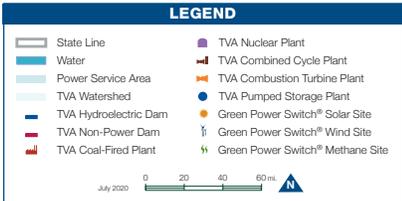
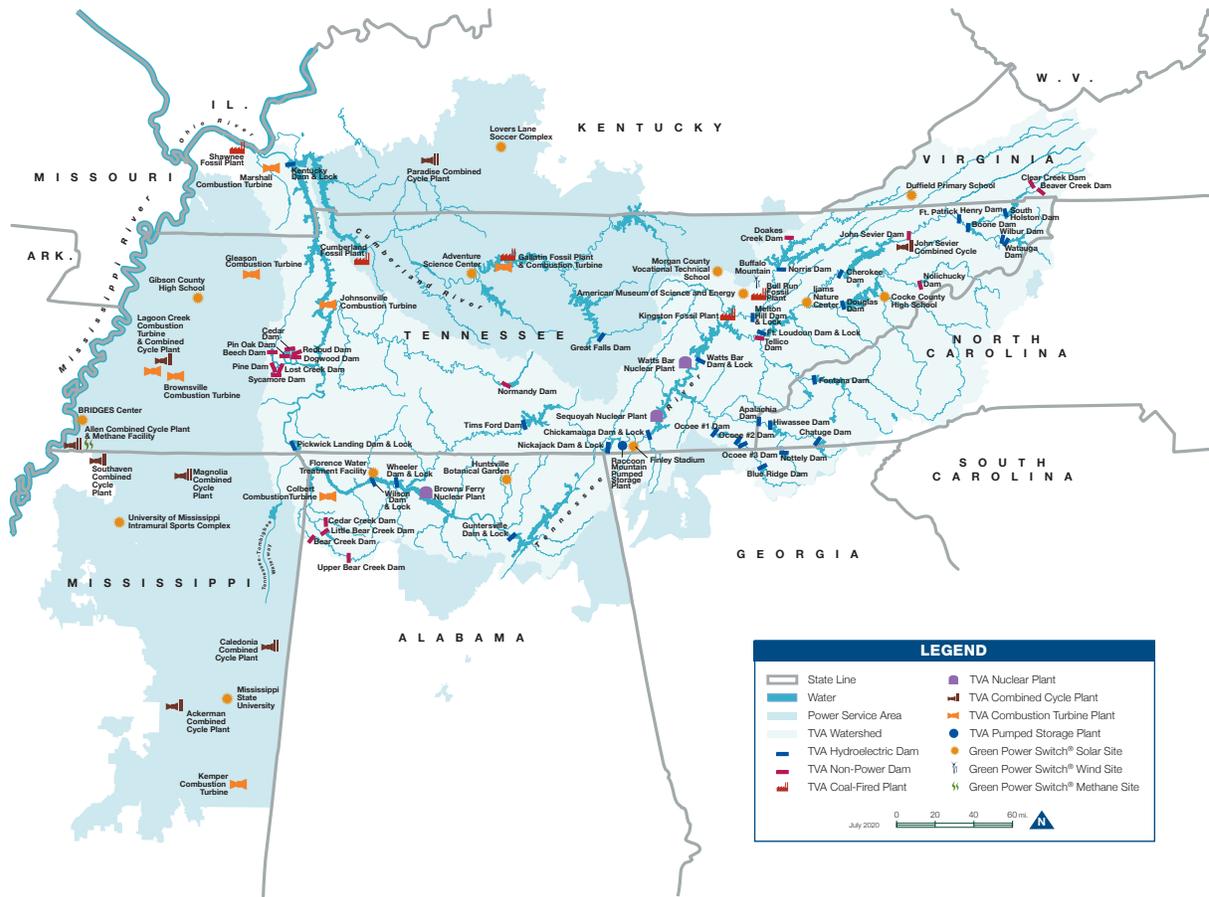
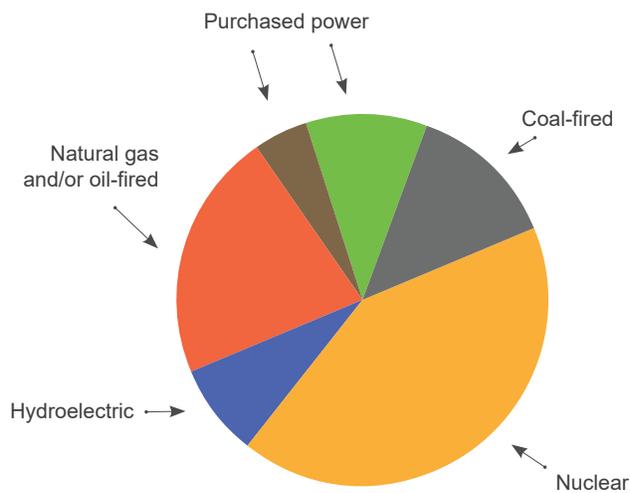




Office of the Inspector General
TENNESSEE VALLEY AUTHORITY
Semiannual Report
April 1, 2023 - September 30, 2023



Total Power Supply by Generating Source Twelve Months Ended September 30, 2023⁽¹⁾⁽²⁾ (in millions of kilowatt hours)



- Coal-fired - 20,896
- Nuclear - 67,102
- Hydroelectric - 13,063
- Natural gas and/or oil-fired - 34,467
- Purchased power (hydroelectric and other renewables) - 7,838
- Purchased power (natural gas, oil-fired, and coal-fired) - 16,425

¹ For additional detail, see TVA's 10-K for the period ended September 30, 2023.

² Generation from TVA-owned renewable resources (nonhydroelectric) is less than one percent for the period shown and therefore is not represented in the chart above. Purchased power contains the majority of TVA's nonhydroelectric renewable energy supply.

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MESSAGE FROM THE INSPECTOR GENERAL

I am pleased to present our report for the period April 1, 2023, to September 30, 2023. In this semiannual period, our audit, evaluation, and investigative activities identified more than \$67.7 million in questioned costs; funds to be put to better use; recoveries, fees, and fines; waste/other monetary loss; and opportunities for Tennessee Valley Authority (TVA) to improve its programs and operations. Below are highlights of our work this period.



- Three contract compliance audits identified almost \$6.2 million in questioned costs.
- Two preaward examinations identified about \$54.3 million of potential savings opportunities for TVA to negotiate.
- An audit of TVA's load not served (LNS) winning performance measure identified opportunities to improve the controls to ensure appropriateness of LNS exclusions and user access permissions.
- Information Technology (IT) Audits' Federal Information Security Modernization Act (FISMA) audit found TVA's information security program was not operating in an effective manner based on our analysis of the FISMA metrics for fiscal year (FY) 2023.
- An evaluation found most critical components at gas plants have not been evaluated to identify critical spare parts, and additional improvements were needed for storage and maintenance of certain critical spare parts.
- Four organizational effectiveness evaluations in the Gas Operations, TVA Police and Emergency Management, Transmission Planning and Projects, and Power Service Shop organizations identified strengths as well as risks that could, if not addressed, impact each individual business unit's ability to execute its mission.
- Our investigative results include four indictments, one information, three convictions, two civil settlements, and multiple criminal and administrative restitutions totaling about \$7.2 million.

Sadly, on July 5, 2023, former Inspector General (IG) Norman A. Zigrossi passed away. Norm Zigrossi was appointed by the TVA Board of Directors (Board) as TVA's first IG. He served as IG from January 1986 until April 1992. At the time of his appointment, TVA was in the midst of shutting down its nuclear program because of safety concerns. The initial caseload of the Office of the Inspector General (OIG) would be centered on these nuclear safety concerns. Prior to becoming IG, Norm was with the Federal Bureau of Investigations for 23 years. I was honored to work with him in building the foundation for the office we have today. We send our condolences to his family and our appreciation for his service to this country and our office.



On May 18, 2023, TVA celebrated its 90th anniversary. During those years, TVA has employed different strategies to carry out its mission. Early in TVA's history, the focus was on building dams, taming the Tennessee River, and building the infrastructure to provide electricity to the Valley. Later as technologies changed and growth occurred, TVA deployed fossil fuel and nuclear power generation. Today, the Tennessee Valley region is growing faster than many areas of the country, and the push to reduce carbon emissions is causing TVA, once again, to make major shifts in how it powers the Valley.

In August 2023, the TVA Board “approved \$15 billion in investments over the next three years to build additional generation and upgrade the existing system to ensure the region continues to benefit from affordable, reliable power.” TVA's Chief Executive Officer, Jeff Lyash, stated “It took us 90 years to build our current power system which positively changed the lives of millions. In the next 30 years, we will have to double or triple the current systems at a speed unlike any other time in TVA history to ensure we can continue to provide affordable, reliable, resilient, and sustainable energy to fuel the region's economic growth.”

As TVA works to meet the growing generation demand of the Valley and evolve its generation portfolio to meet net zero carbon goals, our role is to provide independent oversight of TVA, identify ways to improve the efficiency and effectiveness of TVA operations, and prevent and detect fraud, waste, and abuse. For more than 37 years, we have identified (1) ways for TVA to save and recover costs, (2) ways to improve operations, and (3) people or companies that defrauded TVA. We will continue to approach our work with the purpose of making TVA better for the people of the Valley—a purpose that we share with the TVA Board, management, and employees.

Ben R. Wagner
Inspector General

EXECUTIVE OVERVIEW



TVA relies on contractors and vendors to access materials, build and maintain assets, and innovate new technology to support and advance operations. Just as the world has experienced supply chain issues and workforce shortages, TVA must compete for resources required to expand generation, meet carbon reduction goals, and maintain aging generation assets. Our office supports TVA's efforts by focusing resources to (1) find ways to save and recover costs, (2) identify operational risks that could impact TVA's ability to execute its mission, and (3) detect and prevent fraud, waste, and abuse. TVA has served the people of the Tennessee Valley for 90 years. Our imperative to help make TVA better is how we serve the 10 million people of the Tennessee Valley.

AUDITS

Our audit organization includes three departments that focus on contract audits, financial and operational audits, and IT audits. During this reporting period, these teams completed nine audits and examinations that identified more than \$60 million in questioned costs and funds to be put to better use.

