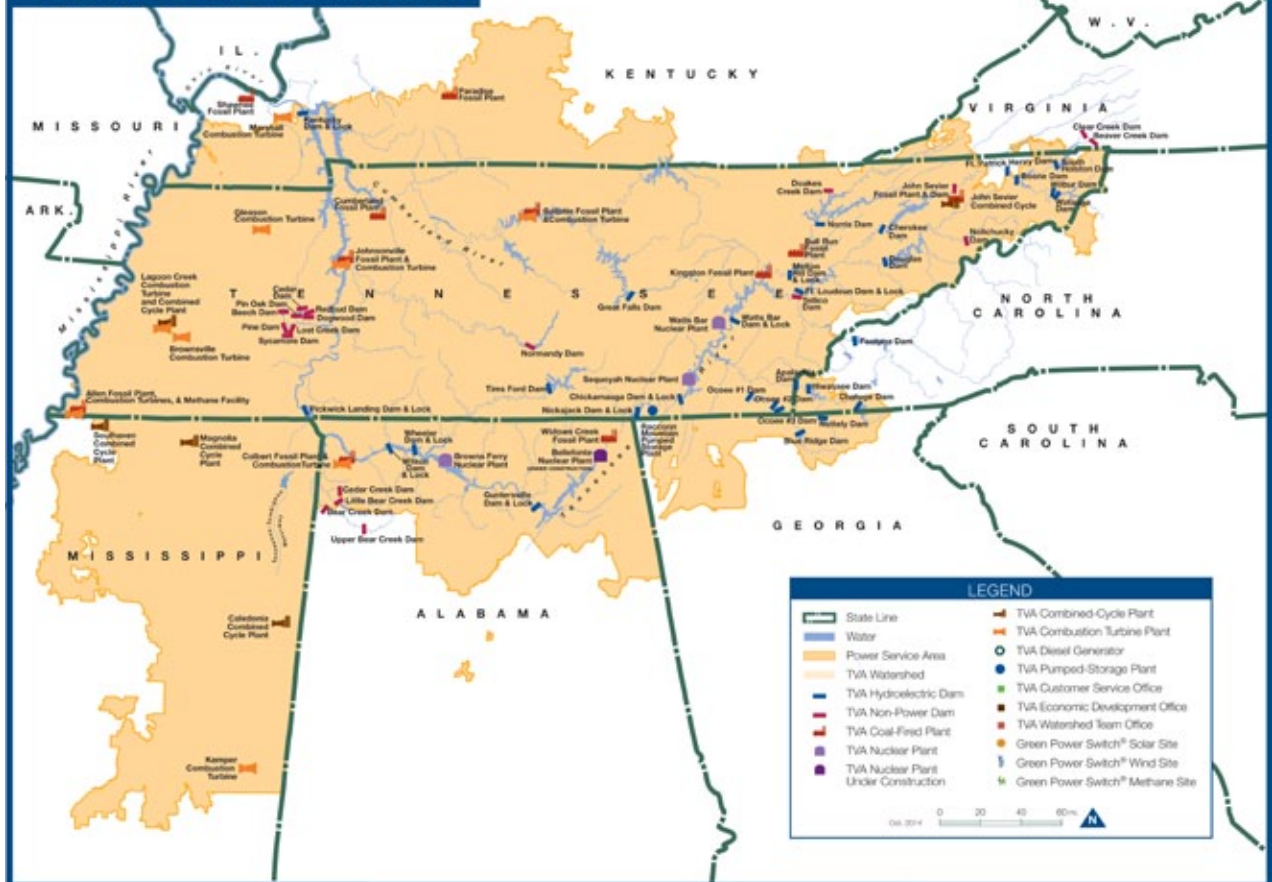


Generating Power Through People

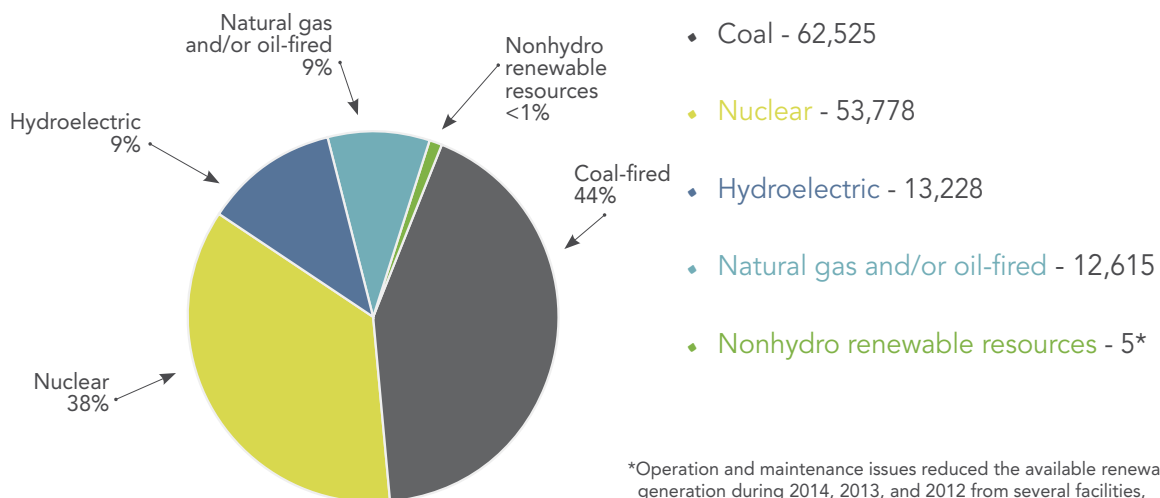
Office of the Inspector General
TENNESSEE VALLEY AUTHORITY
Semiannual Report
April 1, 2014 - September 30, 2014



TVA Selected Locations



TVA POWER GENERATION SIX MONTHS ENDED SEPTEMBER 30, 2014 (in millions of kilowatt hours)



*Operation and maintenance issues reduced the available renewable generation during 2014, 2013, and 2012 from several facilities, including those utilizing methane, solar, and wind.

TABLE OF CONTENTS

Generating Power Through People

Message from the Inspector General.	4
Special Feature	6
Executive Overview	16
Organization.	20
Audits	24
Evaluations.	36
Investigations	42
Legislation and Regulations	46
Appendices	48
Appendix 1 – Index of Reporting Requirements Under the Inspector General Act. . . .	49
Appendix 2 – Audit and Evaluation Reports Issued	50
Appendix 3 – Audit and Evaluation Reports Issued with Questioned and Unsupported Costs and Recommendations for Better Use of Funds. . . .	52
Appendix 4 – Evaluation Reports with No Management Decision	54
Appendix 5 – Audit and Evaluation Reports with Corrective Actions Pending.	55
Appendix 6 – Investigative Referrals and Prosecutive Results	59
Appendix 7 – Highlights	60
Appendix 8 – Government Contractor Audit Findings	61
Appendix 9 – Peer Reviews of the TVA OIG.	62
Appendix 10 – Peer Reviews Conducted of Another OIG	63
Glossary	64
Abbreviations and Acronyms	66

Message from THE INSPECTOR GENERAL



I am pleased to present our report to Congress for the period April 1, 2014, to September 30, 2014. As always, the Office of the Inspector General (OIG) directs its resources to conduct audits and investigations based on the ranking of risks to the Tennessee Valley Authority (TVA). Whether it is cyber security issues, contracts with vendors that pose loss of funds, or TVA employees or contractors engaging in illegal activities, the OIG works with TVA management to reduce the harm to TVA.

In our feature article for this semiannual report, we discuss the importance of a healthy organizational culture at TVA and how culture poses a potential risk. We discuss TVA's efforts to assess its culture over the years and the attempts to sustain a more engaged workforce. In this feature article, we also announce the beginning of OIG reviews in January 2015 to assess organizational effectiveness at TVA. These reviews are designed to help TVA management assess how well they are doing both in meeting operational goals and in building a healthy culture. Given the significant challenges TVA faces, knowing how the level of employee engagement is affecting getting the desired results is imperative.

In this semiannual period, our audit, evaluation, and investigative activities identified more than \$3.3 million in funds that could be put to better use, questioned costs, recoveries, savings and penalties as well as opportunities for TVA to improve its programs and operations. Some of the highlights include:

- A preaward review that identified more than half a million dollars TVA could save in contract negotiations for valley-wide engineering services and four contract compliance audits that identified more than \$2.6 million in overbillings.
- Audits of TVA's invoice preparation process for billing local power companies for power subsequently delivered to end-use customers and assignment of official stations for travel purposes which identified areas for improvement.
- Audits that identified areas for improvement in TVA's information technology (IT) environment around cyber security at a TVA facility, procuring IT equipment, and implementation of a human resources application as well as two other reviews related to security.
- Procedures pertaining to TVA's green energy pricing as well as an evaluation that identified improvement opportunities in TVA's Enterprise Risk Management (ERM) program and an audit of the effectiveness of TVA's energy services contracts for federal customers.
- Ten evaluations including a review of the Kingston Recovery Project more than five years after the coal ash spill at the Kingston Fossil Plant and a review of TVA's coal combustion product management which found TVA has met or was in the process of meeting its commitments in both areas. In addition,



Watts Bar Nuclear Plant

reviews of River Operations (RO) and fossil equipment in poor condition, coal plant preventive maintenance, fossil fire protection, and nuclear groundwater all identified improvement opportunities.

- Completion of prosecution of a former TVA Vice President in Nuclear Operations and the sentencing of a TVA contractor

indicted on five counts of wire fraud. Investigative activity also resulted in more than \$200,000 in projected savings, restitution, and fines/penalties/fees.

We have appreciated working with the Chair of the TVA Board of Directors Joe Ritch during his first term. We look forward to continuing to work with him and

TVA Board members toward our mutual purpose of making TVA better.

Richard W. Moore
Inspector General

SPECIAL FEATURE



Special Feature: GENERATING POWER THROUGH PEOPLE

Since its inception in 1933, TVA has focused on improving the quality of life for people in its seven-state region by delivering reliable, low-cost electricity, environmental stewardship, river management, technological innovation, and economic development across the region. Building the infrastructure, developing products to help farmers increase their yield, taming the waterways, and attracting industries to the Valley were formidable tasks to say the least. TVA's Board and management formulated plans and its workforce delivered the results. Eighty years later, while the strategies and goals have changed, some things have remained the same—TVA's Board and management define the strategies and goals and depend on its workforce to deliver the results.

In this article, we are focusing on TVA's ability and plans to engage the people that generate the power and carry out the mission of TVA. We do this, in part, because we accept the general proposition that how effective TVA is as an organization is dependent on the extent to which TVA management engages the hearts and minds of its workforce. We will examine: (1) TVA's history of attempting to engage its workforce, (2) the risk posed by poor organizational health to TVA's ability to accomplish its mission long term, and (3) the role and responsibilities of the OIG in analyzing TVA's organizational effectiveness and reporting our findings.

TVA's people have proven to be remarkably resilient. Over the last ten years, TVA has had seven restructurings, with three of those

being major reorganizations. The TVA workforce continues to pivot to respond to new challenges placed before them by the evolving nature of their service functions and by TVA leaders. Those leaders often come into TVA without a perspective on what previous leaders have asked those employees to do. If TVA management adheres to the belief that they must depend on employees to execute their new strategies to accomplish TVA's mission, the interdependence between management and employees requires a high degree of respect, trust, accountability, and safe dialogue. Going forward, the OIG will be reporting on how TVA is doing in building a team based upon those principles that TVA acknowledges are key to building a productive workforce that gets results.

The Emerging Risk

The connection between an engaged work force and desired organizational results has been the focus of much academic study over the last 30 years or so. Generally, there has been a growing consensus that the more engaged employees are, the more likely they are to contribute positively to their organization's goals. Much of the study in this area focuses on what is commonly referred to as "organizational culture."¹ Organizations (including TVA as we will see) have recognized the importance of investing in people and have at times spent inordinate amounts of money trying to "change the culture." This has historically been a poor investment according to studies that show most change efforts fail for various reasons.²

¹ The Chartered Institute of Internal Auditors (CIIA) states: "There is no clear-cut agreement on the definition of organisational culture but it is commonly interpreted as 'the way we do things around here,'" citing Terrence E. Deal and Allan A. Kennedy, *Corporate Cultures: The Rites and Rituals of Corporate Life*, New York, 1982, <https://www.iiia.org.uk/media/598939/0805-iiia-culture-report-1-7-14-final.pdf>. Another definition cited by the CIIA refers to organizational culture as "the taken-for-granted assumptions and behaviours that make sense of people's organisational context and therefore contributes to how groups of people respond and behave in relation to issues they face," citing Gerry Johnson et al, *Exploring Strategy*, 10th ed., 2014, <https://www.iiia.org.uk/media/598939/0805-iiia-culture-report-1-7-14-final.pdf>.

