

# REBUILDING *the* FOUNDATION

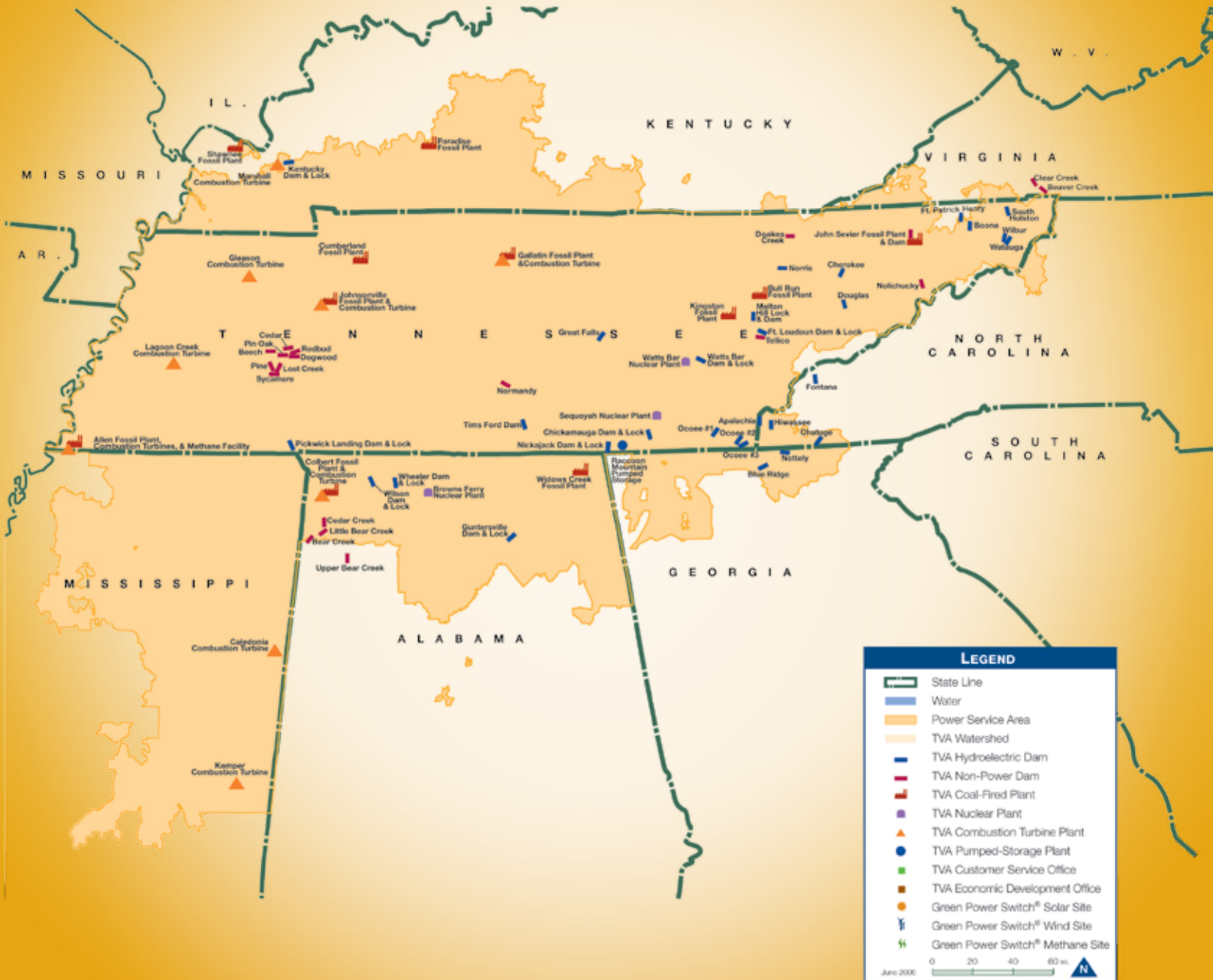
Office of the Inspector General  
Tennessee Valley Authority  
Semiannual Report  
April 1, 2009–Sept. 30, 2009

Kingston Plant December, 2008





# Tennessee Valley Region



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Rebuilding the **Foundation.**

*Message from the* **Inspector General**

## Message From The Inspector General

*Change is coming to TVA... and much of it is internally driven. Undoubtedly, the coal ash spill at the Kingston plant on December 22, 2008, set some of those changes in motion, but the TVA Board and TVA management have reacted with a commitment to make the changes necessary to make TVA better. Yes, Kingston was an environmental tragedy, but ultimately the TVA that is emerging is likely to be better able to serve the needs of Valley residents. As we have pointed out in our reports on Kingston, this was a disaster that did not need to occur. That is, however, true of most failures whether personal or, as in the case of TVA, institutional. And as with most failures, there are new opportunities for growth and TVA is seizing those opportunities.*

The Office of Inspector General at TVA is more than a proverbial “watchdog.” In many ways we chronicle the history of the institution. Our inspections, audits, and investigations over the years weave TVA’s story that is at times inspiring and at times distressing. Our two inspections that assessed TVA’s reaction to the Kingston coal ash spill tell a tale that is mostly distressing. A noble institution with a proud heritage forgot its roots. Its reputation has been sullied both by the event and its failures in how it reacted to it.

What is now happening within TVA, however, is inspiring. Instead of taking defensive half-steps, TVA management

has given itself to righting the wrong. What we are seeing is not for “show” but a true commitment to change. The culture which in part led to the Kingston ash spill is being thoroughly dissected and analyzed by experts brought in with a charge by TVA management to find out what needs to be “fixed.” Just as importantly, TVA is aggressively sifting through its institutional risks with a focus that inspires confidence.

This inspiring story is not a story easily told by TVA. Its damaged image makes any positive story told by TVA suspect. Fortunately, the TVA Board and TVA management appear to be committed to doing the right thing whether or not they get credit for it. The fact is that TVA is on the move...and in the right direction. We report on some of that in the “Special Feature” section of this semiannual report.

While the Kingston coal ash spill seems to have eclipsed everything else during this reporting period, the men and women of the OIG went about the work of performing other inspections, audits, and investigations that saved TVA money and made its operations better. We note those in this report and among them, one investigation that has been singled out for special recognition. I am particularly pleased that Senior Special Agent Craig Yates of our office was given an exceptional performance award for his role on the Hickman Mills prosecution team. The award by the Council of the Inspectors General on Integrity and Efficiency (CIGIE) was for a joint effort by law enforcement including special agents of the Department of Agriculture’s Office of Inspector General as well as special agents of the Internal Revenue Service’s Criminal Investigation Division. The



work of the team exposed fraud against both TVA and the Department of Agriculture in regard to loans made to two businessmen in Kentucky. Those men have now been sentenced to incarceration in a federal penitentiary. This work typifies the collaborative effort of the various IG offices around the United States.

We are grateful for the support that we have received this reporting period from both Congress and the TVA Board, particularly in regard to our Kingston reports.

A handwritten signature in black ink that reads "Richard W. Moore".

**Richard W. Moore**  
Inspector General





Rebuilding the **Foundation.**

## Executive Summary

# Representative Inspections And Audits

*The Tennessee Valley Authority (TVA) continues to deal with the financial consequences brought about by the December 2008 Kingston ash spill as it cleans and restores the community to its pre-spill state. This report describes the Office of Inspector General (OIG) initiatives to identify and better understand the root causes of the spill and its assessment of TVA's response to the community's needs after the event. Following is a brief synopsis of the more significant inspections, audits, and investigations that were performed during this semiannual period.*

## > INSPECTIONS

An initial review by the OIG of TVA's response to the Kingston ash spill found: (1) TVA had not properly implemented the National Incident Management System, which hampered communications and delayed certain emergency response actions following the spill; (2) TVA's quick response to the media and public inquiry resulted in the release of inaccurate and inconsistent information, which resulted in criticism of TVA and caused reputational harm to the company; and (3) while TVA responded effectively to victims affected, failure to timely communicate TVA's claims policy and decisions increased settlement expectations for some.

Our second review of the Kingston ash spill focused on a root cause study performed by a firm contracted by TVA and TVA's ash management practices. We found: (1) the root

cause analysis was handled by TVA in a manner that avoided full transparency and accountability for management practices in order to preserve TVA's litigation strategy; (2) TVA was aware of "red flags" raised over a long period that signaled the need for safety modifications to the ash ponds which, if addressed, could possibly have prevented the spill; (3) factors other than the "slimes" layer identified as the trigger for the spill may have been of equal or greater significance; (4) despite internal knowledge of risks associated with the ash ponds and discussions of placing the ponds under TVA's Dam Safety Program, thereby subjecting the ponds to more rigorous inspections and engineering, TVA's risk management program failed to identify ash management as a risk; and (5) attitudes and conditions that emanated from a legacy culture resulted in ash being relegated to the status of garbage at a landfill rather than treated as a potential hazard to the public and the environment.

TVA's Maintain and Gain Lakeshore Management Program was designed to allow consideration of proposals to obtain lake access rights at the landowner's property by swapping access rights already available at other properties the landowner possessed. The program required transactions that would result in no net loss, and preferably a net gain to TVA, of public shoreline. Our review of the program found: (1) certain actions by TVA employees and others created an appearance of preferential treatment to some that exposed TVA to public criticism and reputational harm; (2) no protocol in the process existed to assure a transparent and objective review of applications submitted by those with possible conflicts of interest;

(3) exceptions were arbitrarily granted in seven of the ten key steps required in a maintain and gain transaction; (4) failure to consistently retain records for applications rejected that sufficiently demonstrated the rationale for the decision impacted the integrity of the Maintain and Gain Program; and (5) the program could undermine TVA Board's 2006 Land Policy and its apparent goal of restricting residential development on TVA shorelines.

## > DISTRIBUTOR AUDITS

During the fiscal year, the OIG launched a new contract compliance audit program related to contracts between TVA and its power distributors. These reviews began in the OIG Inspections group; however, in January 2009, the OIG established the Distributor Audits group to focus solely on these reviews and related issues. During this semiannual period, the OIG completed four distributor reviews and found:

(1) customer classification and metering issues; (2) contract compliance issues; (3) lack of guidance by TVA to determine if a distributor's cash reserves are excessive; and (4) opportunities for TVA to improve its oversight of distributors.

## > IT AUDITS

Our audit of general computing controls related to a TVA control system found security weaknesses in logical security, physical and environmental security, and general security controls. In addition, we found TVA lacked a process for evaluating audit findings that would allow it to identify similar issues in other systems, resulting in repeated findings being reported by the OIG.

An evaluation of the effectiveness of agency-wide controls and processes

in place to monitor, identify, classify, and respond to cyber security events found TVA: (1) lacked a comprehensive strategy; (2) was not adequately monitoring its information technology (IT) assets for cyber security events; (3) did not always follow its incident response policies and procedures; and (4) was not effectively using existing resources capable of increasing IT security monitoring levels and coverage.

### > INTERNAL CONTROL REVIEWS

During the second semiannual period in fiscal year 2009, the OIG continued its support of TVA initiatives to comply with Section 404 of the Sarbanes-Oxley Act of 2002 (SOX). In this period, the OIG completed tests of controls for twenty-seven business processes, five IT general control domains, and eleven applications. In addition, the OIG completed year-end, remediation, and nonoccurrence testing for four IT general and four application controls.

### > CONTRACT AUDITS

This semiannual period we completed ten preaward audits of cost proposals submitted by prospective contractors to provide major equipment and services to TVA. These audits identified \$50.5 million of potential savings opportunities for TVA to negotiate.

We also completed seven compliance audits of contracts with expenditures totaling \$392 million and identified potential overbillings of \$6.7 million.