Contract Audits

To support TVA management in negotiating procurement actions, we completed two preaward examinations of cost proposals submitted by companies proposing to (1) provide nonnuclear modification and supplemental maintenance services to TVA and (2) develop and complete the standard design of a 300-megawatt electric small modular reactor. Our examinations identified \$54.3 million of potential savings opportunities for TVA to negotiate. We also completed three compliance audits of contracts with expenditures totaling \$121.5 million related to (1) steam generator replacement services; (2) architectural engineering services to assist with the site selection, final programming, and schematic design for a new control center; and (3) enterprise architecture and IT infrastructure services. These audits identified potential overbillings of \$6.2 million. The Contract Audits section begins on page 15 of this report.

Financial and Operational Audits

With a focus on financial reporting, compliance with applicable laws and regulations, and TVA operations, we completed an audit of TVA's load not served winning performance measure. This department also monitored the quarterly work performed by TVA's external auditors. The Financial and Operational Audits section begins on page 16 of this report.

IT Audits

IT Audits completed audits of (1) TVA's remote application and desktop virtualization client, (2) Transmission and Power Supply's management of Mac® desktops and laptops, and (3) TVA's information security program as required by the FISMA of 2014. The IT Audits section begins on page 17 of this report.



Shawnee Fossil Plant

EVALUATIONS

Our Evaluations organization includes two groups, one of which focuses on organizational effectiveness reviews. During this reporting period, our teams completed four evaluations and four organizational effectiveness reviews, which identified a number of opportunities for improvement.

Evaluations

The Evaluations group completed four evaluations during this semiannual period. These included evaluations of hazardous chemicals at Power Operations' sites, combustible coal dust, gas plant critical spare parts, and preventive maintenance at nuclear plants. The Evaluations section begins on page 20 of this report.

Organizational Effectiveness

This group completed evaluations of four TVA organizations to identify factors that could impact their organizational effectiveness. The organizational effectiveness reviews included evaluations of Magnolia Combined Cycle Plant, TVA Police and Emergency Management, Transmission Planning and Projects, and Power Service Shop. The Organizational Effectiveness section begins on page 23 of this report.

INVESTIGATIONS

During this reporting period, we opened 66 cases and closed 68. Our investigations have resulted in four indictments, one information, three convictions, two civil settlements, and multiple criminal and administrative restitutions. The Investigations section begins on page 26 of this report.

STATISTICAL HIGHLIGHTS

April 1, 2023 – September 30, 2023

Audit Reports Issued	9
Evaluations Completed	8
Questioned Costs	\$6,196,660
Questioned Costs Agreed to by TVA	\$2,084,422
Questioned Costs Recovered by TVA	\$221,163
Funds to be Put to Better Use	\$54,290,000
Savings Realized by TVA	\$0
Investigations Opened	66
Investigations Closed	68
Recoveries/Fines/Fees	\$7,045,639
Waste/Other Monetary Loss	\$145,053
Criminal Actions	8
Administrative Actions (Number of Subjects)	5

Since 1985, the OIG has worked to help TVA become better. Through our audits, evaluations, and investigations, we provide TVA management, the TVA Board, and Congress with an independent look at the economy, efficiency, and effectiveness of TVA programs and help prevent and detect fraud, waste, and abuse. Over the years, the OIG has helped TVA save or recover millions of dollars and recommended numerous program improvements. We credit our success to the efforts of our hardworking and talented staff and the professional responsiveness of TVA management to our recommendations.

TVA OIG OFFICE LOCATIONS

The OIG has a work philosophy of being in the right place at the right time to do the best work possible. We support that philosophy by encouraging our OIG employees to work where they can be most effective whether that is in one of our physical offices, in the field, or in one of our virtual offices that enable our employees to telework from home or while traveling.

The OIG has strategically located its offices within the Tennessee Valley. We are headquartered in TVA's Knoxville Office Complex overlooking the downtown area. The OIG has field offices in Chattanooga, Tennessee, where members of Evaluations, Organizational Effectiveness, and Financial and Operational Audits departments and several special agents are located. Special agents are also located in Nashville, Tennessee, and Huntsville, Alabama. Additionally, we have office locations at Watts Bar Nuclear Plant in Spring City, Tennessee, and Sequoyah Nuclear Plant in Soddy Daisy, Tennessee. Staff work in these locations as needed. As of September 30, 2023, the OIG had a total staff of 102 employees.

ADMINISTRATION

The Administration team works closely with the IG, Deputy IG, and Assistant IGs to support the day-to-day operations of the OIG and to develop policies and procedures designed to drive and enhance productivity, quality, and compliance, and achieve office goals. Responsibilities include personnel administration, budget and financial management, purchasing and contract services, facilities coordination, training-event coordination, strategic planning, communications facilitation, and IT support.

AUDITS AND EVALUATIONS

The Audits and Evaluations teams perform a wide variety of engagements designed to promote positive change and provide assurance to TVA stakeholders. Based upon the results of these engagements, the Audits and Evaluations organizations make recommendations to enhance the effectiveness and efficiency of TVA programs and operations.

The organizations use an impact- and risk-based approach to develop an annual work plan. In developing the plan, the OIG considers TVA's strategic plans, major management challenges, TVA's enterprise risk management process, and other input from TVA management. This planning model also evaluates each potential engagement from the standpoint of materiality (i.e., costs or value of assets), potential impact, sensitivity (including public and congressional interest), and the likelihood it will result in recommendations for cost savings, recovery of dollars, or process improvements. The result of the OIG Audits and Evaluations planning process is a focus on the issues of highest impact and risk to TVA.

These issues vary depending on the objectives of the project. The graphic on page 12 shows some representative examples of issues our audit and evaluation projects are commonly designed to identify.

TYPES OF AUDIT & EVALUATION ISSUES

Contracts Audits

- Inflated Proposals
- Contract Overpayments
- Inferior Performance
- Fraud

Financial and Operational Audits

- Program Inefficiencies/Ineffectiveness
- Legal/Regulatory Noncompliance
- Policy Noncompliance
- Internal Control Deficiencies
- Fraud

IT Audits

- Internal Control Deficiencies
- Policy Noncompliance
- Integrity of Data and Assets
- Cybersecurity
- Fraud

Evaluations

- Operational Inefficiency
- Policy Noncompliance
- Legal/Regulatory Noncompliance
- Fraud

Organizational Effectiveness

- Operational Ineffectiveness
- Cultural Areas for Improvement
- Unmitigated Risks
- Fraud

The Audits team conducts performance audits of TVA programs and operations, providing insight into TVA's overall fiscal and operational health. The organization is made up of three departments—Contract Audits, Financial and Operational Audits, and IT Audits. The Audits organization performs its work in accordance with *Government Auditing Standards*.

- Contract Audits has lead responsibility for contract compliance audits and preaward examinations. In addition, this department performs audits of TVA contracting processes.
- Financial and Operational Audits is responsible for performing audit work mandated by legislation, agreed-upon procedures, as well as risk-based audits associated with TVA financial and operational activities. The work stems largely from mandated activities, review of TVA's business-risk environment, consideration of emerging issues, and requests. This department also provides oversight of the TVA external auditor's compliance with professional standards.

- IT Audits has lead responsibility for audits relating to the security of TVA's IT infrastructure, application controls, and general controls associated with TVA systems. This department also performs operational audits of the effectiveness of IT-related functions.

The Evaluations team assesses both operational and cultural aspects of programs and departments throughout TVA to ensure objectives and operational functions are achieved effectively and efficiently. This organization is made up of two departments—Evaluations and Organizational Effectiveness. This organization performs its work in accordance with *Quality Standards for Inspection and Evaluation* as prescribed by the Council of the Inspectors General on Integrity and Efficiency (CIGIE).

- Evaluations performs both comprehensive reviews and more limited-scope policy and program reviews to monitor compliance and assess the efficiency and effectiveness of operations.
- Organizational Effectiveness performs risk-based reviews to assess factors that could impact an organization's ability to achieve its mission and goals.

INVESTIGATIONS

The Investigations team focuses on proactive and reactive efforts to uncover fraud, waste, and abuse in TVA programs and operations. This organization performs its investigations in accordance with the *Quality Standards for Investigations* as prescribed by CIGIE, applicable U.S. Attorney General Guidelines, and other guiding documents. OIG special agents maintain liaisons with federal and state prosecutors and notify the U.S. Department of Justice whenever the OIG has reason to believe there has been a violation of federal criminal law. Special agents partner with other investigative agencies and organizations on special projects and assignments, including interagency law enforcement task forces on terrorism, the environment, healthcare, and public corruption. The graphic below shows the major categories of investigations.

LEGAL

The OIG Legal Counsel team monitors existing and proposed legislation and regulations that relate to the mandate, operations, and programs of the OIG and TVA. Additionally, this team provides legal advice as needed for administrative, audit, evaluation, and investigative projects. OIG attorneys serve as ethics officials, providing OIG employees guidance on government ethics and standards of conduct. The TVA Whistleblower Protection Coordinator is also a part of this team and provides information regarding the statutory protections against retaliation for all TVA employees.

MAJOR CATEGORIES OF INVESTIGATIONS

Contract Fraud

Defrauding TVA through its procurement of goods and services, including fraud schemes such as misrepresenting costs, overbilling, product substitution, and falsification of work certifications

Theft of Government Property and Services

Theft of TVA property such as material, tools, equipment, or resources

Unauthorized Access Into TVA Computer Systems

Accessing a TVA computer without authorization or exceeding authorized access

Healthcare Fraud

Intentional misrepresentation of healthcare services, expenses, billings, needs, or coverage that results in unauthorized payments or other benefits

Workers' Compensation Fraud

Falsification of documents to receive payments by employees, former employees, or health-care providers

Employee Misconduct

Misuse of TVA-furnished equipment, travel voucher fraud, a multitude of miscellaneous matters of abuse, conflict of interest, and violations of code of conduct

Environmental Crime

Violations of environmental criminal law pertaining to the Tennessee River system and its watershed, along with violations relating to TVA land and facilities

Special Projects

Management requests, data mining and predictive analysis, congressional and TVA Board requests, and Fraud Risk Assessments

SUMMARY OF REPRESENTATIVE AUDITS



During this semiannual reporting period, the TVA OIG Audits organization completed nine audits and examinations. This work identified more than \$60 million in questioned costs for TVA to recover and funds to be put to better use. We also identified several opportunities for TVA to improve the effectiveness and efficiency of its programs and operations.

CONTRACT AUDITS

Preaward Contract Examinations

To support TVA management in negotiating procurement actions, we completed two preaward examinations of cost proposals submitted by companies proposing to (1) provide nonnuclear modification and supplemental maintenance services to TVA and (2) develop and complete the standard design of a 300-megawatt electric small modular reactor. Our examinations identified \$54.3 million of potential savings opportunities for TVA to negotiate. The savings opportunities were primarily related to overstated indirect cost recovery rates.

