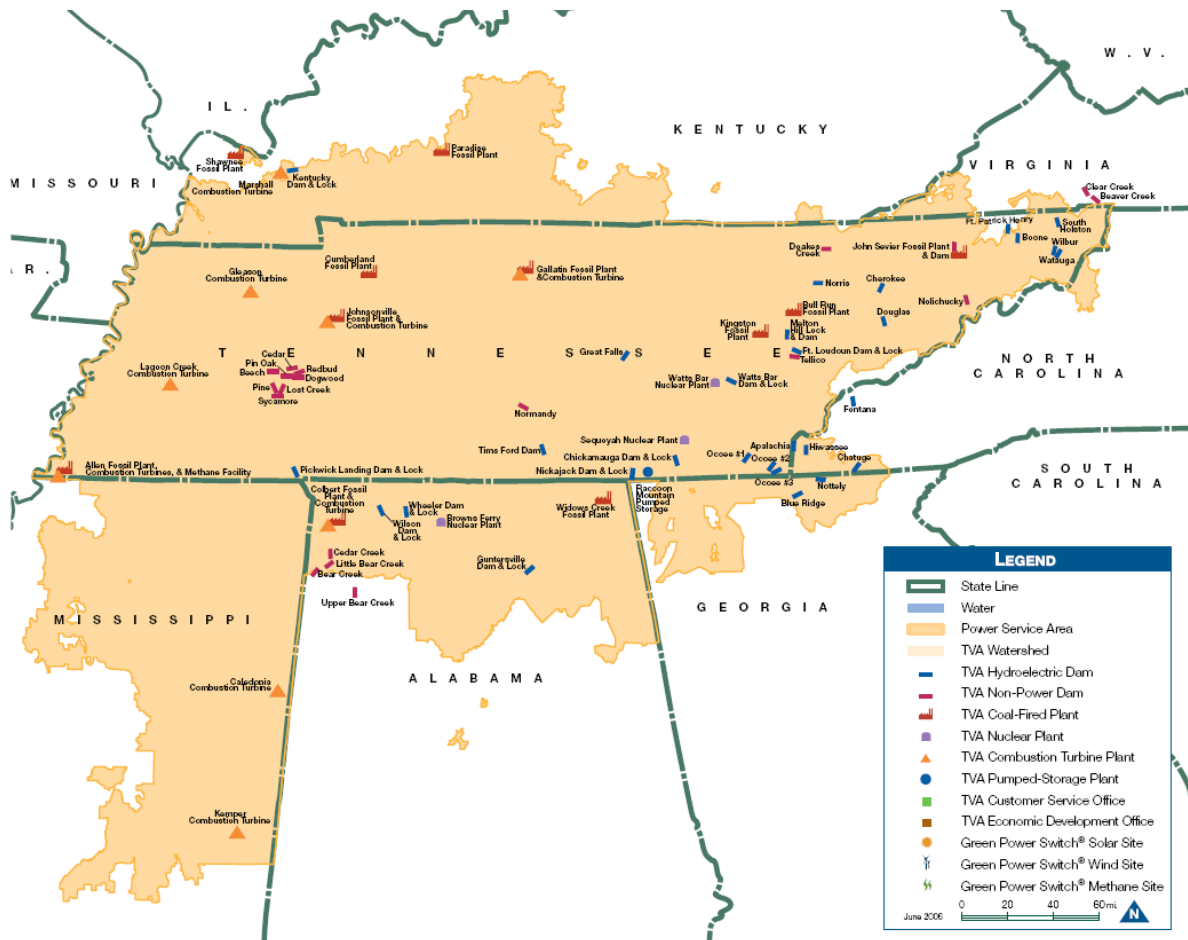


# NAVIGATING RISK

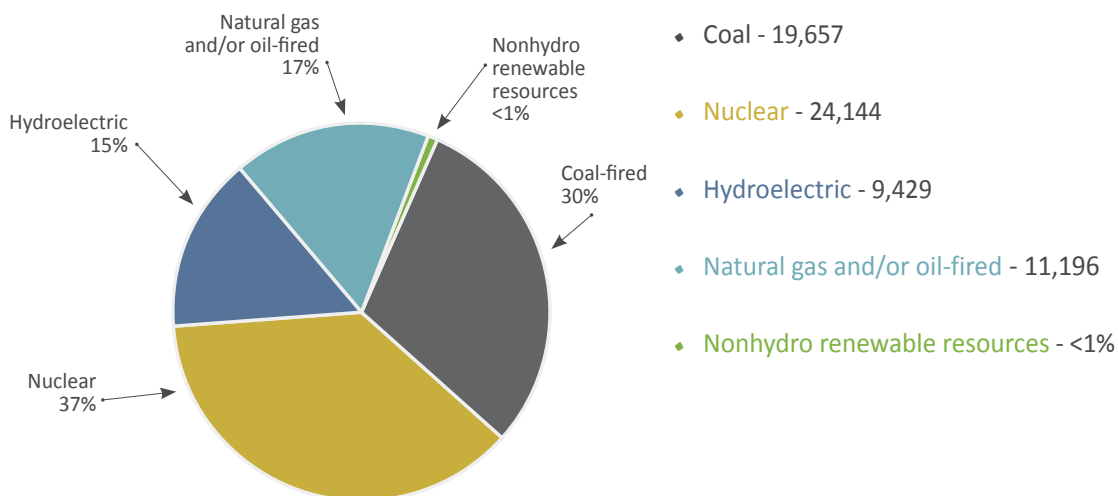
A FOCUS ON CONTRACTING



*Office of the Inspector General*  
**TENNESSEE VALLEY AUTHORITY**  
*Semiannual Report • October 1, 2015 - March 31, 2016*



## TVA Power Generation Six Months Ended March 31, 2016 (in millions of kilowatt hours)



# TABLE OF CONTENTS

## *Navigating Risk: A Focus on Contracting*

Message from the Inspector General. . . . .	4
Special Feature . . . . .	6
Noteworthy Undertaking . . . . .	10
Executive Overview . . . . .	12
Organization . . . . .	16
Audits . . . . .	22
Evaluations . . . . .	30
Investigations. . . . .	36
Legislation and Regulations . . . . .	40
Appendices . . . . .	42
Appendix 1 – Index of Reporting Requirements Under the Inspector General Act . . . . .	43
Appendix 2 – Audit and Evaluation Reports Issued . . . . .	44
Appendix 3 – Audit and Evaluation Reports Issued with Questioned and Unsupported Costs and Recommendations for Better Use of Funds . . . . .	46
Appendix 4 – Audit and Evaluation Reports with Corrective Actions Pending . . . . .	48
Appendix 5 – Investigative Referrals and Prosecutive Results. . . . .	52
Appendix 6 – Highlights . . . . .	53
Appendix 7 – Government Contractor Audit Findings. . . . .	54
Appendix 8 – Peer Reviews of the TVA OIG . . . . .	55
Glossary. . . . .	58
Abbreviations and Acronyms. . . . .	60

## Message from THE INSPECTOR GENERAL



I am pleased to present our report for the period October 1, 2015, to March 31, 2016. The work of the Office of the Inspector General (OIG) is focused on understanding, identifying, and recommending ways to mitigate risks. The theme for this semiannual report is Navigating Risk: A Focus on Contracting. In recent years, Tennessee Valley Authority (TVA) has focused on reducing costs. Annually, TVA spends more than \$7 billion through its contracts for various services, materials, equipment, and purchased power. In our feature article, we discuss how our contract audit work helps TVA recover millions of dollars every year from contractors, negotiate better pricing for future contracts, and improve contract administration processes. These results impact TVA's ability to manage its costs and maintain its financial health. We would be remiss if we also did not acknowledge that the strong working relationships Contract Audits and TVA contracting groups have built together over the years are integral to our success in this area.

In this semiannual period, our audit, evaluation, and investigative activities identified more than \$26.5 million in recoveries, fees, fines, penalties, potential savings, questioned costs, and other monetary loss and identified numerous opportunities for TVA to improve its programs and operations. Highlights include:

- Contract compliance audits identified potential overbillings of more than \$8.8 million and preaward examinations of cost proposals identified more than \$15.4 million in potential savings opportunities that TVA could use during negotiations.
- Four organizational effectiveness reviews provided TVA with a

holistic view of operations in its Corporate Accounting department as well as its Cumberland, Kingston, and Bull Run Fossil Plants. In these reviews, we identified operational and work environment issues that, if left unresolved, could impact each group's ability to meet its mission.

- Organizational effectiveness reviews in TVA's Information Technology (IT) organization identified improvements made by the groups since previous reviews in 2011 as well as additional areas for improvement going forward.
- An evaluation of TVA's Nuclear Employee Concerns Program (ECP) identified areas for improvement related to documentation, the

resolution follow-up process, and reporting to site management.

- An audit of \$17.3 million in corporate card transactions revealed policies could be strengthened and appropriate controls put in place to mitigate the risk of charge card fraud and abuse.
- Investigations identified more than \$615,000 in recoveries/fees primarily associated with (1) two ineligible contractor employees receiving temporary living allowances, and (2) funds recovered from a utility for nonfunctioning water heater load management switches.



Whether the focus of our work is contracting, cyber security, governance, operational or cultural risks, our intent is to provide TVA management with an independent and objective assessment of how well the risks are being mitigated and recommend solutions to issues that will help TVA become better. As always, we appreciate the cooperative spirit in which both the TVA Board and TVA management

work with the OIG to accomplish mutual goals.

**Richard W. Moore**  
Inspector General

# SPECIAL FEATURE

## **NAVIGATING RISK:** *A FOCUS ON CONTRACTING*



TVA continues to face the demanding challenge of balancing eroding revenues with persistent expenses. Milder weather and marketplace efficiency has resulted in a downward trend in demand and revenues. Environmental regulations continue to become more stringent, requiring TVA to modify their aging asset portfolio. The completion of Watts Bar Nuclear Plant (WBN) Unit 2, decommissioning of fossil plants, and conversion of others to combined-cycle plants is resulting in significant capital investments. TVA's mission demands they provide low-cost rates to the 9 million people of the Tennessee Valley. To accomplish that, TVA management continues to look for ways to reduce expenses and increase their operational efficiency. As we will discuss in this article, the OIG is committed to making TVA better by reviewing areas of risk and recommending ways TVA can save or recover funds, mitigate risk, and promote operational efficiency and effectiveness.



When Bill Johnson joined TVA three years ago as Chief Executive Officer (CEO), he partnered with the TVA Board in creating a mandate that TVA “live within its means.” The outcome of that mandate has led to difficult, albeit necessary decisions to reduce expenses. From 2014 to 2015, TVA has reduced their nonfuel operating and maintenance expenses by more than \$500 million dollars, representing a reduction in these expenses by more than 15 percent.

The vision of the OIG is to “Make TVA Better.” Through our audits, evaluations, and investigations, we focus on ways TVA can save money, recover funds, reduce risk, and improve operations. To that end, we align our focus to areas of highest impact as determined by a robust risk identification process that includes input from TVA’s Enterprise Risk Management program. One of these risk areas includes TVA’s significant annual spend on contracts.