² Michael Beut and Nitin Nohria, *Cracking the Code of Change*, Harvard Business Review, May 2000, <http://hbr.org/2000/05/cracking-the-code-of-change/ar/1>.

The work of the OIG shows that TVA has fallen into this same pattern; extensive effort and money spent with few sustainable results. From a “good government” perspective, TVA stakeholders might genuinely wonder, “why?” We hope to shed some light on that question.

Given the acknowledged importance of a healthy organizational culture, you might think that internal auditors and inspectors general would have been auditing this area for the last 30 years or so. We haven’t. Culture and its impact on organizational effectiveness is a relatively new concept in the auditing arena, although it continues to gain recognition as a significant auditable risk. For example, President and Chief Executive Officer of the Institute of Internal Auditors, Richard Chambers, recently stated:

When I think about how the role of internal auditing is evolving, I am struck by the diversity of issues we address. Internal auditors deal with an ever-expanding portfolio of challenges that encompass operational risk, strategic decision-making, compliance, technology vulnerabilities, security threats, fraud prevention and detection, environmental risks,



*disaster preparedness . . . the list goes on and on. Even once-unthinkable subjects like corporate culture are now subject to audit. This is as it should be. We can’t deliver fully effective risk-based audit services if we ignore critical issues, such as a toxic corporate culture.*³

Additionally, in September 2014, the Corporate Executive Board Corporate Executive Board Audit Leadership Council released its *2015 Audit Plan Hot Spots*, which identified and analyzed the top ten emerging issues that audit organizations will focus on during 2015. One of these issues is the impact of organizational culture on a company’s “risk culture.” Specifically, there is growing recognition by regulators that “employee behaviors – including their comfort in reporting issues and the impact of their biases on decision making – is directly

related to the quality of risk management.”⁴

The reality is that the TVA OIG has been auditing “culture” at TVA for a long time, but our reports have tended to focus on the operational processes rather than the dynamics of, for example, employee engagement. In hindsight, there are few reports that the OIG does that do not contain at least some cultural element. We have gradually come to recognize that culture is a risk that touches virtually any audit or evaluation we perform. Our recommendations in previous reports have focused on better processes for TVA but have often stopped short of addressing underlying culture problems. In all likelihood, a better operational process recommended by the OIG to TVA management without consideration of the potential underlying dynamics of the TVA team charged with

³ Richard Chambers, *Auditing the Organizational Culture: A New Frontier for Internal Audit*, July 2014, <https://iaonline.theiia.org/auditing-the-organizational-culture>.

⁴ The Corporate Executive Board Audit Leadership Council, *2015 Audit Plan Hot Spots*, September 2014, p. 14.

implementing that new process was not as helpful as it could have been. In our office, we constantly implore each other to “make TVA better.” We now recognize that to do that we have to be more cognizant about assessing the cultural elements that impact TVA’s operational performance.

For example, in fiscal year (FY) 2014, we assessed the effectiveness of the Enterprise Risk Management (ERM) organization’s role within TVA’s overall risk management program. As part of this evaluation, we summarized prior audits and evaluations performed by our office⁵ related to risks identified and assessed at the Strategic Business Units (SBU) and/or Business Units (BU) level. Although we found improvements were made to the ERM program since the last OIG inspection in 2008, we also identified areas where the ERM program could be strengthened. One of these areas related to TVA’s risk management culture.

Risk management culture refers to the way a company, through its leaders and employees, thinks about and manages risks. For example, an organizational culture where employees are not encouraged to bring up issues or where employees experience retaliation for doing so increases the likelihood that potentially significant risks will not be

addressed. Similarly, leaders who are perceived to not hold their employees accountable could increase the risk that their employees will not proactively identify and adequately manage significant risks.

As part of our audit, we found that TVA’s risk management culture was not fully embedded throughout the organization and that the importance of the ERM process may not have been fully appreciated and/or understood by SBU/BU personnel responsible for completing risk assessments. In addition, there was significant leadership turnover in the ERM group since 1999, which could have affected the level of employee engagement. Doubt about “who is in charge” can dampen employee enthusiasm for a new initiative. This can increase the likelihood that a significant risk will not be identified early enough to prevent or mitigate it.

Perhaps nothing makes the case for the importance of understanding the culture of an organization more than the Kingston coal ash spill of 2008. In the OIG report⁶ on this environmental disaster, we noted both the process failures and the culture failures that contributed to this catastrophic event. As cited in our report, TVA culture relegated ash to the status of garbage at a landfill rather than treating it as a

potential hazard to the public and the environment. These attitudes resulted in culture hitting the bottom line for TVA both in terms of money and reputation. The TVA Board demanded a culture change initiative to address both the process issues and the culture issues by bringing in McKinsey & Company (McKinsey) to design the program and to implement it across TVA.

What the TVA Board implicitly acknowledged by addressing culture in relation to the coal ash spill was that there was, in fact, a connection between employee attitudes and corporate risk. Unfortunately, as we point out in this article, TVA’s management of the effort to change the culture through McKinsey’s work was compromised by a number of factors. TVA spent millions of dollars and implemented myriad process changes, but it is debatable whether TVA’s culture is less risky today than it was in 2008 when the Kingston coal ash spill occurred. It is simply an unknown. While TVA has excelled at rectifying the physical damage around the Kingston plant, the same success in rebuilding an engaged workforce is less apparent.

Fortunately, TVA’s current management appears cognizant of both TVA’s history in attempting to engage its workforce and

⁵ These audits and evaluations were conducted in the past three years.

⁶ Inspection Report 2008-12283-02, Review of the Kingston Fossil Plant Ash Spill Root Cause Study and Observations About Ash Management, July 23, 2009.



Kingston Fossil Plant

what must be done to build an interdependent team to achieve TVA's mission. This is a long-term effort that to be successful must be sustained beyond the tenure of the current TVA leadership. The OIG's work going forward will report on the status of these efforts.

Culture Change at TVA

Culture Change is Personal

Today, TVA's organizational health is more relevant than ever. As we noted earlier, the actions and behaviors of TVA's employees are a manifestation of the state of TVA's organizational health, and a healthy organization is more

likely to survive and be successful than one with deficiencies.

At its core, TVA's employees determine, to a large extent, whether TVA will be successful in its future endeavors. Ultimately, good culture can result if employees have confidence that management will act and speak in ways consistent with good leadership and challenge management when these behaviors are not exhibited. Improved culture and employee and organizational productivity can increase management's motivation to embrace and sustain good leadership behaviors. Thus, there is a

symbiotic relationship between management and employees—both groups are responsible for achieving good culture, with each group benefitting from the other and providing the incentive for the other group to sustain it.

Robert E. Quinn, an expert on organizational change and effectiveness, in his book *Deep Change, Discovering the Leader Within*, stated:

Deep change requires more than the identification of the problem and a call for action. It requires looking beyond the scope of the problem and finding the actual source of the trouble. The real problem is frequently located where we would least expect to find it, inside ourselves. Deep change requires an evaluation of the ideologies behind the organizational culture...Culture changes start with personal change. We become change agents by first altering our own maps. Ultimately, the process returns us to the "power of one" and the requirement of aligning and empowering oneself before successfully changing the organization.⁷

If this is true, no culture change initiative will be successful if the focus is on anything other than changing individual employee attitudes and behaviors. For

⁷ Robert E. Quinn, *Deep Change, Discovering the Leader Within*, John Wiley & Sons, Inc., San Francisco, 1996, p. 103.

example, efforts to “change the company,” but which let key executives opt out of any change initiative, are doomed to fail. Our review of TVA history indicates this too is a pattern in TVA change efforts. Employees who do not see their manager’s behavior change are clever enough to figure out that the “change initiative” is about “fixing” the employees as opposed to building a committed team starting with the managers.

Snapshots from the Field

Since the creation of our office in 1985, the OIG, through its audits, evaluations, and investigations, has provided “snapshots” of TVA’s culture that have been sometimes directly referred to as “culture” but, more often than not, labeled as “leadership” or “process control” issues. As a result, the OIG has been in a position to chronicle, although indirectly, culture shifts at TVA. We should say at the outset that while conducting numerous interviews of TVA employees we found pockets of great culture with examples of sterling leadership. These islands of engaged employees getting great results emphasize the fact that there is no single “TVA culture.” Individual leaders in organizations can and do make a profound difference despite whatever else is going on in the organization. This actually bodes

well for advancing the current TVA leadership’s commitment to enlisting support for specific values and behaviors in the workplace. Unfortunately, the OIG interviews of TVA employees over the years also suggest that those pockets of good culture in TVA historically were outliers.

In recent history, TVA has gone through three major organizational health initiatives.

- The Total Quality (TQ) movement, which ran from 1990 through 1997, focused primarily on problem solving and customer relations.
- Strategic Teamwork for Action and Results (STAR) 7 was implemented in 1996, with the last formal training conducted in 2007. STAR 7 goals were to provide a common understanding about TVA’s mission, goals, and values; strengthen the TVA workforce as a team; and enable the workforce to adapt to rapid change.
- Finally, in 2009, TVA implemented the Organizational Effectiveness Initiative (OEI), led by McKinsey consultants, which attempted to remediate the issues identified after the Kingston ash spill in December 2008.

We observed a pervasive theme whether the change effort was the TQ movement, STAR 7, or OEI. Employees seemed to have watched TVA leadership carefully and concluded that the change effort must not be authentic because they didn’t see individual managers changing. Granted this may have been self-serving justification by employees to not be more accountable, but the result was the same. Trust remained low and the change effort largely failed. In the past there have been occasions where employees believed (rightly or wrongly) that while TVA management appeared to be supporting the new program with their words, their actions suggested that they were “opting-out” of organizational health change efforts and without consequence.

One recent review by the OIG demonstrates how management sometimes unintentionally projects a lack of respect for its employees with lingering effects. Several years ago, TVA management, in an attempt to improve productivity and performance, negatively impacted the culture in at least one TVA business unit due to TVA management’s lack of oversight of the consultant leading the effort. The employees felt disrespected by management due to the perceived adverse treatment

by the consultant performing the work. The consultant in an effort to boost productivity tracked what they called “lost time” such as lunch and breaks. They also started “scoring” employees’ performance without the employees’ supervisors explaining why the consultants were following the employees around. This basic lack of consideration for employees was interpreted by the employees we interviewed as a breach of the relationship with their management. Unfortunately, the employees we interviewed did not feel safe to raise this as an issue.

Although most of the management involved are no longer with TVA and several years had passed by the time OIG auditors conducted the interviews, the employees were still reticent to discuss what had occurred. They did so apparently because one employee was emphatic that what happened should have been reported. Perhaps equally disconcerting was the fact that after putting those employees through a poorly managed process all in the name of productivity, no one ever came back to those employees to report what was gained for that effort. This perceived slight of employees likely built resistance to future

similar efforts. We cannot extrapolate this experience across TVA, but it is consistent with other similar incidents that we have observed over the years. Holding employees more accountable (a universal common theme by management) starts with building trust with those employees by demonstrating respectful behaviors. While this appears obvious, it proves challenging to do in a sustainable way.

Another example of a productivity initiative not achieving its desired results and also alienating employees was work done by McKinsey and their pilot program. The



OIG reviewed this initiative, which encouraged employee participation to identify ideas to improve TVA plants. As part of this initiative, the pilot was initiated at one of the plants to help employees and management identify ways to improve the most significant gaps in the plant's operational and organizational performance with the plant "to serve as the 'beacon' for improvements at other fossil plants." According to TVA, employees at the pilot plant contributed more than 1,300 ideas with savings forecasted from \$50 to \$60 million annually. However, funds were not initially available to implement the improvements which discouraged employees involved in the initiative. As one source stated, it was frustrating to know TVA was paying consultants millions of dollars, but a plant could not get \$30,000 to fix a pump. When another phase of this initiative began at the same plant, there was very little employee buy-in because, according to plant personnel, those plant employees felt the initiative was "flavor of the day" after the majority of the pilot initiatives were not implemented. This experience has become part of TVA folklore and is known across various TVA plants and operations. It is, of course, impossible to gauge the real effect on TVA employee's attitudes but surmising that

there was a loss of trust in TVA leadership does not seem to be a stretch.

Building a trusting workforce that is engaged, accountable, and loyal is hard work. Historically, TVA's efforts to create a healthy culture that gets results appears to suffer from three key impediments: (1) shifting leadership with no consistent organizational health focus, (2) some employees becoming jaded after being subjected to what they may feel are "flavor of the day" initiatives, and (3) a fundamental misunderstanding on the part of management about what creates a safe environment for employees to stay in dialogue with management. This is certainly not peculiar to TVA, but given current challenges for the organization, taking a different approach that doesn't repeat the mistakes of the past will be important to TVA's future success.