Contract Compliance Reviews

During this semiannual period, we completed three compliance audits of contracts with expenditures totaling \$121.5 million. These audits identified potential overbillings of almost \$6.2 million. Highlights of our completed compliance audits follow.

- We audited \$35.9 million in costs billed by a contractor for providing steam generator replacement services to TVA. In summary, we determined the company overbilled TVA \$1,903,315, including:
 - \$1,163,835 in ineligible overhead and fee markups applied to services, equipment, and other costs provided by TVA under the contract.

- \$689,748 in labor costs, including (1) \$685,880 for labor billing rates that exceeded adjusted rates that had been approved through the contract's change order process, and the rates were never incorporated into the contract's pricing schedules; (2) \$1,304 for unsupported travel costs; and (3) \$2,564 for ineligible labor costs.
- \$38,579 in travel costs, including (1) \$37,316 in duplicate costs and (2) \$1,263 in ineligible costs.
- \$11,153 in miscellaneous costs for ineligible subscription renewal costs.

TVA management agreed with our recommendations to (1) recover \$1,903,315 in overbilled costs and (2) ensure future pricing schedules are updated to include adjusted or escalated labor rates.

- We audited \$20.7 million in costs billed by a contractor for providing architectural engineering services to assist with site selection, final programming, and schematic design for a new control center. In summary, we determined the contractor billed TVA:
 - \$873,147 in costs not provided for in the contract, including (1) \$449,311 in equipment costs, (2) \$345,503 in insurance costs, and (3) \$78,333 in other direct costs.
 - \$67,691 in other ineligible costs and incorrect billing rates, including (1) \$47,674 in ineligible markups on subcontract costs, (2) \$15,784 in ineligible travel costs, and (3) a net \$4,233 in labor billing rate errors.

We also noted opportunities to improve contract administration by TVA. Specifically, we determined (1) TVA paid the contractor \$3,239,091 in construction management fees, although fee was already being paid to the contractor through the contract's time and material labor billing rates; (2) the contractor started and completed work on one purchase order, totaling \$484,710, prior to approval by TVA; and (3) TVA could have saved between \$40,741 and \$113,416 if the contract had included temporary living allowance provisions.

TVA management is reviewing our findings and recommendations to determine what actions to take.

- We audited \$64.9 million in costs billed by a contractor for performing enterprise architecture and information technology infrastructure services to TVA. The contract provided that work could be performed using time and material or fixed price payment terms as agreed by the parties in purchase orders. All costs billed to TVA by the contractor during our audit scope were for fixed price projects. We determined the fixed price purchase orders were billed in accordance with the milestone payment schedules that had been authorized in the purchase orders. However, we determined TVA did not have a process in place to determine the reasonableness of the fixed prices it paid to the contractor. Specifically, TVA Supply Chain did not:
 - Compete the fixed price tasks among similar vendors although it had informed TVA senior management it intended to do so; or
 - Obtain detailed breakouts of the contractor's fixed price proposals to determine the reasonableness of the prices. TVA informed us they relied on the contractor's assertions that the fixed prices had been built up and calculated using the contract's pricing schedule. However, no validation of the contractor's assertions were performed.

TVA management agreed with our recommendation to review their current processes for determining reasonableness of proposed fixed prices.

FINANCIAL AND OPERATIONAL AUDITS

During this semiannual period, Financial and Operational Audits completed an audit of TVA's load not served (LNS) winning performance (WP) measure. This department also monitored the quarterly work performed by TVA's external auditors.

Load Not Served Winning Performance Measure

For most TVA employees, annual compensation consists of two components: base pay (salary) and pay at risk (WP). WP is a performance management program designed to promote teamwork, encourage high performance behaviors, and motivate and reward TVA employees for achieving goals aligned with TVA's mission and values.

We included an audit of TVA's LNS WP measure in our annual audit plan because LNS was the second highest weighted measure in the FY 2022 WP scorecard. LNS, which is an estimate of the megawatt hours not delivered when an interruption to a customer connection point is greater than or equal to 1 minute, was weighted at 30 percent at the target level on the WP scorecard for FY 2022. TVA's total payout for WP for FY 2022 was \$147.8 million, based on a total payout percentage of 119 percent of target. The LNS goal was paid at the threshold level for FY 2022 (50 percent of target) and accounted for about \$18.6 million of the total \$147.8 million payout.

Our audit objective was to determine if adequate internal controls were in place to ensure accurate calculation and reporting of the LNS WP measure. Our audit scope included the LNS totals reported for WP in FY 2022 and the calculations' compliance with TVA's policy under Transmission Standard Programs and Processes (TRANS-SPP) 10.001, *Service Interruption Database Guidelines*. Our scope did not include an assessment of the reasonableness of any exclusions allowed by TRANS-SPP-10.001.

We determined TVA had three significant internal controls to ensure the accurate calculation and reporting of the LNS WP measure and these were operating effectively. However, there were not adequate controls in place to ensure the appropriateness of LNS exclusions. Additionally, we found some user access permissions were not appropriate. TVA management agreed with our recommendations to (1) strengthen controls around LNS exclusions by requiring management approvals of all LNS exclusions and (2) implement a periodic review process of user access permissions.

IT AUDITS

During this semiannual period, IT Audits completed audits of (1) TVA's remote application and desktop virtualization client, (2) Transmission and Power Supply's management of Mac® desktops and laptops, and (3) TVA's information security program as required by the FISMA of 2014.

Remote Desktop Application and Desktop Virtualization

TVA utilizes remote application and desktop virtualization software to provide workforce mobility while employees and contractors are not physically in the office. We performed an audit of TVA's use of remote application and desktop virtualization client due to the risks of (1) potential system intrusion through misconfigurations and (2) continued elevated remote users during the COVID-19 pandemic. We found the configuration management control for TVA's remote application desktop virtualization client was ineffective. However, we determined compensating access controls were in place to mitigate the risk to an overall acceptable level. TVA management agreed with our recommendation to design and implement a documented configuration management process of remote application and desktop virtualization client.

Transmission and Power Supply's Management of Mac® Desktops and Laptops

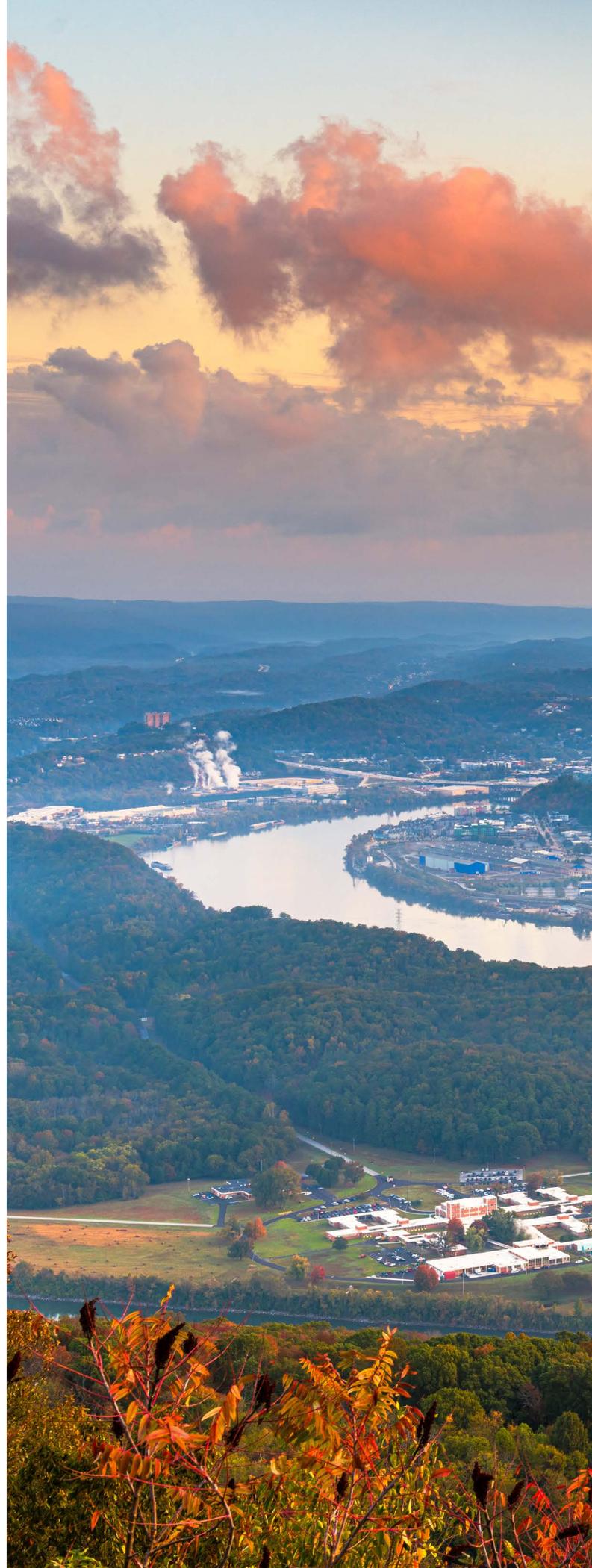
We audited TVA Transmission Operations and Power Supply (TOPS) organization's management of Mac® desktops and laptops to determine if patching and configuration management followed TVA policy. Patch management is the act of applying a change to installed software that corrects security or functionality problems. Configuration management is critical because it has a direct impact on the security posture of an information system.

We found MacBooks® managed by TOPS followed TVA's configuration management policy. However, we determined 3 of 15 MacBooks® did not follow TVA policy for patch management. Specifically, one MacBook® was obsolete, and two had inconsistent patching history. In addition, we identified a gap between TVA policy and a TOPS patch management work instruction. TVA management agreed with our findings and took action to (1) surplus the MacBook® we identified as obsolete and (2) update the TOPS work instruction to align with TVA policy.