The OIG Contract Audits department provides oversight of TVA’s contracting activities. The oversight responsibility is significant. In fiscal year (FY) 2015, TVA spent about \$4.1 billion on labor, services, materials, equipment contracts, and purchase orders (managed by TVA Supply Chain), \$1.8 billion under coal and coal transportation contracts (managed by TVA Coal & Gas Services), and \$1.4 billion on purchased power contracts (managed by TVA Power Origination).

Contract Audits has developed a trusting working relationship with these organizations while providing ongoing reviews and assistance to improve TVA’s contracting processes. While we are organizationally and functionally independent, we work together with these organizations to maximize the positive impact. Specifically, Contract Audits performs contract compliance audits, preaward examinations, and process improvement reviews. Supply Chain, Coal & Gas Services, and Power Origination, in turn, act on our findings and recommendations through recovering overbilled costs, negotiating cost savings for TVA, and implementing process improvements.

The contracts we select for audit are based on analysis of several risk factors to determine those contracts which have a high potential for fraud, waste, and abuse. The specific objectives of a contract compliance audit can vary depending on several factors, including, but not limited to, the type and size of the contract. Contract compliance audits focus on areas such as the (1) accuracy of the contractor’s billings to TVA, (2) compliance with contract terms and conditions (i.e., were costs billed to TVA eligible and supported), (3) reasonableness and clarity of contract terms (i.e., do the contract compensation

provisions make sense), and  
(4) identification of potential fraud.

Preaward examinations are performed when TVA Supply Chain management requests assistance either prior to the (1) award of a contract or (2) extension of a contract. Our objective is generally to determine if a contractor's cost proposal is fairly stated. These examinations allow TVA management to understand where further negotiation could reduce costs and strengthen contract terms.

## MAKING TVA BETTER

While TVA suppliers have a responsibility to accurately estimate and administer their contracts, TVA has a myriad of internal processes and work flows whose degree of efficiency can impact TVA's bottom line. Effective and efficient contract management helps TVA in both cash flow management and cost savings. In this semiannual period, OIG Contract Audits made recommendations that will positively impact TVA in both regards.

During this semiannual period, we identified \$8.8 million in questioned costs on compliance audits and \$15.4 million in potential cost savings on preaward examinations which is consistent with the past 6 years. As shown in Figure 1 below, Contract Audits identified more than \$162 million in questioned costs and potential cost savings between FY 2010 and FY 2015—an average of more than \$27.1 million per year.

We believe a high percentage of questioned costs found on our contract compliance audits could

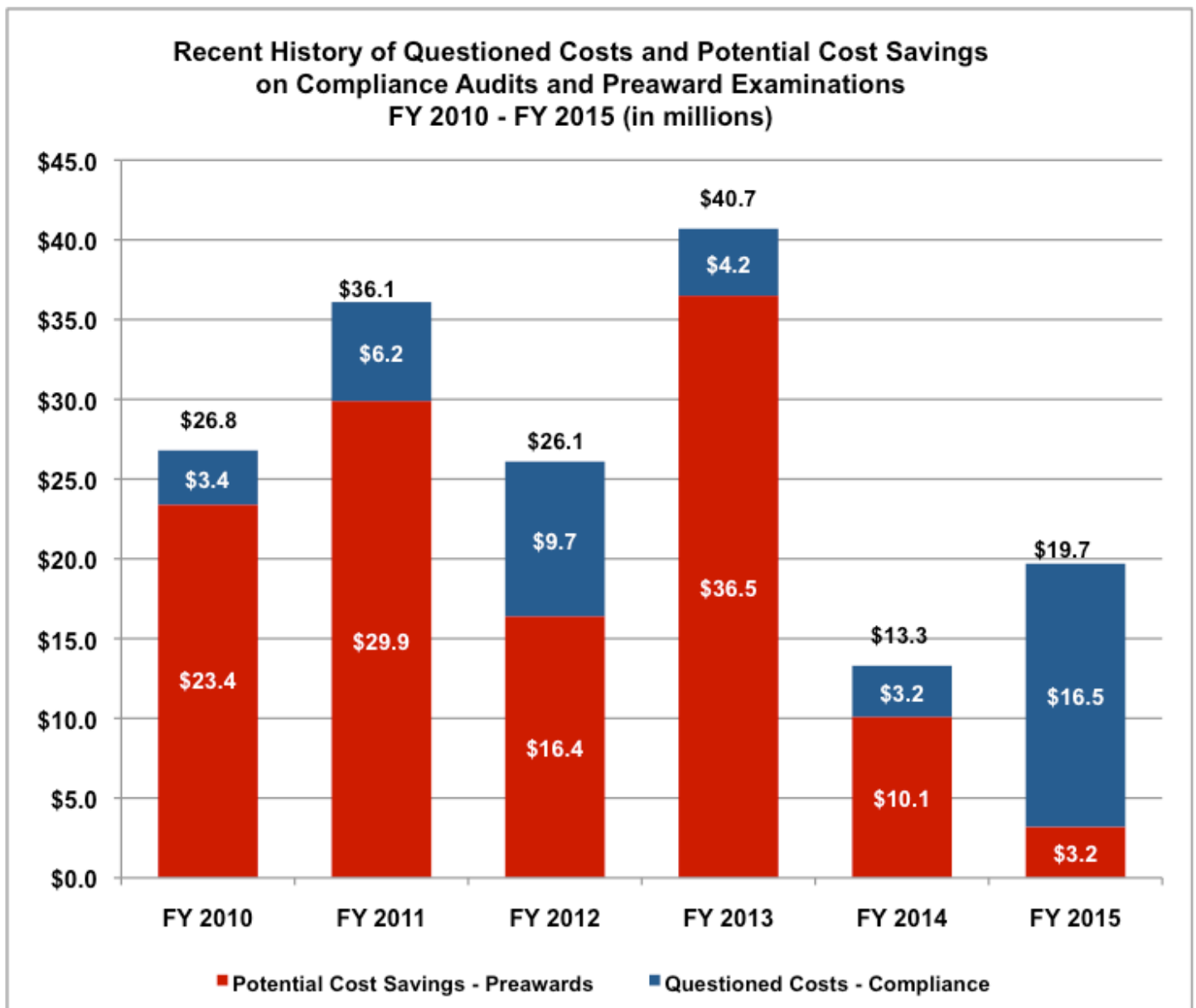


Figure 1

have been identified by TVA if a proper invoice review had been performed. In a June 2015 review of the adequacy of TVA's invoice review processes, we reported that TVA's policies and procedures were not being followed to ensure effective review and approval of supplier invoices. Specifically, we found 73 percent of the 143 invoices reviewed had inadequate reviews performed. The result of TVA agreeing to take action to improve their processes will be greater assurance of more accurate supplier invoice payments and, ultimately, reduction in future overpayments.

In another review, we made recommendations that will aid TVA in making the lowest cost decision on contract pricing. In this review, involving a barge contract managed by Coal & Gas Services, we found TVA

used unsupported assumptions when reviewing supplier pricing options. We also found relevant historical data pertaining to the pricing options was not factored into the estimates. TVA's process improvements resulting from our recommendations will improve their ability to develop more accurate assumptions based on historical data.

## CONCLUSION

The oversight of TVA contracting activities provided by the OIG plays a vital role in helping make TVA better. TVA management receives independent input on best practices, process improvement opportunities, preaward negotiations, and the effectiveness of their contract administration.

TVA management continues to seek new approaches to "live within their

means." The reviews performed by Contract Audits aids in this critical effort by better supporting improved contract compliance and reduced overpayments to suppliers for today and tomorrow.

We have an overriding mutual purpose with TVA management to serve the people of the Tennessee Valley. Our mutual focus to keep communication open and stay in dialogue so that we can hear and be heard is critical for both our parts to deliver the best value and service to the Valley.



Watts Bar Nuclear Plant

# NOTEWORTHY UNDERTAKING

The background of the page is a dark, out-of-focus image of city lights at night, creating a bokeh effect with various colored circles (yellow, orange, red, pink, blue, green). A solid grey vertical bar is positioned on the right side of the page.

# TVA OFFICE OF INSPECTOR GENERAL RANKED ONE OF THE BEST PLACES TO WORK IN THE FEDERAL GOVERNMENT

During this semiannual period, the TVA OIG was named one of the Best Places to Work in the Federal Government by the nonprofit Partnership for Public Service and the accounting firm Deloitte.

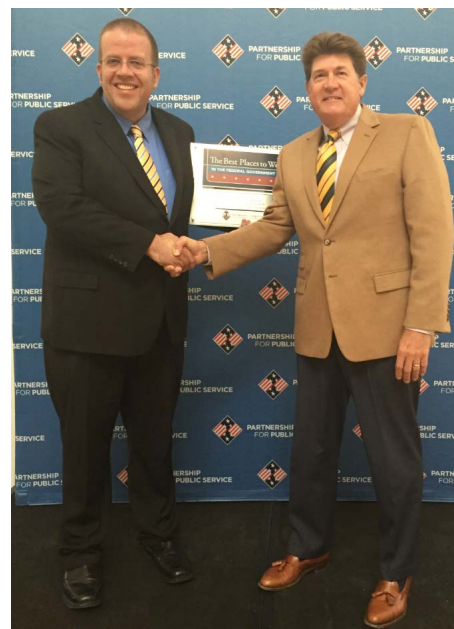
The ranking is based on the annual Employee Viewpoint Survey of federal government employees by the Office of Personnel Management (OPM). The TVA OIG ranked first of 320 federal agency subcomponents. The award was given in a ceremony in Washington, D.C., on December 8, 2015.

For the first time since the Best Places to Work in the Federal Government® rankings were launched, the Partnership for Public Service grouped 75 federal

organizations into six mission areas: Public Health, Law Enforcement, National Security, Energy and Environment, Financial Regulation, and Oversight. The Oversight category includes the Government Accountability Office and participating Offices of Inspector General. TVA OIG ranked highest in this oversight category, as well.

“Our OIG team has worked extremely hard to create and sustain a productive work environment that is focused on making TVA better,” said Inspector General (IG) Richard Moore. “To be rated as the No. 1 oversight office in the federal government is a high honor for our office. I am proud of our very engaged team and the important work they perform to provide an independent perspective on TVA operations. Ultimately, our mission is to help TVA be better and keep electricity rates low for the people of the Tennessee Valley.”

Michael Anderson, chair of the OIG Leadership Council, accepted the award for the TVA OIG. “We work as a team and support each other,” he said. “Our people are excited about our work and the opportunity to serve the people of the Valley. We



Michael Anderson and Richard Moore

have a good working relationship with TVA management, who implements our recommendations to improve TVA’s operations. We understand our mission is important, and this award recognizes that we have an engaged workforce that is well positioned to be successful in our mission of helping TVA be better.”

This is TVA OIG’s first year participating in OPM’s FedView survey and inclusion in the Partnership for Public Service ranking. Best Places to Work in the Federal Government’s Web site is at [www.bestplacestowork.org](http://www.bestplacestowork.org).



# EXECUTIVE OVERVIEW



TVA is no stranger to risk, challenges, or change. In recent years, the 83 year-old federal institution has faced the pressures of decreasing demand, lowering its debt, expanding environmental regulations requiring it to adjust its aging generation fleet, an underfunded retirement system, and multiple organizational restructurings — all of which can increase vulnerability for TVA. It is our job to support the U.S.' largest power provider in navigating risk that enables TVA to meet its challenges in the face of constant change and continue to meet its objective of providing reliable power to the 9 million people of the Tennessee Valley at competitive rates.