The OIG's Role

The OIG is charged with promoting economy and efficiency throughout TVA while also preventing and detecting fraud, waste, and abuse. Although it is the agency's responsibility to identify and mitigate risks, the OIG plays an integral role in assessing risk and how well the agency is mitigating its risks. Each year, we

plan our audits and evaluations based on where we see the top risks in the agency. In recent years, we have recognized the impact poor organizational health can have on the TVA's organizational effectiveness. TVA is currently rolling out new and revised values, competencies and behavior expectations to all of its leadership and employees and integrating these into their human resources structure (through feedback tools, performance management, training, selection, etc.). Ultimately, the goal of this new structure is to help TVA achieve its broad mission and performance and operational goals. Based on TVA's history of past cultural and organizational effectiveness initiatives which we described earlier, TVA is at risk that the new integrated structure might not be accepted and/or sustained.

As TVA and its workforce navigates the current organization changes in an effort to help TVA become a stronger organization, the OIG is well positioned through our audits and evaluations to help TVA identify areas where cultural issues may be affecting the organization's ability to succeed. In FY 2015, our office will undertake a series of "organizational effectiveness" reviews. Our intent in conducting these reviews is

to provide TVA management with independent observations of areas for improvement and identified best practices. Our hope would be that this can then be used to further TVA's change efforts and ultimately produce better operational results. Our work will be conducted in two phases. The first phase will be a risk assessment to determine allocation of OIG resources. This will be comprised of two components—cultural and operational performance. To conduct this assessment, we will review previous OIG audits, evaluations, and investigations; employee concerns received through various venues; available survey data; input from TVA stakeholders; and each BU's performance against their operational goals. The OIG will use these results to assess which BUs may be highest risk.

Based on our risk assessment results, we will select the BUs to be reviewed in greater depth. For the selected BUs, we will focus on identifying the strengths and areas of concern, both culturally and operationally, through techniques such as use of a survey, focus groups, interviews, and a review of other documentation. Our final product will include cultural and operational strengths and areas of concern, and potential causal

factors to these areas of concern as well as recommendations for them.

Conclusion

In the last 30 years, the TVA workforce has become accustomed to an environment that creates uncertainty for them. Recently, as financial pressures increased, management reevaluated the functions being performed and made decisions to discontinue some functions to match costs with revenues. As discussed earlier, TVA employees have been through multiple reorganizations and leadership changes. Leadership changes bring new programs or initiatives rolled out to employees. All of this can create a level of uncertainty for employees and most certainly impacts their trust level. Understanding what the workforce mindset is and what could be impacting their decision to "buy in" or not is critical.

Creating a psychological safe space for employees to offer differing opinions from management is a hallmark of a healthy culture. Creating forums that employees deem "safe" generally differs from what management deems safe for employees. Employees who believe they have actually been heard tend to be quicker

to "buy in" to management's new requests of them. With any new initiative announced by management, it is usually not the details of the initiative that employees question. Rather, it is management's intent that employees question. Building trust in this environment requires enormous skill and patience, often making the "do it because I said so" approach more immediately appealing to management.

The OIG is currently engaged in a healthy dialogue with TVA management about much of what we have addressed in this article. We are encouraged by their obvious commitment to building a TVA team that gets results and does so in the right way. The fact that the OIG and TVA management can offer differing opinions to each other on this subject bodes well for both the current TVA change management effort and the usefulness of the OIG's upcoming reviews of TVA's organizational effectiveness. We appreciate the level of professionalism we see in TVA management, and we look forward to building a better TVA together.



Bull Run Fossil Plant

EXECUTIVE OVERVIEW



EXECUTIVE OVERVIEW

In recent years, the TVA OIG has become increasingly aware of the impact of culture on achieving organizational objectives as research evidences the two are intrinsically connected. This semiannual report's feature article, "Generating Power Through People," focuses on the importance of an engaged workforce in achieving the mission of TVA and introduces our upcoming organizational effectiveness reviews. As we have said before, our audit, evaluation, and investigative activities are focused on Making TVA Better. In the pages ahead, we highlight the results of our activities that provide TVA objective information designed to help improve performance.

AUDITS

The TVA OIG audit organization completed 15 audit, review, and agreed-upon procedures engagements. This work identified more than \$2.6 million in questioned costs for TVA to recover and \$512,000 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 one preaward review of a cost proposal submitted by a company providing TVA valley-wide engineering services. Our review identified \$512,000 of potential savings opportunities for TVA to negotiate. We also completed four contract compliance audits with expenditures totaling \$551 million related to (1) a subcontractor providing staff augmentation personnel for the completion of TVA's Watts Bar Nuclear Plant Unit 2; (2) TVA

corporate credit card purchases of fuel, vehicle fluids, and car washes for TVA-related business; (3) purchased power; and (4) operating and maintaining the radiological emergency preparedness programs for TVA's Browns Ferry and Sequoyah Nuclear plants. These audits identified potential overbillings of \$2.6 million. The Contract Audits section begins on page 25 of this report.

Corporate Governance and Finance Audits

With a focus on TVA's regulatory activities, compliance with applicable laws and regulations,

and financial reporting, we completed audits of TVA Revenue Billing's invoice preparation process for billing local power companies (LPCs) for power subsequently delivered to end-use customers and TVA's assignment of employees to official stations.

In addition to our audit work, we monitored the work of the external auditor in its review of TVA's second and third quarter financial information for FY 2014 to assure compliance with generally accepted government auditing standards. We also provided assistance



STATISTICAL HIGHLIGHTS

April 1, 2014 - September 30, 2014

Audit Reports Issued	15
Evaluations Completed	10
Questioned Costs	\$2,611,842
Questioned Costs Agreed to by TVA	\$2,611,842
Questioned Costs Recovered by TVA	\$483,598
Funds to Be Put to Better Use	\$512,000
Savings Realized by TVA	\$13,113,740
Investigations Opened	134
Investigations Closed	123
Recoveries/Fines/Penalties/ Projected Savings	\$214,935
Criminal Actions	0
Administrative Actions (No. of Subjects)	14

to the external auditor during interim testing for the year-end financial statement audit. The Corporate Governance and Finance Audits section begins on page 27 of this report.

IT Audits

We completed five audits in the IT environment pertaining to: (1) implementation for a new human resources application; (2) controls related to cyber security at a TVA facility; (3) controls over the IT Supply Chain process for procuring IT equipment; (4) controls for network security zones and perimeter architecture; and (5) controls over database security. We identified areas for improvement in all five reviews. The IT Audits section begins on page 29 of this report.

Operational Audits

Operational Audits applied certain agreed-upon procedures to assist the Center for Resource Solutions (CRS) in determining TVA's compliance with the annual reporting requirements of the Green Pricing Accreditation Program. We performed an evaluation of TVA's ERM program and identified improvement opportunities. The team completed an audit assessing whether TVA was adequately addressing environmental risks. Lastly, we performed an audit that identified opportunities to improve the effectiveness of TVA's energy services contracts for federal customers. The Operational Audits section begins on page 31 of this report.

EVALUATIONS

We completed ten evaluations during this semiannual period. Two were related to the Kingston Recovery Project and TVA's management of coal combustion products. Another three addressed systems and programs with poor ratings, preventive maintenance, and fire protection at coal plants. Two were related to nuclear groundwater monitoring and RO systems and components with poor ratings. Additionally, an evaluation of TVA's ERM program was performed by our Operational Audits department which was previously discussed under that department's work. Due to the sensitive subject matter of two evaluations completed in the period, no discussion of these is included in this report. The Evaluations section begins on page 36 of this report.

INVESTIGATIONS

Our investigative results included criminal sentencing of three individuals, numerous administrative actions, and savings and restitution to TVA and to a private entity exceeding \$200,000. We opened 134 cases and closed 123. The Investigations section begins on page 42 of this report.



Norris Dam

ORGANIZATION

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Director, IT Audits

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Curtis C. Hudson
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Contract Audits

**Rick C.
Underwood**
Director, Corporate
Governance &
Finance Audits

ORGANIZATION

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

TVA OIG Office Locations

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

The OIG has strategically located its offices 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 the Edney Building in Chattanooga, Tennessee, where the Evaluations unit, members of the Corporate Governance and Finance team, 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; Bellefonte Nuclear Plant in Hollywood, Alabama; and Sequoyah Nuclear Plant in Soddy-Daisy, Tennessee. Staff work in these locations as needed. As of September 30, 2014, the OIG had a total staff of 104.

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 in achieving office goals. Responsibilities include personnel administration, 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 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.

TYPES OF AUDIT & EVALUATION ISSUES

Corporate Governance and Finance Audits

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

Operational Audits

- Operational Inefficiency
- Not Achieving Intended Results
- Inferior Performance
- Legal/Regulatory Noncompliance
- Fraud

IT Audits

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

Evaluations

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

Contract Audits

- Inflated Proposals
- Contract Overpayments
- Inferior Performance
- Fraud

The Audits team, primarily based in Knoxville, 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 four departments—Contract Audits, Corporate Governance and Finance Audits, IT Audits, and Operational Audits. This team performs its work in accordance with *Government Auditing Standards*.

- Contract Audits has lead responsibility for contract compliance and preaward reviews. In addition, this team performs reviews of TVA contracting processes and provides claims assistance as well as litigation support.

- Corporate Governance and Finance 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 reviews to assess the results as well as the economy and efficiency of TVA's financial programs.

- 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 reviews of the effectiveness of IT-related functions.

- Operational Audits focuses on risk and impact-driven operational audit work. The

team performs audits of operational effectiveness and efficiency, as well as TVA compliance with laws and regulations.

The Evaluations team seeks to ensure that program objectives and operational functions are achieved effectively and efficiently. It performs both comprehensive reviews and more limited scope policy and program reviews. In accordance with the *Quality Standards for Inspection and Evaluation*, the objectives of the unit include providing a source of factual and analytical information, monitoring compliance, measuring performance, assessing the efficiency and effectiveness of operations, and conducting inquiries into allegations of fraud, waste, abuse, and mismanagement.

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

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 Council of the

Inspectors General on Integrity and Efficiency (CIGIE), applicable United States 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 graphic shows the major categories of investigations.

LEGAL

The OIG Legal Counsel team monitors existing and proposed legislation and regulations that relate to the mandate, operations, and programs of the OIG and TVA. Additionally, this team provides legal advice as needed for administrative, audit, evaluation, and investigative projects.

MAJOR CATEGORIES OF INVESTIGATIONS

Contract Fraud

Defrauding TVA through its procurement of goods and services including fraud schemes such as misrepresenting costs, overbilling charges, 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.

REPRESENTATIVE AUDITS



Summary of REPRESENTATIVE AUDITS

During this reporting period, the TVA OIG Audit organization completed 15 audit, review, and agreed-upon procedures engagements. This work identified more than \$2.6 million in questioned costs for TVA to recover and \$512,000 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 Reviews

To support TVA management in negotiating procurement actions, we completed one preaward review of a cost proposal submitted by a company providing TVA valley-wide engineering services. Our review identified \$512,000 of potential savings opportunities for TVA to negotiate. The savings opportunities were related to overstated indirect cost recovery rates.

Contract Compliance Audits

During this semiannual period, we completed four compliance audits of contracts with expenditures totaling \$551 million and identified potential overbillings of \$2,611,842. Highlights of our completed contract compliance audits follow.

- We audited \$121.4 million in costs billed by a subcontractor to a contractor (and subsequently to TVA) to furnish qualified personnel to the contractor on a seconded (staff augmentation) basis for

the Watts Bar Nuclear Plant Unit 2 construction completion project. We determined TVA was overbilled \$1,547,434 in costs and fees which included (1) \$1,484,582 in excessive payroll tax and insurance costs and related fee, (2) \$60,287 in ineligible temporary living allowance costs, and (3) \$2,565 in excessive labor costs and related fee.

- We audited \$22.7 million in costs billed by a contractor to provide TVA with a MasterCard platform and issue fuel cards to TVA personnel to purchase fuel, vehicle fluids, and car washes for TVA-related business. We determined the contractor overbilled TVA \$1,035,140. The overbilling included:

- \$846,022 for duplicate invoices submitted by the contractor.
- \$83,271 in duplicate costs charged on merchant transactions.