### > REPRESENTATIVE INVESTIGATIONS

During this period, TVA experienced the Kingston ash spill which had a significant environmental impact. Investigations worked closely with Audits and Inspections to determine the root causes of the event and how TVA reported the

results of their internal inquiry. Investigations also played a significant role in the review of TVA's maintain and gain lakeshore management program performed by Inspections. We continued to focus on major fraud investigations and continued our participation on Task Forces with other federal, state, and local agencies. We conducted numerous administrative cases that resulted in both savings to TVA and administrative actions. Following is a brief summary of the more significant work completed by Investigations during this period.

In the last semiannual report, we reported the guilty plea of Heraeus Corporation to a one-count Information, charging false statements relating to Clean Air Act requirements in an Environmental Crimes Joint Task Force case brought in the Eastern District of Tennessee. The company was fined \$350,000 and sentenced to 18 months probation. During this reporting period, the plant manager also pled guilty to a one-count Information, charging him personally with making false statements in, and omitting information from, documentation required under the Clean Air Act. The plant manager was sentenced to one year probation and 50 hours of community service.

A (now former) TVA Program Manager was indicted in Circuit Court in Tennessee for Forgery and Passing Forged Instruments based on a falsified invoice to a TVA contractor for property damage allegedly sustained during a paid move. The invoice falsely represented work done to repair the damage. The OIG issued a report to TVA management and after receiving notice of proposed termination, the employee resigned.

A workers' compensation benefits investigation resulted in projected savings to TVA of \$472,007. The recipient was a painter who sustained a

back injury in 1984 and who collected partial compensation payments since that time. The recipient has since been vocationally rehabilitated to such extent that his current reported income far exceeds his expected income as a painter. Though the recipient properly reported his income to the Department of Labor (DOL), our investigation prompted a DOL review which determined he is ineligible for workers' compensation benefits.

A call to our Empowerline resulted in an investigation into an allegation that a TVA-owned tugboat sank in TVA's Muscle Shoals harbor. The Empowerline caller reported that the sunken vessel discharged 2,500 gallons of diesel fuel into the harbor, and that the sinking was due to possible malfeasance on the part of TVA management. Our investigation revealed, however, that the tugboat submerged only partially, the amount of bilge fuel discharged was 25 gallons, and despite the measures taken, a malfunctioning pump was the causal factor.



At the request of plant management, we investigated a computer use practice with security and safety implications. The practice involved the use of commonly known passwords and identification numbers within a work group that allowed individuals in the group to set and release holds during projects. The practice came to light following a release authorization not made by the individual setting the hold. The release could have had



serious worker safety implications though no event actually occurred. In addition, plant management was concerned that statements regarding the practice differed among employees. Our investigation led to a report published both to plant management and the Nuclear Regulatory Commission (NRC).

We also investigated the inaccurate reporting of the presence of two heaters at Browns Ferry Nuclear Plant (BFN) during freeze protection program reviews dating back to 2003. The heaters are part of capital asset protection not associated with direct nuclear operation equipment. We issued a report documenting the history and likely causal factors to TVA Management which shared the information with the NRC.

The OIG investigated the sale of items on eBay bearing identifiers associated with the BFN. The investigation revealed that the seller, L&W Surplus, L.L.C., buys and sells industrial surplus equipment and has had a contractual relationship with TVA since 2007. Our investigation revealed that the suspicious nature of the items resulted from the inadequate inventory and itemization of items prior to their sale. A report was published to plant management delineating the issues.

The OIG investigated and substantiated an allegation that an administrative employee changed her husband's leave schedule to reflect that he was working when he was on leave. The administrative employee retired before the matter was concluded and her husband's schedule was corrected.

Two hangman's noose matters were concluded in this reporting period at the Shawnee Fossil Plant. The first matter originated in January 2009 when a supervisor reviewing photographs of scaffolding built for an outage noticed

a noose in one of the photographs. The noose was cut down, and an investigation ensued. During the course of the investigation, a second noose-related matter was discovered. A Shawnee Unit Operator had tied a noose during his shift sometime in February 2008 which was witnessed by an African American Unit Operator. Another employee told the Operator tying the noose he could be fired for doing so, and he immediately untied the noose and apologized. The facts were presented to the United States Attorney's Office, and forwarded to the United States Department of Justice, which declined criminal prosecution. The OIG published a report to TVA management on the first case suggesting sensitivity training at the local level and management concurred.

The OIG investigated an allegation that an employee of a local utility had defrauded TVA's *energy right*® Program, which in part funds conversions from gas to electric water heaters, by approving disbursements to friends and family members who did not make the switch. The investigation substantiated the allegation and revealed additional unrelated fraudulent activity. Though prosecution was declined, the employee was forced to resign and his wages were garnished to offset the fraudulent payments.

The OIG continued to monitor temporary living expense fraud and substantiated an allegation that a contractor had obtained more than \$6,000 in expenses to which he was not entitled through the submission of false statements. The contractor died prior to being indicted.

## STATISTICAL HIGHLIGHTS

*April 1, 2009 ~ September 30, 2009*

Audit Reports Issued .....	66
Questioned Costs .....	\$6,743,618
Disallowed Costs .....	\$2,798,657
Funds Recovered .....	\$908,578
Funds to be Put to Better Use .....	\$50,570,129
Funds Realized by TVA. ....	\$4,722,979
Investigations Opened .....	194
Investigations Closed .....	223
Fines/Recoveries/Restitution/Savings .....	\$493,065
Criminal Actions .....	6
Administrative Actions (No. of Subjects) .....	6
Inspections Completed .....	21

The OIG investigated a TVA manager who procured materials used at a fossil plant and who allegedly benefited personally from his procurement choices. Specifically, the manager bought materials from a vendor which purchased them from a third-party company of which the subject manager was half owner. The manager had not been required to submit annual financial disclosures until recently, but the manager did disclose the third party nexus when the submission was required. The manager subsequently retired and prosecution was declined.

The OIG investigated computer misuse at a fossil plant, and determined that an employee had been accessing pornographic Web sites for at least five years. The employee was suspended for 30 days. The OIG continues to work with TVA Information Services to determine and implement more effective measures to lessen computer misuse.

During this review period, we opened seven criminal workers' compensation cases based on information developed through our data mining program. These cases involve recipients receiving workers' compensation benefits while earning income from other sources. ■



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*Office of the* **Inspector General**

## ORGANIZATIONAL PROFILE

The OIG is headquartered in the TVA East Tower in Knoxville, Tennessee, across from the TVA headquarters in the West Tower. The OIG has a major satellite office in the Edney Building in Chattanooga, Tennessee, where the Inspections unit and several investigators are located. There is also a staffed field office at the Watts Bar Nuclear Plant, Tennessee, to which an auditor and investigator are assigned. In addition, the Investigations unit has staffed field offices in Nashville, Tennessee; Huntsville, Alabama; and Mayfield, Kentucky.

As of September 30, 2009, the OIG had a total staff of 103. The Audit and Inspections units are composed of 63 individuals, the Investigations unit is composed of 30 individuals, and the Administrative staff is composed of 10 individuals.

The number of personnel located at each staffed office is as follows: Knoxville–76, Watts Bar Nuclear Plant–2, Chattanooga–16, Nashville–2, Huntsville–4, and Mayfield, Kentucky–1.

## > OIG STRATEGIC PLAN

### MISSION

Promote excellence in TVA's operations through the conduct of investigations, audits, inspections, and advisory services designed to promote economy, efficiency, and effectiveness and prevent and detect fraud, waste, and abuse

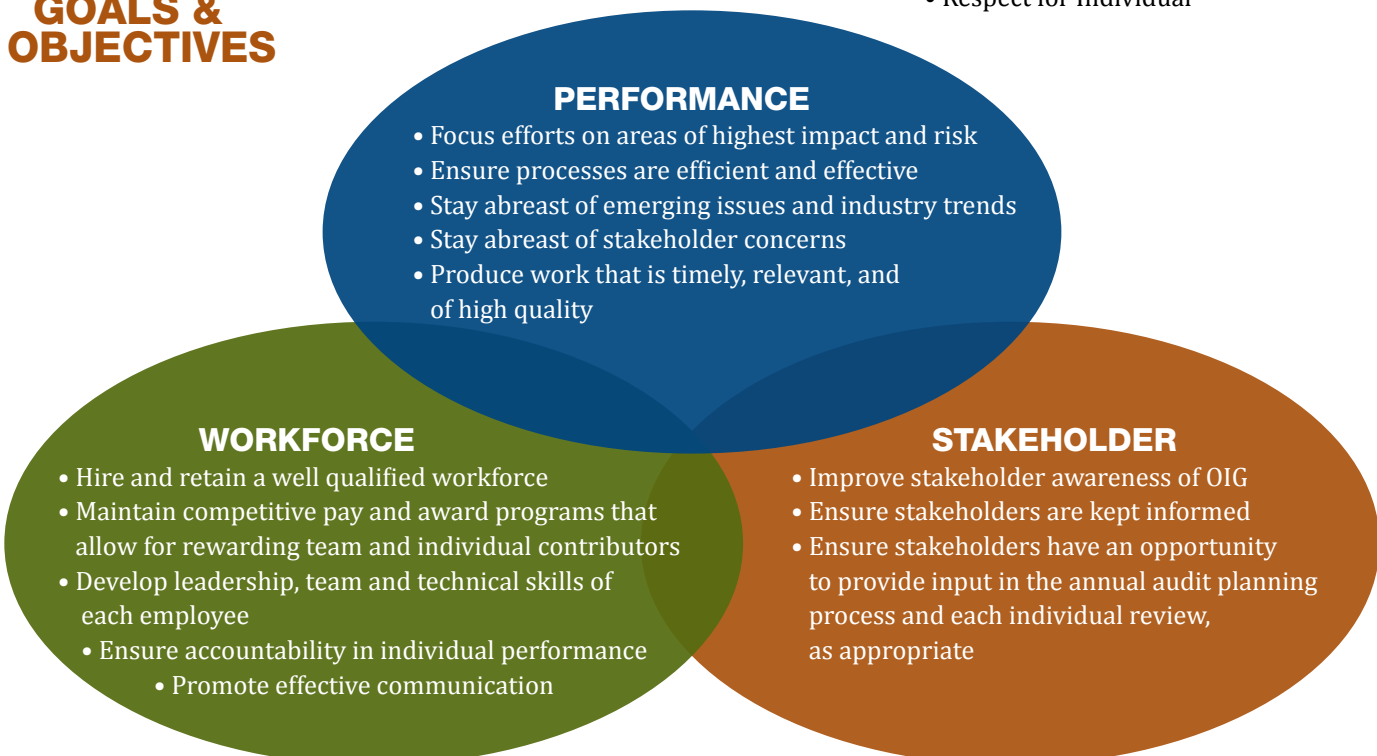
### VISION

To be a highly effective organization that promotes positive change by identifying opportunities for improvements in the performance and efficiency of TVA's programs and operations

### CORE VALUES

- Independence
- Integrity
- Innovation
- Initiative
- Quality
- Results
- Leadership
- Teamwork
- Communication
- Respect for Individual

## GOALS & OBJECTIVES





## > OFFICE RESPONSIBILITIES AND AUTHORITY

Created by the TVA Board of Directors in 1985, the TVA OIG became statutory under the Inspector General Act Amendments of 1988 (IG Act). The authority to appoint the TVA Inspector General (IG) was transferred to the President in November 2000 by Public Law No. 106-422.

## > OIG RESPONSIBILITIES

- Promote economy and efficiency while preventing and detecting fraud, waste, and abuse.
- Conduct and supervise audits, inspections, and investigations relating to TVA programs and operations.
- Keep the TVA Board and Congress fully and currently informed concerning fraud and other serious problems, abuses, and deficiencies relating to TVA programs and operations.
- Recommend corrective actions concerning problems, abuses, and deficiencies, and report on the progress made in implementing such actions.
- Assure work performed by nonfederal auditors complies with Government Auditing Standards.
- Issue semiannual reports to TVA Board and the Congress.