This semiannual feature specifically focuses on how our Contract Audits team provides TVA with an independent perspective of contract compliance, contract administration, and fairness of contract proposals. Additionally, in this semiannual edition, we highlight how we support TVA in navigating risk to achieve its mission through our audits, evaluations, and investigations. Our independent findings and recommendations enlighten and empower TVA management to optimally manage their resources in the ever-changing landscape that is the utility industry.

## AUDITS

The TVA OIG audit organization completed 15 audit, examination, and agreed-upon procedures engagements. This work identified more than \$9 million in questioned costs for TVA to recover and \$15.4 million in funds the company could put to better use. We also identified several opportunities for TVA to improve the effectiveness and efficiency of its programs and operations.

### Contract Audits

To support TVA management in negotiating procurement actions, we completed six preaward examinations of cost proposals submitted by companies proposing to provide (1) civil projects and coal combustion management services, (2) services supporting TVA's Dam Safety Assurance Program, and (3) engineering and management services for TVA's hydroelectric power train and associated systems. Our examinations identified \$15.4 million of potential savings opportunities for TVA to negotiate. We also completed three compliance audits of contracts with expenditures totaling \$157.1 million related to (1) the design, engineering, procurement, delivery, and installation of combined-cycle or simple-cycle combustion turbines, selective catalytic reduction, dry flue gas desulfurization, and other environmental technologies at TVA facilities; (2) engineering services for TVA's Bellefonte Nuclear Plant; and (3) personnel, equipment, chemicals, and consumables necessary to process liquid radioactive waste for all three TVA nuclear operating sites. These audits identified potential overbillings of \$8.8 million. The Contract Audits section begins on page 23 of this report.

### Financial and Operational Audits

With a focus on financial reporting, compliance with applicable laws and regulations, and TVA operations, we completed audits of TVA's corporate card and ethics programs. In addition to our audit work, we monitored the audit of TVA's FY 2015 financial statements by an external auditor and applied agreed-upon procedures related to TVA's FY 2015 Winning Performance (WP) payout. The Financial and Operational Audits section begins on page 24 of this report.

## IT Audits

IT Audits (1) completed two IT organizational effectiveness audits and (2) audited the IT security practices of TVA as required by the Federal Information Security Management Act (FISMA) of 2002. The IT Audits section begins on page 28 of this report.

## EVALUATIONS

Our Evaluations organization assesses operational and cultural aspects of programs and departments throughout TVA to ensure objectives and operational functions are achieved effectively and efficiently. This team is made up of two departments—Evaluations and Organizational Effectiveness. During this reporting period, our evaluation teams completed five reviews including a review of TVA's

Nuclear ECP and four organizational effectiveness reviews.

## Evaluations

This group completed a review of TVA's Nuclear ECP and found the program generally addressed employee concerns around TVA's Nuclear program in a timely and effective manner; however, we identified multiple opportunities for improvement of this program. The Evaluations section begins on page 30 of this report.

## Organizational Effectiveness

This group completed four organizational effectiveness reviews of (1) Cumberland Fossil Plant (CUF), (2) Corporate Accounting, (3) Kingston Fossil Plant (KIF), and (4) Bull Run Fossil Plant (BRF) to assess operational and cultural

areas, including strengths and areas for concern that could impact each organization's effectiveness. The Organizational Effectiveness section begins on page 31 of this report.

## INVESTIGATIONS

This reporting period, we opened 100 cases and closed 103. Our investigative results include recoveries exceeding \$615,000, one Information filed, and one conviction. The Investigations section begins on page 36 of this report.

## STATISTICAL HIGHLIGHTS

*October 1, 2015 - March 31, 2016*

Audit Reports Issued	15
Evaluations Completed	5
Questioned Costs	\$9,038,737
Questioned Costs Agreed to by TVA	\$2,411,367
Questioned Costs Recovered by TVA	\$268,104
Funds to Be Put to Better Use	\$15,447,300
Savings Realized by TVA	\$792,300
Investigations Opened	100
Investigations Closed	103
Recoveries/Fees	\$615,286
Other Monetary Loss	\$1,418,811
Criminal Actions	2
Administrative Actions (No. of Subjects)	11



Bull Run Fossil Plant

# ORGANIZATION

**Charles A. Kandt**  
Counsel to the IG

**Richard W. Moore**  
Inspector General

**Ben R. Wagner**  
Senior Advisor,  
Stakeholder Relations

**Jill M. Matthews**  
Deputy Inspector General

## LEGAL COUNSEL

**W. David Winstead**  
Legal Counsel

## INVESTIGATIONS

**Paul B. Houston**  
Assistant Inspector  
General, Investigations

**Nancy J. Holloway**  
Special Agent  
In Charge

**James E. Hunter**  
Special Agent  
In Charge

**L. Suzanne Allin**  
Manager,  
Investigative Services  
Staff

## AUDITS & EVALUATIONS

**David P. Wheeler**  
Assistant Inspector General, Audits & Evaluations

**Phyllis R. Bryan**  
Deputy Assistant  
Inspector General,  
IT Audits

**Colonel J. Cline**  
Director,  
IT Audits

**Curtis C. Hudson**  
Deputy Assistant  
Inspector General,  
Audits

**Chad B. Bube**  
Director,  
Contract Audits

**Rick C.  
Underwood**  
Director, Financial &  
Operational Audits

**Greg R. Stinson**  
Deputy Assistant  
Inspector General,  
Evaluations

**Lisa H. Hammer**  
Director,  
Organizational  
Effectiveness

**E. David Willis**  
Director,  
Evaluations

## ADMINISTRATION

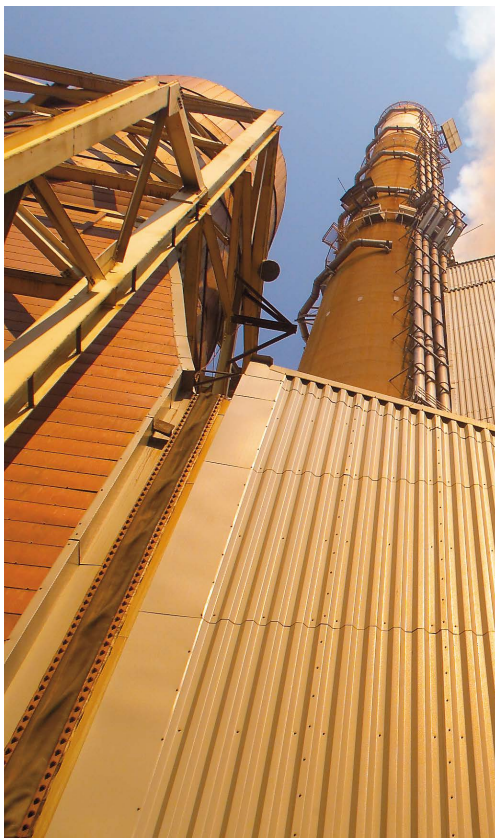
**Terri Beatty**  
Manager,  
Organizational  
Effectiveness

**Louise B. Beck**  
Manager, Audit Quality

**Phyllis R. Bryan**  
Deputy Assistant  
Inspector General,  
IT Services

**Kathy H. Kirkham**  
Manager, Resources &  
Resource Mgmt.

Since 1985, the OIG has worked to help TVA become better which is the OIG vision. 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.



Paradise Fossil Plant

## 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 near all major TVA offices throughout the Tennessee Valley. We are headquartered in TVA's East Tower, opposite TVA's corporate offices, overlooking downtown Knoxville.

The OIG has field offices in Chattanooga, Tennessee, where members of the Evaluations and Financial and Operational Audits teams and several special agents are located, as well as in Nashville, Tennessee, and Huntsville, Alabama. We also 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 March 31, 2016, the OIG had a total staff of 106.

## ADMINISTRATION

**The Administration team** works closely with the IG, Deputy IG, and Assistant IGs to address 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, internal assessments, budget and financial management, purchasing and contract services, facilities coordination, training event 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 teams make recommendations to enhance the effectiveness and efficiency of TVA programs and operations.

The teams use an impact- and risk-based approach to develop an annual work plan. In developing the plan, the OIG considers TVA's

# TYPES OF AUDIT & EVALUATION ISSUES

## Financial and Operational Audits

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

## Contract Audits

- Inflated Proposals
- Contract Overpayments
- Inferior Performance
- Fraud

## IT Audits

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

## Evaluations

- Internal Control Deficiencies
- Operational Inefficiency
- Policy Noncompliance
- Fraud

## Organizational Effectiveness

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

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 those issues of highest impact and risk to TVA.

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

**The Audits team** generates and oversees comprehensive financial and performance audits of TVA programs and operations, providing an inclusive picture of TVA's overall fiscal and operational health. This team is made up of three departments—Contract Audits, Financial and Operational Audits, and IT Audits. The audits team performs its work in accordance with *Government Auditing Standards*.

- Contract Audits has lead responsibility for contract compliance audits and preaward examinations. In addition, this team performs audits of TVA contracting processes and provides claims assistance as well as litigation support.
- Financial and Operational Audits has lead responsibility for oversight of TVA's (1) financial statement audit and related

services performed by TVA's external auditor and (2) regulatory activities. This team also conducts operational audits to assess the results as well as the economy and efficiency of TVA programs. It focuses on risk- and impact-driven operational audit work as well as TVA compliance with laws and regulations.

- 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 team 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 team is made up of two departments—Evaluations and Organizational Effectiveness.

This team 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, measure performance, and assess the efficiency and effectiveness of operations.

- Organizational Effectiveness, created in October 2015, performs risk-based reviews to assess operational and cultural areas, including strengths and concerns that could impact an organization’s ability to achieve its mission and goals.

## INVESTIGATIONS

*The Investigations team* proactively and reactively uncovers activity related to fraud, waste, and abuse in TVA programs and operations. This team performs its investigations in accordance with the *Quality Standards for Investigations* as prescribed by the CIGIE, applicable U.S. Attorney General Guidelines,

and other guiding documents. The 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. The special agents partner with other investigative agencies and organizations on special projects and assignments, including interagency law enforcement task forces on terrorism, the environment, health care, and public corruption, as well as securities fraud. The following graphic shows the major categories of investigations.

## 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.

### 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.

### Health Care Fraud

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

### Unauthorized Access Into TVA Computer Systems

Accessing a TVA computer without authorization or exceeding authorized access.

### 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.

### Special Projects

Management requests, data mining and predictive analysis, congressional and TVA Board requests, and fraud risk assessments.

## 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 also serve as ethics officials and provide OIG employees guidance on government ethics and standards of conduct.





# SUMMARY OF REPRESENTATIVE AUDITS



During this reporting period, the TVA OIG audit organization completed 15 audit, examination, and agreed-upon procedures engagements. This work identified more than \$9 million in questioned costs for TVA to recover and \$15.4 million in funds the company could 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 six preaward examinations of cost proposals submitted by companies proposing to provide (1) civil projects and coal combustion management services, (2) services supporting TVA's Dam Safety Assurance Program, and (3) engineering and management services for TVA's hydroelectric power train and associated systems. Our examinations identified \$15.4 million of potential savings opportunities for TVA to negotiate. The savings opportunities were primarily related to overstated costs, including indirect cost recovery rates and excessive profit rates.