Watts Bar Nuclear Plant



- A net \$97,012 in state taxes paid on fuel purchases which included (1) \$253,337 in state fuel taxes for which TVA was exempt, (2) \$164,663 in state fuel excise taxes that had been stripped by the contractor for which TVA was liable, and (3) \$8,338 in state excise taxes from states outside TVA's service region from which TVA may be exempt.
 - \$8,835 in unauthorized transactions.
- In addition, the contractor owed TVA \$11,459 for interest on overpayments TVA made due to duplicate invoice billings.
- We audited \$400.3 million in costs billed by a contractor for power purchases. In summary, we found:
 - TVA's electronic workbook used to calculate the invoice amount did not contain a formula needed to account for unexcused hours when TVA directs the contractor to provide less than full capacity (derated) and the generation facility cannot produce any power.
 - TVA needed to improve documentation and communication of adjustments to the generation facility meter data.
 - The contractor billed TVA \$12,674 in costs for meter readings not supported by actual meter data on the October 2011 invoice.
 - The contractor overbilled TVA a net \$5,135 due to data entry errors made by TVA in the electronic workbook used to calculate the invoice amount.
 - We audited \$6.6 million in costs paid to two state agencies to operate and maintain the Radiological Emergency Preparedness (REP) programs for TVA's Browns Ferry and Sequoyah Nuclear plants in accordance with the requirements established by the Nuclear Regulatory Commission and the Federal Emergency

Management Agency. The contract provided for TVA to reimburse expenses incurred by the two state agencies in carrying out the REP operation and maintenance activities. In addition, as part of the payment amount provided to one of the agencies, the agency agreed to transfer minimum amounts established in the contract to the five affected counties around Browns Ferry Nuclear Plant.

In summary, we found the current contract's compensation terms should be revised to (1) clarify whether TVA will

reimburse costs incurred or pay an annual lump sum to the contractor and (2) require the two state agencies and the five counties to provide details to TVA on actual funds spent during a FY in support of the REP program. We also noted the salaries paid to emergency management personnel varied significantly between the five counties.

Corporate Governance and Finance Audits

During this semiannual period, Corporate Governance and Finance Audits completed audits

of TVA (1) Revenue Billing's invoice preparation process for billing LPCs for power subsequently delivered to end-use customers and (2) assignment of employees to official stations. In addition, the team provided oversight of and assistance to TVA's external auditor.

TVA Revenue Billing's Invoice Preparation Process

TVA sells power at wholesale rates to 155 LPCs, who then resell the power to their end-use customers at retail rates. TVA's total electricity sales were \$10.8 billion in FY 2013, and

Browns Ferry Nuclear Plant



revenue earned from the LPCs was \$9.4 billion or 87 percent of total sales.

TVA bills the LPCs based on meter readings for demand and energy amounts delivered. The majority of the amount billed on each invoice consists of two components: (1) monthly demand and energy totals determined by daily meter readings multiplied by (2) rates for the various classifications of users (e.g., residential and commercial/industrial). TVA utilizes the software package Oracle Utilities to produce the wholesale invoices.

The OIG included a review of Revenue Billing’s invoice preparation process in its annual audit plan because of the significance of LPCs revenue to TVA. We audited Revenue Billing’s invoice preparation process for the period April 1, 2011, through July 31, 2013, to determine if (1) wholesale invoices were calculated correctly, (2) controls to prevent and detect invoice errors were adequate, and (3) Oracle Utilities had appropriate and adequate IT general and application level controls. This audit did not include testing of meter readings which was addressed in a previous audit, TVA Meter Testing, completed in March 2013.

Our audit focused on the Revenue Billing and the Power Billing departments’ roles and responsibilities in the revenue billing process. The Power Billing department is responsible for the validity of the demand and energy readings in Oracle Utilities. The Revenue Billing department is responsible for the accuracy and completeness of amounts invoiced.

Our audit of TVA Revenue Billing’s invoice preparation process for LPCs during the period found (1) wholesale invoices were calculated correctly, (2) controls to prevent and detect invoice errors were adequate, and (3) Oracle Utilities had

appropriate and adequate IT general and application level controls. However, we identified some minor issues where changes could strengthen and improve the revenue billing process and may decrease the likelihood of errors or adjustments.

Per TVA personnel, beginning in January 2013, monthly meetings between the various departments involved with the invoicing process were conducted to review adjustments and higher risk areas to improve the process. As of July 31, 2013, the number of adjustments made by Power Billing and Revenue Billing had decreased 48 percent from FY 2012.



Based on the findings, we made recommendations to TVA management to improve the revenue billing process. TVA management generally agreed with our findings and recommendations and is taking corrective actions to address these issues.

TVA's Official Stations

TVA incurs travel expenses when employees perform TVA business away from their official stations. The OIG included a review of the assignment of employee official stations on its annual audit plan based on concerns expressed to the OIG regarding the appropriateness of official stations assigned for frequent travelers. For FYs 2009 through 2013, a total of 13,350 employees incurred approximately \$134 million in travel expenses. Our audit objectives were to determine (1) if TVA's most frequent travelers were assigned to appropriate official stations and (2) whether controls were in place to assign employees to proper and/or cost effective official stations.

In summary, we found the assignments of official stations generally appeared appropriate for TVA's most frequent travelers. However, we noted departments with employees who frequently travel to multiple locations assign official stations in differing ways. Additionally, controls and policies

could be strengthened by (1) including guidance on evaluating official stations and (2) requiring approval from the appropriate level of management for decisions not to change official stations based on the dollar values of travel expenses incurred or expected to be incurred. As part of our audit, we followed up on TVA management's actions taken in a previous inspection, Review of TVA Travel Reimbursements, completed in August 2007. We noted action plans agreed to in the past did not appear to have been fully implemented.

Based on the findings, we made recommendations to TVA management to improve guidance related to assignment and maintenance of official station assignments. TVA management generally agreed with our findings and recommendations and is taking corrective actions to address these issues.

IT Audits

During this semiannual period, we completed the following five audits in the IT environment: (1) implementation audit for a new human resources application; (2) controls related to cyber security at a TVA facility; (3) controls over the IT Supply Chain process for procuring IT equipment; (4) controls for

network security zones and perimeter architecture; and (5) controls over database security.

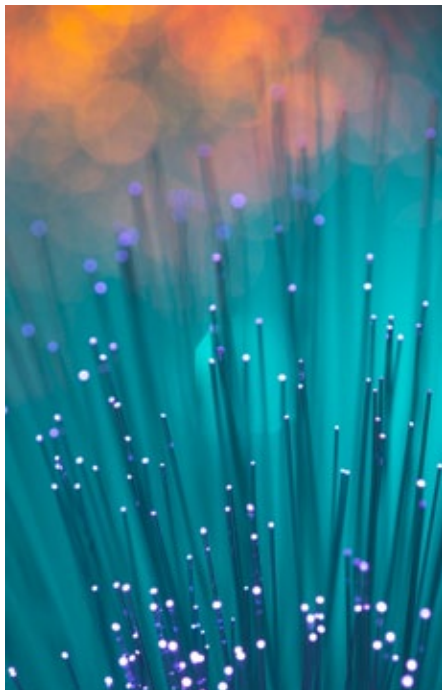
New Human Resources Application Implementation

At the request of TVA management, we audited the implementation of a new human resources management application to evaluate whether (1) TVA systems development processes were being followed and (2) business processes were considered during implementation of the project. We determined the TVA project team followed TVA systems development processes and included consideration of business processes during implementation.

During the audit, we communicated items of potential risk and concern to the project management team. The project team addressed all of our findings by implementing our recommendations prior to the system implementation. Additionally, we noted two areas where improved engagement by participating business units would have made the project team more successful.

Cyber Security Audit at a TVA Facility

We audited the cyber security controls at a TVA facility to evaluate the adequacy of:



(1) logical security controls in place to prevent unauthorized access to system operations and data; (2) network infrastructure in place to minimize the risk to process control systems; (3) general controls in place for backup and recovery of critical systems and a change control process for ensuring only authorized changes were made to production systems and data; and (4) physical security and environmental controls in place to ensure system availability.

While we found TVA had improved the cyber security position for this facility since our last audit in 2007, we identified potential control weaknesses (1) around wireless devices located at the facility and (2) in the areas of network infrastructure and logical security controls.

We recommended TVA management identify unauthorized wireless access points located within the facility, implement a strategy/policy to manage such situations, and ensure personnel are properly trained regarding the updated policy. TVA management agreed with our recommendations and is taking corrective action to address the issues.

Procuring IT Equipment

In March 2012, the Government Accountability Office (GAO) issued a report titled, *IT Supply Chain: National Security-Related Agencies Need to Better Address Risks*. We audited TVA's supply chain processes for procuring IT equipment to determine if TVA had implemented appropriate controls to address the risks identified in the GAO report.

While TVA had agency-wide supply chain processes for procuring equipment which all organizations were to follow, we found there was no agency-wide process for determining when it was necessary to perform assessments to uncover unintentional and intentional vulnerabilities on IT equipment prior to it being placed in service. Additionally, we were unable to determine how the IT Store was integrated into TVA's procurement process.

We recommended TVA management: (1) in coordination with the business units, develop and implement policies and procedures that define which security measures should be employed and implemented to protect against supply chain threats; (2) document how monitoring will be implemented to verify compliance with and assess the effectiveness of the protection measures; and (3) update TVA procurement policies to describe the IT Store procurement process. TVA management agreed with our recommendations and is taking corrective action to address the issues.

Network Architecture Audit

TVA relies on the network infrastructure for communications, access to critical applications, and to operate its core business functions. TVA recently completed projects to upgrade the network functionality at some facilities. We audited the current network architecture to (1) review the logical and physical network architecture to identify security zones and perimeters, (2) perform a gap analysis of the network in relation to security zones and perimeters, and (3) test network access at security zone boundaries and at the perimeter.

In summary, we found that TVA management has leveraged

best practices in recent network upgrades. However, we also found (1) legacy network cabling design and capacity issues at one location, (2) a work instruction for periodic review of firewall rules was not being followed, (3) certain configurations could be improved to provide additional security, and (4) wireless controller configurations could be strengthened.

We recommended TVA management (1) reinstitute the firewall rule review, (2) review interface configurations, and (3) review best practices documentation provided by the equipment manufacturer for the wireless controllers and implement best practices that could provide better control of or security around TVA's wireless environment(s). TVA management agreed with our recommendations.

Database Security Audit

As part of our annual audit plan, the OIG performed an audit of database security to determine the adequacy of (1) database security architecture, (2) Database Administrator (DBA) database access, (3) DBA log file access, (4) log file security architecture, and (5) database access control. We found (1) a lack of controls over DBA access to databases containing confidential and

sensitive information and (2) weak general controls for configuration management and password enforcement.

We recommended TVA management improve security controls in its production environment by (1) identifying and deploying privileged user access controls, (2) adding additional audit options, (3) identifying and deploying database configuration management controls as outlined in *NIST Special Publication 800-53 Recommended Security Controls for Federal Information Systems*, (4) reviewing and updating database password controls to meet TVA requirements, and (5) updating work instructions by adding database security requirements for development environments. TVA management agreed with our recommendations.

Operational Audits

Operational Audits applied certain agreed-upon procedures to assist the CRS in determining TVA's compliance with the annual reporting requirements of the Green Pricing Accreditation Program. We performed an evaluation of TVA's ERM program and identified improvement opportunities. The team completed an audit assessing whether TVA was adequately

addressing environmental risks. Lastly, we performed an audit that identified opportunities to improve the effectiveness of TVA's energy services contracts for federal customers.

Verification of TVA's Compliance with the Green Pricing Accreditation Program Requirements

TVA's Green Power Switch Program produces electric power from renewable resources such as solar, wind, and methane gas, and adds such sources to TVA's power mix. Both solar and wind power were produced in sufficient quantities to qualify for accreditation by the CRS. The OIG completed certain agreed-upon procedures to assist the CRS in determining TVA's compliance with the annual reporting requirements of the CRS Green Pricing Accreditation Program for the year ended December 31, 2013.

These procedures included steps to verify that the renewable energy supply was sufficient to meet sales; products met the Green-e criteria and stated product content; and marketing as well as product information was accurate and communicated to customers. The results of the procedures verified that TVA's Green Power sales were based on electricity generated or acquired from eligible renewable sources



Solar Powered Charging Kiosk Installed by TVA on Market Square

and otherwise met the above aspects. CRS was provided with results of the procedures applied.

Effectiveness of TVA's Enterprise Risk Management Program

According to TVA, its ERM program is an ongoing and evolving process designed to protect the value of the enterprise and realize opportunities for stakeholders by promoting efficient and effective risk management across TVA. TVA's ERM organization is a critical function of this

program and "is responsible for developing and improving the structure, processes, tools, and communication channels. . ." to support various critical elements of TVA's risk management program through the following: (1) governance, oversight, and leadership; (2) identification and prioritization of enterprise risks; (3) assessment and analysis of high priority risks; (4) coordination of the development and approval of risk management plans; (5) monitoring and reporting trends in high priority risks; and (6) risk disclosure. The ERM

organization also develops policies and procedures and works with TVA's strategic SBUs and BUs to facilitate the risk identification and risk assessment process. However, due to ERM's position in the organization, it does not generally have authority to enforce SBUs or BUs compliance with its policies, procedures, and initiatives.