## > OIG AUTHORITY

- Conduct any audit, inspection, or investigation the IG deems necessary or desirable.
- Access all TVA records or other material.
- Issue subpoenas and administer oaths.
- Receive complaints and grant confidentiality.
- Have direct and prompt access to the TVA Board.
- Hire employees and contract for services as necessary.



**Charles A. Kandt**  
Legal Counsel



**Ronald Wise**  
Assistant Inspector  
General, Administration  
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Emerging Issues

**Jill M. Matthews**  
Deputy Assistant Inspector General, Audits and Support

**David P. Wheeler**  
Director, Contract Audits

**Louise B. Beck**  
Audit Quality Manager

## > ADMINISTRATION

The administrative section 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. Responsibilities include operations for personnel administration, budget and financial management, purchasing and contract services, facilities, conferences, and government relations.

## > AUDITS AND INSPECTIONS

The Audits and Inspections group performs a wide variety of engagements designed to promote positive change and provide assurance to TVA stakeholders. Based upon the results of the engagements, the Audits and Inspections group makes recommendations to enhance the effectiveness and efficiency of TVA's programs and operations. The group uses an impact- and risk-based approach to develop an annual work plan. The group's plan considers TVA's strategic plans, major management challenges, enterprise risk management process and results, and other input from TVA management. The 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/or congressional interest), and likelihood it will result in recommendations for cost savings or process improvements. The result of the OIG audit and inspections planning process is a focus on those issues of highest impact and risk of fraud, waste, abuse, or in regard to IT, malicious, or other intrusion.

**The Audits group**, based in Knoxville, conducts and/or supervises comprehensive financial and performance audits of TVA programs and operations.

It consists of four departments—Contract Audits, Distributor Audits, Financial/Operational Audits, and IT Audits.

- Contract Audits has lead responsibility for contract compliance and preaward audits. In addition, this group performs reviews of TVA contracting processes and provides claims assistance and litigation support.
- Distributor Audits has lead responsibility for contract compliance reviews of TVA's distributors. This group assesses compliance with the terms of the power contracts between TVA and its distributors.

- Financial/Operational Audits has lead responsibility for: (1) oversight of TVA's financial statement audit and related services performed by TVA's external auditor; (2) reviews of TVA's internal controls related to financial reporting, operational efficiency, and compliance with laws and regulations; and (3) operational reviews to assess the results and economy and efficiency of TVA 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 group also performs operational reviews of the effectiveness of IT-related functions. In addition to its audit mission, IT Audits is responsible for developing and supporting an independent OIG computer network.

The Inspections group, based in Chattanooga, Tennessee, 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

## TYPES OF AUDIT AND INSPECTION ISSUES

### Information Technology Audits

- Unauthorized Access
- Inadequate Controls
- Lack of Data Integrity
- Fraud

### Operational Audits

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

### Contract Audits

- Inflated Proposals
- Contract Overpayments
- Inferior Performance
- Fraud

### Financial Audits

- Internal Control Deficiencies
- Material Misstatements
- Legal Noncompliance
- Fraud

### Distributor Audits

- Contract Noncompliance
- Misstatement of Power Sales to TVA
- Fraud

### Inspections

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



Inspections, the objectives of the Inspections group 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 inspection findings vary depending on the objectives of the project. Issues can be generalized into specific categories depending on the type of engagement performed. The graphic on page 14 shows some representative examples of audit and inspection issues commonly reported.

## > INVESTIGATIONS

**The Investigations group** performs investigative activity related to fraud, waste, and abuse in TVA programs and operations. It conducts its work in accordance with the Quality Standards for Investigations. The investigators maintain liaison with federal and state prosecutors and file a report with the Department of Justice whenever the OIG has reason to believe there has been a violation of federal criminal law. Our investigators work with other investigative agencies and organizations on special projects and assignments, including interagency law enforcement task forces on terrorism, the environment, and health care. Our investigative workload includes the following major categories:

**Contract Fraud** – Defrauding TVA through its procurement of goods and services.

**Theft of Government Property and Services** – Theft of TVA property and “schemes to defraud . . . designed to deprive individuals, the people, or the government of intangible rights, such as the right to have public officials perform their duties honestly.”

**Environmental Crime** – Any act which violates an environmental protection statute.

**Health Care Fraud** – The intentional misrepresentation of health care services, expenses, billings, needs, or coverage that results in unauthorized payments or other benefits.

**Illegal Hacking into TVA Computer Systems** – Accessing a computer without authorization or exceeding authorized access.

**Workers’ Compensation Fraud** – Includes employee fraud, medical fraud, premium fraud, and employer fraud, most often a false claim of disability to receive benefits.

**Employee Misconduct** – Generally includes misuse of TVA furnished equipment, travel voucher fraud, and a multitude of miscellaneous matters. ■

## EXAMPLES OF CRIMES THE OIG SEEKS TO UNCOVER

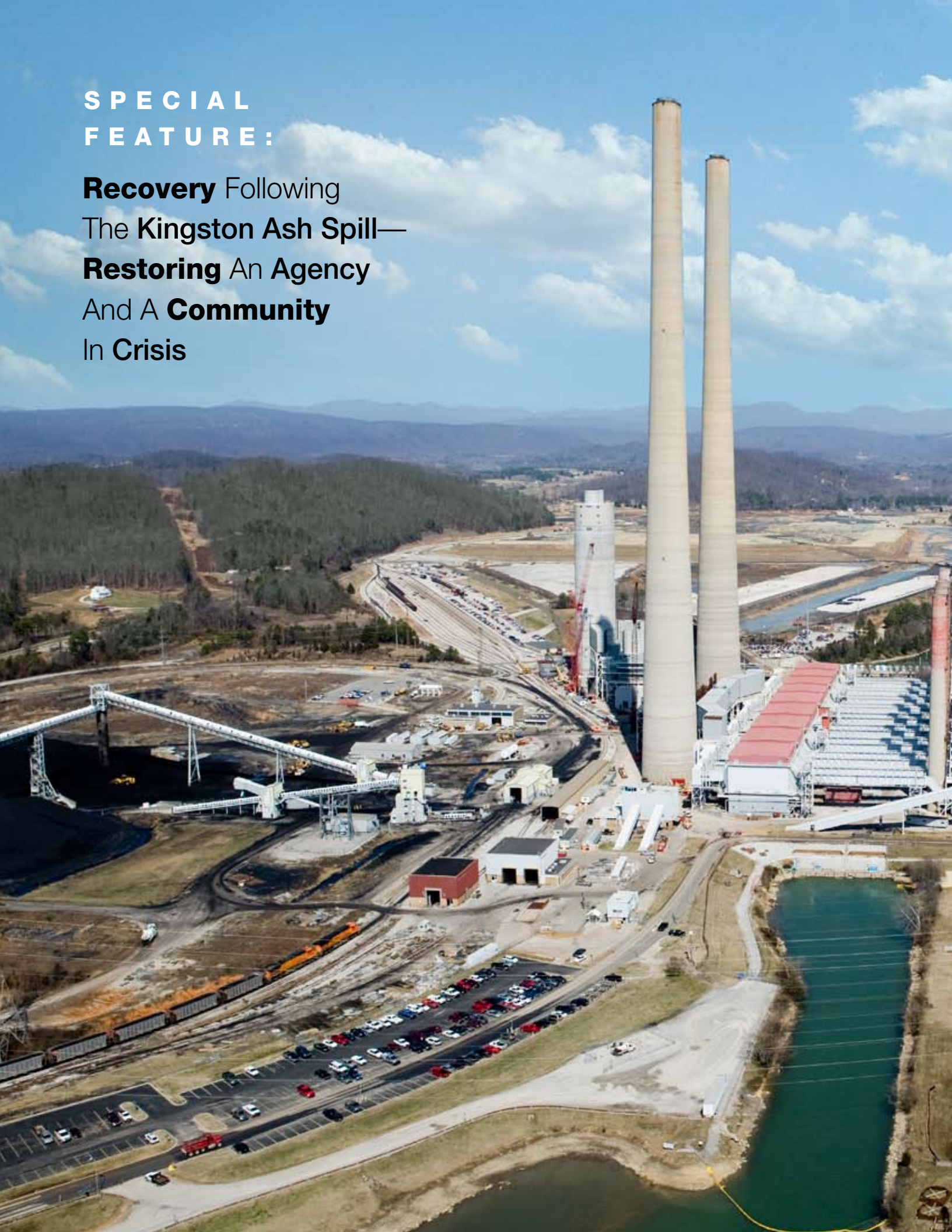
- Contract Fraud
- Economic Development Grant Fraud
- Bid Rigging/Collusion
- False Claims (e.g., billing for services not rendered or costs not incurred)
- False Statements
- Defective Pricing
- Computer Crimes
- Product Substitution and Counterfeit Parts
- Conflicts of Interest
- Bribery/Kickbacks
- Environmental Crimes
- Mail and Wire Fraud
- Theft of Government Property
- Employee Criminal Misconduct (e.g., purchase card misuse)

## ACTUAL FRAUD SCHEMES INVESTIGATED BY THE OIG

- Falsification of information in Economic Development grant application and bid proposals
- Unallowable or unauthorized purchases (e.g., use of TVA funds for personal luxury items)
- Misallocation of costs among projects
- Mischarging for expenses not incurred or work not performed (i.e., phantom charges)
- Misrepresentation of project status and progress in order to continue receiving funds
- Falsification of test results or other data
- Disposal of hazardous waste in violation of Federal regulations
- Influencing an award to a family member or friend

**SPECIAL  
FEATURE:**

**Recovery** Following  
The **Kingston Ash Spill**—  
**Restoring** An Agency  
And A **Community**  
In Crisis







*As discussed in the previous semiannual report to Congress, TVA has been portrayed by many as an agency in crisis. Because of nationally-publicized challenges such as decreasing revenues, multiple lawsuits against TVA and an unprecedented environmental spill publicly compared to the Exxon Valdez, TVA's stability and long-term health has been called into question. "TVA is undeniably being challenged on a number of fronts," says TVA Inspector General Richard Moore.*

The Kingston Fossil Plant coal ash spill of December 22, 2008, in which 5.4 million cubic yards of ash poured onto adjacent land and into the Emory River, is one of the largest environmental disasters in American history. The TVA OIG released two reports—one in June 2009 critiquing TVA's response to the ash spill and another in July 2009 evaluating TVA's root cause analysis of the spill.

The second report assessing TVA's root cause analysis also evaluated TVA management's role regarding ash storage and found that managing ash storage was a low priority. The TVA OIG hired Marshall Miller & Associates (Marshall Miller), a nationally-recognized engineering consulting firm, to assist with the technical aspects of the review. TVA hired AECOM Technology Corporation (AECOM) to complete the initial root cause analysis. The objectives of the TVA OIG review were to (1) provide an independent peer review of AECOM's root cause analysis and (2) review TVA's ash management for weaknesses.

In summary, the TVA OIG peer review found that:

- TVA management handled the root cause analysis in a manner that avoided transparency and accountability in favor of preserving a litigation strategy. TVA elected not to publicly disclose management practices that may have contributed to the Kingston spill.
- TVA could have possibly prevented the Kingston spill if it had taken recommended corrective actions. TVA

was aware of "red flags" that were raised over a long period of time signaling the need for safety modifications to TVA ash ponds.