Federal Information Security Modernization Act

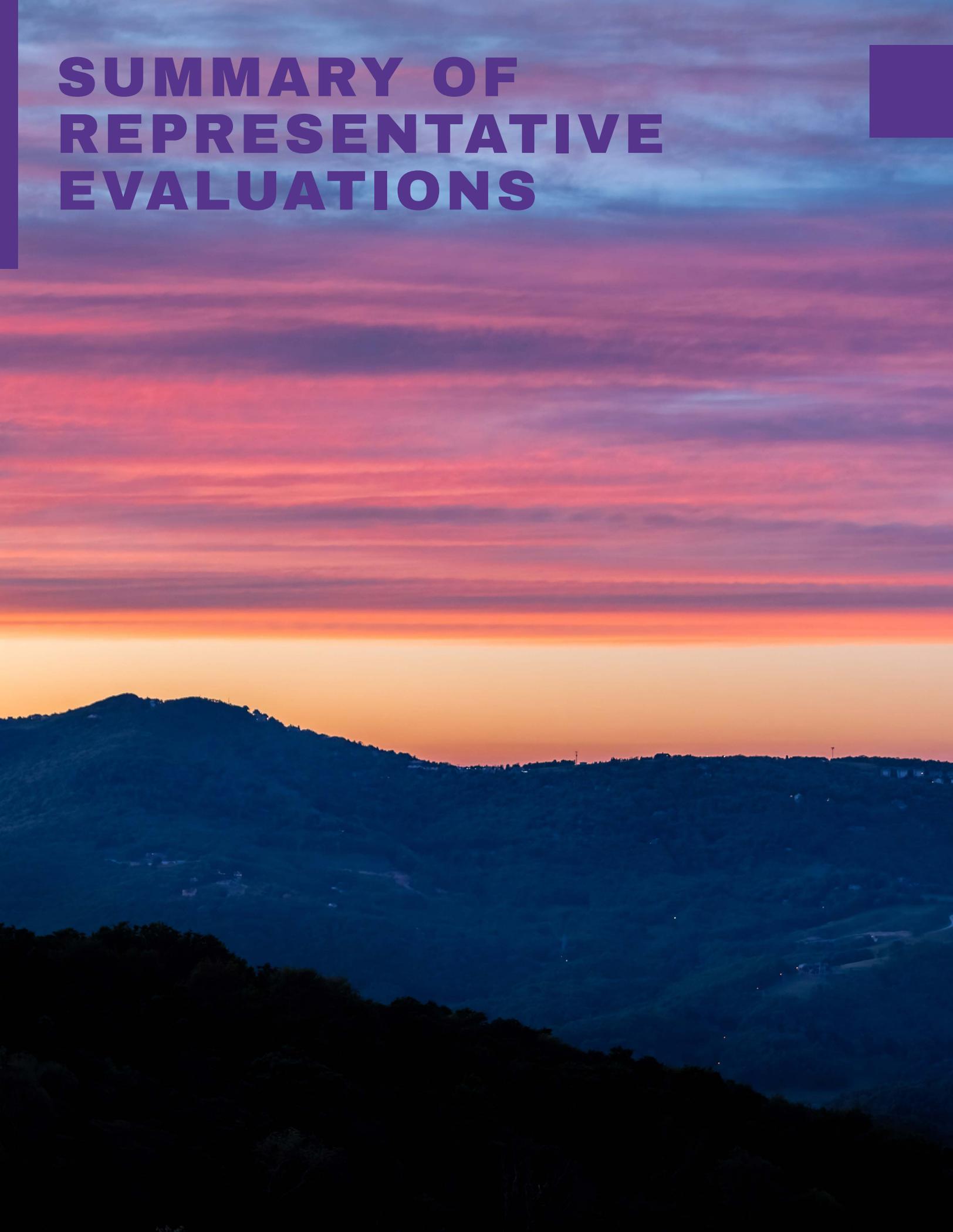
The FISMA of 2014 requires each agency's IG to conduct an annual independent evaluation to determine the effectiveness of the information security program and practices of its respective agency. As required by the Office of Management and Budget (OMB), FISMA shifted to a continuous assessment process in FY 2022. As a result, OMB and the CIGIE transitioned the IG metrics process to a multi-year cycle beginning in FY 2022. Specifically, a subset of the FY 2021 IG FISMA metrics were selected as the 20 core IG metrics to be evaluated annually and the additional IG metrics will be evaluated on a two-year cycle. For FY 2023, IGs were required to test 20 core and 20 supplemental IG metrics. The 20 core IG metrics were chosen based on alignment with Executive Order 14028, *Improving the Nation's Cybersecurity*, as well as recent OMB guidance to agencies in furtherance of the modernization of federal cybersecurity.

The FISMA methodology considers metrics at a level 4 (managed and measurable) or higher to be at an effective level of security. Based on our analysis of the 40 IG metrics and associated maturity models, we found 21 of 40 IG metrics were at a level 1 (ad-hoc), level 2 (defined), or level 3 (consistently implemented); therefore, TVA's information security program was not operating in an effective manner. TVA management agreed with our recommendations to improve the maturity of ineffective core IG metrics related to (1) security workforce assessment, (2) business impact analysis, (3) vulnerability disclosure policy, (4) contingency planning, and (5) communicating recovery activities.





SUMMARY OF REPRESENTATIVE EVALUATIONS



During this reporting period, our teams completed four evaluations and four organizational effectiveness reviews, which identified a number of opportunities for improvement.

EVALUATIONS

Evaluations performs both comprehensive reviews and more limited-scope policy and program reviews to monitor compliance and assess the efficiency and effectiveness of operations. During this semiannual reporting period, the Evaluations department completed four evaluations, including reviews of (1) hazardous chemicals at Power Operations' sites, (2) combustible coal dust, (3) gas plant critical spare parts, and (4) preventive maintenance at nuclear plants.

Power Operations Hazardous Chemicals

Title 29, Code of Federal Regulations (CFR), Section 1910.1200, (29 CFR § 1910.1200), *Hazard Communication*, establishes directives for the identification, communication, and handling and storage of hazardous chemicals. According to 29 CFR § 1910.1200, employers are to provide information to their employees about the hazardous chemicals to which they are exposed. The information can be provided through a hazard communication program, labels and other forms of warning, safety data sheet (SDS), and training. TVA Safety Procedure 18.917, *Hazard Communication*, establishes TVA's written hazard communication program. Due to the risks associated with hazardous chemicals at generating plants, we conducted an evaluation of its hazardous chemicals. The objectives of our evaluation were to determine if hazardous chemicals at Power Operations' sites were (1) adequately identified and communicated and (2) properly handled and stored.

We determined hazardous chemicals at most Power Operations' sites we visited were not adequately identified or communicated. Specifically, most sites had incomplete hazardous chemical lists or unmarked containers. In addition, we selected items from a storage location at each site and determined hazardous

chemicals selected were properly stored according to their SDS instructions. We were unable to determine if hazardous chemicals were being handled properly because we did not observe any chemical use. However, we did find that 10 of 33 individuals interviewed could not retrieve an SDS, which could increase the risk that hazardous chemicals may not be properly handled and stored. Additionally, our testing identified 2 sites with best practices. TVA management agreed with our recommendations to (1) ensure hazardous chemicals are adequately identified and communicated and (2) address knowledge gaps for accessing SDSs. TVA management indicated deficiencies identified have been corrected and additional actions will be implemented to ensure sustainability.

Combustible Coal Dust

Combustible coal dusts are fine particles created when coal is crushed, ground, or pulverized. This dust can be deposited on various surfaces and eventually create a thick layer of accumulation. According to the Occupational Safety and Health Administration, coal dust also presents an explosion hazard when suspended in air in certain conditions and can be catastrophic and cause employee deaths, injuries, and the destruction of entire buildings. The TVA Combustible Dust Program establishes requirements to protect employees and minimize fire and explosion hazard potentials from combustible dust. Due to the potential for fire and explosion from combustible dust, we performed an evaluation of actions taken to minimize combustible coal dust.

We determined TVA's coal plants have taken steps to reduce combustible coal dust since dedicated Combustible Dust Program funding was provided by TVA in 2018. Specifically, coal plants have dedicated combustible dust housekeeping crews to help mitigate combustible dust accumulations, and projects were completed to improve conditions at the plants.

However, we identified areas of noncompliance with TVA Technical Safety Procedure 18.1205, *Combustible Dust* (Combustible Dust TSP), related to (1) coal dust accumulation, (2) documentation of combustible dust daily inspections, and (3) training. In addition, we identified an area for improvement related to inconsistent language in the Combustible Dust TSP and site combustible dust programs. TVA management provided ongoing and planned actions to address (1) areas of noncompliance with the Combustible Dust TSP and (2) inconsistent language in the Combustible Dust TSP and site combustible dust programs.

Gas Plant Critical Spare Parts

TVA operates 18 natural gas plants with a combined generation capacity of 11,777 megawatts. According to TVA's Integrated Resource Plan, natural gas will play an important role in TVA's future generation portfolio to ensure reliability and grid stability with projected significant solar expansion over the next decade. In addition, as TVA retires its coal-fired fleet, it will evaluate adding gas plants as a strategy to maintain reliability.

TVA defines critical spares as components or parts needed to (1) prevent loss of generation or transmission, (2) prevent unsafe operating conditions, and/or (3) return critical components to service.

TVA identified 45,934 critical components for the 18 plants. Due to the importance of critical spare parts being available to reduce safety and generation impacts when equipment fails, we conducted an evaluation to determine if TVA adequately identified, stocked, and maintained critical spare parts for gas plants.

We found most gas plant critical components have not been evaluated to identify critical spare parts. In January 2023, TVA's dashboard for tracking progress towards identifying critical spare parts indicated only 291 of 45,934 critical components¹ in the gas fleet had been

reviewed. We identified the following contributing factors: (1) limited resources dedicated to reviewing existing components to identify critical spare parts, (2) Power Operations not having governing procedures defining the process for identifying critical spare parts, and (3) incomplete inventory data in Maximo.² We also found not all identified critical spare parts were in stock or set to reorder once used.

Additionally, we determined improvements are needed to (1) properly store and maintain critical spare parts and (2) maintain the useful life of certain items such as those with electronic components or requiring preventive maintenance while in storage.

TVA management provided ongoing or planned actions to address seven of the eight recommendations related to identifying which gas plant components need critical spare parts and ensuring they are stocked and maintained.

Nuclear Preventive Maintenance

TVA operates the Browns Ferry, Sequoyah, and Watts Bar nuclear plants, which are capable of generating an average of 8,275 megawatts of electricity each day and providing power to more than 4.5 million homes and businesses, or about one-third of TVA's customers. Preventive Maintenance (PM), which is a key part of the equipment reliability program at TVA's nuclear plants, is defined as predictive, repetitive, and planned maintenance actions taken to maintain a piece of equipment within design-operating conditions and extend its life. Since PM is important to the reliable operation of assets, we performed an evaluation to determine if PM has been performed in accordance with established schedules at nuclear sites.

Based on our review of PM metric data provided by TVA, we determined PMs were generally being performed within established schedules at TVA's nuclear plants; however, some metrics indicated performance could be improved.