Over the past three years, the OIG has performed several audits and evaluations covering certain TVA risks identified and assessed by SBUs or BUs pursuant to

guidance issued by TVA's ERM organization. In general, these audits and evaluations were designed to assess the adequacy of the respective SBUs' or BUs' strategies and/or actions to address these risks. Our most recent evaluation was initiated to assess the effectiveness of the ERM organization's role within TVA's overall risk management program. To aid in our assessment, we compiled the results of our prior audits and evaluations to identify common themes that bear on the ERM organization's effectiveness.

We found TVA had made improvements in its ERM program since the last OIG inspection in this area was performed in 2008, including the formalization of its risk management policies and procedures, continued efforts to drive the risk management culture into and across TVA, initiating efforts to improve the risk assessment process, and enhanced communications with the TVA Board and senior executives.

However, we also identified several areas for improvement that if not addressed could prevent TVA from having a sustainable, viable, and effective ERM program. Specifically, in comparing TVA's ERM practices to identified ERM best practices, we determined (1) risks were not aligned to strategic objectives

that support TVA's mission, (2) TVA had not established and communicated a risk appetite (which describes the organization's acceptance level of risk before it deems action to mitigate the risk is necessary) or risk appetite statement, (3) the risk management culture was not fully embedded throughout the organization, (4) risk tolerances reported by SBUs or BUs could be improved, and (5) multi-point risk assessments were not used as part of the risk assessment process. In addition, we determined (1) the current application used to collect and analyze risks limited the effectiveness and efficiency of the ERM program, and (2) information contained in the ERM policy and the process for reviewing the policy could be improved.

In an effort to align risks to strategic imperatives and improve communications on risk, during our evaluation, TVA transitioned away from using previous scorecard categories and objectives in favor of a multi-point risk reporting template to provide a broader perspective on risk and aid in gauging the appropriate level of mitigation required to manage risk within an acceptable tolerance level.

We made six recommendations for improving the effectiveness of the ERM program. Prior to issuing our report, TVA addressed the deficiencies in its review of risk management guidelines and policy. Management generally agreed with the remaining findings and recommendations.

TVA Environmental Risk Management

We evaluated the effectiveness of TVA processes for identifying and managing actual and potential environmental issues and risks. TVA's Environmental Management System (EMS) program was established to manage environmental impacts of TVA operations and help fulfill commitments listed in TVA's Environmental Policy. Within this purpose, EMS plays a significant role in managing environmental risks across TVA and sustaining a high level of environmental compliance in TVA operations.

Generally, TVA had effective processes for identifying and managing actual and potential environmental issues and risks at the end of FY 2013. However, we noted areas where environmental risk management processes could be strengthened. Specifically, we found environmental risks identified for business planning could be more comprehensive, more clearly defined, and integrated agency wide in order to help ensure their recognition

and resource availability. In addition, weaknesses in environmental review processes increase TVA risks and could be strengthened to demonstrate regulatory compliance and due diligence in assessing the potential environmental impacts of proposed agency decisions.

Many positive aspects of the EMS program were evident and demonstrated effectiveness of functions related to environmental risk management. However, we determined opportunities for enhancing TVA's EMS program existed in communicating with

regulators, coordinating planning processes, emergency response preparedness, environmental training, and sharing lessons learned.

We recommended process improvements related to identifying risks and integrating environmental information sources, system enhancements to strengthen environmental reviews, and enhancements to EMS functions. Management generally agreed with our findings and recommendations.

TVA's Energy Services Contracts for Federal Customers

TVA provides energy efficiency services to federal customers under the Federal Energy Services Program (FESP). In the fall of 2013, TVA's Industrial Marketing and Services group performed an evaluation of the FESP predecessor, Energy Services Company (ESCO) program, due to previously identified inconsistencies and gaps, including an absence of oversight or project controls and unclear roles and responsibilities.



Due to the potential risk to TVA, we conducted a programmatic review of ESCO and FESP. The objective of our review was to determine if the program was meeting its intended purpose of providing energy efficiency for the customer. Specifically, we reviewed program documentation and conducted interviews to determine (1) whether the intended purpose of providing energy efficiency for the customer was achieved, (2) if the program aligned with TVA's core mission and vision, (3) if programmatic gaps identified during TVA's internal review and programmatic

improvements were implemented to address the gaps, and (4) if other opportunities for improvements existed.

TVA was unable to provide documentation to allow determination of the amount of actual energy efficiency achieved, specifically by ESCO, for two of three customers participating in the program (as of the date of our audit report, TVA had not initiated a new project under FESP); therefore, we were unable to determine the total impact of ESCO on providing energy efficiency for the customer.

As a result, we were also unable to determine to what degree ESCO supported accomplishment of TVA's 2020 vision of greater energy efficiency. As part of our audit, we also assessed TVA's governance, oversight, execution and support analysis as well as business case documentation and found that while substantial improvements were made to the program, programmatic gaps and other opportunities for improvement existed. Management agreed with our findings and recommendations.



Fort Loudoun Dam

REPRESENTATIVE EVALUATIONS



Summary of REPRESENTATIVE EVALUATIONS

We completed ten evaluations during this semiannual period. Two were related to the Kingston Recovery Project and TVA's management of coal combustion products. Another three addressed systems and programs with poor ratings, preventive maintenance, and fire protection at coal plants. Two were related to nuclear groundwater monitoring and RO systems and components with poor ratings. Additionally, an evaluation of TVA's ERM program was performed by our Operational Audits department which was previously discussed under that department's work. Due to the sensitive subject matter of two evaluations completed in the period, no discussion of these is included in this report. More information on the results of our evaluations can be found below.

Kingston Recovery Project

On Monday, December 22, 2008, between midnight and 1 a.m., a portion of the dike for an ash containment area at Kingston Fossil Plant failed. Approximately 5.4 million cubic yards of fly ash and bottom ash were released onto land and into adjacent waterways, including the Emory River that flows into the Clinch River near the plant. The approximate 1 billion gallons of coal combustion waste slurry covered about 300 acres of which 8 were privately owned lands, not owned or managed by the TVA. The impacts of the coal ash spill destroyed and/or damaged (1) the railroad adjacent to the plant; (2) real and personal property; and (3) community infrastructure, including roads and utilities. TVA took immediate and ongoing actions to address the needs of those affected, clean up the spill, and protect human health and the environment. TVA also took action and made commitments to restore the area and regain public confidence.

TVA OIG committed to providing oversight where warranted and completed several reviews pertaining to the initial emergency response, root cause analysis, environmental monitoring, and impoundment stability. This review was initiated as part of that commitment to provide oversight of the Kingston Recovery Project. The objective of our review was to determine if TVA is meeting its commitments for the Kingston Recovery Project.

Our review found TVA has met, or is in the process of meeting, its commitments for

the Kingston Recovery Project. Tom Kilgore, former President and Chief Executive Officer of TVA, testified before the U.S. Congress several times stating TVA's commitment to clean up the spill, protect the public health and safety, restore the area, and look for opportunities as well as work closely with the leaders and residents of Roane County to make the area better than it was before the spill. Community leaders and regulatory personnel interviewed were satisfied with TVA's actions to meet its commitments.



Kingston Fossil Plant

In order to address these commitments, TVA has taken a number of steps. Specifically, TVA has cleaned up the ash spill and restored the area, protected public health and safety, kept the public and stakeholders informed and involved in the process, and helped with the economic development of Roane County. Some community leaders believe TVA has worked to make the area better than it was before the spill. The report did not contain any recommendations.

TVA's Coal Combustion Product Management

As a result of the Kingston ash spill, on July 21, 2009, the TVA Board adopted resolutions, one of which was to provide a formal Fossil Remediation Plan covering not only Kingston, but also all other fossil ponds including all mitigation plans or remediation actions in process, prior to August 20, 2009. This review was initiated as part of the TVA OIG



commitment to provide oversight of coal combustion product (CCP) management. The objective of our review was to determine if TVA is meeting its commitments for CCP management.

We found TVA was meeting its commitments for CCP management. We identified four areas of CCP management that TVA committed to improve: (1) programmatic improvements, (2) storage stability, (3) oversight, and (4) industry leadership.

In order to address these commitments, TVA has taken a number of steps. Specifically, we found TVA has implemented programmatic improvements, stabilized its coal ash storage facilities, and improved oversight of CCP management. Additionally, we found TVA was taking steps to become an industry leader in CCP management. The report did not contain any recommendations.

Actions to Address Coal Plant Systems and Programs with Poor Ratings

During a September 2012 review of how TVA organizations assess the condition of its assets, Survey of TVA's Process for Determining Condition of Assets, we learned that asset condition assessments done by Fossil Power Group (FPG) determined some generation assets were in poor condition. As a follow up

to the prior work, we initiated a review to determine whether TVA was taking actions to address FPG systems and programs with poor ratings, defined as those designated with a red or yellow rating. Red ratings indicated unacceptable performance and required monitoring and resources to maintain or operate. Yellow ratings indicated performance needed improvement and required additional attention.

We found actions were taken to address some programs and systems with poor health. We found 785 out of 1,617 programs and systems within FPG had been rated red or yellow. We randomly selected 35 programs and systems for detailed review. Actions taken by FPG to address the poor health resulted in an improvement in ratings or overall health of 17 programs and systems. However, there was no upgraded rating or improvement in system health for 18 systems. Of these 18 systems, 7 had no actions completed, while 11 had some actions completed without improvement in system health. The major reason cited for not completing actions was the lack of funding.

We also found system health reports were not completed or documented and required program health reports could

not be provided. Additionally, TVA standard programs and processes, Performance of Engineering Programs and System Health Reports, were superseded by engineering guidance documents which had no requirements, only recommendations. This could increase the number of health reports not completed or not completed in a timely manner. The absence of accurate and timely equipment health reports could make it more difficult for TVA to effectively manage equipment reliability risk.

We recommended the Senior Vice President, Power Operations, (1) document justification when actions are not taken to address systems and programs with red and yellow ratings, (2) reinforce the importance of consistent documentation of system health reports, and (3) consider the potential impact of eliminating the requirement to do asset health assessments on TVA's non-nuclear asset condition risk and determine a schedule for completing health assessments that will mitigate the risk of equipment failure.

Coal Plant Preventive Maintenance

Preventive maintenance (PM) is important to the reliable operation of assets. As a result of findings identified in a

September 2013 evaluation, Review of TVA's Nuclear Power Group Preventive Maintenance, we conducted a review of coal plant PM. PM is carried out at predetermined intervals, including PM routes, and intended to reduce the likelihood of a failure. The objective of our review was to determine if coal plant PM was performed in accordance with established schedules and if not, what effect the deviations were having.

We found compliance with PM schedules varied by plant and the PM compliance metric captured may not fully represent all PM activities deferred or not completed. The monthly PM compliance percentage varied from 10.5 to 100 percent. The most common reasons cited for not completing PM or adjusting the PM schedule was resource driven and/or due to emergent or sponsored work. We also found if a work order did not have the correct reconciliation code, a canceled PM work order would be counted as completed, which would skew the data. Reconciliation codes are essential for accurate reporting, but they were not a required field in the tracking system.

We found that both uncompleted PMs and unestablished PMs contributed to equipment failures. In a review of

65 Problem Evaluation Reports (PERs), we identified 6 PERs linking failures to PM issues. Four of those PERs related to equipment for which no PM schedule or requirement had been established, and 2 PERs related to uncompleted PMs. We also found plants were making progress implementing the new Maintenance Basis Optimization (MBO), but had experienced some delays in achieving target dates. Support of outages had impacted some site's abilities to complete its MBO phases. Additionally, we found the absence of PM requirements could make it harder to manage equipment reliability risk.

We recommended the Senior Vice President, Power Operations, (1) increase PM completion and reduce deviations from PM schedules as well as reinforce importance of PM activities, (2) develop a way to more accurately capture and report PM compliance and other appropriate PM tracking metrics, (3) expedite MBO efforts, and (4) consider the potential impact of having PM governed only by guidelines and not requirements.

Coal Fire Protection Systems Follow Up

This review was initiated as a follow up to the Review of TVA's Fossil Fire Protection Systems, September 30, 2011.

Fire protection systems are a combination of mechanical and electrical components and, like power generation equipment, need regular attention. The objective of our review was to determine if the fire protection systems were adequately maintained and mitigating actions were taken to minimize the impact of fires at TVA fossil plants.

We found TVA's maintenance of fire protection systems was improving; however, there was heightened risk of damaging fires at TVA sites due to (1) restoration times for certain priority systems exceeding TVA targets; (2) delays in addressing fire protection work orders; (3) instances of noncompliance with TVA's inspection, testing, and maintenance procedure; and (4) difficulties maintaining aging equipment. We noted improvements had also been made to minimize the impacts of fire, such as equipping fire trucks for each plant, replacing the fire brigade room at Kingston, and updating a portion of personal protective equipment for brigade members. However, many issues noted in the original inspection remained. For example, fire brigade members continued to have concerns about fire response preparedness, and lessons learned were not shared consistently across the fleet. We also found fire protection self-assessments presented the

condition of TVA's fire protection systems in a more positive manner than other sources might suggest were warranted.