- AECOM overemphasized the "slimes" layer as a trigger for the Kingston spill. Marshall Miller concluded that factors other than the "slimes" layer may have been of equal or greater significance.
- Despite internal knowledge of risks associated with ash ponds, TVA's formal Enterprise Risk Management (ERM) process, which began in 1999, had not identified ash management as a risk. While over the years there was internal discussion about placing the ash ponds under TVA's Dam Safety Program, which would have required more rigorous inspections and engineering of the ash ponds, TVA chose not to do this.
- Attitudes and conditions at TVA's fossil fuel plants that emanate from a legacy culture impacted the way TVA handled coal ash. Ash was relegated to the status of garbage at a landfill rather than treating it as a potential hazard to the public and environment.

TVA management generally agreed with the findings of the report and has subsequently hired McKinsey & Company, a consulting firm, to address the cultural issues brought to light as a result of the ash spill. TVA also hired Stantec, an engineering company, to rigorously inspect, evaluate, and make recommendations on ash storage facilities at all its fossil plants.





Kingston Fossil Plant

Additionally, on January 9, 2009, TVA retained the firm of McKenna Long & Aldridge, LLP, a national expert in independent investigations, to conduct an independent factual investigation of the Kingston spill and its implications relating to systems, controls and culture. On July 21, 2009, the Board approved a resolution proposed by Director Tom Gilliland, chairman of the Audit, Ethics and Governance Committee, to address the failures identified in the McKenna report. At the same board meeting, the Board directed TVA management to develop an extensive remediation plan in response to the independent investigation of the Kingston ash spill, various reports by the TVA Inspector General and recommendations by TVA management.

“The TVA Board and management have been very receptive,” IG Moore said of the TVA OIG report findings. “They understand what the issues are and TVA is doing what we think needs to be done to address the findings.”

TVA recently completed removing one-third of the coal ash dumped into the Emory River from its Kingston Fossil Plant.

TVA Chief Executive Officer and President (CEO) Tom Kilgore was quoted as saying in a September 23 Chattanooga Times Free Press article that work crews had excavated 1 million cubic yards of ash that spilled last December into the river beside the Kingston coal plant. Some 580,000 cubic yards of the ash has been shipped to a lined landfill in Perry County, Alabama.

“Since we had the biggest accident with coal ash in the industry, I want to have the best cleanup program of any utility,” Kilgore said. The cleanup, slated to be

completed by next spring, is the first phase of a multi-billion-dollar program designed to make TVA a leader in coal ash disposal.

TVA has spent nearly \$230 million this year to clean up the Kingston ash spill, according to TVA Environmental Executive Anda Ray who was also quoted in the September 23rd article. TVA anticipates spending \$1.2 billion to clean up the Kingston spill and up to \$2 billion over the next eight years to convert five other wet ash storage plants to dry ash storage systems.

TVA executives have stated repeatedly that they want the area impacted by the spill to be “better” than it was before the incident. As part of this initiative, TVA set aside approximately \$40 million in economic development funds for locally-identified projects to help Roane County and its communities.

TVA and the elected leaders of Roane County and its communities announced in September that they are establishing the Roane County Economic Development Foundation to administer the funds provided by TVA. The elected leaders and TVA representatives are serving as the foundation’s board and have set criteria for considering requests for funding projects. The foundation has already granted requests to provide \$6.7 million for revitalization of the Harriman downtown area and to improve the Kingston wastewater treatment system.

TVA has also been working diligently to compensate Kingston residents affected by the ash spill. A recent editorial to a local newspaper perhaps says it best that TVA both literally and metaphorically changed the waterscape of Kingston long before the unprecedented ash spill.

The East Tennessee resident, who authored the editorial, implores “Kingstonians” to give TVA a chance to “redress the issues at hand” and to remedy any economic harm. “There are few citizens in Roane County who have not been helped by the huge presence of the Tennessee Valley Authority at their doorstep,” she writes. She goes on to credit the opening of TVA’s Kingston steam plant with creating jobs for residents.

“The South was not known for well-paying jobs in the 1950s,” she writes, “but TVA changed that for many families. Kingston became an enclave of comfortable middle-class families with good schools enriched by funding that came with each child of a TVA or federal employee. Besides the jobs created by TVA, the recreational benefits have been tremendous. Before TVA, Kingston was not situated on a lake suitable for bass fishing, jet skiing or boating. It was on a river that flooded at the whim of heavy rains. Homes did not dot the shoreline, as they do now, because they would likely have been washed away...”

Though TVA has received an onslaught of public scrutiny and criticism since the Kingston ash spill, there are a number of Kingston residents who have expressed gratitude to TVA for their work in trying to restore their lives. TVA’s Environmental Executive Anda Ray has repeatedly stated that the ultimate goal is not just to restore the area affected by the spill, but to make it better. She has encouraged residents to envision what that would entail and to provide their insight to TVA employees working on the restoration.

As of this writing, TVA has purchased 138 properties. They’ve settled 95 insurance claims and have provided help to more than 750 residents through

the TVA Outreach Center established in downtown Kingston. TVA also contracted with a mental health provider to provide residents a professional with whom to discuss their feelings and how the ash spill affected them.

After the initial onset of the crisis, TVA set up a hotline phone number to which more than 600 residents have called since December 22, placed 23 families in hotel rooms, and provided cell phones to residents whose phone service was temporarily disconnected. TVA also provided VISA debit and restaurant cards for purchase of meals and other sundries to those displaced from their homes and gift cards for Christmas to one family.

TVA was also responsive in attempting to provide protection from potential environmental hazards caused by the spill by delivering bottled water and several hundred air filters to residents in the first two weeks.

"We wanted to ensure residents were safe first and foremost," Ray said, "then we focused on restoring the infrastructure to the area by supporting local utilities with restoration of electric, gas and water lines and by repairing and repaving two primary roads in the area."

Letters to TVA from residents affected by the spill indicate the gratitude some have toward TVA for their quick response in helping them restore their lives.

"We are two (Swan Pond area) residents who want to let you know how much we appreciate everything you have done during these past two weeks," one letter read. "Christmas night we welcomed Mr. Ron Hall into our home. The numerous additional staff who have telephoned and knocked on our front door to just

say hello, to inquire if we had any questions, needs and/or concerns, were graciously welcomed too. We also must recognize the 24/7 efforts of the water and road crews, and the amazing progress that has been made in such a short time.

"Our family has owned this home for over 40 years, and neither of us want or plan to leave. We have great hopes that not only will the area be returned to 'like it was' status, but that status will become 'better than it was.'"

TVA's efforts continue with an operational outreach center and mental health services, a well-water testing process for residents, air testing, a toll-free number regarding insurance claims, interim housing including furnishings and amenities and a medical outreach effort driven by Vanderbilt University and its medical center and Oak Ridge Associated Universities to assess the health of Roane County residents who believe they have been affected by the spill, and to educate area physicians about fly ash and the medical protocols Vanderbilt physicians will follow.

Besides the impactful efforts that TVA has made to restore the community and residents of Kingston, TVA has worked intensely to bolster its ERM program designed to identify potential risk areas and prevent a possible operational failure, such as the ash spill. In 2008, the TVA OIG conducted a follow-up review of TVA's ERM since its initial 2003 review. While the OIG found that TVA made significant progress in enterprise risk identification and assessment, further recommendations included:

- Continuing to drive the risk management culture into and across the organization.

- Assessing both inherent and residual risks.
- Articulating the company's risk tolerance with respect to various risks that have been identified.
- Enhancing governance by formally documenting risk policies and procedures.
- Enhancing board communication with respect to the ERM program and results.

The findings from our reviews of the ERM program and from recent reviews related to the Kingston Fossil Plant ash spill solidify our conclusion that TVA needs to drive ERM further down into the organization to increase the future likelihood that known risks will be identified and addressed. Based on our reports and the recent Kingston catastrophic event, TVA has made ERM staffing and process changes. Specifically, TVA has initiated a bottom-up approach and now conducts business unit workshops. This process has allowed TVA to address many more risks that may not have surfaced using a top-down approach.

Risk assessment efforts, driven by 15 Risk Coordinators, are now occurring at multiple levels throughout the organization and these efforts span multiple enterprise risk categories such as employee fraud, pandemic, terrorist attack, and deteriorating IT infrastructure. Management's commitment to ERM has been a key factor in driving the program's success and will be critical to extracting the program's strategic value going forward. ■

## Kingston Fossil Plant

- Construction begins in 1951.
- Commenced operations in 1954 and was the world's largest coal-burning power plant at the time.
- Nine coal-fired units, consumes approximately 14,000 tons of coal per day at maximum operating capacity—an amount of coal that would fill 140 railroad cars.
- Burns a low-sulfur blend of coal to limit emissions of sulfur dioxide (SO<sub>2</sub>).
- Generates about 10 billion kilowatt-hours a year—enough electricity to supply 700,000 homes.

# NOTEWORTHY UNDERTAKINGS

## > THE TVA OIG LAUNCHES PUBLIC SERVICE ANNOUNCEMENTS ON LOCAL TV STATIONS

A series of three thirty-second public service announcements (PSAs) were created from the TVA OIG's latest video release which addresses the thought, "If only it were easy to spot fraud." The PSAs are expected to run on local TV stations throughout the Tennessee Valley.

The four-minute video, from which the PSAs were created, showcases what it might look like if it were easy to spot fraud, but because it's not, a message from the Inspector General highlights what TVA employees and ratepayers can do if they suspect fraud.

Our office initiated this effort to encourage TVA employees, contractors, and the public to report possible instances of fraud, waste, abuse, and mismanagement to the office's hotline, the Empowerline, which allows users to report anonymously if they choose.

To view the video, visit [www.oig.tva.gov](http://www.oig.tva.gov), and click on the video link.



TVA Inspector General Richard Moore interviews with TV Anchor Gene Patterson for Tennessee This Week, which aired Sunday, Aug. 2 on Knoxville's Channel 6.

## HOW TO REPORT

Suspected or alleged fraud, waste, or abuse can be reported to the TVA OIG in person at a local office, or via the TVA OIG Empowerline. Empowerline options include: phone (1 877 866 7840) and Web [www.OIGempowerline.com](http://www.OIGempowerline.com).



## > TVA OIG SENIOR SPECIAL AGENT RECOGNIZED BY CIGIE FOR WORK ON CASE LEADING TO THE PROSECUTION OF TWO TENNESSEE BUSINESSMEN

The TVA OIG was named as an award recipient by the 2009 Council of the Inspectors General on Integrity and Efficiency (CIGIE) Awards Panel for its work in a complex loan fraud that resulted in the conviction of two Tennessee businessmen, Lloyd Aaron Smith and Neal Gordon Wall, for bank fraud, mail fraud, and money laundering. The awards ceremony took place on Tuesday, October 20, 2009, at the Andrew Mellon Auditorium in Washington, D.C.

TVA OIG Senior Special Agent Craig Yates received the award on behalf of the prosecution team. Other team members included: G. Lynn Bracey, Senior Special Agent, USDA-OIG; James R. Lesousky, AUSA Western District of Kentucky; William K. Miller, Special Agent, Internal Revenue Service; and James H. Rafferty, Retired Special Agent, Internal Revenue Service.

According to the nomination, these individuals were honored for their exceptional performance in the joint investigation and prosecution of a complex fraud case where the two Tennessee businessmen were sentenced and ordered to pay \$4.5 million in restitution for bank fraud, mail fraud, and money laundering. This investigation was conducted jointly with the Tennessee Valley Authority's Office of Inspector General, the U.S. Department of Agriculture's Office of Inspector General – Investigations (USDA-OIG), the U.S. Internal Revenue Service's Criminal Investigation Division, and the U.S. Attorney's Office for the Western District of Kentucky.

Smith and Wall applied for and received a \$500,000 loan from the TVA's Economic Development program, the

proceeds of which were to be used solely for the purpose of purchasing ten specific items of equipment for use in operating Hickman Mills, Inc., a textile company in Hickman, Kentucky, which Smith and Wall owned and operated during that time.