¹ Critical Component Level 1 and Critical Component Level 2 were considered critical because failure of the component would result in loss of generation.

² Maximo is the TVA system of record for inventory, asset, and location information.



Magnolia Combined Cycle Plant

In addition, we found other areas where improvements are needed, including (1) some discrepancies between TVA's PM metrics data in Cognos³ reports and the data submitted to an industry oversight organization; (2) PMs needed that were not established, causing declines of equipment condition and a regulatory finding; and (3) recurring issues that prevented or delayed PMs being performed. Additionally, we identified obsolescence-related equipment issues at TVA's nuclear plants. Specifically, obsolescence-related equipment issues were identified in many program, system, and component health reports as having a negative impact. TVA management agreed with our recommendations and provided actions planned or taken to address the areas for improvement.

ORGANIZATIONAL EFFECTIVENESS

During this semiannual reporting period, the Organizational Effectiveness group completed evaluations of four TVA organizations to identify factors that could impact their organizational effectiveness. The organizational effectiveness evaluations included Magnolia Combined Cycle Plant, TVA Police and Emergency Management, Transmission Planning and Projects, and Power Service Shop.

Magnolia Combined Cycle Plant

Magnolia Combined Cycle Plant (MCC), an organization within TVA's Power Operations, was commissioned in August 2003 and purchased by TVA in August 2011. MCC consists of three units with a plant capacity of 968 megawatts.

MCC plant personnel informed us the culture at the plant was generally positive due to the positive interactions between team members and with most plant management. However, plant personnel also indicated concerns with the completeness of work packages and staffing.

TVA management agreed with our recommendations to improve the completeness of work packages and plans to evaluate completing a strategic over-hire that supports the workforce strategy for MCC.

³ Cognos is the business analytics reporting tool used across TVA to access and analyze company data.

TVA Police and Emergency Management

As part of the TVA Act of 1933, TVA was authorized to designate law enforcement agents to assist in carrying out its mission. In 1994, Congress passed legislation authorizing TVA's Board to designate employees as law enforcement officers, and on September 12, 1995, TVA Police officers were sworn in as federally commissioned law enforcement officers. Since that time, changes have been made to the organization, including the addition of Emergency Management and Security Installation and Maintenance Services. TVA Police and Emergency Management (TVAP&EM) is focused on preventing, protecting, and responding to any threats, crimes, or acts of terrorism threatening TVA.

TVAP&EM personnel indicated positive interactions within and outside TVAP&EM, but also brought up concerns related to (1) engagement risks, (2) inconsistent practices within the organization, (3) TVAP&EM's mobile software tool, and (4) personnel security. We also identified an opportunity to strengthen risk assessment within TVAP&EM.

TVA management provided actions taken or planned to address our recommendations related to (1) engagement risks, (2) inconsistent practices, (3) mobile software, (4) personnel security, and (5) TVAP&EM's risk assessment process.

Transmission Planning and Projects

The TVA transmission system connects the power produced by TVA's generating assets through a network of local power providers to the 10 million people in the Tennessee Valley. Transmission Planning and Projects (TPP), a business unit under TVA's Transmission and Power Supply organization, is responsible for ensuring (1) the power from TVA's generation sources is safely and reliably connected to TVA's transmission system through planning and executing transmission-related projects and (2) TVA's compliance with transmission regulatory requirements and maintaining the reliability of transmission assets.

TPP personnel revealed positive interactions with team members and business partners provided positive feedback on TPP. However, we identified issues that could negatively impact TPP's effectiveness, if not addressed. These issues



include (1) engagement risks, (2) insufficient resources, (3) system risks related to an ineffective estimating and material processing system and the inadequacy of customer relationship management systems, and (4) needed improvements with business partner support.

TVA management agreed with our recommendations to (1) address engagement risks, (2) evaluate current staffing levels, (3) address concerns with the estimating and material processing system and the customer relationship management systems, and (4) address concerns with business partner support.

Power Service Shop

Power Service Shop (PSS), based in Muscle Shoals, Alabama, provides fabrication, equipment and component repair, inspection and refurbishment services for assets within TVA's Nuclear and Power Operations organizations, as well other federal agencies, including the U.S. Corps

of Engineers and U.S. Bureau of Reclamation. The mission of PSS is to "provide a competitive advantage to TVA by performing repair and refurbishment services, using flexible, economical, and safe solutions," with a focus on safety, quality, reliability, and customer satisfaction.

PSS personnel commented positively on interactions within and outside of PSS, as well as PSS's safety environment. However, we identified issues that could negatively impact PSS's effectiveness, including (1) staffing challenges; (2) resource concerns related to tooling, tools, equipment, and trailers; (3) communication with business partners; and (4) risks to the independence of PSS's Quality Control inspectors performing work on nuclear related components.

TVA management agreed with our recommendations and provided actions taken and planned related to staffing, resources, and centralizing support functions that will improve customer communications and address the risks to Quality Control inspector independence.



Browns Ferry Nuclear Plant

SUMMARY OF REPRESENTATIVE INVESTIGATIONS



During this reporting period, we opened 66 cases and closed 68. Our investigations have resulted in four indictments, one information, three convictions, two civil settlements, and multiple criminal and administrative restitutions totaling about \$7.2 million. Highlights of Investigative accomplishments follow.

TVA Employee Falsifies Military Leave Records for 8 years

In 2022, the TVA OIG received an allegation that TVA employee James Christopher May, an Assistant Unit Operator at TVA's Gallatin Fossil Plant, boasted about falsely claiming military leave to receive paid time off from his TVA position. The OIG's investigation revealed Mr. May had retired from the Alabama Army National Guard in 2014, yet continued to request and receive military leave until 2022 by falsifying military leave orders. During the course of the investigation, TVA OIG Investigations also determined that Mr. May had submitted applications for military leave that did not correspond to an actual military assignment (i.e., active duty or training). In total, from 2011 to 2022, Mr. May submitted over 50 military leave requests and received approximately \$77,679 in compensation from TVA to which he was not entitled. During our investigation, Mr. May resigned from TVA. On August 21, 2023, Mr. May pled guilty to one count of theft of public money and will be sentenced in December 2023.

Investigation Results in \$279,839 Recovery from Overbilling

The OIG received an allegation of potential billing discrepancies by a TVA vendor specializing in the supply of office trailers/containers. The OIG investigation identified overbillings of approximately \$279,839 in rental, delivery and pickup, setup and teardown, and other charges under the vendor's contract with TVA. After notification by the OIG, the vendor realized it did not have contract rates coded into its systems for TVA, as former personnel of the company did not provide the contract rate schedule to appropriate staff that needed it. This resulted in sales personnel of the vendor potentially quoting market rates, instead of contract rates, to TVA when procurement requests were executed.

Our investigation further identified purchases utilizing stand-alone purchase orders billed outside of the contract rates, as well as purchases for items included in the vendor's response to TVA's request for proposal that were not incorporated into the contract. This resulted in roughly \$115,660 in increased costs to TVA.

After determining there was no criminal violation, the OIG reported the findings of the investigation to TVA management. As a result, TVA management recovered approximately \$279,839 from the vendor. Additionally, the remaining \$115,660 was classified as waste and/or lost opportunity by the OIG.

TVA OIG Investigations Result in Two Civil Settlements

Joint Qui Tam Investigation Results in \$6.6 Million Settlement

On June 26, 2020, allegations of fraud were brought against John Chung, M.D., and his practice, Skin Cancer and Cosmetic Dermatology Center, P.C., in a lawsuit filed under the qui tam provisions of the False Claims Act, which permit private parties to sue on behalf of the government for false claims and receive a share of any recovery. As a result, an investigation was conducted by TVA OIG in conjunction with the Federal Bureau of Investigation, Tennessee Bureau of Investigation, Health and Human Services OIG, Veterans Administration OIG, Department of Defense OIG, Tennessee's Attorney General's Office, and Georgia's Attorney General's Office.

On June 13, 2023, the U.S. Attorney's Office, Eastern District of Tennessee, reached a civil settlement agreement with Dr. Chung and his practice to resolve allegations he defrauded various government healthcare plans to include TVA.

The United States contended that between 2010 and 2020, the dermatologist defrauded various government healthcare plans by submitting claims for payment for (1) Mohs¹ procedures as if the surgery and pathology portions of the procedures were performed by the dermatologist when, in fact, they were performed by other individuals and (2) multiple procedures for which claims for payment were submitted in a manner that improperly circumvented the “multiple procedure reduction rule.”

The settlement agreement states Dr. Chung will pay \$6.6 million to the United States, of which \$3.3 million is restitution. The payment will be distributed to the relator and various government agencies, including TVA who will receive \$51,766.

The claims settled by these agreements are neither an admission of liability by the defendants nor a concession by the United States that their claims were not well founded.

Healthcare Investigation Results in Civil Settlement of \$40,000

TVA OIG participated in a joint healthcare investigation with the U.S. Department of Labor OIG in response to a report of possible false records associated with Workers’ Compensation cases involving a doctor and his medical practice in Huntsville, Alabama. It was alleged the practice utilized unspecified coding when billing for a synthetic opioid to avoid reporting requirements.

The investigation identified multiple patients, to include former TVA personnel, who were on federal Workers’ Compensation insurance at the time they were treated by the practice. The patients were treated with a synthetic opioid, a pharmaceutical determined to be medically unnecessary and not approved by the U.S. Food and Drug Administration. The investigation concluded it would be incredibly difficult and potentially dangerous for pharmacy personnel to compound such a product from a bulk substance even under appropriate U.S. Pharmacopeia Convention guidelines.

The investigation determined the federal government paid the medical practice for inaccurate synthetic opioid claims for the applicable patients. The investigation was ultimately pursued as a civil matter by the U.S. Attorney’s Office in the Northern District of Alabama resulting in a settlement agreement on September 11, 2023, related to a former TVA employee who was a patient of the practice. As referenced in the settlement agreement, the doctor submitted, or caused to be submitted, claims for payment to Office of Workers’ Compensation programs regarding the medically unnecessary prescription of a synthetic opioid to current and former employees of the TVA. The settlement totaled \$40,000. The Alabama state medical licensure commission revoked the doctor’s medical license in December 2017, and the medical practice was dissolved in March 2023.



¹ Mohs is a procedure for treating skin cancer lesions.

Temporary Living Allowance Investigation Results in Recovery of \$38,973

The OIG completed an investigation of former Bechtel Power Corporation contractor Jeffrey David Beguin's alleged falsification of claims to receive temporary living allowance (TLA) while on assignment at Watts Bar Nuclear Plant (WBN), located in Spring City, Tennessee. Our investigation substantiated the allegation.