### Contract Compliance Reviews

During this semiannual period, we completed three contract compliance audits with expenditures totaling \$157.1 million and identified potential overbillings of more than \$8.8 million. Highlights of our completed compliance audits follow.

- We audited \$113.6 million in costs billed to TVA under two contracts for (1) the design, engineering, procurement, delivery, and installation of combined-cycle or simple-cycle combustion turbines; and (2) selective catalytic reduction, dry flue gas desulfurization, and other environmental technologies at TVA facilities. We determined the contractor overbilled TVA as much as \$6,885,835 in shared cost savings and \$317,852 for a completion bonus due to potential misrepresentations in estimated material costs included in the target cost estimate for the John Sevier combined-cycle project. Additionally, we determined the contractor overbilled TVA \$1,205,758, including (1) \$378,212 in temporary assignment costs, (2) \$325,876 in other direct costs, (3) \$439,189 in labor costs, (4) \$55,390 in markup costs, and (5) \$7,091 in travel costs.
- We audited \$26.8 million in costs billed by a contractor for engineering services for Bellefonte Nuclear Plant Unit 1. We determined the contractor overbilled TVA \$322,535, including (1) \$236,224 in excessive labor markup costs, (2) \$50,685 in ineligible temporary living allowance and travel costs, (3) \$14,171 in other ineligible costs, and (4) \$21,455 in unsupported costs.
- We audited \$16.7 million in costs billed by a contractor for personnel, equipment, chemicals, and consumables necessary to process liquid radioactive waste for all three TVA nuclear operating



sites. We determined the contractor overbilled TVA \$85,246, including (1) \$42,229 in ineligible and unsupported supply, per diem, and travel costs for spent fuel pool cleanout work; (2) \$28,967 in ineligible equipment costs; (3) \$11,550 in unauthorized waste shipments; and (4) \$2,500 in ineligible dewatering and cask costs. In addition, we found \$68,898 in costs administratively paid under the contract which should have been administratively paid under another contract TVA has with the contractor.

## FINANCIAL AND OPERATIONAL AUDITS

During this semiannual period, Financial and Operational Audits completed audits of TVA's (1) Corporate Card Program and (2) Ethics Program. In addition, the team monitored the audit of TVA's FY 2015 financial statements by an external auditor and applied agreed-upon procedures related to TVA's FY 2015 WP payout.

## TVA Corporate Card Program

On October 1, 2013, TVA transitioned from having separate credit cards for business expenses related to fuel and other travel expenses to having one corporate credit card (Corporate Card) for official travel-related business expenses other than meals and incidentals. Implementing the current Corporate Card also moved accountability and liability from the employee to TVA. Previously, each employee received a statement for their TVA credit card purchases, paid the balance, and then requested reimbursement through TVA's

Employee Reimbursement System (ERS) for business expenses at actual cost up to the per diem limit. Under the new contract and process, TVA pays all Corporate Card charges through an Automated Clearing House payment within 15 days of the “posted” date. Therefore, Corporate Card expenses are not reimbursable to employees, but they must be associated (“tied”) to expense vouchers in ERS.

The OIG included an audit of the Corporate Card Program in its annual plan because of the move from employee liability to TVA liability. We audited Corporate Card transactions of \$17.3 million for the period March 1, 2014, through August 31, 2014, to determine if

appropriate policies and controls were in place to mitigate the risk of charge card fraud and abuse.

We found policies could be strengthened and appropriate controls were not in place to mitigate the risk of charge card fraud and abuse. More specifically, we found:

- Corporate Card transactions not in compliance with TVA policies including (1) charges that did not include required receipts and (2) charges for business meetings that did not include itemized documentation of the expenditures as required by TVA policy.

- Potentially duplicate vendor charges and ineligible employee charges.
- Delegation of supervisory approval responsibilities leading to inadequate segregation of duties and ineffective reviews of expense vouchers and corresponding credit card charges.
- Weaknesses in controls regarding limitations on charges within certain Merchant Category Codes.
- More than 38,000 Corporate Card transactions paid by TVA and not tied to expense vouchers for supervisory review to determine the appropriateness of the charges.



Browns Ferry Nuclear Plant

- Detailed Corporate Card data not being provided for nonfuel transactions for supervisory review.
- Ineffective override controls on Corporate Card expenditure limits.

We also found there was no documentation to explain the various database tables utilized or the contents of Corporate Card data fields in ERS. Additionally, potential cost savings may not be achieved due to insufficient, tax-related data and confusion regarding TVA's tax status within the organization and among vendors.

TVA management addressed some of the weaknesses we identified during our audit by either implementing

planned system enhancements or taking action to correct certain deficiencies.

Our recommendations to TVA management included: (1) requiring annual training for approvers, (2) implementing multiple ERS modifications to strengthen automated controls and enhance compliance with policies, (3) reviewing potentially duplicate and ineligible transactions identified to determine if TVA was due reimbursement, (4) performing periodic review of ERS data to identify potentially ineligible charges, (5) evaluating the appropriateness of delegation of supervisory approval, (6) formally documenting ERS, and (7) determining which Corporate

Card transactions are exempt from state and local taxes.

TVA management agreed to or has taken actions to address some, but not all of our recommendations to mitigate the risk of charge card fraud and abuse. However, TVA management decided to (1) accept the risks associated with other findings and (2) not take action on other recommendations.

## TVA Ethics Program

An organization's culture plays a major role in the way employees respond and react when dealing with ethical dilemmas. According to internal TVA Ethics Program documentation, TVA's program uses



a compliance-centered and values-based approach. We included a review of TVA's Ethics Program in our annual audit plan due to the increased awareness of businesses with poor ethical climates potentially having greater strategic risks. Our audit objectives were to determine if TVA's Ethics Program (1) was in compliance with applicable statutes and regulations, and (2) management had identified and incorporated best practices. In summary, we did not identify any areas where TVA's Ethics Program did not comply with requirements of Title 5, Code of Federal Regulations, § 2638.203, for federal agencies' ethics programs. Additionally, TVA's Ethics Program had incorporated many of the best practices identified, with the exception of having embedded ethics champions throughout the organization. We also found references in TVA's Code of Conduct to an Ethics Council but found the Council had been inactive since at least 2011.

We recommended TVA's Executive Vice President and General Counsel, Designated Agency Ethics Official, consider: (1) having ethics champions embedded throughout the organization who could emphasize the importance of ethical conduct at an individual and organizational level and (2) reinstating the Ethics Council or removing references to it from the TVA Code of Conduct. TVA management agreed with the audit findings and recommendations and plans to take corrective actions.

## Oversight of the FY 2015 Financial Statement Audit

TVA contracted with the independent public accounting firm of Ernst & Young LLP to audit TVA's consolidated balance sheet as of September 30, 2015, and the related consolidated statements of operations, comprehensive income (loss), changes in proprietary capital, and cash flows for the year then ended. This also included the audit of TVA's internal control over financial reporting as of FY-end. Additionally, the firm also reviewed TVA's FY 2015 interim financial information filed on Form 10-Q with the Securities and Exchange Commission. The contract required the work be performed in accordance with *Government Auditing Standards*. Our monitoring of their work disclosed no instances where the firm did not comply, in all material respects, with these standards.

## Agreed-Upon Procedures Applied to FY 2015 Winning Performance Payouts

TVA's WP Incentive Plan is a performance management program designed to promote teamwork, focus on continued high performance, and motivate and reward employees for achieving strategic objectives and critical success factors.

We applied six agreed-upon procedures which were requested and agreed to by TVA management solely to assist management in determining the validity of the WP payout awards for the FY ended September 30, 2015. In summary, we found:

- The FY 2015 WP goals for the enterprise-wide and Strategic Business Unit (SBU) measures were properly approved. Two scorecard adjustment change forms for FY 2015 were approved on February 4, 2015, one change form was approved on March 2, 2015, and one change form was approved on June 24, 2015. The change forms affected seven scorecards and seven measures and/or payout percentages.
- The FY 2015 goals (i.e., target) for the corporate multiplier measures were properly approved.
- The actual year-to-date results for the SBU scorecard measures agreed with the respective supporting documentation.
- The actual year-to-date results for the enterprise-wide scorecard measures agreed with the underlying support.
- The actual year-to-date results for the corporate multiplier measures agreed with the underlying support.
- The FY 2015 WP payout percentages provided by

the TVA Benchmarking and Performance Analysis organization on November 4, 2015, were mathematically accurate and agreed with the OIG's recalculations.

## IT AUDITS

During this semiannual period, IT Audits (1) completed two IT organizational effectiveness audits and (2) audited IT security practices of TVA as required by the FISMA of 2002.

### IT Organizational Effectiveness Audits

A key aspect of the TVA mission and vision is to provide affordable electricity to ratepayers. TVA IT organization's contribution to this mission and vision includes operating effectively. Accordingly, to assist IT in increasing its effectiveness, the recommendations from our 2011 organizational effectiveness audit were focused on creating sustainable processes. In addition, TVA's former Chief Information Officer created a program entitled 1,000 Days to Success (IT1K) to address findings from the audit as well as other observations he made as to the current state of IT.

Currently, we are conducting a series of audits to assess the IT organizations' (1) current effectiveness, including alignment with TVA values; (2) sustainability of actions taken in response to the 2011 OIG audit; and (3) outcomes of the IT1K program. Previously,

we completed four audits in the following organizations within TVA IT: Enterprise Information Security and Policy, Enterprise Architecture and Programs, Operations Solutions Delivery, and Enterprise Customer Operations. During this reporting period, we completed audits in the remaining two organizations within TVA IT: Infrastructure Delivery and Enterprise Solutions Delivery. In summary, we found:

- Enterprise Infrastructure Delivery's operational maturity is well defined. However, there are opportunities to improve its disaster-recovery program and improve communications within one of the operational groups.
- Enterprise Solutions Delivery's operational maturity is well defined; however, there are opportunities to improve efficiencies in the documentation of IT development work. In addition, Enterprise Data Warehouse efforts planned within the IT1K initiatives were not fully implemented.

TVA management agreed with our findings and recommendations and is implementing its remediation plan.

### FISMA Controls Improving but More Still Needs to be Done

FISMA is meant to bolster computer and network security within the federal government. In accordance with FISMA and guidance from the

Office of Management and Budget, TVA and the TVA OIG are required to report on agency-wide IT security and privacy practices annually. In our 2015 review of TVA's information security program, we found TVA was in compliance in the security program control areas of (1) identity and access management, (2) incident response and reporting, (3) plan of action and milestones, (4) remote access management, and (5) contingency planning. However, TVA still has ongoing actions in the following areas: (1) continuous-monitoring management, (2) configuration management, (3) risk management, (4) security training, and (5) contractor systems control. Additionally, we found controls over the issuing of virtual private network tokens could be improved. TVA management agreed with our findings and recommendations and is implementing its remediation plan.



Allen Fossil Plant

# SUMMARY OF REPRESENTATIVE EVALUATIONS

Nuclear ECP generally addressed concerns in an effective manner. However, we identified areas for improvement related to documentation, the resolution follow-up process reporting to site management. We concluded that the overall conclusion related to the Nuclear ECP was that the program was effective over time.

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During this semiannual period, the Evaluations teams completed five reviews including a review of TVA's Nuclear ECP and four organizational effectiveness reviews.

## EVALUATIONS

The Evaluations group completed a review of the Nuclear ECP.