The defendants caused fraudulent documents to be submitted to TVA in support of their \$500,000 loan application. One of the documents indicated that Smith and Wall owned the ten items of equipment to be acquired with the loan proceeds through a purchase transaction in April 2002. Another document showed that Smith and Wall entered into a contract in July 2003 to sell the same ten pieces of equipment to Hickman Mills for \$500,000. The indictment charges that Smith and Wall, in fact, never owned the ten items of equipment.

Instead of using the proceeds of the \$500,000 loan from TVA to purchase the ten items of specified equipment, Smith and Wall deposited the monies into an account established with a Tennessee bank in the name of Dyer Fabrics, Inc., another business owned and operated by the two.

Smith and Wall pled guilty to bank fraud, mail fraud, and nine counts of money laundering. On February 11, 2009, both men were sentenced by the U.S. District Court in Paducah, Kentucky. Smith received 30 months incarceration, and Wall received 27 months incarceration. They were jointly and severally ordered to pay restitution in the amount of \$420,733.37 directly to TVA and \$4,104,562.51 to the Citizens Bank of Hickman or USDA, and assessed \$1,100.

"The prosecution of this case was important in maintaining the integrity of TVA's Economic Development program," TVA OIG Inspector General Richard Moore said. "The Office of the Inspector General will continue to scrutinize these types of loans to determine if TVA is being defrauded."



Senior Special Agent Yates and IG Moore with Award



Hickman Mills TVA Investigative Team

## > SOCIAL NETWORKING TURNED PROFESSIONAL AT THE TVA OIG

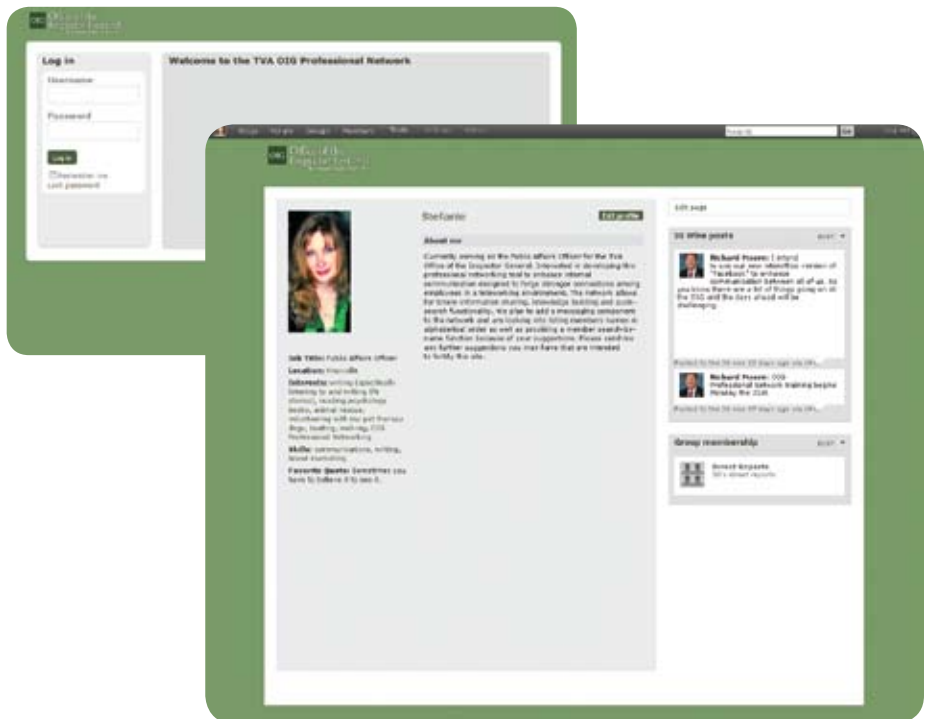
Social networking mediums such as Facebook, MySpace, and Twitter have appeared to reach a peak in popularity among students, adults, and even those beyond retirement age. The efficiency social networking provides in allowing people to be instantly connected to friends and family members has made the medium attractive to private businesses and now government agencies, such as the TVA OIG.

In a teleworking environment where face-to-face contact is limited, a professional network is ideal for information sharing and employee collaboration. Social networking is being used professionally by government agencies such as the Centers for Disease Control and the Office of Management and Budget and now it has been seemingly well received by our office.

The network allows all TVA OIG employees throughout multiple states including Kentucky, Alabama, and Tennessee to learn about each other's professional endeavors and to share knowledge on specific areas of interest and expertise. It also allows employees to blog and create group discussions or forums on relevant topics.

According to [www.usa.gov](http://www.usa.gov), "Social networking sites with government partners can help achieve a government's mission. Internal social networking sites can establish connections across traditionally stovepiped and geographically dispersed organizations. Employees could form groups on social networking sites to overcome stovepipes within organizations."

The TVA OIG Professional Network is based on the same format that Facebook uses and allows employees to post information about themselves to their own profiles that are only accessible to other TVA OIG employees. It is a secure way for employees to communicate with each other and learn about common interests and specific areas of expertise that they might not otherwise have an opportunity to learn about. Work projects requiring interoffice collaboration can be done even more efficiently because of this information-sharing tool.



## **TVA INSPECTOR GENERAL TESTIFIES BEFORE CONGRESS**

Richard Moore testified before the House Subcommittee on Water Resources and Environment on June 28, 2009. The testimony was in regard to the TVA OIG's second report on the Kingston Fossil Plant ash spill: Review of the Kingston Fossil Plant Ash Spill Root Cause Study and Observations about Ash Management. A copy of his testimony can be found on our Web site at [www.oig.tva.gov](http://www.oig.tva.gov).







Rebuilding the **Foundation.**

## Summary of Representative Inspections

## Summary of Representative Inspections



**Gregory C. Jaynes**

Deputy Assistant  
Inspector General,  
Inspections

During this semiannual period, we completed 19 inspections covering a smorgasbord of operational areas, in addition to the two distributor reviews completed under Inspections. Specifically, we completed: (1) two inspections which addressed aspects of the Kingston ash spill, including the root cause, TVA's management culture, TVA's emergency response, TVA's media response, and reparations to victims; (2) an assessment of TVA's financial performance and challenges; (3) a review which resulted in the termination of the Maintain and Gain Lakeshore Management Program; (4) four inspections of TVA coal suppliers to assess contract compliance with weighing and sampling provisions; and (5) eleven campground inspections

to determine if operation was in accordance with program intent and operating controls were functioning. Results of the distributor reviews are discussed below under Distributor Audits. This once again shows Inspections' ability to impact the effectiveness and efficiency of programs across TVA.

### > KINGSTON FOSSIL PLANT ASH SLIDE INTERIM REPORT

The spill of wet coal ash at the Kingston Fossil Plant is the largest such spill to occur in our country. More than one billion gallons (i.e., 5.4 million cubic yards) of coal ash poured onto adjacent land and into the Emory River. Coal ash is a byproduct produced when fossil fuel plants burn coal to generate electricity. Our report focused on: (1) TVA's initial emergency response, including implementation and utilization of the National Incident Management System (NIMS); (2) TVA's responses to the media; and (3) reparations to the victims and restoration of the affected Roane County community. In summary, we found:

- TVA had not implemented NIMS in accordance with Homeland Security Presidential Directive 5 which hampered communications and delayed

certain emergency response actions following the spill.

- TVA's actions for responding quickly to media and public inquiry resulted in releases of inaccurate and inconsistent information and subsequent public criticism which caused reputational harm to TVA.
- TVA has responded effectively to victims in the affected area; however, failure to communicate the claims policy and decisions in a timely manner increased settlement expectations for some.

TVA management agreed with our findings and is taking actions to address the recommendations. Specifically, management plans to: (1) fully implement NIMS, ensure required NIMS training is completed, and evaluate the implementation of best practices as identified by the Roane County Emergency Management Director; (2) document the protocol and verification process for the release of media statements and maintain verification that the appropriate processes were followed; and (3) continue to work with the communities and local residents to improve the communications related to TVA's efforts with property acquisition and claims process.



**Kingston Fossil Plant Area Pre-Dike Failure**



**Kingston Fossil Plant Area Post-Dike Failure**



**Kingston Fossil Plant as of August 2009**



## > REVIEW OF THE KINGSTON FOSSIL PLANT ASH SPILL ROOT CAUSE STUDY AND OBSERVATIONS ABOUT ASH MANAGEMENT

On December 22, 2008, a major dike failure occurred on the north slopes of the ash pond at the TVA Kingston Fossil Plant. This failure resulted in the release of approximately 5.4 million cubic yards (more than 1 billion gallons) of wet coal ash spilling onto adjacent land and into the Emory River. TVA's CEO directed the TVA Office of the General Counsel to contract with a firm to do a root cause analysis of the spill, and AECOM was commissioned with the task. The objectives of the OIG's review were to: (1) provide an independent peer review of AECOM's root cause analysis and (2) review TVA's ash management for weaknesses. To assist with technical aspects of this review, the OIG hired Marshall Miller to independently peer review TVA's root cause analysis and provide other observations about ash management practices at TVA. In summary, we found:

- TVA management handled the root cause analysis in a manner that avoided transparency and accountability in favor of preserving a litigation strategy. TVA elected not to publicly disclose management practices that may have contributed to the Kingston Fossil Plant spill.
- TVA could have possibly prevented the Kingston Fossil Plant spill if it had taken recommended corrective actions. TVA was aware of "red flags" that were raised over a long period of time signaling the need for safety modifications to TVA ash ponds.

- AECOM overemphasized the "slimes" layer as a trigger for the Kingston Fossil Plant spill. Marshall Miller concluded that factors other than the "slimes" layer may have been of equal or greater significance.
- Despite internal knowledge of risks associated with ash ponds, TVA's formal ERM program, which began in 1999, had not identified ash management as a risk. While over the years there was internal discussion about placing the ash ponds under TVA's Dam Safety Program, ultimately, TVA did not place the ash ponds under its Dam Safety Program. Treating the ash ponds like dams would have required more rigorous inspections and engineering.
- Attitudes and conditions at TVA's fossil fuel plants that emanate from a legacy culture impacted the way TVA handled coal ash. Ash was relegated to the status of garbage at a landfill rather than treating it as a potential hazard to the public and environment.

In addition, this OIG report was presented to the TVA Board on July 14, 2009. After the OIG briefed the TVA Board on its findings, a specially called TVA Board meeting was held on July 21, 2009. A report prepared by McKenna Long and Aldridge and commissioned by the Audit, Governance, and Ethics Committee of the TVA Board in February of 2009 was released. TVA management acknowledged at the July 21, 2009, meeting many of the management failures that we identify in this report. These admissions reflect the type of transparency and accountability for TVA that the OIG has pressed for some time. We applaud the TVA Board's leadership in this matter and TVA management's acknowledgement of TVA's role in the Kingston Fossil Plant spill.

The OIG recommended TVA's CEO, in consultation with the TVA Board:

- Commission a dedicated cadre of professionals skilled in change management focused solely on driving compliance throughout TVA and measuring positive changes in the culture that affect ash management and other TVA programs.
- Assess the culture of the Fossil Power Group to determine what changes need to be made, if any, to ensure the support for sound policies and procedures related to ash management.
- Assess the management practices of TVA for ash management to determine whether those practices contributed to the failure of the dike at the Kingston Fossil Plant.
- Complete the assessments of TVA ash storage facilities and determine which ones are at risk of failure. The determination should be, as suggested by Marshall Miller, based on whether any of the four conditions contributing to the failure at the Kingston Fossil Plant exist sufficiently to pose a significant risk of failure. The determination should not be limited to just looking for the existence of the combination of all four contributing conditions found at the Kingston Fossil Plant.
- Develop policies and procedures for the storing, handling, and maintaining of ash and ash disposal facilities.
- Continue the efforts to drive the ERM program further down into the organization to increase the future likelihood that known risks will be identified and addressed.