TLA payments are provided to qualifying TVA and contractor personnel as a means of reimbursing expenses for those who are on-assignment given their permanent residence is at least 60 miles from their assigned work area. Mr. Beguin was assigned to WBN and claimed a permanent residence in Decatur, Alabama. Between December 2013 and August 2015, Mr. Beguin intentionally failed to inform TVA or Bechtel that he no longer occupied the Decatur, Alabama, permanent residence. This omission resulted in Mr. Beguin collecting TLA pay to which he was not entitled.

As a result, on March 30, 2023, Mr. Beguin entered a guilty plea with the U.S. Attorney's Office, Eastern District of Tennessee, and was sentenced on August 25, 2023, to one year of probation and ordered to pay \$38,793 in restitution to TVA.

Pandemic Relief Fund Investigations Results in Four Convictions

The Pandemic Response Accountability Committee (PRAC) was established to serve the American public by promoting transparency and facilitating coordinated oversight of the federal government's COVID-19 pandemic response. The PRAC's 20-member Inspectors General identify major risks that cross program and agency boundaries to detect fraud, waste, abuse, and mismanagement in the more than \$5 trillion in COVID-19 spending. The PRAC Fraud Task

Force brings together agents from 16 Inspectors General to investigate fraud involving a variety of programs, including the Paycheck Protection Program (PPP). TVA OIG participates on the PRAC Task Force.

During the course of a separate PRAC Task Force related investigation, four additional individuals were identified as receiving PPP funds under fraudulent representation. The PPP is a form of financial assistance provided as part of the Coronavirus Aid, Relief, and Economic Security Act passed in March 2020 for purposes of providing emergency financial assistance to millions of Americans suffering the economic hardships caused by the COVID-19 pandemic. A review of the four subjects' PPP applications revealed they all claimed to own Sole Proprietorships, they certified on their applications that their businesses were in operation prior to their applications, and the funds would be used to support their ongoing operations. As part of the application, the four individuals also provided a 2020 Schedule C in support of their businesses. As a result of these applications, the four individuals received PPP loans totaling approximately \$104,864 in 2021.

However, a subsequent review of the banking records revealed no data in support of the businesses they claimed to own, and a review of applicable tax documents for the subjects revealed no Schedule Cs were on file with the Internal Revenue Service.

As a result of the TVA OIG investigations, in April and May 2023 three individuals were charged with one count of 18 U.S.C. § 1001(a)(2), and one individual was charged with three counts of 18 U.S.C. § 1001(a)(2), detailing that they all did willfully and knowingly make a materially false, fictitious, and fraudulent statement and representation in the submission of their PPP loan applications. Two of the individuals pled guilty and were sentenced in September 2023, both receiving 6 months of imprisonment and a requirement to pay restitution.

IN MEMORIAM



TVA OIG's first Inspector General, Norman A. Zigrossi, passed away July 5, 2023. We pause to remember him and acknowledge his impact to our office.

Norman A. Zigrossi was appointed by TVA's Board of Directors as TVA's first Inspector General. He served as the Inspector General from 1986 until 1992. Prior to becoming TVA's first Inspector General, Mr. Zigrossi worked for the Federal Bureau of Investigation (FBI) for 23 years, including serving as the Special Agent in Charge of the FBI's Washington, D.C., and San Diego, California, field offices. He transitioned from our office and joined TVA as the Chief Administrative Officer & Executive Vice President, Business Services, later retiring from federal service in 2001.

During Mr. Zigrossi's six years at TVA OIG, he created our organizational structure and established the foundation of our operations. His drive and decisiveness set the tone for performance excellence.

Through Mr. Zigrossi's leadership, our office focused significant attention on investigating TVA's nuclear-related employee concerns and identifying opportunities for TVA to achieve savings and cost reductions.



Norman A. Zigrossi

His legacy will always be a part of our TVA OIG story
and he remains part of our family.

LEGISLATION AND REGULATIONS



In this section of our semiannual report, it is our intent to address only current and pending legislation which relates to the economy or efficiency of TVA operations when we have recommendations or comments to make to Congress regarding the legislation. At times, we may direct recommendations to general positions and issues, particularly when there are multiple bills dealing with the issue. At other times, we anticipate making recommendations relating to particular statutes and bills and their particular wording.

During this reporting period, we are not making any recommendations to Congress regarding current or pending legislation.



Great Falls Dam

APPENDICES



INDEX OF REPORTING REQUIREMENTS UNDER THE INSPECTOR GENERAL ACT

REPORTING	REQUIREMENT	PAGE OR APPENDIX
Section 4(a)(2)	Review of legislation and regulations.	32-33
Section 5(a)(1)	Description of significant problems, abuses, and deficiencies relating to the administration of programs and operations of the establishment and associated reports and recommendations for corrective action made by the Office of the Inspector General.	14-29
Section 5(a)(2)	Identification of each recommendation made before the reporting period, for which corrective action has not been completed, including the potential costs savings associated with the recommendation.	Appendix 3
Section 5(a)(3)	Summary of significant investigations closed during the reporting period.	26-29
Section 5(a)(4)	Identification of the total number of convictions during the reporting period resulting from investigations.	Appendix 4
Section 5(a)(5)	Information regarding each audit, inspection, or evaluation report issued during the reporting period, including (a) a listing of each audit, inspection, or evaluation; (b) if applicable, the total dollar value of questioned costs (including a separate category for the dollar value of unsupported costs) and the dollar value of recommendations that funds be put to better use, including whether a management decision had been made by the end of the reporting period.	Appendix 2
Section 5(a)(6)	Information regarding any management decision made during the period with respect to any audit, inspection, or evaluation issued during a previous reporting period.	Appendix 3
Section 5(a)(7)	Information described under Section 804(b) of the Federal Financial Management Improvement Act of 1996.	Not Applicable
Section 5(a)(8)	Appendix containing the results of any peer review conducted by another Office of the Inspector General during the reporting period; or if no peer review was conducted within that reporting period, a statement identifying the date of the last peer review conducted by another Office of the Inspector General.	Appendix 9
Section 5(a)(9)	List of any outstanding recommendations from any peer review conducted by another Office of the Inspector General that have not been fully implemented, including a statement describing the status of the implementation and why implementation is not complete.	None
Section 5(a)(10)	List of any peer reviews conducted of another Office of the Inspector General during the reporting period, including a list of any outstanding recommendations made from any previous peer review (including any peer review conducted before the reporting period) that remain outstanding or have not been fully implemented.	None
Section 5(a)(11)	Statistical table showing (a) the total number of investigative reports issued during the reporting period; (b) the total number of persons referred to the Department of Justice for criminal prosecution during the reporting period; (c) the total number of persons referred to state and local prosecuting authorities for criminal prosecution during the reporting period; and (d) the total number of indictments and criminal informations during the reporting period that resulted from any prior referral to prosecuting authorities.	Appendix 4

APPENDIX 1

INDEX OF REPORTING REQUIREMENTS UNDER THE INSPECTOR GENERAL ACT (CONTINUED)

REPORTING	REQUIREMENT	PAGE OR APPENDIX
Section 5(a)(12)	Description of the metrics used for developing the data for the statistical tables under Section 5(a)(17).	Appendix 4
Section 5(a)(13)	Report on each investigation conducted by the Office where allegations of misconduct were substantiated involving a senior government employee ¹ or senior official (as defined by the Office) if the establishment does not have senior government employees.	Appendix 5
Section 5(a)(14)	Detailed description of (a) any instance of whistleblower retaliation, including information about the official found to have engaged in retaliation; and (b) what, if any, consequences the establishment actually imposed to hold the official accountable.	None
Section 5(a)(15)	Information related to interference by the establishment, including (a) a detailed description of any attempt by the establishment to interfere with the independence of the Office, including (i) with budget constraints designed to limit the capabilities of the Office, and (ii) incidents where the establishment has resisted or objected to oversight activities of the Office or restricted or significantly delayed access to information, including the justification of the establishment for such action; and (b) a summary of each report made to the head of the establishment under Section 6(c)(2) during the reporting period.	None
Section 5(a)(16)	Detailed descriptions of the particular circumstances of each (a) inspection, evaluation, and audit conducted by the Office that is closed and was not disclosed to the public; and (b) investigation conducted by the Office involving a senior government employee that is closed and was not disclosed to the public.	Appendix 6

¹ Pursuant to Section 5(a)(13) of the IG Act, as amended, which gives discretion to the OIG to make determinations where an Agency does not have "Senior Government employees," senior managers are those categorized as Officer/Executive in the TVA pay bands and others by exception, based on their responsibilities.

OIG AUDIT REPORTS • ISSUED DURING THE SIX-MONTH PERIOD ENDED SEPTEMBER 30, 2023

Report Number and Date	Title	Questioned Costs	Unsupported Costs	Funds Put To Better Use
CONTRACT AUDITS				
2022-17394 04/05/2023	Proposal for Nonnuclear Modification and Supplemental Maintenance Services	\$0	\$0	\$54,290,000
2022-17360 04/19/2023	The Steam Generating Team, LLC - Contract No. 11144	1,903,315	1,304	0
2023-17424 05/16/2023	Small Modular Reactor Technology Collaboration Agreement - Rate Review	0	0	0
2023-17403 09/11/2023	Robert E. Lamb, Inc. - Contract No. 13659	4,293,345	0	0
2023-17412 09/20/2023	Accenture Federal Services LLC - Contract No. 14910	0	0	0
FINANCIAL AND OPERATIONAL AUDITS				
2023-17405 09/26/2023	Load Not Served Winning Performance Measure	\$0	\$0	\$0
INFORMATION TECHNOLOGY AUDITS				
2022-17390 06/21/2023	Remote Application and Desktop Virtualization Client	\$0	\$0	\$0
2022-17380 07/03/2023	Transmission and Power Supply's Management of Mac® Desktops and Laptops	0	0	0
2023-17423 ¹ 09/26/2023	2023 Federal Information Security Modernization Act	0	0	0
TOTAL AUDITS (9)		\$6,196,660	\$1,304	\$54,290,000

¹ Management decision was not received by the end of the reporting period.