We recommended the Senior Vice President, Power Operations, (1) take steps to restore impaired fire protection systems as appropriate to service and determine if additional personnel or resources are needed to expedite repairs of fire protection systems in the future; (2) determine the equipment needs of fire brigade members and take steps to provide that equipment; (3) identify additional training needs for fire brigade members and take steps to provide that training; (4) determine whether increased staffing is warranted for fire brigades; (5) create and implement a formal process for capturing and sharing lessons learned from fire events across the fleet; (6) amend the Fire Protection Self-Assessments to include ratings of fire protection system equipment, provide a more objective means for determining whether preventive maintenance was performed, reflect prioritization of impairments and work orders that are outstanding, and provide a synopsis of additional drivers of fire risk at each site.

TVA's Nuclear Groundwater Protection Program

Based on the findings of our June 2011 review, TVA's

Groundwater - Monitoring at Coal Combustion Products Disposal Areas, we evaluated the TVA Nuclear Power Group (NPG) Groundwater Protection Program (GWPP). Groundwater contamination can result from routine nuclear plant activities such as wet storage of spent fuel, leaks from liquid waste pipelines and tanks, and leaks of contaminated cooling water. NPG's GWPP was designed to prevent, detect, and mitigate impacts associated with potential subsurface and/or groundwater contamination. The objectives of our review were to determine if NPG's GWPP (1) performed required monitoring and reporting and (2) completed required corrective actions based on monitoring results.

While NPG's GWPP performed required reporting, we could not verify the monitoring requirements in TVA's NPG standard programs and processes were followed. Our review also found corrective actions were taken to address the leaks and spills at TVA's nuclear plants reported to the NRC for the time frame of our review. However, we found opportunities for programmatic improvements. There were instances where programmatic weaknesses were identified several times, over the last 5 years, and were not remediated. External assessments also noted

deficiencies in the program that were downgraded or excluded when NPG performed its fleet self-assessment. In addition, there was not a formal process in place to ensure recommendations and/or action items made by external consultants were addressed.

We recommended the Vice President, Functional Area and Outage Governance, (1) develop and implement a process that includes (a) appropriately classifying and addressing recommendations and/or action items identified in external assessments, (b) requiring documentation of deviations from recommendations to correct deficiencies identified by external assessments, and (c) capturing outstanding site and fleet deficiencies within periodic fleet self-assessments; (2) require sites to revisit outstanding programmatic weaknesses to develop a remediation plan and establish a timeframe for completion and if no action is planned, document the reasons; and (3) incorporate the Senior Manager, Chemistry Oversight, in the remediation efforts for deficiencies identified by external consultants and industry groups to ensure issues are appropriately addressed and lessons learned and best practices are shared among NPG sites and implemented at a fleet level when needed.

Actions to Address River Operations Systems and Components with Poor Ratings

During a September 2012 review of how TVA organizations assess the conditions of assets, Survey of TVA's Process for Determining Condition of Assets, we learned asset condition assessments completed by RO had determined some assets were in deteriorated condition. As a follow up to the prior work, we reviewed whether TVA was taking actions to address RO systems and components with deteriorated conditions. Assets with deteriorated conditions were designated with a red or yellow rating. According to RO personnel, red ratings indicated equipment condition was poor, while yellow ratings indicated equipment condition was marginal.

We found actions had been taken to address some systems and components with poor or marginal health. In RO, 1,438 systems and components had been rated red or yellow. We randomly sampled 50 (8 reds and 42 yellows) for detailed review. Of the 8 systems and components with a red rating, all had either a project or work order developed to address the condition as required by the guidance, 5 had actions in progress, and 3 had no actions underway or planned within the next 3 years. Of the 42 systems

and components with yellow ratings, 32 had no actions taken and 10 had projects developed to address the identified deficiency. Of the 10 systems and components that had projects developed, 2 had projects that were funded or being worked, 7 had projects that were not currently funded, and 1 had a project that was completed.

Additionally, we found TVA had identified asset condition of non-nuclear generation as a top enterprise risk in FY 2014. TVA's policies and procedures were superseded by an engineering guidance document which had no requirements, only recommendations. This could result in health assessments not being completed. Without accurate and timely equipment health assessments, TVA cannot effectively manage equipment reliability risk.

We recommended the Vice President, RO, (1) consider the potential impact to non-nuclear asset condition risk of eliminating the requirement to do asset health assessments and determine a schedule for completing health assessments that will adequately mitigate the risk of equipment failure and (2) document justification when actions are not taken to address systems and components with a red rating.

REPRESENTATIVE INVESTIGATIONS



Summary of REPRESENTATIVE INVESTIGATIONS

This reporting period, our investigative results include criminal sentencing of three individuals, numerous administrative actions, and savings and restitution—to TVA and to a private entity—exceeding \$200,000. We opened 134 cases and closed 123. Representative highlights of our activities follow.

Former TVA Vendor Sentenced

As previously reported, a TVA OIG investigation resulted in former TVA vendor Frank Lewis Conn's indictment on five counts of wire fraud. Mr. Conn was an owner of a company that contracted with TVA to remove vegetation from power lines and other TVA property across the Tennessee Valley. The federal indictment alleged he devised a scheme to defraud TVA of \$152,712 through the use of fraudulently inflated invoices. Based on his January guilty plea to one count of the indictment, he appeared for sentencing May 28, 2014. Mr. Conn was ordered to pay TVA \$72,000 restitution and sentenced to three months of home detention and two years of probation. The judge additionally mandated he write an essay for publication in his local newspaper describing the difference between a "mistake" and a deliberate choice.

Prosecution Complete for Former TVA Vice President

During September 2013 Masoud Bajestani, former Vice

President, Watts Bar Nuclear Plant Unit 2, pled guilty to federal charges of conspiracy to violate the International Emergency Economic Powers Act and Iranian Transactions Regulations (one count), and filing false income tax returns (two counts). He also agreed to the forfeiture of \$600,000 in U.S. currency, representing the funds used to promote his unlawful activity. On June 17, 2014, he was sentenced to two years of probation, 120 hours of community service, and the \$600,000 forfeiture agreed to in his plea.

On August 15, 2014, roughly 20 percent of the \$600,000 forfeiture—\$119,592—was credited to TVA OIG Investigations, with the requirement, per U.S. Department of Justice guidelines, that it be used for law enforcement purposes only and not to replace or supplant existing budgeted resources. (The remainder of the \$600,000 will be dispersed to other agencies, chiefly Homeland Security Investigations and the Internal Revenue Service Criminal Investigations Division.)

TVA Senior Manager Resigns

Investigative activity revealed a TVA senior manager used TVA travel and credit cards, in violation of TVA policy, to make more than \$16,000 in personal purchases or for purchases lacking documentation. The individual reimbursed questioned charges. Additionally, evidence indicates the senior manager falsified U.S. Office of Government Ethics Confidential Financial Disclosure Reports by not reporting personal travel paid for by outside companies. Prosecution was declined in these matters. As a result of our report to management, it was determined the senior manager could not continue to effectively serve, and the individual resigned from TVA.

Medical Certificate Falsification

TVA OIG investigated an allegation that a TVA truck driver falsified the required Medical Examiner's Certificate for an S05 Commercial Driver's License (commonly referred to as an "S-5"), and submitted it to TVA. During an OIG interview,

the individual acknowledged he falsified the S-5 by photocopying another employee's card, inserting his own name, and faxing the result to TVA management. For approximately five months, management relied on the authenticity of the card to allow the driver to continue his duties. Following a report issued by TVA OIG, the employee was terminated, and his future TVA employment has been permanently restricted.

Fraud Risk Assessments

OIG Investigations facilitates fraud risk assessments (FRA) to proactively assist TVA with fraud prevention. While not a

traditional OIG audit, evaluation, or investigation, the OIG, acting in the role of facilitator, assists TVA through the FRA process with the dual purpose of preventing fraud and saving ratepayers unnecessary expense. The FRA process primarily focuses on the identification of potential fraud schemes, as well as existing fraud-prevention controls, with the objective of identifying opportunities for strengthening internal controls to reduce the potential for fraud. An effective FRA team includes stakeholders from the TVA business unit conducting the assessment who are willing to "think deviantly" to brainstorm

and identify fraud schemes that could occur, then discuss controls to prevent those schemes.

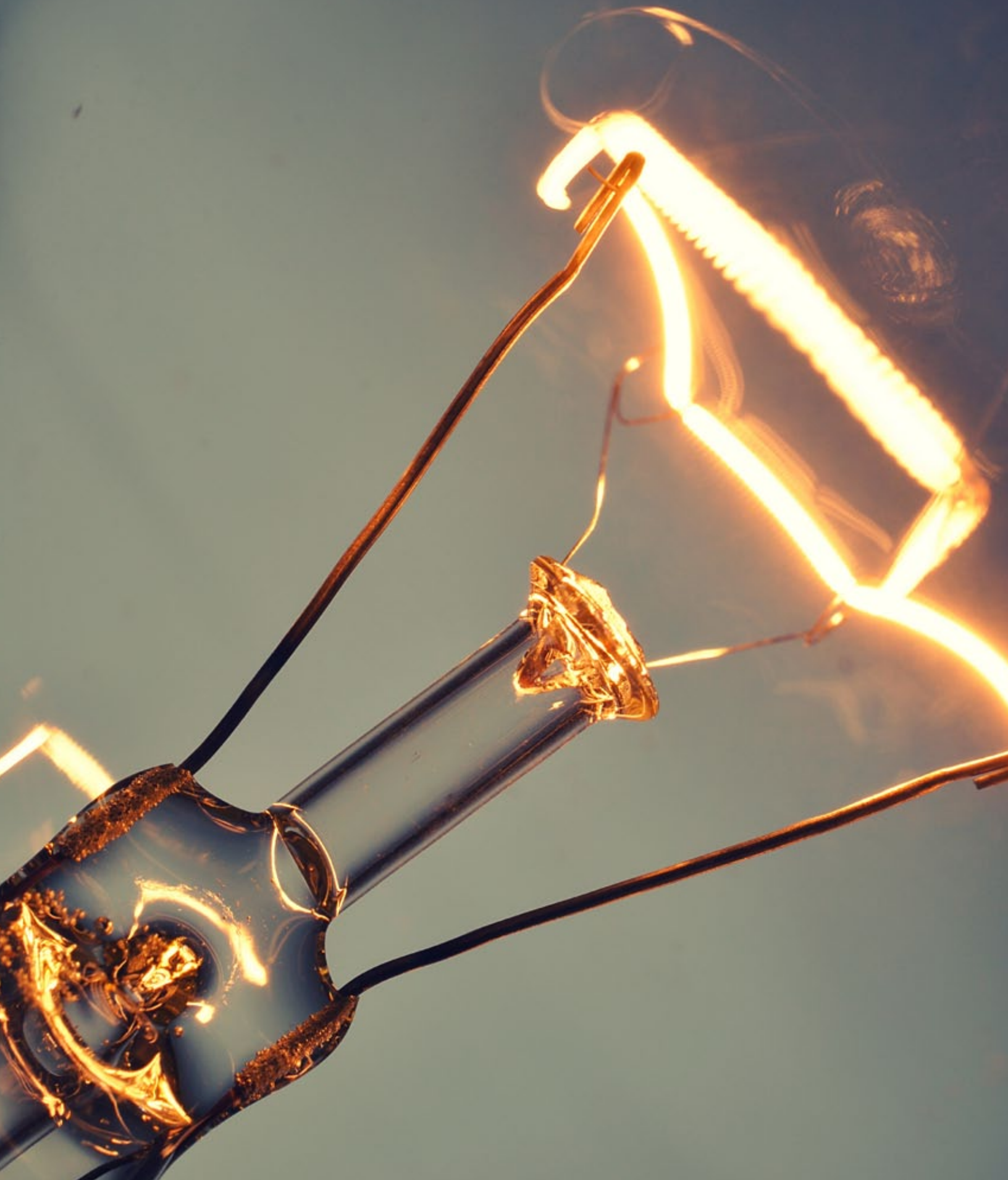
During this reporting period, the OIG facilitated FRA on the following: a major contractor company's (Gilbert Union Boiler-Morrison Knudsen) modification and supplementary maintenance services, TVA's Natural Gas Services, Disbursement Services, and Occupational Health/Workers' Compensation Program.



Apalachia Dam



LEGISLATION & REGULATIONS



LEGISLATION & REGULATIONS

Section 4(a) of the Inspector General Act of 1978, as amended, provides that the IG 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 particular wording.