TVA's CEO provided comments on a draft to this report. The CEO generally agreed with our recommendations and, in addition to identifying actions



already taken, stated that actions in-process or planned include: (1) implementing a cultural—focusing initiative across the agency, incorporating lessons learned from the Kingston Fossil Plant spill; (2) using the detailed, technical explanation of what and how the Kingston Fossil Plant dike failure occurred to ensure that it never happens again and to safely close the failed cell; (3) developing and

implementing (a) more detailed and rigorous policies and procedures for storing, handling, and maintaining ash and managing ash disposal facilities, and (b) a comprehensive program for future coal combustion product remediation and conversion; and (4) implementing ERM improvements to better achieve the goals of the program.



Kingston Fossil Plant Cleanup

## > REVIEW OF TVA'S FINANCIAL PERFORMANCE

This review was the second in a series of reviews that will benchmark TVA's performance in key areas and answer the question, "How is TVA doing in regard to financial performance?"

In conducting this review, we:

(1) assessed key performance measures and their alignment with the key strategic objectives; (2) evaluated TVA's results relative to targets and available benchmark information; and (3) identified key management challenges that could affect how successful TVA is in achieving its financial strategic objectives.

In our judgment, TVA's overall financial performance for this assessment period was adequate; however, the agency faces several significant financial challenges, some of which have recently emerged. This conclusion is based on our analysis of TVA's financial health in three areas: (1) maintaining adequate revenues; (2) making sound capital investments; and (3) containing costs. In summary:

- TVA's ability to set its own rates and the implementation of a fuel cost-adjustment clause provides flexibility to help maintain adequate revenues to cover costs. Additionally, TVA operates in a service area that is largely free from competition and has a large, diverse customer base.
- TVA has made certain investment decisions in the past that did not pay off. TVA is seeking to improve its capital investment decisions and the financial performance of its capital assets. However, TVA's ability to make these large investments pertaining to: (1) new generation and transmission assets; (2) environmental requirements; and (3) existing assets that are aging and need regular upgrades to keep running, will be a challenge, given TVA's financing structure and legislative debt ceiling.
- TVA is attempting to reduce certain costs to improve its financial position. TVA fares poorly when compared to other electric utilities with respect to nonfuel operation and maintenance

(O&M) costs. TVA is seeking to reduce nonfuel O&M costs but has made limited progress to date. TVA has also focused on reducing interest costs as a percentage of revenues and has made progress in doing so in recent years.

Recent events have negatively affected TVA financially including: (1) a wet coal fly ash spill at the Kingston Fossil Plant; (2) a downturn in the economy causing declining power sales; (3) a court ruling on a lawsuit brought by the state of North Carolina; and (4) significant losses on accounts established to fund pensions and asset retirements. Our report includes discussions of the necessity to manage commodity price, investment price, interest rate, credit, and capital requirement risks. In addition, while TVA's bond rating is based primarily more on its federal ties than its financial position, TVA management has identified maintaining the AAA bond rating as a risk factor in its 2008 filing with the U.S. Securities and Exchange Commission on Form 10-K.

## > REVIEW OF MAINTAIN AND GAIN LAKESHORE MANAGEMENT PROGRAM

This review was conducted to determine whether: (1) TVA gave anyone preferential treatment in the review and approval of Maintain and Gain transactions, and (2) the policies and procedures related to the design and execution of the Maintain and Gain process were adequate. The Maintain and Gain program was designed to allow consideration of proposals to obtain lake access rights at the landowner's property by swapping access rights already available at other properties the landowner may possess. The policy, as written, required that transactions would result in no net loss, or preferably, a net gain of public shoreline. We reviewed all Maintain and Gain transactions that had been approved since inception of the program up to the date of our report and found:

- Certain actions by TVA employees and by others created the appearance of preferential treatment and thereby increased TVA's risk of reputational harm.
- TVA did not have a protocol in the Maintain and Gain process to ensure a transparent and independent review of applicants having known conflicts of interest.
- The Maintain and Gain program has been administered in an arbitrary manner and requires substantial improvement if it is to be retained by TVA. We noted that exceptions were granted in seven of the ten key steps required in a Maintain and Gain transaction.
- TVA's failure to retain records of who filed applications and why those



applications were rejected damages the integrity of the Maintain and Gain program.

- The Maintain and Gain program may undermine the TVA Board of Director's 2006 Land Policy and its apparent goal of restricting residential development on TVA shorelines.

We recommended TVA management, in consultation with the TVA Board, consider:

- Eliminating the Maintain and Gain program and only consider changes to water access rights during the periodic update of the Shoreline Management Policy.
- Alternatively, if the Maintain and Gain program is retained, TVA should: (a) evaluate the extent it may conflict with the Land Policy regarding residential development; (b) strengthen procedural guidelines to reduce the inconsistency in how matters are resolved; and (c) implement procedures to ensure adequate documentation is maintained of rejected and withdrawn applications.
- Establishing a clearly defined protocol which creates a procedure for identifying inherent conflicts of interest by those applying for any TVA benefit. We also recommended that the protocol include the following elements:

- A definition of inherent conflicts of interest broad enough to capture the majority of cases that involve conflicted parties soliciting something of value from TVA.
- A training program for TVA employees to enable them to recognize and report conflicts.
- A process to refer these cases to the Ethics and Compliance Officer, the Designated Agency Ethics Officer and to the OIG to track, review, and report on whether or not any preferential treatment occurred.
- A notice provision to any conflicted party applying for a TVA benefit advising them that their request or application will be the subject of a formal review and public report.

The CEO generally agreed with our findings and recommendations. Based on our review, the TVA Board and management eliminated the Maintain and Gain program and a conflict of interest protocol was developed and implemented that incorporates the elements recommended by the OIG.

## > TVA COAL SUPPLIER CONTRACTS

We conducted four inspections to determine whether selected coal suppliers were in compliance with weighing and sampling requirements of each respective contract. We performed tests to verify that shipment weight documentation maintained at each mine supported the amounts used to support invoices to TVA for tonnage shipped. In summary, our reviews found documentation maintained at each respective mine

for ten randomly selected shipments agreed with the information provided to TVA regarding tons shipped. Each supplier was also found to be in general compliance with the weighing and sampling requirements in the contract. However, we did identify a few issues requiring TVA management action related to bias testing. TVA management generally agreed with our findings and recommendations and plans to take corrective action.



Coal Barge

## > REVIEW OF TVA MANAGED CAMPGROUNDS

At the request of the Senior Vice President of Environment and Research, we initiated reviews of the 11 TVA-managed campgrounds to determine: (1) if the campgrounds were being operated in accordance with the program's intent and (2) if the operating controls were functioning as intended. We found that the campgrounds were operating within the program's intent, which is to provide public areas for recreation. In addition, we found the operating controls were functioning as intended and

campground guidelines were generally being complied with. However, we did note:

- Some minor overall program guideline inconsistencies.
- For the four campgrounds with a resident manager, the resident manager contracts did not include some specific responsibilities identified in the TVA Resident Manager Manual.

- The resident manager contract for one campground differed somewhat with regard to duties and responsibilities when compared to the other three resident manager contracts.
- One resident manager contract had not been updated to reflect revised responsibilities.

TVA management generally agreed with our findings and recommendations and has taken or plans to take corrective actions. ■



Foster Falls Campground



Douglas Dam Tailwater Campground





Rebuilding the **Foundation.**

## Summary *of* Representative Audits

## Summary of Representative Audits

Our four audit departments issued 66 reports to TVA management during this semiannual period. The newly established distributor audit department completed four reviews of TVA power distributors. The IT Audits group assessed TVA's general computing controls, security monitoring program and backup and recovery controls. This group also performed a pre-implementation review of controls for a new asset management system. This work was in addition to tests of general computer and application controls completed in support of TVA's efforts to comply with SOX. To further assist TVA in SOX compliance, Financial and Operational Audits completed tests of financial reporting controls for 27 business processes. Financial and Operational Audits also applied agreed-upon procedures this period related to TVA's 2008 green power pricing accreditation. Contract Audits succeeded in identifying \$50.5 million of potential savings opportunities, primarily related to overstated cost recovery rates and misclassified labor categories, for TVA to negotiate. Additionally, Contract Audits completed seven compliance audits of contracts with expenditures totaling \$392 million and identified potential overbillings of \$6.7 million. Following are additional details for the engagements completed this semiannual period by the four departments.



Jill M. Matthews

Deputy Assistant  
Inspector General,  
Audits & Support

### Distributor Audits

During this fiscal year, the OIG launched a new contract compliance audit program related to the revenue contracts between TVA and its power distributors. These reviews began in the Inspections group; however, in January 2009, the OIG established the Distributor Audits group to focus solely on these reviews and related issues. The objective of these reviews is to assess compliance with the key power contract provisions including: (1) the proper reporting of power sales by customer class to facilitate proper revenue recognition and billing by TVA; (2) nondiscrimination in providing electricity to members of the same rate class; and (3) the use of power revenues.

During this semiannual period, the OIG completed four reviews of TVA distributors. Two reports were issued under Inspections and two were issued by the newly formed Distributor Audits group. Below are issues noted in one or more of these reviews.

#### > CLASSIFICATION AND METERING

We noted some instances where: (1) customers were not classified properly; (2) similar customers were not classified the same; (3) meters were not accurately measuring consumption; (4) customers were not metered for demand; and (5) customers were not metered, which resulted in estimates being used for billing purposes. The impact of these issues, where we

had adequate information to estimate, was not material; however, there were some instances where we did not have enough information to estimate the impact. Generally, the distributors are taking action to correct these issues.

#### > CONTRACT COMPLIANCE

We found distributors were not complying with certain contract requirements. Specifically, we noted: (1) contracts not in place with all customers whose demand was greater than 50 kW; (2) accounting practices not in compliance with Federal Energy Regulatory Commission requirements; (3) co-mingling of electric department funds with those of other city departments; (4) adjustments to customer bills not made as required in the contract; and (5) proper documentation not kept to verify compliance with the small manufacturing company credit. The distributors generally agreed to take actions to address these issues with the exception of the co-mingling of funds issue. TVA also agreed no action was necessary. In addition, TVA is reevaluating the threshold for requiring distributor's to obtain contracts with their customers.

#### > USE OF ELECTRIC REVENUES

We noted the distributors had more than enough cash on hand to fund planned capital expenditures and provide a cash reserve. While TVA has established guidelines to determine if a distributor has adequate cash reserves (cash ratio of 5 to 8 percent), TVA has not established guidelines to determine if a distributor's cash reserves are excessive. Two of the four distributors reviewed had cash ratios exceeding the minimum guidelines of 5 to 8 percent. TVA has agreed to define criteria for determining when a distributor's cash reserves are excessive. We did not

identify any issues relating to the use of revenues for approved purposes in any of the four reviews.

## **> OPPORTUNITIES FOR TVA OVERSIGHT IMPROVEMENTS**

We found TVA: (1) did not include cash used to prepay TVA power in the calculation of the cash ratio for rate review purposes; (2) had not provided definitive guidance for distributors on what constituted prudent expenditures; (3) had not adequately defined how often meters should be tested by the distributors; (4) had not performed a joint cost study in more than 20 years; (5) had not defined at what point a demand meter is required for certain commercial rate class customers; and (6) had not provided guidance on what types of appurtenances were allowed or at what point in time the use must be predominately residential. TVA agreed to take action on all identified issues except for the issue related to appurtenances.