The purpose of TVA's Nuclear ECP is to assist and support management in ensuring (1) all employees supporting the Nuclear Power Group are free to express safety issues, concerns, or differing views to Nuclear Power Group management without fear of reprisal; and (2) all such concerns and issues are investigated and resolved in a timely manner. Additionally, Nuclear ECP's mission is to support a safety-conscious work environment by providing employees and supplemental workers with an alternate means for identifying and resolving concerns.

The objective of our evaluation was to determine whether Nuclear ECP is addressing employee concerns in a timely and effective manner. The scope of our review included the program's functions during FYs 2013 and 2014.

We determined the Nuclear ECP generally addressed employee concerns in an effective manner. However, we identified areas for improvement related to documentation, the resolution follow-up process, and reporting to site management. We could not form an overall conclusion related to timeliness in addressing Nuclear ECP cases because there was no defined timeliness goal for some types of cases. However, Nuclear ECP did not meet its timeliness goals for a high percentage of sample cases we reviewed that were classified as concerns. (Concerns are issues that require ECP to open an investigative case.) TVA management agreed with our recommendations.

## ORGANIZATIONAL EFFECTIVENESS

For the past 30 years, the OIG, through its audits, evaluations, and investigations, has routinely assessed TVA operations while providing limited "snapshots" of TVA's organizational health, sometimes directly referred to as "culture," but more often than not, labeled as "leadership" or "process control" issues. To achieve and sustain organizational effectiveness, there should be alignment between strategy, operational performance, and team engagement. Specifically, values and behaviors that drive good performance should be embedded throughout the organization's business processes and exemplified by the individuals who manage and work in the organization.

In 2014, we developed a more comprehensive approach to assess business units' effectiveness by incorporating both operational and cultural elements into our methodology. As a result, in January 2015, we initiated organizational effectiveness reviews of specific TVA business units as a part of the OIG's mission to promote economy, efficiency, and effectiveness. In October 2015, the OIG created the Organizational Effectiveness group within its Evaluations department dedicated to this type of review. The focus of these reviews is to identify strengths as well as areas for improvement that may impact the ability of the business unit to achieve its mission.

During this semiannual reporting period, the Organizational Effectiveness group completed evaluations of four business units within TVA—Cumberland Fossil Plant, Corporate Accounting, Kingston Fossil Plant, and Bull Run Fossil Plant.

### Cumberland Fossil Plant

CUF is one of the fossil plants relied upon to assist TVA in meeting its mission. CUF is a two-unit fossil facility located in Cumberland City, Tennessee. Both units are identical, each rated at 1,300 megawatts (MW), having a summer net capability of 2,386 MW, making it TVA's

largest operating steam plant. According to TVA's external Web site, CUF generates about 16 billion kilowatt-hours per year, enough to power 1.1 million homes.

We identified operational and cultural strengths and opportunities for improvement at TVA's CUF. Specifically, we found CUF was meeting or exceeding expectations related to key measures in its current business plan. In addition, we noted the plant manager was generally seen as open, approachable, and respected, and some managers within the plant's midlevel management group were viewed by employees as trusted and supportive of their crews. We also found CUF employees exhibited a high degree of enthusiasm and commitment to the mission of the plant and seemed genuinely motivated to make the plant a highly successful operation. Additionally, employees generally viewed CUF's safety program favorably.

However, employees also expressed frustrations related to a number of management decisions and actions. These types of issues, if left unresolved, can undermine employee trust in management and negatively impact both employee engagement and operational performance. TVA management generally agreed with our recommendations and provided planned actions for addressing those recommendations.

## Corporate Accounting

Corporate Accounting provides financial services to TVA and is comprised of the following departments: (1) Accounting, Reporting and Research, which includes Accounting Policy and Research, External Reporting, and Fuel Accounting; (2) Disbursement Services, which includes Payment Services and Payroll Operations; (3) Revenue; and (4) Sarbanes-Oxley.

We identified several operational and cultural strengths within Corporate Accounting. Specifically,

we found Corporate Accounting effectively provides business support to TVA operations and works well with other TVA organizations. Additionally, employees reported they have the financial information systems they need to do their jobs. We also found Corporate Accounting has an ethical environment, engaged workforce, leadership that is trusted and respected, strong teams, and opportunities for input that are satisfactory to employees.

However, we also identified several operational and cultural areas for improvement within Corporate Accounting. Operational areas for



Cumberland Fossil Plant

improvement included: missing and misaligned performance measures for core services, not formally soliciting customer feedback, and differing management and employee perspectives around adequacy of staffing resources. Cultural areas for improvement included: minimal response to prior cultural surveys, perceived unfairness in hiring and promotion practices, lack of cohesion between Corporate Accounting departments, relationship issues with two managers, and perceived negative impacts from reorganizations and recent cost-cutting measures. These types of issues, if left unresolved, can undermine employee trust in management and negatively impact both employee engagement and operational performance. TVA management generally agreed with our recommendations and provided planned actions for addressing those recommendations.

## Kingston Fossil Plant

KIF is one of the nine fossil plants relied upon to assist TVA in meeting its mission. KIF is located on Watts Bar Reservoir near Kingston, Tennessee, and has nine generating units with a summer net capability of 1,379 MW.

Overall, KIF has significant opportunity to improve its effectiveness. While we identified strengths associated with trust of first-line supervisors and teamwork, KIF's operational performance in

FY 2015 was mixed, and the morale of the workforce was low primarily due to a lack of trust between plant management and employees. The specific operational opportunities for improvement we identified included: (1) work management, (2) ammonia operations staffing, (3) training, and (4) inventory. In addition, we found a number of factors that impacted trust and employee morale, including: (1) behaviors displayed by a few influential employees, (2) consistency of disciplinary actions, (3) ineffective communication, and (4) unresolved conflict. We also identified concerns based on corporate decisions surrounding staffing levels and management selections that have directly impacted employees. These operational and work environment issues, if left unresolved, could increase the risk that KIF employee engagement and performance levels will not be sufficient for the plant to meet its mission. TVA management generally agreed with our recommendations and provided actions, planned and taken, for addressing those recommendations.

## Bull Run Fossil Plant

BRF is one of nine fossil plants relied upon to assist TVA in meeting its mission. BRF is located on the north bank of Bull Run Creek in Anderson County, Tennessee, and is the only single-generator, coal-fired plant in TVA's system, with a net generating capacity of 881 MW.

Overall, BRF has significant opportunity to improve its effectiveness. While we identified strengths associated with trust of first-line supervisors and teamwork, BRF's performance in FY 2015 was mixed, and the morale of the workforce was low primarily due to the impact of corporate decisions and limited trust between plant management and employees. The specific operational opportunities for improvement we identified included: (1) plant performance, (2) equipment condition, (3) work management, (4) safety, and (5) staffing. In addition, we found a number of factors that impacted trust and employee morale, including: (1) corporate decisions, (2) behaviors displayed by a manager, (3) an increase in contractor usage, and (4) ineffective communication between plant management and employees. These operational and work environment issues, if left unresolved, can increase the risk that BRF employee engagement and performance levels will not be sufficient for the plant to meet its mission. TVA management generally agreed with our findings and associated recommendations.





Racoon Mountain Pumped Storage Facility

# SUMMARY OF REPRESENTATIVE INVESTIGATIONS



This reporting period, we opened 100 cases and closed 103. Our investigative results include recoveries exceeding \$615,000, one Information filed, and one conviction. Highlights from this semiannual period follow.



## Former TVA Contractor Employee Prosecuted for False Statements

On November 17, 2015, Jon Stephen Morris, a former Johnson Services Group contractor at TVA's Allen Combustion Turbine facility, waived indictment and pled guilty to a one-count Information charging him with fraudulent timesheet submission to receive wages to which he was not entitled. Mr. Morris' plea agreement states that between September 2013 and April 2014, he received more than \$45,000 pay for time he was not on-duty, including the 2013 Christmas/New Year holiday, when all contractor work at the jobsite was suspended.

Mr. Morris was sentenced in federal court on March 9, 2016. He was ordered to pay TVA \$47,115 restitution and placed on probation for a term of 36 months, to include six months of home detention.

## TVA's Cycle and Save Program Recoveries

TVA OIG investigated possible vendor fraud related to "smart" water-heater switches to be used for TVA's Cycle and Save Program (Cycle and Save). Cycle and Save was created to give residential customers a credit on their monthly statements in exchange for allowing TVA to switch off appliances, in this case, water heaters, during peak power-demand periods—benefitting the Valley and reducing costs to consumers. (The switches would be affixed directly to participating ratepayers' water heaters and would be programmable to instruct the water heaters to cease operation during periods of system strain.) TVA supported this new technology by reimbursing a local utility for its purchase of 5,000 switches in the amount of \$1.25 million.

The utility subsequently ceased participation in Cycle and Save, and TVA took ownership of the switches. A portion of these switches, valued at \$117,000 (468 at \$250 each), were obtained by a second utility, which soon determined them unusable. The second utility had the switches repaired and put to their intended use.

During this timeframe, it was discovered most of the 5,000 switches shipped to the first utility were neither complete nor functioning. TVA requested the first utility provide full reimbursement of its \$1.25 million investment, minus the cost of the switches used by the second utility. (Any losses to the first utility would have to be recouped by it from the vendor company.)



Fontana Dam

Based on our active involvement, during 2015, the utility reimbursed TVA \$517,651; and, on March 2, 2016, the utility and TVA entered into a settlement agreement, which resulted in additional payments to TVA of \$425,000. Though the majority of TVA's investment was returned, TVA did suffer a net loss of \$190,349 in this transaction.

## Temporary Living Allowance Recoveries to TVA

Various TVA organizations make use of a sizeable contractor-employee workforce, and TVA pays contractor companies millions each year in

Temporary Living Allowance (TLA) stipends for contractor employees working specified distances from their homes, often for extended periods. Contractor employees must certify their eligibility to receive the stipend, initially and on an ongoing basis. TLA payments are governed not only by contractual obligation, but also the TVA Supplier Code of Conduct and federal law. To promote efficiency and to detect fraud where it exists, TVA OIG Investigations is engaged in an ongoing initiative to investigate questionable TLA payments. This reporting period, two investigations garnered more than \$137,000 in recoveries for TVA.

During the previous reporting period, investigative activity revealed a contractor employee assigned to WBN Unit 2-Construction received significant TLA reimbursement by improperly certifying his TLA eligibility. We forwarded our findings to TVA management; and, as a result, the contractor employee was terminated and his future TVA employment restricted. As FY 2016 began, the contractor company reimbursed TVA the full amount of its loss, \$64,068.

During this semiannual period, investigative activity revealed a TVA-corporate contractor employee certified he met requirements

to receive TLA, despite what we later found to be insufficient and questionable documentation. We forwarded our findings to TVA. The contractor employee's assignment was terminated and future TVA employment restricted. The contractor company reimbursed TVA the full questioned amount of \$73,400.

Based on administrative remedies available to TVA, the U.S. Attorney's Office declined prosecution in both matters.

## Contractor Employee Breaches Codes of Conduct

Investigative work revealed a staff-augmented/contractor-company site foreman at a TVA fossil site used his position for private gain, in violation of the TVA Supplier Code of Conduct and his employing company's code of conduct as well.

