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18-04-8. Fiscal Year 2019 Salaries in Excess of Executive Schedule Level IV

The Board adopted the following resolution as recommended in a memorandum from the Senior Vice President and Chief Human Resources Officer, dated October 4, 2018, and filed with the records of the Board as Exhibit 11/14/18E:

WHEREAS the People and Performance Committee has reviewed and made information available to other Board members regarding the employees other than the Chief Executive Officer and the Inspector General with salaries in excess of Executive Schedule Level IV; and

WHEREAS the Board previously delegated to the Chief Executive Officer the authority to approve lists of TVA employees whose salaries would exceed Executive Schedule Level IV for Fiscal Years 2008 through 2018; and

WHEREAS the Board does not desire to alter the previously approved guidance as part of any delegation related to Executive Schedule Level IV for Fiscal Year 2019;

BE IT RESOLVED, That the Board hereby delegates to the Chief Executive Officer the authority to approve a list of TVA employees other than the Chief Executive Officer and the Inspector General whose salaries will exceed Executive Schedule Level IV for Fiscal Year 2019.

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18-04-9. CEO Fiscal Year 2019 Compensation

The Board adopted the following resolution as recommended in a memorandum from Director Lodge, dated November 13, 2018, and filed with the records of the Board as Exhibit 11/14/18F:

WHEREAS in accordance with the TVA Act, as amended, and the TVA Compensation Plan, as approved by the Board, the People and Performance Committee (“Committee”) has considered and recommends proposed compensation adjustments for TVA’s Chief Executive Officer (“CEO”) beginning in Fiscal Year 2019 consisting of an increase in base salary and a performance grant (“LTP”) and a retention grant (“LTR”) under TVA’s Long-Term Incentive Plan (“LTIP”), as set forth in the November 13, 2018, memorandum from Virginia T. Lodge to the Board, a copy of which is filed with the records of the Board as Exhibit 11/14/18F; and

WHEREAS FW Cook, the Committee’s independent executive compensation consultant, has reviewed and concurred in this recommendation;

BE IT RESOLVED, That the Board hereby approves adjustments to the CEO’s compensation beginning in Fiscal Year 2019 consisting of an increase in base salary and a performance grant (“LTP”) and a retention grant (“LTR”) under TVA’s Long-Term Incentive Plan (“LTIP”), as set out in Exhibit 11/14/18F. Previously approved components of total compensation will remain unchanged.

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18-04-10. Report of the Audit, Risk, and Regulation Committee

Director Thompson, Chair of the Committee, reported the Committee met twice, once for its quarterly discussion and again to review TVA’s annual 10-K report to be filed with the SEC.

At its regular meeting on October 24, the Office of Inspector General (OIG) provided updates regarding ongoing audits and investigations, and reviewed a summary of their plan for FY 2019. Management provided the Committee with an overview of TVA's debt issuance authority. Management also discussed an opportunity to accelerate the amortization of certain regulatory assets given TVA's strong net income in FY 2018, and informed the Board of its plan to record accelerated amortization for the Bellefonte and nuclear training regulatory assets in FY 2018, resulting in a zero balance for these assets as of September 30, 2018. Management also recommended accelerating amortization of the regulatory asset for the environmental clean-up cost related to the Kingston ash spill. Director Thompson explained that the effect of these accelerations is to reduce or eliminate expense items that would otherwise be included in customer rates in the future, and stated the Committee agrees with management's recommendations. At this point Director Thompson requested and received a vote by the Board on Minute Item 18-04-11. Following the vote on Minute Item 18-04-11, Director Thompson reported the Committee met in executive session with TVA's regulatory assurance group and received an update on various TVA programs under the group's effectiveness review, as well as several reports on the status of TVA's Enterprise Risk Management program and Disclosure Control Committee activities. Director Thompson stated the Committee also conducted a review of its charter and annual work plan, and conducted its annual review of the Board's conflict of interest policy.

Director Thompson reported that the Committee's second meeting was held by conference call on November 9, and during the meeting the Committee focused solely on reviewing TVA's annual 10-K report. TVA staff briefed the Committee on the draft report, and TVA's external auditors at Ernst & Young (EY) provided an independent assessment of TVA's

financial reporting process. Following its review the Committee recommended the inclusion of the financial statements in the 10-K report.