**Phyllis R. Bryan**

Director, IT Audits & Support

## **IT Audits**

### **> IMPROVEMENTS NEEDED IN GENERAL COMPUTING CONTROLS**

We reviewed general computer controls related to a TVA control system. We found security weaknesses existed in each of the areas we reviewed—logical security, physical and environmental security, and general security controls.

We also noted TVA does not have a process to evaluate audit findings to determine if similar issues could exist in other TVA systems. As a result, the findings identified in this report are similar to findings in previous OIG reports for control system reviews. TVA management agreed with our findings and has taken or is in the process of taking corrective action to remediate issues noted in these audits.

### **> IMPROVEMENTS NEEDED FOR SECURITY MONITORING PROGRAM**

We evaluated the effectiveness of agency-wide controls and processes in place to monitor, identify, classify, and respond to cyber security events. We found TVA: (1) lacked a comprehensive strategy; (2) was not adequately monitoring its IT assets for cyber security events; (3) did not always follow its incident response policies and procedures; and (4) was not effectively using existing resources capable of increasing IT security monitoring levels and coverage.

During this audit, TVA began working toward an agency-level IT security monitoring framework and initiated several projects to improve monitoring, identification, and classification of security events. TVA management agreed with our findings and has taken or is in the process of taking corrective action to remediate the identified issues.

### **> PRE-IMPLEMENTATION REVIEW CONCLUDED CONTROLS WERE ADEQUATE**

We performed a pre-implementation review of the initial phase of the enterprise asset management system. We determined plans and processes in place were adequate after actions were completed to address our concerns

regarding application access controls, system security, system testing, data conversion, and general controls included in our audit scope. TVA management agreed with our findings and has taken or is in the process of taking corrective action to remediate the identified issues.

### **> BACKUP AND RECOVERY CONTROLS DETERMINED EFFECTIVE**

We assessed the controls in place for the backup and recovery of control system configurations for the River Operations business unit. We found River Operations has effective controls and processes in place related to the backup and recovery of control system configurations.

### **> FY 2009 IT SOX TESTING IDENTIFIED OPPORTUNITIES FOR IMPROVEMENT**

During this semiannual period, we completed (1) control testing for five IT general control domains and eleven applications, and (2) year-end, remediation and nonoccurrence testing for four IT general controls and four application controls. Overall, we noted opportunities to improve the operating effectiveness of controls and SOX documentation. TVA management agreed with our findings and has taken or is in the process of taking corrective action to remediate issues noted in these audits.





**Lisa H. Hammer**

Director, Financial and  
Operational Audits

## Financial and Operational Audits

During this semiannual period, we completed testing of financial reporting controls for twenty-seven business processes to assist with TVA's initiative to comply with SOX. In addition, we performed agreed-upon procedures related to TVA's 2008 green power pricing accreditation. Highlights of these projects follow.

### > SOX TESTING IDENTIFIES NEEDED IMPROVEMENTS

We completed testing of 106 control activities within 27 TVA key business processes designated by TVA's Financial Compliance and Regulatory Controls Group as requiring testing for SOX compliance. We found that of the 106 controls tested, 83 were operating effectively, ten were not operating as intended, four lacked sufficient documentation to demonstrate the control operated effectively, five were not designed effectively, and four controls operated differently than what was described in the process documentation. In addition, OIG identified 39 instances where process documentation could be improved.

### > TVA'S COMPLIANCE WITH THE GREEN PRICING ACCREDITATION PROGRAM

TVA's Green Power Switch Program produces or acquires electric power generated from renewable resources such as solar, wind, and methane gas, and adds such sources to TVA's power mix. Both solar and wind power are produced in sufficient quantities to qualify for accreditation by the Center for Resource Solutions (CRS). We completed agreed-upon procedures to assist the CRS in determining TVA's compliance with the annual reporting requirements of CRS' Green Pricing Accreditation Program, Green-e Energy for utility pricing programs, for the year ended December 31, 2008. 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 and 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 and otherwise met the above aspects. CRS was provided with the results of our work.



**Green Power Switch®**



David P. Wheeler

Director, Contract Audits

## Contract Audits

### > PREAWARD CONTRACT REVIEWS

To support TVA management in negotiating procurement actions, we completed ten preaward audits of cost proposals submitted by companies proposing to provide: (1) major equipment and services for TVA's power plants; (2) maintenance, modification, and construction services; and (3) other technical and security services. Our audits identified \$50.5 million of potential savings opportunities for TVA to negotiate. The savings opportunities were primarily related to overstated cost recovery rates and misclassified labor categories.

### > CONTRACT COMPLIANCE REVIEWS

During this semiannual period, we also completed seven compliance audits of contracts with expenditures totaling \$392 million and identified potential overbillings of \$6.7 million. In addition, we provided (1) assistance on various contractor-related investigations, and (2) advice to management regarding various planned contracts. Highlights of our completed compliance audits follow.

- We audited \$23.2 million of costs billed to TVA by a contractor for the design, engineering, and delivery of air preheater equipment for TVA fossil plants. Our audit found TVA had been overbilled at least \$2,232,780 as follows:

- The contract provided for all work, with the exception of a baseline project at Allen Fossil Plant, to be performed on a cost reimbursable basis. However, we found the contractor had overbilled TVA at least \$2,025,739 on four additional fossil plant projects that had been performed because it had billed fixed prices instead of using the cost reimbursable terms required by the contract. The actual overbilling may be higher because our calculation of the overbilling used a maximum fee rate the contractor would have been eligible to receive.

- The contractor overbilled \$207,041 for field technician services because incorrect billing rates had been used.

Although the contractor agreed it had overbilled TVA, it disagreed with the amount that had been overbilled. TVA management plans to recover the overbilling and is working with the contractor to determine the amount to be repaid to TVA.

- We audited \$57.4 million in payments TVA had made to the contractor for providing turbine generator outage services at TVA nuclear plants and found the contractor had overbilled or not provided services to TVA totaling an estimated \$281,023, including: (1) \$171,150 for labor and per diem costs that were either unsupported or unallowable; (2) \$6,729 for overbilled fixed price labor; and (3) \$103,144 for engineering services that had not been provided as required by the contract. TVA management is reviewing the audit findings in detail to determine what actions to take.

- We audited \$9.98 million in costs billed to TVA by a contractor for right-of-way clearing and land restoration services for transmission line projects. In summary, we found the contractor overbilled TVA \$34,678, including (1) \$28,925 in unallowable rental costs, and (2) \$5,753 due to miscellaneous invoice errors. Additionally, we could not determine if price changes had been accurately accounted for under the contract because the contract's provisions related to price changes were unclear. TVA management subsequently decided to recover \$6,380 of the overbilled costs and revise the contract price change provisions.



TVA transmission right-of-way

- We audited the cost billed to TVA by a contractor for performing preheat and post-weld heat treatment services and found the contractor (1) had billed certain tasks at fixed prices instead of using the time and material billing rates provided for by the contract, and (2) overbilled or could not provide support for \$1,350 that had been billed as time and material.

Although the contractor was subsequently able to document that the fixed prices billed to TVA did not overstate its actual costs, we recommended TVA management ensure: (1) the contract explicitly states how procurement agents will determine whether to use time and materials pricing or fixed prices for task assignments, and (2) procurement

agents retain documentation of how TVA assessed the reasonableness of the price for any work performed at the fixed price. Additionally, we recommended TVA recover the \$1,350 of overbilled/unsupported cost. TVA management is planning to recover the \$1,350 overbilled and is reviewing our recommendations regarding the use of fixed-price tasks.

- We audited \$3.5 million in costs billed to TVA by a contractor for work related to the restart of BFN Unit 1. In summary, we found TVA had been overbilled \$1,075,020 including: (1) \$174,912 of unsupported and ineligible labor and per diem costs; (2) \$621,428 of unsupported and ineligible equipment costs; (3) \$199,180 of unsupported material costs; and (4) \$79,500 of overstated task costs. Although the contractor only agreed it could not provide support for \$224,836 of the items questioned by the audit, TVA management is planning to recover the total overbilled amount identified by the audit.
- We audited \$25 million of costs billed to TVA by a contractor for providing research and development activities and found: (1) TVA made invoice payments in advance of the work being performed, thus losing an estimated \$1,125,000 in foregone interest over the period; (2) project status reports submitted by the contractor were incomplete and inaccurate; and (3) TVA was delinquent in recovering \$84,371 in overfunded project amounts.

We recommended TVA management (1) discontinue the use of advanced payments unless the contractor is required to pay interest on the advanced amounts; (2) require the contractor to provide a final status report for all projects worked; and

(3) recover all unspent funds and institute procedures for ensuring the timely collections of all future overpayments. TVA management is reviewing our recommendations to determine what actions to take.

- We audited the costs billed to TVA by a contractor for providing (1) modification and supplemental maintenance services at TVA nuclear plants (operating unit work), and (2) construction services for the restart of BFN U1. The scope of our review included \$272.2 million of noncraft costs billed by the contractor through December 31, 2007, including (1) \$89.6 million for modification and supplemental maintenance services, and (2) \$182.6 million for the BFN U1 services.

In summary, we found TVA had overpaid the contractor (1) from \$876,519 to \$1,579,575 for BFN U1 performance fees due to an overstated fee base and inflated fee rates; (2) \$268,538 due to ineligible and unsupported billings for labor costs; (3) \$54,633 due to overbillings for temporary living and relocation costs; and (4) \$6,650 due to miscellaneous overbilled costs. TVA management is reviewing our findings to determine what amounts to recover from the contractor. ■



An aerial photograph of a river valley, likely the Ohio River, showing a winding river, green fields, and a forested hillside. In the background, two tall industrial smokestacks are visible against a blue sky with light clouds. The image is overlaid with a semi-transparent blue banner at the top.

Rebuilding the **Foundation.**

## Summary *of* Representative Investigations

## Summary of Representative Investigations

During the semiannual period, we completed 223 investigations of criminal and administrative matters. These investigations covered a wide range of topics including environmental crimes, falsification of invoices, computer security issues, and contract fraud to name a few. Specifically, the criminal investigations resulted in three indictments with one involving environmental crimes, one involving theft of government property, and another involving forged and falsified invoices by a TVA manager. In addition, three convictions were obtained during this period. Two of the convictions related to environmental crimes and one involved theft of government property by a TVA employee. Our administrative investigations resulted in savings to TVA, numerous process improvements and corrective actions taken by TVA management including suspension and termination. In addition, we continued our data mining efforts to identify potential areas for investigation. One Workers' Compensation investigation identified through data mining resulted in a savings to TVA of almost \$500,000. These investigations demonstrated that the OIG continues to have a positive impact on TVA and the Valley.



Paul B. Houston

Special Agent  
in Charge,  
Investigations

### ACTIONS IN CRIMINAL INVESTIGATIONS – CONVICTIONS

#### > HERAEUS METAL PROCESSING, INC.

Heraeus Corporation, a company located in Wartburg, Tennessee, reclaims silver and other precious metals through the use of furnaces in a high temperature reclamation process. The resultant airborne emissions are filtered through a process which uses wet scrubbers. In our last Semiannual Report we recounted that Heraeus Corporation pled guilty on January 21, 2009, to a one-count Information, charging the company with making false statements in and omitting information from a document required to be maintained pursuant to the Clean Air Act. The Corporation was fined \$350,000 and sentenced to 18 months of probation. On April 15, 2009, Brent Anderson, the plant manager for Heraeus Metal Processing, Inc., pled guilty to a one-count criminal Information, charging him with making false statements in and omitting information from a document required to be maintained pursuant to the Clean Air Act. Anderson was sentenced to one year probation and 50 hours of community service. This case was initiated by the Environmental Crimes Joint Task Force, Eastern District of Tennessee, based on allegations that operating logs had been falsified.