The site foreman solicited the owner of a vendor company, which worked directly under his supervision, to purchase a used automobile for him. The owner declined. Subsequently, at the site foreman's request, the owner authorized the site foreman to use a company account to make a one-time fuel purchase at a local convenience store. Eventually, the OIG determined the site foreman and his wife charged more than \$15,000 in fuel, groceries, cigarettes, and other miscellaneous items to the account without the owner's consent.

Connected to a separate investigative matter, the site foreman's TVA employment was terminated. As a result of our report on his misconduct against the vendor company's owner, the site foreman was permanently restricted from future TVA employment.

## Product-Safety Inquiry Yields Results

Transmission linemen expressed concerns about whether routinely used shackles and O-links manufactured in China were properly tested and met specifications; failure of that equipment could result in severe injury or death of linemen. We found the shackles were manufactured in China; and, although TVA policy requires vendors to furnish certified test reports showing products comply with specifications, the laboratory conducting the test was unidentified, and documentation was written in Chinese. TVA policy requires foreign-made materials to be tested by a domestic, independent laboratory and such testing was not conducted.

As a result of our investigative report, management will take the following action.

- A certified laboratory will perform quality-control testing of the manufacturer's foreign-made material—until the manufacturer acquires its certification (projected to occur July/August 2016), a certified, independent third-

party test center will conduct the required testing.

- Ongoing determinations will be made to ensure foreign-made material supplied by this manufacturer meets all safety and integrity specifications. This will include revising contract language and requiring test reports if production is moved to another location, if the manufacturing process is changed, or if there is a change in metallurgical composition.
- Management will engage in continued communication with Transmission Line Construction personnel to ensure all concerns are addressed regarding the use and integrity of foreign-manufactured products.

## TVA Energy Services Company Investigation Update

During the previous semiannual period, we reported our investigation into the now-former TVA Energy Services Company resulting in a contractor company repaying TVA \$1 million based on a defective pricing claim. Our investigation had identified a total of \$2,228,462 in overbilling. Inasmuch as no further investigation remained, our matter was closed this period, and the additional \$1,228,462 was reported as other monetary loss.

# LEGISLATION AND REGULATIONS



*Section 4(a) of the Inspector General Act of 1978, as amended, provides that the Inspector General shall review existing and proposed legislation and regulations relating to programs and operations of such establishment and make recommendations in the semiannual reports...concerning the impact of such legislation or regulations on the economy and efficiency in the administration of such programs and operations administered or financed by such establishment or the prevention and detection of fraud and abuse in such programs and operations.*



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 respective wording.

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



Shawnee Fossil Plant



# APPENDICES

## INDEX OF REPORTING REQUIREMENTS UNDER THE INSPECTOR GENERAL ACT

REPORTING	REQUIREMENT	PAGE
Section 4(a)(2)	Review of Legislation and Regulations	40-41
Section 5(a)(1)	Significant Problems, Abuses, and Deficiencies	22-39
Section 5(a)(2)	Recommendations With Respect to Significant Problems, Abuses, and Deficiencies	22-39
Section 5(a)(3)	Recommendations Described in Previous Semiannual Reports on Which Corrective Action Has Not Been Completed	Appendix 4
Section 5(a)(4)	Matters Referred to Prosecutive Authorities and the Prosecutions and Convictions That Have Resulted	Appendix 5
Section 5(a)(5) and 6(b)(2)	Summary of Instances Where Information Was Refused	None
Section 5(a)(6)	Listing of Audit and Evaluation Reports	Appendix 2
Section 5(a)(7)	Summary of Particularly Significant Reports	22-39
Section 5(a)(8)	Status of Management Decisions for Audit and Evaluation Reports Containing Questioned Costs	Appendix 3
Section 5(a)(9)	Status of Management Decisions for Audit and Evaluation Reports Containing Recommendations That Funds Be Put to Better Use	Appendix 3
Section 5(a)(10)	Summary of Audit and Evaluation Reports Issued Prior to the Beginning of the Reporting Period for Which No Management Decision Has Been Made	None
Section 5(a)(11)	Significant Revised Management Decisions	None
Section 5(a)(12)	Significant Management Decisions With Which the Inspector General Disagreed	None
Section 5(a)(13)	Information Under Federal Financial Management Improvement Act of 1996	Not Applicable
Section 5(a)(14)	Appendix of results of any peer review conducted by another Office of Inspector General during the reporting period, and if none, a statement of the date of the last peer review.	Appendix 8
Section 5(a)(15)	List of outstanding recommendations from any peer review conducted by another Office of Inspector General, including a statement describing the status of the implementation and why implementation is not complete.	None
Section 5(a)(16)	List of 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 that remain outstanding or have not been implemented.	None

## APPENDIX 2

### OIG AUDIT REPORTS • Issued During the Six-Month Period Ended March 31, 2016

Report Number and Date	Title	Questioned Costs	Unsupported Costs	Funds Put To Better Use
CONTRACT AUDITS				
2014-15232 10/30/2015	Vector JV – Sargent & Lundy, LLC	\$322,535	\$21,455	\$0
2015-15321 11/17/2015	Cost Proposal for Civil Projects and Coal Combustion Product Management	0	0	2,960,000
2015-15322 12/10/2015	Cost Proposal for Civil Projects and Coal Combustion Product Management	0	0	1,234,000
2015-15327 12/17/2015	Cost Proposal for Civil Projects and Coal Combustion Product Management	0	0	4,144,300
2015-15330 12/17/2015	Rate Proposal for Services Supporting TVA's Dam Safety Assurance Program	0	0	319,000
2014-15047 01/26/2016	URS Energy and Construction, Inc.	8,409,445	2,426	0
2015-15324 03/03/2016	Cost Proposal for Civil Projects and Coal Combustion Product Management	0	0	3,340,000
2016-15358 03/23/2016	Cost Proposal for Engineering and Management Services	0	0	3,450,000
2014-15241 03/29/2016	EnergySolutions, LLC	85,246	734	0
FINANCIAL AND OPERATIONAL AUDITS				
2016-15356 11/10/2015	Agreed-Upon Procedures for TVA Fiscal Year 2015 Performance Measures	\$0	\$0	\$0
2014-15228 12/10/2015	TVA Corporate Card Audit	221,511	0	0
2015-15312 02/29/2016	TVA Ethics Program Audit	0	0	0
INFORMATION TECHNOLOGY AUDITS				
2015-15276 01/04/2016	2015 Federal Information Security Management Act	\$0	\$0	\$0
2014-15063-05 01/12/2016	Information Technology Organizational Effectiveness – Infrastructure Delivery	0	0	0
2014-15063-06 02/25/2016	Information Technology Organizational Effectiveness – Enterprise Solutions Delivery	0	0	0
TOTAL AUDITS (15)		\$9,038,737	\$24,615	\$15,447,300

## OIG EVALUATION REPORTS • Issued During the Six-Month Period Ended March 31, 2016

Report Number and Date	Title	Questioned Costs	Unsupported Costs	Funds Put To Better Use
2015-15296 11/04/2015	Cumberland Fossil Plant Organizational Effectiveness	\$0	\$0	\$0
2015-15313 11/05/2015	Corporate Accounting Organizational Effectiveness	0	0	0
2015-15270 02/24/2016	Nuclear Employee Concerns	0	0	0
2015-15329 03/10/2016	Kingston Fossil Plant Organizational Effectiveness	0	0	0
2016-15357 03/30/2016	Bull Run Fossil Plant Organizational Effectiveness	0	0	0
<b>TOTAL EVALUATIONS (5)</b>		<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

**Note:** A summary of or link to the full report may be found on the OIG's Web site at [www.oig.tva.gov](http://www.oig.tva.gov).



Appalachia Dam

## APPENDIX 3

TABLE I • TOTAL QUESTIONED AND UNSUPPORTED COSTS • AUDITS

Audit Reports	Number of Reports	Questioned Costs	Unsupported Costs
A. For which no management decision has been made by the commencement of the period	0	\$0	\$0
B. Which were issued during the reporting period	4	\$9,038,737	\$24,615
Subtotal (A+B)	4	\$9,038,737	\$24,615
C. For which a management decision was made during the reporting period	4 <sup>1</sup>	\$9,038,737	\$24,615
1. Dollar value of disallowed costs	4	\$2,411,367	\$24,615
2. Dollar value of costs not disallowed	2	\$6,627,370	\$0
D. For which no management decision has been made by the end of the reporting period	0	\$0	\$0

TABLE I • TOTAL QUESTIONED AND UNSUPPORTED COSTS • EVALUATIONS

Evaluation Reports	Number of Reports	Questioned Costs	Unsupported Costs
A. For which no management decision has been made by the commencement of the period	0	\$0	\$0
B. Which were issued during the reporting period	0	\$0	\$0
Subtotal (A+B)	0	\$0	\$0
C. For which a management decision was made during the reporting period	0	\$0	\$0
1. Dollar value of disallowed costs	0	\$0	\$0
2. Dollar value of costs not disallowed	0	\$0	\$0
D. For which no management decision has been made by the end of the reporting period	0	\$0	\$0

1 The total number of reports for which a management decision was made during the period differs from the sum of C(1) and C(2) when the same report includes both recommendations agreed to by management and others not agreed to by management.

TABLE II • FUNDS TO BE PUT TO BETTER USE • AUDITS

Audit Reports	Number of Reports	Funds To Be Put To Better Use
A. For which no management decision has been made by the commencement of the period	1	\$2,106,300
B. Which were issued during the reporting period	6	\$15,447,300
Subtotal (A+B)	7	\$17,553,600
C. For which a management decision was made during the reporting period	5 <sup>2</sup>	\$10,763,600
1. Dollar value of recommendations agreed to by management	5	\$10,490,900
2. Dollar value of recommendations not agreed to by management	1	\$272,700
D. For which no management decision has been made by the end of the reporting period	2	\$6,790,000

TABLE II • FUNDS TO BE PUT TO BETTER USE • EVALUATIONS

Evaluation Reports	Number of Reports	Funds To Be Put To Better Use
A. For which no management decision has been made by the commencement of the period	0	\$0
B. Which were issued during the reporting period	0	\$0
Subtotal (A+B)	0	\$0
C. For which a management decision was made during the reporting period	0	\$0
1. Dollar value of recommendations agreed to by management	0	\$0
2. Dollar value of recommendations not agreed to by management	0	\$0
D. For which no management decision has been made by the end of the reporting period	0	\$0

<sup>2</sup> The total number of reports for which a management decision was made during the period differs from the sum of C(1) and C(2) when the same report includes both recommendations agreed to by management and others not agreed to by management.

# APPENDIX 4

## AUDIT AND EVALUATION REPORTS WITH CORRECTIVE ACTIONS PENDING

As of the end of the semiannual period, final corrective actions associated with 20 audits and 11 evaluations reported in previous semiannual reports were not completed. Presented below for each audit and evaluation are the report number, date, and title, along with a brief description of final actions management has planned to resolve the open recommendations, including the date management expects to complete final action.