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

Colbert Fossil Plant





APPENDICES

INDEX OF REPORTING REQUIREMENTS UNDER THE INSPECTOR GENERAL ACT

REPORTING	REQUIREMENT	PAGE
Section 4(a)(2)	Review of Legislation and Regulations	46-47
Section 5(a)(1)	Significant Problems, Abuses, and Deficiencies	24-45
Section 5(a)(2)	Recommendations With Respect to Significant Problems, Abuses, and Deficiencies	24-45
Section 5(a)(3)	Recommendations Described in Previous Semiannual Reports in Which Corrective Action Has Not Been Completed	Appendix 5
Section 5(a)(4)	Matters Referred to Prosecutive Authorities and the Prosecutions and Convictions That Have Resulted	Appendix 6
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	24-45
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	Appendix 4
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 the Inspector General during the reporting period and if none, a statement of the date of the last peer review.	Appendix 9
Section 5(a)(15)	List of outstanding recommendations from any peer review conducted by another Office of the 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.	Appendix 10

APPENDIX 2

OIG AUDIT REPORTS • Issued During the Six-Month Period Ended September 30, 2014

Report Number and Date	Title	Questioned Costs	Unsupported Costs	Funds Put To Better Use
CONTRACT AUDITS				
2013-15239 05/29/2014	Comdata Network, Inc.	\$1,046,599	\$940,752	\$0
2014-15186 06/18/2014	State of Alabama (Alabama Emergency Management Agency and Alabama Department of Public Health)	\$0	\$0	\$0
2014-15039 06/30/2014	Choctaw Generation LTD	\$17,809	\$12,674	\$0
2014-15036 09/03/2014	Bartlett Holdings, Inc.	\$1,547,434	\$0	\$0
2014-15223 09/17/2014	Proposed Rate Changes for Engineering Services	\$0	\$0	\$512,000
CORPORATE GOVERNANCE AND FINANCE AUDITS				
2014-15027 06/23/2014	TVA's Official Stations	\$0	\$0	\$0
2013-15106 09/04/2014	Revenue Billing's Invoice Preparation	\$0	\$0	\$0
OPERATIONAL AUDITS				
2014-15071 06/19/2014	Agreed-Upon Procedures – Center for Resource Solutions' Green-e Energy Program	\$0	\$0	\$0
2013-14959 08/07/2014	TVA Environmental Risk Management	\$0	\$0	\$0
2014-15075 08/20/2014	Energy Services Contracts for Federal Customers	\$0	\$0	\$0
INFORMATION TECHNOLOGY AUDITS				
2011-14054 06/17/2014	PLUS Implementation Audit	\$0	\$0	\$0
2013-15296 06/24/2014	Plant Cyber Security Assessment	\$0	\$0	\$0
2013-15052 07/23/2014	TVA Supply Chain Risks Associated with Procuring IT Equipment	\$0	\$0	\$0
2014-15065 09/23/2014	Network Security Zones and Perimeter Architecture Audit	\$0	\$0	\$0
2014-15064 09/29/2014	Oracle Database Security	\$0	\$0	\$0
TOTAL AUDITS (15)		\$ 2,611,842	\$ 953,426	\$ 512,000

OIG EVALUATION REPORTS • Issued During the Six-Month Period Ended September 30, 2014

Report Number and Date	Title	Questioned Costs	Unsupported Costs	Funds Put To Better Use
2013-15332 06/02/2014	Effectiveness of TVA's Enterprise Risk Management Program	\$ 0	\$ 0	\$ 0
2013-15157 06/05/2014	Actions to Address River Operations Systems and Components with Poor Ratings	\$ 0	\$ 0	\$ 0
2013-15135 07/30/2014	Actions to Address Coal Plant Systems and Programs with Poor Ratings	\$ 0	\$ 0	\$ 0
2014-15218 09/03/2014	Kingston Recovery Project	\$ 0	\$ 0	\$ 0
2014-15056 09/25/2014	Nuclear Groundwater Review	\$ 0	\$ 0	\$ 0
2014-15053 09/29/2014	Coal Plant Preventive Maintenance	\$ 0	\$ 0	\$ 0
2014-15216 09/29/2014	Follow-up Review of Coal Fire Protection	\$ 0	\$ 0	\$ 0
2012-14882 09/30/2014	Injury Reporting at TVA	\$ 0	\$ 0	\$ 0
2014-15055 09/30/2014	Process for Determining Cost Information Used in Making Commitment and Dispatch Decisions for Coal and Combined Cycle Plants	\$ 0	\$ 0	\$ 0
2014-15217 09/30/2014	Coal Combustion Product Management	\$ 0	\$ 0	\$ 0
TOTAL EVALUATIONS (10)		\$ 0	\$ 0	\$ 0

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



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	3	\$2,611,842	\$953,426
Subtotal (A+B)	3	\$2,611,842	\$953,426
C. For which a management decision was made during the reporting period	3	\$2,611,842	\$953,426
1. Dollar value of disallowed costs	3	\$2,611,842	\$953,426
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

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

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	\$414,250
B. Which were issued during the reporting period	1	\$512,000
Subtotal (A+B)	2	\$926,250
C. For which a management decision was made during the reporting period	1	\$414,250
1. Dollar value of recommendations agreed to by management	1	\$414,250
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	1	\$512,000

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

EVALUATION REPORTS WITH NO MANAGEMENT DECISION

The following evaluation report was issued before the commencement of the semiannual period; however, management decision on all the recommendations in this report had not been received by the end of the reporting period.

Evaluation Report Number and Date	Report Title, Summary, and Explanation of Reasons Management Decision was Not Made by the End of the Reporting Period
2013-14950 09/19/2013	<p>TVA's Succession Planning</p> <p>The TVA has stated its future depends on effective succession planning and faces a potential workforce challenge due to retirements within the next five years. Also, TVA has identified a risk of senior leadership attrition that could leave a gap in key positions. This review was conducted as a follow up to a previous OIG review to assess TVA's succession planning.</p> <p>Our review found TVA has made improvements to succession planning; however, areas for improvement still exist. Improvements include the use of a talent grid, implementation of succession planning metrics, and a more accurate attrition prediction model. In addition, we found TVA could strengthen some best practices.</p> <p>While TVA has made progress in its succession planning process, we found through interviews and review of documentation areas for improvement still exist, including: (1) follow up on action items identified in talent reviews, including the development of organizational action plans; (2) cross-pollination of talent; (3) reduction of talent review preparation time; and (4) less frequent revisions of the talent review and succession planning process, which have caused frustration among TVA management. Additionally, TVA is working to address areas of concern regarding populating the succession plans with realistic candidates.</p> <p>As part of this review, we identified succession planning best practices and compared them to the processes TVA currently has in place. Of ten best practices identified, we found TVA could strengthen executive ownership, onboarding of succession candidates, and transparency of the succession planning process. In addition to these findings, all TVA managers who were interviewed expressed concerns with the use of forced distribution for the talent grid.</p> <p>We recommended the Vice President, Human Resources: (1) work in conjunction with TVA organizations to improve follow-up actions by developing organizational action plans as stated in TVA-SPP-11.301, Succession Planning, Section 3.2.3; (2) evaluate options to incorporate cross-pollination of TVA organizations into the succession planning process, including a unified succession planning system that could also reduce talent review preparation; (3) determine if changes and initiatives to the talent review and succession planning process are working and intended results are achieved before additional changes are made; (4) complete and implement the Strategic Workforce Management, Standard Programs and Processes, including a unified definition for a mission critical position; (5) work with TVA management to develop a plan that promotes executive ownership of talent development; (6) consider developing formalized transition plans, similar to the Nuclear Power Group, in other organizations; (7) clarify the succession planning process by producing a high-level, TVA-wide communication that describes the talent review and succession planning process, and consider the merits of communicating performance and potential.</p> <p>We did not receive management decision or a date for final action on two of the seven recommendations, numbers one and five above, by the end of the reporting period.</p>

AUDIT AND EVALUATION REPORTS WITH CORRECTIVE ACTIONS PENDING

As of the end of the semiannual period, final corrective actions associated with 19 audits and seven evaluations/inspections reported in previous semiannual reports were not completed. Presented below for each audit and evaluation are the report number and date and a brief description of final actions 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
2010-13132 06/15/2011	Physical and Logical Access for Contractors TVA agreed to create a cross-reference matrix of TVA roles to assets with the associated qualification/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 December 31, 2014.
2011-14177 04/23/2012	Site Cyber Security Audit TVA agreed to (1) review the three servers without logon banners and, if technically feasible, add the logon banner, perform a comprehensive review of unnecessary services and protocols, implement restrictions on the basis of operations requirement, and research utilizing Secure Shell (Version 2) for remote access with vendors and, if technically feasible, implement Secure Shell; and (2) monitor all production servers using the configuration management tool. Management expects to complete final action by December 31, 2014.
2011-14244 09/28/2012	TVA's Direct Load Control Program TVA agreed to develop a strategy for replacing the Direct Load Control Program. TVA recently informed the OIG it had bought out the ten-year contracts of ten of the twelve distributors participating in the program and does not plan to adjust the wholesale credits for these two participants until a replacement program is developed. Management expects to complete final action by January 30, 2015.
2012-14567 01/30/2013	Building and Infrastructure Failure Risks TVA agreed to (1) reexamine its approach to challenged properties under its Strategic Real Estate Plan, (2) enhance Tririga functionality and other tools for building asset information, and (3) address weaknesses in the Tririga production database. Management expects to complete final action by September 30, 2015.
2013-14983 06/14/2013	Protection of Personally Identifiable Information on TVA Desktop and Laptop Computers TVA management agreed to evaluate the feasibility of full-disc encryption and other methods of protection of data on TVA personnel computers. Management expects to complete final action by September 30, 2015.
2012-14619 06/18/2013	Effectiveness of Substation Modem Access TVA Information Technology agreed to work with the business units to update the request and provisioning process and to develop processes for providing inventory information. TVA Energy Delivery is working with the meter interrogation vendor to modify the nightly program to include a check of password settings. Management expects to complete final action by September 30, 2014.
2013-15265 10/10/2013	Proposal for Engineering Services TVA will require the vendor to submit their actual salary ranges for the labor classifications in question and review these rates for incorporation into the contract. Management expects to complete final action by October 10, 2014.
2013-15185 11/07/2014	Proposal for Engineering Services TVA agreed to amend its contract with the vendor to add new salary ranges and revise the contract language. Management expects to complete final action by November 7, 2014.
2012-14631 11/14/2013	Review of TVA's Management of Combustible Coal Dust TVA agreed to (1) use a previously created short- and long-term combustible dust projects spreadsheet that includes fleet-wide prioritization and funding requirements and update it quarterly; (2) develop policies and procedures to replace the Combustible Dust Program document; (3) continue to evaluate projects, such as installing shed plates to prevent reaccumulation of dust in hard-to-reach areas; and (4) develop a site-specific combustible dust procedure template that will be provided to all coal sites. Management expects to complete final action by November 14, 2014.