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18-04-11. Accelerated Amortization of Regulatory Assets

The Board adopted the following resolution:

WHEREAS in August 2017, the Board authorized management to accelerate amortization of the following regulatory assets to the extent that actual net income for FY 2018 exceeds the budgeted amount, up to the aggregate amount thereof: (1) deferred nuclear generating units (Bellefonte), (2) environmental cleanup costs related to the Kingston ash spill (Kingston), and (3) nuclear training costs related to the refurbishing and restarting of Browns Ferry Unit 1 and the construction of Watts Bar Unit 2 (Nuclear Training); and

WHEREAS, pursuant to this delegation, management informed the Board in November 2018 that TVA is planning to record \$857 million of accelerated amortization of the Bellefonte and Nuclear Training regulatory assets in FY 2018, which means that these two regulatory assets will be fully amortized and have a zero balance as of September 30, 2018; and

WHEREAS as discussed and explained by the Chair of the Audit, Risk, and Regulation Committee at the Board's November 14, 2018 meeting, management recommends (1) accelerating the amortization of the Kingston regulatory asset and (2) using the amounts included in the FY 2019 rate action for the Bellefonte and Nuclear Training regulatory assets, to the extent needed, for such acceleration;

BE IT RESOLVED, That the Board of Directors hereby approves management's recommendation.

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18-04-12. Report of the External Relations Committee

Director Satz, Chair of the Committee, reported the Committee met on October 25.

During the meeting management provided progress updates on the 2019 Integrated Resource Plan (IRP) and revisions to TVA's National Environmental Policy Act (NEPA) procedures.

Director Satz stated that collecting input is a vital part of the process involved in both. He added that the IRP will help chart TVA's energy resource development, taking into consideration new technologies available and looking into different potential futures to assist in determining what fleet will be most reliable and least cost in the future. Director Satz then explained that the revision of TVA's NEPA procedures is intended to update TVA's processes to reflect past experiences, align current decision making, and enable environmental compliance. Director Satz stated TVA balances many competing interests, whether in formulating an IRP or assessing the environmental impact of proposed action on TVA's public lands. Learning more about these public interests and engaging stakeholders will result in better plans, better decisions, and better execution. Whether input comes from members of the Regional Resource Stewardship Council (RRSC), the Regional Energy Resource Council (RERC), the IRP Work Group, or participants in a public meeting or comment period, the Board appreciates the input and involvement. With such input, TVA is able to broaden its views and develop balanced solutions for all of the people it serves. Director Satz stated the Board encourages staff to continue its constructive dialogs with many stakeholder groups as part of its decision making process.

Director Satz reported that the Committee was briefed on TVA's current efforts in working with its local power company (LPC) partners, and also requested and received independent information on distributed energy resources and how they will affect, and possibly improve, TVA's reliability in the future. Director Satz then expressed appreciation to staff whose efforts have secured approximately 700 MW of solar power in TVA's service area, and stated he believes this marks the beginning of something new. He stated that, in addition to helping bring Facebook to the Valley with the attendant jobs and investment, TVA made great strides in providing more renewable energy by contracting for the largest solar installations in

Tennessee and Alabama, and he expressed appreciation for the work of TVA staff and partners from inside and outside the Valley that lead to this accomplishment.

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18-04-13. Report of the Nuclear Oversight Committee

Director Smith, Chair of the Committee, reported the Committee met on October 4 at Sequoyah Nuclear Plant and spent time walking the floors of the plant in order to have an opportunity to interact with employees and first line supervisors in particular. Director Smith stated he continues to be impressed with the professionalism and quality of staff with whom the Committee has interacted at all of TVA's nuclear plants, and the Committee considers the selection and development of first line supervisors to be one of the most important things upon which the Committee must focus its attention because they set the culture and tone of the workforce. The Committee is pleased to have observed that employees are very proud to work with and to be a part of TVA, and the Committee will continue to focus on first line supervisor development in working with the new Chief Nuclear Officer.

Director Smith reported that TVA's nuclear plants each have different issues to address, and the Committee feels all such issues are being paid appropriate attention. Director Smith stated there is some overlap and some similarity in issues, but also some differences, and there are instances where lessons learned at a particular site could be more effectively shared with the others. He stated the Committee believes there are some excellent supervisory programs in effect at the different sites, and all sites could benefit by picking from the best of them. Director Smith reported the Committee has also reviewed nuclear fleet performance as a whole and has

nothing to report in connection with that review. Director Smith noted the slight increase in capacity factor and acknowledged that increase marks a positive trend. Director Smith stated the Committee spent time with nuclear oversight and quality assurance personnel, and the Committee believes these individuals are performing the necessary audits and assessments to monitor low-level issues and concerns. Director Smith reported that, overall, the Committee is pleased with the safe operation and production of the nuclear fleet, is encouraged by management's efforts at continuous improvement and leadership improvement, and will continue to pay attention to these issues going forward.

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Following the completion of Report of the Nuclear Oversight Committee, Chair Howorth expressed his appreciation and thanks to Director Satz in light of the impending expiration of his term of office, after which Director Satz made remarks of his own which were then followed by brief remarks from Director Lodge.

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The meeting was adjourned at 10:56 a.m. (CST).