Audit Report Number and Date	Report Title and Recommendation(s) for Which Final Action is Not Complete
	<b>Physical and Logical Access for Contractors</b>
2010-13132 06/15/2011	TVA agreed to create a matrix to cross reference TVA roles to assets and identify the associated qualification and background requirements needed to gain access to that asset and develop a process to restrict contractor access to sensitive data and assets until the proper clearances have been obtained. Management expects to complete final action by June 30, 2016.
	<b>Building and Infrastructure Failure Risks</b>
2012-14567 01/30/2013	TVA agreed to enhance Tririga functionality and other tools for building asset information and address weaknesses in the Tririga production database. Management expects to complete final action by September 30, 2016.
	<b>TVA Environmental Risk Management</b>
2013-14959 08/07/2014	TVA Environment and Energy Policy group will update TVA's Environmental Management System to better describe environmental review processes and responsibilities. Management expects to complete final action by September 30, 2017.
	<b>Bartlett Holdings, Inc. – Bechtel Power Corporation Subcontract</b>
2014-15036 09/03/2014	TVA agreed to recover \$1,484,582 in questioned payroll tax and insurance costs and related fee; \$60,287 in ineligible costs for an employee who did not maintain a permanent residence more than 60 miles from his assigned workplace; and \$2,565 in ineligible labor costs and fee. Management expects to complete final action by June 30, 2016.
	<b>Bechtel Power Corporation</b>
2014-15037 11/17/2014	TVA agreed to recover \$923,231 in overbilled labor and related costs; \$938,928 in ineligible or unsupported relocation, permanent and temporary assignment and travel costs; and \$204,336 in ineligible or unsupported affiliate company and subcontractor costs. Management expects to complete final action by May 31, 2016.
	<b>2014 Federal Information Security Management Act</b>
2014-15059 01/13/2015	TVA agreed to implement Interconnection Service Agreements (ISA) for each contractor system as appropriate and document justifications for systems that have not implemented ISAs; where appropriate, document and implement a continuous monitoring plan for the system; and generate remediation tickets to the appropriate parties for addressing deviations. Management expects to complete final action by October 30, 2015.
	<b>Geosyntec Consultants, Inc.</b>
2014-15042 04/22/2015	TVA agreed to identify the necessity of two tasks and discuss amending the contract to include acquiring work on a fixed-price basis; recover any overbilled costs Geosyntec was unable to substantiate; and initiate discussions to identify the necessity of four subcontracts and establish better communication and controls by and between Geosyntec and TVA. Management expects to complete final action by April 22, 2016.
	<b>Information Technology Organizational Effectiveness – Enterprise Information Security and Policy</b>
2014-15063-01 06/04/2015	TVA agreed to develop a unified risk management program; update appropriate security process documents and improve integration of risk management and assessment activities; update appropriate security process documents to clarify roles; and create and maintain a controls library. Management expects to complete final action by November 30, 2016.

## AUDIT AND EVALUATION REPORTS WITH CORRECTIVE ACTIONS PENDING (CONTINUED)

Audit Report Number and Date	Report Title and Recommendation(s) for Which Final Action is Not Complete
2014-15031 06/23/2015	<p><b>Adequacy of the Invoice Approval Process</b></p> <p>TVA agreed to develop a contract quality assurance program; coordinate training/communication of personnel and ensure storage expectations are documented; review and revise the Field Invoice Approver (FIA) training; partner with Financial Services to ensure invoice approval oversight and guidance are housed in the proper organization and expert guidance is used in providing direction on the invoice review process; update the Standard Programs and Processes (SPP) and FIA training modules to include more specific language/instruction and identify opportunities to standardize invoice formats; and look at technology options to improve the invoice approval process. Management expects to complete final action by June 23, 2016.</p>
2014-15234 06/25/2015	<p><b>TVA's Talent Acquisition and Deployment Process</b></p> <p>TVA agreed to address process inefficiencies and provide general training on how to use the PLUS recruiting module; standardize the recruitment cycle and develop a central depository for recruitment tools and templates; develop a talent acquisition alignment team; update SPPs to reflect the current process and add pertinent information to the Employee Handbook and Leadership Handbook; work on process improvements to identify position requirements; evaluate the use of a single application for nuclear candidates; and continue to work with IT Security and the Office of General Counsel to implement ways to mitigate the duplication of applicant employee identification number. Management expects to complete final action by June 25, 2016.</p>
2014-15063-02 08/04/2015	<p><b>Information Technology Organizational Effectiveness – Enterprise Architecture and Programs</b></p> <p>TVA agreed to (1) define in the Project Management Guide (a) IT Enterprise Programs (EP) process requirements, (b) project management roles, responsibilities, and levels of authority, (c) a training plan on proper project management tool usage and IT EP expectations for quality documentation, and (d) the method to determine the proper level of IT Senior Level Team project engagement and delegations of authority; (2) develop a method for scheduling and prioritizing IT resources; and (3) review current processes and tools, standardize documents and processes, including business and function requirements, update SharePoint to make the process and tools conveniently available, and train appropriate personnel on the process. Management expects to complete final action by November 30, 2016.</p>
2015-15309 08/04/2015	<p><b>Proposal for Hydro Modernization, Unit Rehabilitation, and Functional Support Services</b></p> <p>TVA agreed to negotiate (1) a lower sales and administrative overhead rate and eliminate the markup for subcontractor fees; (2) a lower rate schedule; and (3) lower rates overall. Management expects to complete final action by August 4, 2016.</p>
2014-15240 08/11/2015	<p><b>Bechtel Power Corporation – Review of Rework</b></p> <p>TVA agreed to review total claims, remove any duplicates, and provide Bechtel with an accurate claims listing, distinguish between rework and damages, track costs for each potential claim through completion, and work with Bechtel to come to agreement on how to calculate rework and damage costs going forward. Management expects to complete final action by August 11, 2016.</p>
2014-15063-03 09/03/2015	<p><b>Information Technology Organizational Effectiveness – Operations Solutions Delivery (OSD)</b></p> <p>TVA agreed to (1) examine OSD work processes along with efficiency of coordination, communication, and best practices (such as LEAN) across the other IT departments and complete LEAN process reviews of IT Engineering Design Review, IT Change Management, and IT System Development Lifecycle and implement steps that will assist OSD personnel in expediting changes and other required support. Management expects to complete final action by November 30, 2016.</p>
2014-15024 09/09/2015	<p><b>TVA Overtime</b></p> <p>TVA agreed to (1) develop guidance as part of the nonnuclear Fitness for Duty program that will specifically address the response to extended hours of work and management of worker fatigue; (2) continue to use NPG-SPP-03.21, Fatigue Management and Work Hour Limits, to meet Federal Nuclear Regulations, and develop a methodology for overtime review on a quarterly basis with trigger points for assessing if safety or productivity are being challenged; and (3) develop procedural guidance to include: (a) when verbal overtime approval is allowed, and (b) when documented preapproval of overtime is required. Management expects to complete final action by October 1, 2016.</p>
2014-15062 09/10/2015	<p><b>Maximo 7.5 Upgrade</b></p> <p>TVA agreed to (1) develop a different approach for maintaining accountability; (2) engage the business units to ensure ownership of stranded documents and establish a process to place documents in appropriate folders within the published Enterprise Content Management information during migration. Management expects to complete final action by June 29, 2018.</p>

## AUDIT AND EVALUATION REPORTS WITH CORRECTIVE ACTIONS PENDING (CONTINUED)

Audit Report Number and Date	Report Title and Recommendation(s) for Which Final Action is Not Complete
<b>2014-15063-04</b> <b>09/22/2015</b>	<p><b>Information Technology Organizational Effectiveness – Enterprise Customer Operations</b></p> <p>TVA agreed to properly track IT assets that introduce risk to TVA by storing sensitive data (e.g., on laptops, PCs, tablets, and external disk drives), and modify processes and procedures to support IT's Service Management program to more clearly align technical support expectations between IT and the business units. Management expects to complete final action by May 15, 2017.</p>
<b>2015-15307</b> <b>09/28/2015</b>	<p><b>TVA Executive Incentives</b></p> <p>TVA People and Performance Committee (1) agreed to review metrics and incentives for executives for the future and (2) Human Resources and Communication agreed to update plan documents to better describe the approval processes. Management expects to complete final action by September 28, 2016.</p>
<b>2014-15242</b> <b>09/29/2015</b>	<p><b>TVA's Contractor Workforce Management Process</b></p> <p>TVA agreed to (1) review recommendations from the Kaizen event, assess the current process and implement any indicated actions; (2) assess policies regarding the duration of staff augmentation assignments, as well as controls and monitoring; (3) assess the program design, written guidance, and system data to determine if the selection of positions with higher salaries is appropriate, and if not, what controls would address this gap; (4) assess the creation and monitoring of appropriate program metrics to increase oversight of program operations; (5) review controls and monitoring of H-1B visa holders and assess measures to increase awareness and ensure compliance with TVA Citizenship Requirements Policy; and (6) review roles and accountabilities regarding compliance with the USCIS memorandum. Management expects to complete final action by June 30, 2016.</p>
<b>2014-15224</b> <b>09/30/2015</b>	<p><b>Obtaining Things of Value</b></p> <p>TVA agreed to (1) enhance the protocol by (a) identifying the types of "things of value" and "covered persons" that should be defined in the protocol, (b) incorporating how employees report a request for a "thing of value," (c) developing a process for documenting and tracking all types of defined "covered person" requests, (d) defining applicant consequences for violating the protocol, and (e) implementing a review cadence; (2) present revised protocol to TVA Board of Directors; (3) provide detailed and robust annual training to all employees; (4) collaborate with affected TVA business units to incorporate the protocol into all related SPPs and processes associated with requests for all TVA benefits identified as "things of value"; (5) disseminate the protocol annually to TVA business units with employees who could be affected by the requirements; and (6) post the "Obtaining Things of Value" protocol on the appropriate TVA Web sites. Management expects to complete final action by September 30, 2016.</p>
Evaluation Report Number and Date	Report Title and Recommendation(s) for Which Final Action is Not Complete
<b>2012-14535</b> <b>03/21/2013</b>	<p><b>Master Key Program Management – Energy Delivery</b></p> <p>TVA agreed to secure facilities protected by master keys to minimize the risk posed by keys outside TVA's control and develop specifications for the purchase of a new system. A contract has been awarded and management expects to complete final action by June 30, 2017.</p>
<b>2013-14950</b> <b>09/19/2013</b>	<p><b>TVA's Succession Planning</b></p> <p>TVA management agreed to continue to evaluate ways to improve cross-pollination using a system to reduce preparation time and submit a proposal for a new system during FY 2016 business planning. Management expects to complete final action by September 30, 2016.</p>
<b>2012-14587</b> <b>10/17/2013</b>	<p><b>Nuclear Power Group and Coal and Gas Operations Critical Spare Parts Program</b></p> <p>TVA agreed to (1) develop the appropriate procedures to define the roles, responsibilities, and accountabilities of key persons, and define the decision and approval process in regard to the procurement of critical spares; (2) define maintenance program accountabilities for inventory including critical spares; (3) take steps to follow up on actions recommended by the management consulting firm; and (4) define the decision and approval process for the removal of the critical spare designation from spare parts in inventory. Management expects to complete final action by July 29, 2016.</p>