APPENDIX 5

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
2012-14666 11/15/2013	<p>URS Energy & Construction, Inc.</p> <p>TVA agreed to take action to ensure (1) URS obtains TVA technical contract manager (TCM) approval for applicable subcontracts and change orders on future work, (2) contract language is revised to specify when TVA TCM approval is not required, and (3) URS cannot circumvent subcontract change order approval requirements. TVA intends to pursue (1) collection of URS' markup of \$168,623 and (2) an amendment to the contract language which will clarify that any future services and equipment TVA provides will be a direct pass through with no markups/fee. Management expects to complete final action by November 15, 2014.</p>
2013-15314 12/12/2013	<p>Proposal for Construction/Modification Services for Transmission/Power Supply Program</p> <p>TVA management stated (1) they had rejected the vendor's noncraft labor rates, and noncraft labor will be included in the agreed-upon overhead and general and administrative (G&A) markup rates; and (2) the draft contract will be conformed into a final document that accurately defines how TVA intends to compensate the vendor. Management expects to complete final action by December 12, 2014.</p>
2013-14948 12/18/2013	<p>AirWatch Pre-implementation Audit</p> <p>TVA Information Technology management agreed to (1) complete initial setup of AirWatch as part of the Mobile Enablement project; (2) address business case, strategy, requirements, and perform a risk assessment as part of the Mobile Enablement project; (3) review mobile device policies and procedures; and (4) address wireless, iTunes backup, and Bluetooth issues in a separate project. Management expects to complete final action by December 5, 2014.</p>
2013-15252 01/08/2014	<p>Proposal for Construction/Modification Services for Transmission/Power Supply Program</p> <p>TVA (1) agreed to negotiate the lowest allowable rates for G&A costs, insurance, and equipment; (2) rejected the vendor's noncraft labor rates and stated noncraft labor will be included in the agreed-upon overhead and G&A markup rates; and (3) TVA will conform the draft contract into a final document that accurately defines how TVA intends to compensate the vendor. Management expects to complete final action by January 8, 2015.</p>
2012-14912 01/21/2014	<p>AMEC Environment and Infrastructure, Inc.</p> <p>TVA agreed to pursue recovery of \$100,441 in overbilled costs. Management expects to complete final action by January 21, 2015.</p>
2013-15190 02/03/2014	<p>Proposal for Hydro Modernization and Rehabilitation</p> <p>TVA agreed to (1) negotiate the recommended markups for fixed-price work, (2) negotiate the recommended overhead and G&A rates, (3) include contract language to ensure the vendor cannot bill more than 40 hours per week for nonmanual employees, (4) obtain a comprehensive list of equipment rates prior to completing negotiations and specify the cost components of the equipment rates in the contract, and (5) consider expanding the performance-based fee language to the vendor's fixed price and time and materials pricing. Management expects to complete final action by February 3, 2015.</p>
2013-15330 02/10/2014	<p>Proposal for Construction/Modification Services for Transmission/Power Supply Program</p> <p>TVA (1) agreed to negotiate to remove small tools and workers' compensation from the vendor's markup rates, (2) stated no separate overtime burden rate will be allowed, (3) is negotiating an equipment rate list that reflects the lower of TVA's equipment support services or the lowest rate submitted by all bidders, and (4) will conform the draft contract into a final document that accurately defines how TVA intends to compensate the vendor. Management expects to complete final action by February 10, 2015.</p>
2013-15104 02/12/2014	<p>PowerWAN Security and Architecture</p> <p>TVA agreed to (1) modify system configuration policies and practices to better harden systems, (2) modify password policies to comply with TVA policies, (3) develop policies and practices to ensure legitimate traffic is traversing the PowerWAN network, and (4) limit clear-text protocols and restrict traffic to specific hosts/destinations and protocols/ports. Management expects to complete final action by May 1, 2015.</p>
2013-15350 02/13/2014	<p>Proposal for Construction/Modification Services for Transmission/Power Supply Program</p> <p>TVA management stated (1) they had rejected the vendor's noncraft labor rates, and noncraft labor will be included in the agreed-upon overhead and G&A markup rates; and (2) the draft contract will be conformed into a final document that accurately defines how TVA intends to compensate the vendor. Management expects to complete final action by February 13, 2015.</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
2011-14477-01 03/28/2014	<p>Follow-Up Audit of TVA's Financial Trading Program</p> <p>TVA agreed to take action on each of the nine recommendations made in our report. At the end of this reporting period, actions were not complete for five of the following recommendations: (1) TVA agreed with the recommendation to improve and consolidate performance reports for monitoring fuel costs and associated risks and will examine the effectiveness of the risk measures currently reported and streamline the front- and middle-office reporting so that there is one official version of reporting metrics. TVA disagreed with the recommendation to develop a metric specific to natural gas exposure risk. (2) TVA agreed that VaR should not be the primary risk metric and should be replaced with "at risk" measures such as fuel cost at risk, liquidity at risk, and individual counterparty maximum potential exposure limits (credit risk). TVA is in the process of implementing a programmatic solution for risk measurement and reporting which will be able to calculate fuel cost at risk. TVA will also investigate whether or not the credit system currently being implemented can calculate liquidity at risk and individual counterparty maximum potential exposure. If an automated solution is not available, TVA will develop a manual approach for monitoring these risks. (3) TVA agreed to perform routine stress testing after implementation of its risk analytics solution for risk measurement and reporting. (4) TVA put new Fossil Fuel and Power Commodity Risk Guidelines into effect on November 1, 2013, that superseded the Commodity Risk Management Policy whose language addressed stress tests. In addition, TVA has initiated the process to retire the Financial Trading Program SPP. (5) TVA agreed to evaluate its physical and financial positions to effectively manage portfolio risks. In addition, TVA agreed to focus on TVA's total energy commodity portfolio as it implements Mercatus' recommendations and updates its governance documents. Management expects to complete final action by November 30, 2014.</p>

Paradise Fossil Plant



AUDIT AND EVALUATION REPORTS WITH CORRECTIVE ACTIONS PENDING (CONTINUED)

Evaluation Report Number and Date	Report Title and Recommendations on which Final Action is Not Complete
2008-11829 06/02/2010	TVA Records Retention TVA agreed to continue current plans to replace the Electronic Data Management System. Management expects to complete final action by May 29, 2015.
2012-14535 03/21/2013	Master Key Program Management – Energy Delivery 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. Management expects to complete final action by September 30, 2016.
2012-14636 08/28/2013	Master Key Program Management – Property & Natural Resources TVA agreed to develop standard policies and procedures and secure facilities protected by master keys to minimize the risk posed by master keys outside TVA's control. Management expects to complete final action by September 30, 2015.
2013-14950 09/19/2013	TVA's Succession Planning TVA provided a corrective-action plan for five of the seven recommendations made in the report. Until corrective action planned for the remaining two recommendations is provided, a target date for final action is not determinable. See also Appendix 4.
2012-14845 09/24/2013	TVA's Nuclear Power Group Preventive Maintenance TVA agreed to address the issue with the "Counts as Deferral" flag used in preventive maintenance tracking and expedite preventive maintenance organization efforts. Management expects to complete final action by June 1, 2015.
2012-14789 09/27/2013	TVA's Capital Projects Approval Process TVA agreed to design and implement a forecasting and project prioritization process that will capture budget and forecasting information at a project level in a timely, accurate manner. Management expects to complete final action by October 30, 2014.
2012-14587 10/17/2013	Nuclear Power Group and Coal and Gas Operations Critical Spare Parts Program 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; (4) develop processes and procedures required to manage critical spare information; and (5) 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 October 17, 2014.

INVESTIGATIVE REFERRALS AND PROSECUTIVE RESULTS¹

Referrals	
Subjects Referred to U.S. Attorneys	16
Subjects Referred to State/Local Authorities	0
Results	
Subject Indicted	0
Subjects Convicted	0
Pretrial Diversion	0
Referrals Declined	14

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



HIGHLIGHTS – STATISTICS

	SEPT 30, 2014	MAR 31, 2014	SEPT 30, 2013	MAR 31, 2013	SEPT 30, 2012
AUDITS					
AUDIT STATISTICS					
Carried Forward	24	28	38	32	35
Started	20	17	21	23	28
Canceled	(1)	(1)	(1)	(1)	(6)
Completed	(15)	(20)	(30)	(16)	(25)
In Progress at End of Reporting Period	28	24	28	38	32
AUDIT RESULTS (Thousands)					
Questioned Costs	\$2,612	\$635	\$2,916	\$1,262	\$11,708
Disallowed by TVA	\$2,612	\$308	\$647	\$2,039	\$9,153
Recovered by TVA	\$484	\$164	\$2,447	\$559	\$4,168 ¹
Funds to Be Put to Better Use	\$512	\$9,584	\$36,522	\$0	\$10,204
Agreed to by TVA	\$414	\$20,938	\$23,100	\$0	\$1,235
Realized by TVA	\$13,114	\$375	\$2,479	\$145	\$1,235
OTHER AUDIT-RELATED PROJECTS					
Completed	10	5	5	7	10
Cost Savings Identified/Realized (Thousands)	\$0	\$0	\$0	\$0	\$0
EVALUATIONS					
Completed	10	3	6	6	6
Cost Savings Identified/Realized (Thousands)	\$0	\$0	\$0	\$0	\$0
INVESTIGATIONS²					
INVESTIGATION CASELOAD					
Opened	134	112	173	134	148
Closed	123	148	158	105	157
In Progress at End of Reporting Period	163	150	179	160	128
INVESTIGATIVE RESULTS (Thousands)					
Recoveries	\$89.1 ³	\$10,874.7 ⁴	\$899.9	\$0	\$4,416.4
Savings	\$125	\$0	\$550.4	\$770.2	\$1,454.7
Fines/Penalties	\$0.8	\$1	\$603.8	\$0	\$0.3
Other Monetary Loss	\$0	\$0	\$519.3	\$0	\$83.4
MANAGEMENT ACTIONS					
Disciplinary Actions Taken (# of Subjects)	14	22	18	16	11
Counseling/Management Techniques Employed (# of Cases)	12	14	20	14	20
Debarment	0	0	0	0	0
PROSECUTIVE ACTIVITIES (No. of Subjects)					
Referred to U.S. Attorneys	16	14	18	13	12
Referred to State/Local Authorities	0	2	0	0	7
Indicted	0	5	0	2	1
Convicted	0	1	2	4	1
Pretrial Diversion	0	1	0	0	0

¹ Includes \$109,054 recovered in excess of amounts decided by management.

² These numbers include task force activities and joint investigations with other agencies.

³ \$12,573 of this amount is restitution ordered to be paid to a non-governmental financial institution as the result of a criminal investigation.

⁴ \$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 Valley-wide investors under the pretense that they were helping fund the Kingston ash spill remediation.

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, OIG issued no contract review reports under this requirement.

Sequoyah Nuclear Plant



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://www.oig.tva.gov/PDF/PeerReviewReport03312014>.

Investigations Peer Review

Investigative operations undergo an external peer review, Quality Assessment Review (QAR), at least once every three years. The United States Department of Commerce OIG conducted a QAR of the TVA OIG Investigative Operations. The Commerce OIG found the "...system of internal safeguards and management procedures for the investigative function of the Office of 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/PDF/22NOV2013-tvaog-inv-peer-review.pdf>.



Peer Review of the Audit Organization of the Board of Governors of the Federal Reserve System and the Consumer Financial Protection Bureau Office of Inspector General

The TVA OIG completed a peer review of the audit operations of the Board of Governors of the Federal Reserve System and the Consumer Financial Protection Bureau (FRB/CFPB) OIG. We issued our final report to the FRB/CFPB Inspector General on September 4, 2014, in which we reported that in our opinion, the system of quality control for the audit organization of the FRB/CFPB OIG, in effect for the 12-month period ended March 31, 2014, had been suitably designed and complied with to provide the FRB/CFPB OIG with reasonable assurance of performing and reporting in conformity with applicable professional standards in all material respects. Accordingly, the FRB/CFPB OIG received a peer review rating of pass. FRB/CFPB OIG has posted its peer review report on its Web site at <http://oig.federalreserve.gov/reports/peer-reviews.htm>.



The background of the page is a complex, abstract geometric pattern composed of numerous triangles in various shades of dark gray and black. These triangles are arranged in a way that creates a three-dimensional, crystalline effect, with some triangles appearing to overlap others. At the top of the page, there is a solid white horizontal bar. Centered within this bar is the word "GLOSSARY" in a dark gray, serif, all-caps font.

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.

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

ABBREVIATIONS & ACRONYM

The following are acronyms and abbreviations widely used in this report.

AIG	Assistant Inspector General
BU	Business Units
CCP	Coal Combustion Product
CRS.....	Center for Resource Solutions
DBA	Database Administrator
EMS	Environmental Management System
ERM	Enterprise Risk Management
ESCO	Energy Services Company
FESP	Federal Energy Services Program
FPG.....	Fossil Power Group
FRA.....	Fraud Risk Assessments
FRB/CFPB.....	Board of Governors of Federal Reserve System and the Consumer Financial Protection Bureau
FY	Fiscal Year
GAO	Government Accountability Office
GWPP	Groundwater Protection Program
IG	Inspector General
IT	Information Technology
LPC.....	Local Power Companies
MBO	Maintenance Basis Optimization
NPG.....	Nuclear Power Group
OEI	Organizational Effectiveness Initiative
OIG.....	Office of the Inspector General
PERs.....	Problem Evaluation Reports
PM	Preventive Maintenance
QAR.....	Quality Assessment Review
REP	Radiological Emergency Preparedness
RO	River Operations
SBU.....	Strategic Business Units
SIGTARP	Special Inspector General for the Troubled Asset Relief Program
STAR.....	Strategic Teamwork for Action and Results
TCM.....	Technical Contract Manager
TQ	Total Quality
TVA.....	Tennessee Valley Authority
TVA BOARD	TVA Board of Directors
U.S.	United States of America



OFFICE of the INSPECTOR GENERAL

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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 is administered by a third-party contractor and 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). You may report your concerns anonymously or you may request confidentiality.



BE A HERO

REPORT FRAUD

Contact the OIG EmPowerline® at 855-882-8585
or online at www.OIGempowerline.com



YOU CAN MAKE A DIFFERENCE

If you see or suspect wrongdoing, say something. TVA may be able to recover money and you could receive a cash reward from the TVA Office of the Inspector General. Visit our EmPowerline® Web site at www.oigempowerline.com or call toll-free at 855-882-8585.

OIG *Leadership* PHILOSOPHY

The TVA OIG strives to be a high performing organization made up of dedicated individuals who are empowered, motivated, competent, and committed to producing high quality work that improves TVA and life in the Valley.

Each of us has important leadership, management, team, and technical roles. We value integrity, people, open communication, expansion of knowledge and skills, creative problem solving, and collaborative decision-making.



Office of the Inspector General
TENNESSEE VALLEY AUTHORITY
Semiannual Report
April 1, 2014 - September 30, 2014