APPENDIX 2

OIG EVALUATION REPORTS • ISSUED DURING THE SIX-MONTH PERIOD ENDED SEPTEMBER 30, 2023 (CONTINUED)

Report Number and Date	Title	Questioned Costs	Unsupported Costs	Funds Put To Better Use
EVALUATIONS				
2022-17377 05/11/2023	Power Operations Hazardous Chemicals	\$0	\$0	\$0
2022-17376 07/05/2023	Combustible Coal Dust	0	0	0
2022-17400 07/26/2023	Gas Plant Critical Spare Parts	0	0	0
2022-17384 09/28/2023	TVA Nuclear Preventive Maintenance	0	0	0
ORGANIZATIONAL EFFECTIVENESS				
2022-17373 05/12/2023	Organizational Effectiveness - Transmission Planning and Projects	\$0	\$0	\$0
2022-17371 05/25/2023	Organizational Effectiveness - TVA Police and Emergency Management	0	0	0
2023-17421 ² 09/11/2023	Organizational Effectiveness - Magnolia Combined Cycle	0	0	0
2022-17396 09/27/2023	Organizational Effectiveness - Power Service Shop	0	0	0
TOTAL EVALUATIONS (8)		\$0	\$0	\$0

Note: A summary of or link to the full report may be found on the OIG's Web site at <https://oig.tva.gov>.

² Management decision was not received by the end of the reporting period.

RECOMMENDATIONS INCLUDED IN A PREVIOUS SEMIANNUAL REPORT AND AWAITING IMPLEMENTATION

At the end of the semiannual period, final corrective action was not complete on 29 recommendations associated with 5 audit and 5 evaluation reports issued in a prior period. Presented below for each audit and evaluation are the report number, date, and title, along with a brief description of action management agreed to take to resolve the open recommendation, including the date management expects to complete final action and potential cost savings. (Report numbers followed by an "*" indicates management decision was received during this semiannual period.)

Audit Report Number and Date	Report Title and Actions Agreed to by Management to Resolve Recommendations
2022 Federal Information Security Modernization Act	
2022-17370 09/19/2022	TVA agreed to (1) ensure (a) contingency plans are consistently tested as required by policy and (b) the configuration management process is consistently implemented for all information systems; (2) create processes to maintain a complete and accurate inventory of hardware assets connected to the corporate network; and (3) create processes to develop and maintain a complete and accurate inventory of (a) software assets and (b) software assets connected to the corporate network. TVA expects to complete final action by January 31, 2024.
Employee Relocation Allowances	
2022-17348 12/13/2022	TVA agreed to update TVA-SPP-11.208, <i>Employee Relocation Allowances</i> , to (1) remove a reference to the Federal Travel Regulation, (2) clarify the relocation benefits available to manager and specialist new hires under Board resolution authority, (3) include guidance for administering relocations for officer and executive employees whose offer letters include language stating TVA will reimburse "actual and reasonable" costs associated with relocation, and (4) include guidance for evaluating and administering subsequent relocations for manager and specialist and officer and executive employees. Additionally, TVA stated SIRVA Relocation, LLC will update their process for authorizing miscellaneous expense allowance claims to provide documentation of review. TVA expects to complete final action by December 13, 2023.
Baker's Construction Services, Inc. - Contract No. 14743	
2021-17300 02/01/2023	TVA stated they will enter into negotiations to recover (a) \$11,269 in ineligible equipment costs, (b) \$21,582 in overbilled subcontractor costs, (c) \$3,245 in unsupported noncraft labor costs, and (d) \$8,845 in overbilled material costs. In addition, TVA agreed to (1) review the contract for inconsistent compensation terms and determine if updates are needed; (2) determine if \$421,683 in temporary living allowance (TLA) costs were eligible and enter into negotiations to recover any TLA costs deemed ineligible; and (3) work with the business partner to address invoice and payment errors identified. TVA expects to complete final action by February 1, 2024.
Substation Physical Security	
2020-15708 02/21/2023	TVA agreed to (1) revise applicable Standard Programs and Processes (SPP) to define requirements for physical access reviews and (2) document the frequency of physical access log reviews. TVA expects to complete final action by February 21, 2024.
Proposal for Nonnuclear Modification and Supplemental Maintenance	
2022-17393* 03/30/2023	TVA agreed to negotiate (1) the proposed rate for workers' compensation and general liability to an acceptable level and (2) the insurance markup rate to only be applicable to craft labor stripped base payroll; potentially avoiding \$4,390,000 in future costs. In addition, TVA directed the contractor to obtain a workers' compensation and general liability reimbursement rate through competitive marketing. TVA expects to complete final action by March 30, 2024.

APPENDIX 3

RECOMMENDATIONS INCLUDED IN A PREVIOUS SEMIANNUAL REPORT AND AWAITING IMPLEMENTATION (CONTINUED)

Evaluation Report Number and Date	Report Title and Actions Agreed to by Management to Resolve Recommendations
2021-15789 03/24/2022	<p>Acquisition and Disposal of Real Property</p> <p>TVA agreed to review, update, and publish the Real Property SPP and user guides. TVA expects to complete final action by December 31, 2023.</p>
2020-15747 10/24/2022	<p>Power Supply Plan</p> <p>TVA agreed to (1) implement measures to enhance the review process including multi-year initiatives that will help incorporate more data automation steps to reduce errors; (2) implement a weighted average transportation rate based on the preceding 12 months of actual coal deliveries; (3) correct errors identified during the evaluation; and (4) review and update load forecast process documentation. TVA expects to complete final action by October 24, 2023.</p>
2022-17336 10/26/2022	<p>Organizational Effectiveness - Ackerman Combined Cycle Plant</p> <p>TVA agreed to develop and implement a plan to improve the work management process, specifically related to the gatekeeper and workweek processes. TVA expects to complete final action by October 26, 2023.</p>
2022-17375 03/30/2023	<p>TVA Training and Development Processes</p> <p>TVA agreed to (1) utilize data to drive training effectiveness reviews and (2) review and update TVA-SPP-17.006, <i>Training Evaluation Phase</i>. TVA expects to complete final action by March 29, 2024.</p>
2022-17381* 03/31/2023	<p>Identification of TVA's Enterprise Risks</p> <p>TVA agreed to revise TVA-SPP-13.017, <i>Enterprise Risk Management</i>, to (a) fully document the process used to identify and assess risks and (b) clarify the process used to define and document TVA's risk appetite approach. Additionally, Enterprise Risk Management (ERM) will work with business partners to incorporate into the ERM process any gaps or lessons learned that will improve TVA's risk portfolio. TVA expects to complete final action by March 29, 2024.</p>

INVESTIGATIVE REFERRALS AND PROSECUTIVE RESULTS

Referrals	
Reports Issued to TVA Management	7
Subjects Referred to U.S. Attorneys	5
Subjects Referred to State/Local Authorities	0
Results	
Subjects Indicted/Informations Filed	5
Subjects Convicted	3
Pretrial Diversions	0
Federal Referrals Declined	1
State/Local Referrals Declined	0

Metrics: Reports issued to TVA management are comprised of formal written reports and, when appropriate, e-mailed summaries conveying the findings of a completed investigation.

The number of indictments does not include sealed indictments or superseding indictments of the same individual already reported in this or a prior semiannual report unless charges or charging mechanism differs substantially.

Results include persons and companies/entities as applicable, and may include task force activities and joint investigations with other agencies.



APPENDIX 5

SUBSTANTIATED INVESTIGATIONS INVOLVING SENIOR AGENCY OFFICIALS

Case No.	Allegation and Disposition
22-0036	<p>The OIG received an allegation that a senior project manager was attempting to implement new TVA contracts prior to his retirement from TVA to position himself for employment with the contracting companies once he retired.</p> <p>The initial allegation was unsubstantiated; however, during the course of the investigation, it was discovered that a different senior manager deceptively facilitated the return of the senior project manager accepting a voluntary reduction in force (VRIF). The manager added a position to an existing TVA contracting company's contract and ensured the incorrect classification of the position allowing them to circumvent the TVA VRIF restriction of not returning to TVA in that type of role for at least one year.</p> <p>A memorandum describing our findings was provided to TVA management. As a result, management (1) met with the senior manager and discussed the conclusions and explained how those actions could be viewed as inconsistent with TVA's policies and ethical expectations, (2) added new positions to the team to allow senior management to be in an oversight/leadership role rather than being directly engaged in a wide range of executive and implementation tasks, (3) conducted benchmarking with other TVA Business Units to determine how they handle VRIFs and classifications of former employees returning to TVA as contractors, and (4) provided guidance to Human Resources to review information pertaining to VRIFs, ensuring that requirements for the classification of returning employees are clear, direct, and provide contacts in the event clarification is needed.</p>

Metrics: Pursuant to Section 5(a)(13) of the IG Act, as amended, which gives discretion to the OIG to make determinations where an agency does not have "Senior Government employees," senior managers are those categorized as Officer/Executive in the TVA pay bands and others with salaries equal to or greater than 86.5 percent of the rate for level II of the Executive Schedule.

APPENDIX 6

PREVIOUSLY UNDISCLOSED INVESTIGATIONS INVOLVING SENIOR AGENCY OFFICIALS

Case No.	Allegation and Disposition
23-0056	<p>It was alleged a senior manager at a nuclear plant unfairly awarded work to a contractor and is removing other competing contractors from the site. The favored contractor hired the senior manager's son who was unqualified for the position. The senior manager also encourages other TVA organizations to use the contractor and also uses his influence as an elected official to promote the vendor in the community. Unsubstantiated.</p>

Metrics: Pursuant to Section 5(a)(13) of the IG Act, as amended, which gives discretion to the OIG to make determinations where an agency does not have "Senior Government employees," senior managers are those categorized as Officer/Executive in the TVA pay bands and others with salaries equal to or greater than 86.5 percent of the rate for level II of the Executive Schedule.