## AUDIT AND EVALUATION REPORTS WITH CORRECTIVE ACTIONS PENDING (CONTINUED)

Evaluation Report Number and Date	Report Title and Recommendation(s) for Which Final Action is Not Complete
<b>2013-15157</b> <b>06/05/2014</b>	<b>Actions to Address River Operations Systems and Components with Poor Ratings</b> TVA agreed to develop a 10-year asset management plan to further document risks and develop a long-term strategy for addressing major components with poor ratings across the nonnuclear fleet. Management expects to complete final action by September 30, 2016.
<b>2014-15056</b> <b>09/25/2014</b>	<b>Nuclear Groundwater Review</b> TVA agreed to form a groundwater working group with representatives from all sites to address outstanding program weaknesses. Management expects to complete final action by November 30, 2016.
<b>2014-15053</b> <b>09/29/2014</b>	<b>Coal Plant Preventive Maintenance</b> TVA agreed to (1) develop a way to more accurately capture and report preventive maintenance compliance and other appropriate preventive maintenance tracking metrics and (2) consider the potential impact of having preventive maintenance governed only by guidelines and not requirements. Management expects to complete final action by April 15, 2016.
<b>2014-15216</b> <b>09/29/2014</b>	<b>Follow-Up Review of Coal Fire Protection</b> TVA agreed to prioritize impairments and establish a due date for long-term fire impairments or make a formal decision to not pursue repair; train employees on work management priorities for fire impairments; revise SPPs to require capturing and sharing of lessons learned for all fires; and revise SPPs to include a new rating calculation and process for sharing assessment data with Power Operations senior leadership. Management expects to complete final action by December 31, 2016.
<b>2015-15269</b> <b>07/16/2015</b>	<b>Transmission Fire Protection</b> TVA agreed to refurbish or replace pumps and valves to assure systems meet requirements; risk assess stations and implement appropriate mitigation strategies using applicable recommendations from the Institute of Electrical and Electronics Engineers guide; create Maximo records for fire protection systems and major components; develop standard inspection questions for monthly, annual, and biennial project management; evaluate the use of failure and condition codes in tracking fire protection system health; evaluate development and use of fire protection system readiness index; evaluate the Substation Maintenance Manual — 500 kV Transformer Fire Protection to ensure it clearly identifies maintenance requirements and instructs maintenance personnel in the performance of those requirements; risk assess intervals for inspection of fire protection and implement necessary changes; develop and store in Maximo site specific work plans for fire protection system project management. Management expects to complete final action by July 31, 2016.
<b>2015-15265</b> <b>07/24/2015</b>	<b>Hydro Generation Obsolete Equipment</b> TVA agreed to add requirements to manage obsolete equipment in the Hydro Generation fleet to the Power Operations asset health procedure, including an obsolescence indicator for all Hydro Generation equipment condition assessments to be applied in the FY 2016 assessment cycle. Management expects to complete final action by September 30, 2016.
<b>2015-15273</b> <b>07/24/2015</b>	<b>Nuclear Outage Performance</b> TVA agreed to drive the TVA Nuclear Fleet to top quartile performance in duration, dose and dollars using "FY2016-FY2020 Nuclear Operations Support Business Plan-Outage Execution," which contains the initiatives the Nuclear Executive Team has developed to achieve industry top quartile outage performance in the TVA Nuclear Fleet. TVA will monitor/analyze budget performance and seek other cost saving initiatives and continue to drive outage performance and achieve top quartile outage rating in all categories. Management expects to complete final action by September 1, 2016.
<b>2015-15294</b> <b>07/24/2015</b>	<b>Hydro Generation Fire Protection</b> TVA agreed to (1) develop an SPP to provide guidance for reporting, and maintain a historical record of fire protection system impairments in Hydro Generation, as well as coal and gas; develop an SPP for providing guidance and implementing code-required activities; perform annual facility walk downs to verify compliance with housekeeping; supersede an SPP with site specific emergency response plans; develop property risk improvement prioritization methodology to qualify and prioritize property loss control recommendations across the organization; and employ a modifier to capture the criticality of the affected plant or unit to TVA's load strategy; and (2) revise SPPs to capture lessons learned for all fires and require the use of the Homeland Security Exercise and Evaluation Program for the design, conduct, and documentation of emergency response exercises. Management expects to complete final action by October 7, 2016.

# APPENDIX 5

## INVESTIGATIVE REFERRALS AND PROSECUTIVE RESULTS<sup>1</sup>

Referrals	
Subjects Referred to U.S. Attorneys	14
Subjects Referred to State/Local Authorities	0
Results	
Subject Indicted/Information Filed	1
Subject Convicted	1
Pretrial Diversion	0
Federal Referrals Declined	10
State Referrals Declined	0



Widows Creek Fossil Plant

<sup>1</sup> These numbers include task force activities and joint investigations with other agencies.

## HIGHLIGHTS – STATISTICS

	MAR 31, 2016	SEPT 30, 2015	MAR 31, 2015	SEPT 30, 2014	MAR 31, 2014
<b>AUDITS</b>					
<b>AUDIT STATISTICS</b>					
Carried Forward	26	28	28	24	28
Started	15	21	11	20	17
Canceled	(4)	(1)	(0)	(1)	(1)
Completed	(15)	(22)	(11)	(15)	(20)
In Progress at End of Reporting Period	22	26	28	28	24
<b>AUDIT RESULTS (Thousands)</b>					
Questioned Costs	\$9,039	\$7,599	\$8,908	\$2,612	\$635
Disallowed by TVA	\$2,411	\$2,156	\$8,908	\$2,612	\$308
Recovered by TVA	\$268	\$2,981	\$89	\$484	\$164
Funds to Be Put to Better Use	\$15,447	\$2,106	\$1,067	\$512	\$9,584
Agreed to by TVA	\$10,491	\$1,067	\$512	\$414	\$20,938
Realized by TVA	\$792	\$142	\$7,375	\$13,114	\$375
<b>OTHER AUDIT-RELATED PROJECTS</b>					
Completed	3	7	5	10	5
Cost Savings Identified/Realized (Thousands)	\$0	\$0	\$0	\$0	\$0
<b>EVALUATIONS</b>					
Completed	5	6	1	10	3
Cost Savings Identified/Realized (Thousands)	\$0	\$0	\$0	\$0	\$0
<b>INVESTIGATIONS<sup>1</sup></b>					
<b>INVESTIGATION CASELOAD</b>					
Opened	100	126	126	134	112
Closed	103	142	146	123	148
In Progress at End of Reporting Period	131	134	152	163	150
<b>INVESTIGATIVE RESULTS (Thousands)</b>					
Recoveries	\$615.2	\$1,064.0	\$522.2	\$89.1 <sup>2</sup>	\$10,874.7 <sup>3</sup>
Savings	0	\$1,897.1	\$403.3	\$125	\$0
Fines/Penalties/Fees	\$0.1	\$64.1	\$0.2	\$0.8	\$1
Other Monetary Loss	\$1,418.8	\$0	\$0	\$0	\$0
<b>MANAGEMENT ACTIONS</b>					
Disciplinary Actions Taken (No. of Subjects)	11	14	10	14	22
Counseling/Management Techniques Employed (No. of Cases)	18	9	17	11	14
Debarment	0	3	0	0	0
<b>PROSECUTIVE ACTIVITIES (No. of Subjects)</b>					
Referred to U.S. Attorneys	14	18	8	16	14
Referred to State/Local Authorities	0	2	0	0	2
Indicted/Information Filed	1	1	6	0	5
Convicted	1	1	6	0	1
Pretrial Diversion	0	0	0	0	1

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

2 \$12,573 of this amount is restitution ordered to be paid to a nongovernmental financial institution as the result of a criminal investigation.

3 \$10,794,728 of this total is restitution ordered in a TVA OIG led federal criminal case. The defendant was ordered to repay victims of a Ponzi scheme, the largest portion of which was comprised of his fraudulent collection of money from Valleywide investors under the pretense that they were helping fund the Kingston ash spill remediation.

## APPENDIX 7

### 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

IG 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. TVA OIG underwent its most recent peer review of its audit organization for the period ended September 30, 2013. The review was performed by the Special Inspector General for the Troubled Asset Relief Program (SIGTARP). The SIGTARP issued the report, dated March 31, 2014, in which it concluded the TVA OIG audit organization's system of quality control for the fiscal year ended September 30, 2013, was suitably designed and complied with to provide the 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. The peer review report is posted on our Web site at <http://oig.tva.gov/reports/PeerReviewReport03312014.pdf>.

### Investigations Peer Review

Investigative Operations undergoes a Quality Assessment Review (QAR), or external peer review, at least once every three years. The U.S. Department of Commerce OIG conducted the most recently completed QAR of TVA OIG's Investigative Operations and found the "...system of internal safeguards and management procedures for the investigative function of the Office of the Inspector General for the Tennessee Valley Authority in effect for the year ended April 30, 2013, is in compliance with the quality standards established by CIGIE and the applicable Attorney General guidelines. These safeguards and procedures provide reasonable assurance of conforming with professional standards in the planning, execution and reporting of its investigations." The QAR report can be found on our Web site at <http://oig.tva.gov/reports/22NOV2013-tvaog-inv-peer-review.pdf>.

The Railroad Retirement Board OIG is conducting a QAR of TVA OIG's Investigative Operations that will overlap this semiannual reporting period and the next. As such, the ongoing review will be detailed in the next semiannual report.



Sequoyah Nuclear Plant



# 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 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.

**Improper Payment** – Any payment that should not have been made or was made in an incorrect amount under statutory, contractual, administrative, or other legally applicable requirements, as defined in the IPIA.

**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 IG questions because (1) of an alleged violation of a law, regulation, contract, 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.

BRF.....	Bull Run Fossil Plant
CEO.....	Chief Executive Officer
CIGIE.....	Council of the Inspectors General on Integrity and Efficiency
Corporate Card.....	Corporate Credit Card
CUF.....	Cumberland Fossil Plant
Cycle and Save.....	Cycle and Save Program
ECP.....	Employee Concerns Program
EP.....	Enterprise Programs
ERS.....	Employee Reimbursement System
FIA.....	Field Invoice Approver
FISMA.....	Federal Information Security Management Act
FY.....	Fiscal Year
IG.....	Inspector General
ISA.....	Interconnection Service Agreement
IT.....	Information Technology
IT1K.....	1,000 Days to Success
KIF.....	Kingston Fossil Plant
MW.....	Megawatts
OIG.....	Office of the Inspector General
OPM.....	Office of Personnel Management
OSD.....	Operations Solutions Delivery
QAR.....	Quality Assessment Review
SBU.....	Strategic Business Unit
SIGTARP.....	Special Inspector General for the Troubled Asset Relief Program
SPP.....	Standard Programs and Processes
TLA.....	Temporary Living Allowance
TVA.....	Tennessee Valley Authority
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 system. 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](http://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.


## REPORT CONCERNS TO THE OIG EMPOWERLINE

**WATCH, LEARN AND BE  
EMPOWERED**

If you see or suspect wrongdoing and report it, TVA could recover money and you could receive a cash reward from the TVA Office of the Inspector General. Learn how by watching this revealing video. To watch this video now, simply scan the QR symbol at the lower right with your smart phone to be taken directly to the video. QR Code scan app required.



You can report wrongdoing to the Office of the Inspector General by visiting our EmPowerline® website at [www.oigempowerline.com](http://www.oigempowerline.com) or by calling toll-free at 855-882-8585. See the EmPowerline® website for details on the cash reward process and other important information.





*Office of the Inspector General*  
TENNESSEE VALLEY AUTHORITY  
*Semiannual Report • October 1, 2015- March 31, 2016*