HIGHLIGHTS - STATISTICS

	SEPT 30, 2023	MAR 31, 2023	SEPT 30, 2022	MAR 31, 2022	SEPT 30, 2021
AUDITS					
AUDIT STATISTICS					
Carried Forward	18 ¹	16	18 ²	20 ³	20 ⁴
Started	7	14	11	12	14
Canceled	(0)	(0) ⁵	(2)	(0) ⁶	(2)
Completed	(9)	(10)	(13)	(13)	(12)
In Progress at End of Reporting Period	17 ⁷	18	16	18	20
AUDIT RESULTS (Thousands)					
Questioned Costs	\$6,197	\$6,177	\$3,012	\$1,630	\$13,458
Disallowed by TVA	\$2,084	\$6,177	\$3,012	\$1,630	\$8,425
Recovered by TVA	\$221	\$1,550	\$316	\$102	\$395
Funds to Be Put to Better Use	\$54,290	\$33,282	\$139,418	\$6,483	\$9,700
Agreed to by TVA	\$58,680 ⁸	\$48,992 ⁹	\$125,801	\$0	\$9,700
Realized by TVA	\$0	\$20,100	\$8,201	\$0	\$2,240
OTHER AUDIT-RELATED PROJECTS					
Completed	3	4	5	5	8
Cost Savings Identified/Realized	\$0	\$0	\$0	\$292	\$0
EVALUATIONS					
Completed	8	5	10	7	13
Cost Savings Identified/Realized (Thousands)	\$0	\$0	\$0	\$0	\$0
SPECIAL PROJECTS					
Completed	0	0	0	0	0
INVESTIGATIONS¹⁰					
INVESTIGATION CASELOAD					
Opened	66	62	79	79	74
Closed	68	59	79	79	83
In Progress at End of Reporting Period	69 ¹¹	73 ¹²	73	73	73
INVESTIGATIVE RESULTS (Thousands)					
Recoveries	\$7,045.4 ¹³	\$1,860.3 ¹⁴	\$1,596.4 ¹⁵	\$447.4	\$7,357.7 ¹⁶
Projected Savings	\$0	\$0	\$0	\$63.1	\$0
Fines/Penalties/Fees	\$.2	\$100.1	\$1.5	\$175.4	\$0.6
Waste/Other Monetary Loss	\$145.1	\$0	\$0	\$506.2	\$2,887.0
Forfeiture(s) Ordered - Criminal	\$0	\$0	\$1,000	\$0	\$1,750.0
Forfeiture(s) Ordered - Civil	\$0	\$0	\$134.1	\$0	\$0
MANAGEMENT ACTIONS					
Disciplinary Actions Taken (Number of Subjects)	5	4	6	4	4
Counseling/Management Techniques Employed (Number of Cases)	6	8	9	12	11
Debarments	0	0	1	0	0
PROSECUTIVE ACTIVITIES (Number of Subjects)					
Referred to U.S. Attorneys	5	20	10	6	11
Referred to State/Local Authorities	0	0	0	0	5
Indicted/Informations Filed	5	1	4	2	7
Convicted	3	2	3	2	1
Pretrial Diversions	0	0	0	1	0

¹ Does not include two projects that were postponed at the beginning of the period.

² Ibid.

³ Does not include one project that was postponed at the beginning of the period.

⁴ Ibid.

⁵ Two projects were postponed during the period.

⁶ One project was postponed during the period.

⁷ Includes one project that had previously been postponed.

⁸ Includes amounts identified in a prior period.

⁹ Ibid.

¹⁰ These numbers may include task force activities and joint investigations with other agencies.

¹¹ Adjusted from previous period.

¹² Ibid.

¹³ Of this amount, \$455,868 is restitution to TVA.

¹⁴ Of this amount, \$818,759 was recovered for other entities as a result of our investigations.

¹⁵ Of this amount, \$1,248,300 was restitution ordered to a general public entity as a result of a criminal TVA OIG investigation.

¹⁶ Includes \$6,775,896 court-ordered restitution to other federal and state entities resulting from a multi-agency investigation.

APPENDIX 8

GOVERNMENT CONTRACTOR AUDIT FINDINGS

The National Defense Authorization Act for Fiscal Year 2008, P.L. 110-181, requires each Inspector General appointed under the Inspector General Act of 1978 to submit an appendix on final, completed contract audit reports issued to the contracting activity that contain significant audit findings—unsupported, questioned, or disallowed costs in an amount in excess of \$10 million, or other significant findings—as part of the Semiannual Report to Congress. During this reporting period, the Office of the Inspector General issued no contract review reports under this requirement.



PEER REVIEWS OF THE TVA OIG

Audits Peer Review

Inspector General audit organizations are required to undergo an external peer review of their system of quality control at least once every three years, based on requirements in the *Government Auditing Standards*. Federal audit organizations can receive a rating of pass, pass with deficiencies, or fail. The Tennessee Valley Authority (TVA) Office of the Inspector General (OIG) underwent its most recent peer review of its audit organization for the period ended September 30, 2022. This review was performed by the U.S. Securities and Exchange Commission (SEC) OIG. The SEC OIG issued its report, dated February 28, 2023, in which it concluded the system of quality control for the audit organization of TVA OIG in effect for the year ended September 30, 2022, has been suitably designed and complied with to provide TVA OIG with reasonable assurance of performing and reporting in conformity with applicable professional auditing standards in all material respects. Accordingly, the TVA OIG received a rating of pass. There are no outstanding recommendations from this review. The peer review report is posted on our Web site at https://oig.tva.gov/peer_reports.html.

Evaluations Peer Review

Inspector General organizations that conduct evaluations in accordance with the Council of the Inspectors General on Integrity and Efficiency's *Quality Standards for Inspection and Evaluation* (Blue Book) are required to undergo an external peer review every three years. The TVA OIG underwent its most recent peer review of its evaluation organization for the period ended March 31, 2023. This review was performed by the U.S. Department of Housing and Urban Development (HUD) OIG. The HUD OIG issued its report, dated August 24, 2023, in which it determined the (1) TVA OIG's internal policies and procedures generally were consistent with the Blue Book standards addressed in the external peer review and (2) TVA OIG reports reviewed generally complied with the Blue Book standards. The peer review report is posted on our Web site at https://oig.tva.gov/peer_reports.html.

Investigations Peer Review

Investigative Operations undergoes a Quality Assessment Review at least once every three years. The Corporation for National & Community Service (CNCS) OIG completed a Quality Assessment Review of TVA OIG Investigative Operations on May 31, 2019. CNCS OIG found "...the system of internal safeguards and management procedures for the investigative function of TVA-OIG in effect for the period ending December 31, 2018, was in compliance with the quality standards established by CIGIE and the applicable Attorney General guidelines..." This confirmation is posted on our Web site at https://oig.tva.gov/reports/2019_Investigations_Peer_Review.pdf.

GLOSSARY



Disallowed Cost

A questioned cost that management, in a management decision, has sustained or agreed should not be charged to the agency.

Final Action

The completion of all management actions, as described in a management decision, with respect to audit findings and recommendations. When management concludes no action is necessary, final action occurs when a management decision is made.

Funds To Be Put To Better Use

Funds which the OIG has disclosed in an audit report that could be used more efficiently by reducing outlays, deobligating program or operational funds, avoiding unnecessary expenditures, or taking other efficiency measures.

Information

A formal accusation of a crime made by a prosecuting officer as distinguished from an indictment presented by a grand jury.

Management Decision

Evaluation by management of the audit findings and recommendations and the issuance of a final decision by management concerning its response to such findings and recommendations.

Questioned Cost

A cost the Inspector General questions because (1) of an alleged violation of a law, regulation, contract, grant, cooperative agreement, or other document governing the expenditure of funds; (2) such cost is not supported by adequate documentation; or (3) the expenditure of funds for the intended purposes was unnecessary or unreasonable.

Unsupported Cost

A cost that is questioned because of the lack of adequate documentation at the time of the audit.

ABBREVIATIONS & ACRONYMS



THE FOLLOWING ARE ACRONYMS AND ABBREVIATIONS WIDELY USED IN THIS REPORT.

Blue Book	Quality Standards for Inspection and Evaluation
Board	Board of Directors
CIGIE	Council of the Inspectors General on Integrity and Efficiency
CFR	Code of Federal Regulations
CNCS	Corporation for National & Community Service
Combustible Dust TSP	Technical Safety Procedure 18.1205, <i>Combustible Dust</i>
ERM	Enterprise Risk Management
FBI	Federal Bureau of Investigation
FISMA	Federal Information Security Modernization Act
FY	Fiscal Year
HUD	U.S. Department of Housing and Urban Development
IG	Inspector General
ISP	Information Security Program
IT	Information Technology
LNS	Load Not Served
MCC	Magnolia Combined Cycle Plant
OIG	Office of the Inspector General
OMB	Office of Management and Budget
OPM	U.S. Office of Personnel Management
PM	Preventive Maintenance
PPP	Paycheck Protection Program
PRAC	Pandemic Response Accountability Committee
PSS	Power Service Shop
SEC	U.S. Securities and Exchange Commission
SDS	Safety Data Sheet
SPP	Standard Programs and Processes
TLA	Temporary Living Allowance
TOPS	Transmission Operations and Power Supply
TPP	Transmission Planning and Projects
TRANS-SPP	Transmission Standard Programs and Processes
TVA	Tennessee Valley Authority
TVAP&EM	TVA Police and Emergency Management
VRIF	Voluntary Reduction in Force
WBN	Watts Bar Nuclear Plant
WP	Winning Performance



Office of the Inspector General

400 West Summit Hill Drive
Knoxville, Tennessee 37902

The OIG is an independent organization charged with conducting audits, evaluations, and investigations relating to TVA programs and operations, while keeping the TVA Board and Congress fully and currently informed about problems and deficiencies relating to the administration of such programs and operations.

The OIG focuses on (1) making TVA's programs and operations more effective and efficient; (2) preventing, identifying, and eliminating waste, fraud, and abuse and violations of laws, rules, or regulations; and (3) promoting integrity in financial reporting.

If you would like to report to the OIG any concerns about fraud, waste, or abuse involving TVA programs or violations of TVA's Code of Conduct, you should contact the OIG EmPowerline, TVA OIG's hotline. The EmPowerline can be reached 24 hours a day, seven days a week, either by a toll-free phone call (1-855-882-8585) or over the Web (www.oigempowerline.com). A third-party contractor will take your call or online concern and immediately forward it to OIG personnel. You may report your concerns anonymously or you may request confidentiality.





EmPowerline®

**A hotline for reporting anonymous
and confidential concerns**

**www.oigempowerline.com
Toll-Free 855-882-8585**



**We investigate fraud, waste, and abuse in TVA programs and operations.
Examples include:**

- Contract Fraud
- Environmental Crimes
- Healthcare/Prescription Drug Fraud
- Employee Misconduct
- Conflict of Interest
- Workers' Compensation Fraud

Whistleblower Protection

Educates TVA employees about prohibitions on retaliation for protected disclosures, as well as the rights and remedies of employees who have been subjected to workplace retaliation for making protected disclosures. E-mails may be directed to: whistleblowercoordinator@tvaog.gov.



Nottely Reservoir

TVA OIG VALUES

- Effective Communication
- Trusting Relationships
- Integrity
- Independence
- Continuous Improvement
- Accountability



We are a high performing work team that achieves OIG strategic objectives through operational excellence and modeling our values and behaviors every day.







Office of the Inspector General
TENNESSEE VALLEY AUTHORITY
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