#### > INDICTMENT OF FORMER TVA NUCLEAR ASSURANCE PROGRAM MANAGER, WBN

A former Program Manager at the Watts Bar Nuclear Plant was indicted in Circuit Court in Tennessee on one count of Forgery and one count Passing Forged Instruments. Our investigation determined that during a move of personal household belongings required by the manager's TVA employment, the manager submitted a forged and falsified invoice to a TVA contractor for property damage. Specifically, the manager submitted a \$600 invoice claiming that a construction company had repaired the damage. A management review of the invoice determined some of the personal information on the invoice belonged to another TVA employee. The other employee had no knowledge of the invoice nor did he consent to the use of his name. During an interview with the OIG, the manager admitted falsifying and forging the invoice in an attempt to collect \$600. The OIG issued a report to TVA Management in May 2009. After receiving notice of proposed termination, the manager resigned his TVA employment.



Watts Bar Nuclear Plant



Nancy J. Holloway

Special Agent  
in Charge,  
Investigations

## OTHER INVESTIGATIONS

### > DATA MINING

The TVA OIG continuously monitors data related to workers' compensation recipients and payments since TVA spends more than \$68 million annually in this area. Data reviews focus on identifying enrollees who are (1) receiving wages and salaries from other sources, indicating their ability to work; (2) currently incarcerated and receiving payments; or (3) over the age of 80 and may possibly be deceased but still receiving payments. Recent reviews resulted in the investigation of five enrollees who were identified as receiving significant annual earnings while receiving workers' compensation payments. Three of these individuals received over \$70,000 each in wages from other sources. Similar investigations in the past resulted in enrollees being permanently removed from the Office of Workers' Compensation Program rolls, thus saving TVA hundreds of thousands of dollars. Cases may also be criminally prosecuted if fraudulent documents are submitted in order to obtain workers' compensation payments.

### > WORKERS' COMPENSATION BENEFITS TERMINATED: SAVES TVA \$472,007

We completed an investigation of a former TVA employee who was receiving workers' compensation benefits. The former painter suffered a back injury in 1984 and had been receiving partial compensation payments since that time. At the time of the injury, he was making \$501.60 a week. A painter currently working for TVA makes \$39,875 annually (\$766.83 weekly). Our investigation determined that the former painter currently earns about \$79,000 annually as a financial officer at a regional health corporation and has been in that position since 2005. Although he had properly reported his earnings to the Department of Labor, he continued to receive workers' compensation benefits from TVA of about \$21,000 annually. We determined that since he is vocationally rehabilitated and his wage-earning capacity is greater than the current pay of the job he held when injured, he is no longer eligible for compensation benefit payments. At the OIG's request, the Department of Labor reviewed the former painter's earnings and determined he is no longer eligible to receive workers' compensation benefits. As a result, the projected savings to TVA is \$472,007, based on an estimated life expectancy of 22 years.

### > SINKING OF THE JOE SWANK TUGBOAT INVESTIGATED

An Empowerline caller reported on the sinking of the Joe Swank tugboat in TVA's Muscle Shoals harbor. The caller said a TVA supervisor was made aware that the tug was listing; several hours later, the supervisor instructed laborers to pump the vessel out with an electric pump that was allowed to run overnight. By the following day, the vessel had sunk, allegedly dumping 2,500 gallons of diesel fuel. The caller claimed that the environmental event should have been prevented. Our investigation determined, however, that only 25 gallons of diesel fuel were discharged, and that the partial sinking was the result of a number of malfunctions in pumps despite the best efforts of TVA personnel. The Alabama Department of Environmental Management and the United States Coast Guard were pleased with TVA's response to the event.



### > COMPUTER SECURITY ISSUE WITH SAFETY IMPLICATIONS ADDRESSED AT BFN

At the request of plant management, we investigated a computer security and related safety issue at BFN. The facts demonstrated that a foreman logged-in to a maintenance software program using a second foreman's computer identification number and password without his permission or knowledge and "signed-off" on a security hold (which prevents the flow of water into wells) that had been placed by the second foreman. BFN management requested the OIG examine the matter and noted that identification numbers and passwords were readily available to a number of users and in this instance were used in such a way as to present a potential safety hazard to others working in the affected area. Plant management also expressed concern over disparate explanations of the events leading to the discovery of the problem. The OIG investigated the allegation and published a detailed report to BFN management which included the history of identification number and password use in the affected area. The report was also made available to the NRC. Plant management responded positively to the recommendations in the report.

### > SUSPICIOUS APPEARANCE OF ITEMS FROM BFN ON EBAY INVESTIGATED

We conducted an investigation based on a report that TVA nuclear colleagues who were searching for obsolete parts on eBay located several items which appeared to have come from TVA. Stickers on one item identified it as a part purchased for BFN Unit 1. Another item had a sticker which identified it as a TVA part. The seller was L&W Surplus, L.L.C., Decatur, Alabama, a corporation which buys and sells industrial surplus equipment, materials, and supplies. L&W Surplus has a contractual relationship with TVA and, since 2007, has purchased more than \$200,000 in surplus equipment from TVA sites, including Hartsville, Browns Ferry, Bellefonte, and Widows Creek. The OIG investigation determined that items sold at the plant level and on eBay had not been adequately inventoried or itemized prior to sale. A Report of Administrative Inquiry was published to BFN, and management responded positively to the recommended remedial actions.

### > ENERGY RIGHT® PROGRAM



The OIG received a report that an employee of TN Electric Utility had defrauded TVA's *energy right*® Program (ERP). TVA ERP provides funding to local utilities to distribute to customers who convert from gas water heaters to electric water heaters, etc. The employee served as an approving official for the distribution of ERP funds. The complaint alleged in pertinent part that the employee completed ERP forms and subsequently obtained funds which were then distributed to friends and family members though they did not upgrade or replace their water heaters. The investigation also revealed information bearing on non-TVA related fraud committed by the employee against the city including using city funds to purchase gift cards that were supposed to be used in charity auctions but were instead used for personal gain. Criminal prosecution was declined due to the comparatively low dollar loss. However, the city official was forced to resign, and the city garnished the wages of this employee. A report to TVA management was provided and a recommendation approved.



### > INACCURATE REPORTING IN FREEZE PROTECTION PROGRAM INVESTIGATED AT BFN

At the request of plant management, we investigated issues identified as problematic in the Freeze Protection Program at BFN. As documented in a Problem Evaluation Report, two heaters identified in the Condensate Pipe Tunnel, previously identified as missing in 2003 were documented by TVA technicians as being in place during BFN's winter readiness "walk-downs" from 2001 to 2008. These heaters are "non-nuclear." They are not direct pieces of nuclear operation equipment, but are used as preventive care equipment for the prevention of frost and cold damage to other capital assets within the tunnel (pipes, etc). An NRC report in 2008 noted two missing heaters. The OIG investigated the inaccurate reporting and documented the history and likely causal factors in a Report of Administrative Inquiry published to BFN management. Plant managers responded positively to the recommendations made in the report.

### > SHAWNEE NOOSE CASE (1 OF 2)

On February 15, 2009, a Fossil Field Services Supervisor took photographs of scaffolding constructed at the Unit 1 H.P. turbine at the Shawnee Fossil Plant during an outage. When the supervisor reviewed the photographs later on his computer he noticed a noose tied to the back of the scaffolding. The rope was cut down and TVA Police was notified. Several TVA contractors and employees were interviewed and denied knowledge concerning who tied and placed the hangman's noose. Three individuals were identified who might be capable of tying a hangman's noose and who had allegedly made racist comments in the past. However, there were no witnesses to the event and no evidence to clearly connect any individual to the tying of the noose.

Recommendations were provided to fossil management concerning sensitivity awareness training in smaller group settings. The recommended training included procedures to follow in the event a hangman's noose is discovered in the future. Fossil management responded to the OIG recommendations by implementing smaller setting sensitivity awareness training for all Shawnee employees, contractors, and all Power Service Shop employees.

### > SHAWNEE NOOSE CASE (2 OF 2)

During the investigation of a separate noose-related complaint (outlined previously) another unrelated noose incident was uncovered. An investigation determined that a Shawnee Unit Operator had tied a hangman's noose during his shift in the control room sometime during February 2008 (exact date unknown). A co-worker informed the Operator that he could get fired for making a hangman's noose. The Operator immediately apologized and untied the noose. An African American Unit Operator witnessed the incident. The matter was referred to the United States Department of Justice, Civil Rights Division after consultation with the local United States Attorney's Office. On September 21, 2009, the U.S. Attorney's office, based on the advice of the Department of Justice, declined criminal prosecution.

### > KINGSTON FOSSIL PLANT ADMINISTRATIVE EMPLOYEE CHANGED HUSBAND'S LEAVE TO PAID TIME WORKED

TVA Management informed us that it appeared a Kingston Fossil Plant Administrative employee was changing her husband's leave in the payroll system to paid time. Each time he entered leave into the system and after it was subsequently approved by his supervisor, she entered the system and changed the leave to straight time, allowing her husband to be paid as if he were at work, when he was actually on leave. Our investigation verified that the Kingston Fossil Plant Administrative employee cancelled her husband's leave on two instances. However, the Kingston Fossil Plant Administrative employee had announced her retirement from TVA and retired prior to the completion of our investigation. The husband's leave was corrected.

### > TVA CONTRACTOR INVESTIGATED FOR FRAUDULENT TEMPORARY LIVING EXPENSE SUBMISSIONS

A TVA contractor at the Watts Bar Nuclear Plant received temporary living allowances totaling more than \$17,000 by submitting two different "permanent addresses" to TVA for that purpose. The contractor had a temporary address in Chattanooga, Tennessee, and a permanent address in Alabama. He also owned a home in Atlanta. The contractor submitted two different permanent addresses to TVA in order to qualify for a temporary living allowance. Neither address was his permanent address. The contract employee died prior to being indicted.

### > COMPUTER MISUSE INVESTIGATION RESULTS IN 30-DAY SUSPENSION

An investigation was predicated on a TVA Enterprise IT Security Division referral alleging that a unit operator at a TVA fossil plant had been accessing pornographic Web sites during his assigned shift. Proxy logs obtained by TVA Enterprise IT Security contained references tending to substantiate the allegation. A more thorough forensic computer investigation followed leading to an interview of the subject, during which he confessed to downloading extremely graphic pornography from the Internet onto TVA computers for the past five years.

OIG issued a report to management detailing the findings of the investigation both from a personnel and technical standpoint. TVA management suspended the employee for 30 days. TVA IS assessed the findings and is in the process of implementing Valley-wide processes to better address such misuse.

### > TVA MANAGER WITH PROCUREMENT AUTHORITY FOUND SELF-DEALING

An investigation followed confidential reporting alleging that a TVA manager used his management position at TVA to procure wheat straw from a side business for personal financial gain. The manager had procurement authority for anything related to fossil outage work which included the purchase of wheat straw. Although the individual became a manager in 2003, he was not required by TVA's General Counsel's office to provide a financial disclosure until 2007. The manager did not provide the required financial disclosure form

due in 2007 or 2008, despite repeated notifications. In 2008, the manager was instructed to disclose his finances for January 1 through December 31, 2007.

Our investigation determined that the former manager is part owner of a wheat straw business, along with another TVA employee, which sells straw to several customers including a TVA vendor. The TVA fossil plant purchased more than \$38,000 in straw from the vendor from 2002 through 2008. Wheat straw is ordered by the fossil

plant personnel after purchase requests are submitted by plant staff.

The manager was listed as the approval authority on nine occasions from 2004 through 2007 for Widows Creek Fossil Plant wheat straw purchase requests that were ultimately purchased from the pertinent vendor.

Based on investigative findings, the OIG formally recommended a number of remedial actions designed to identify and scrutinize both employees and contracts at risk for self-dealing. ■



An aerial photograph of a large-scale construction project, possibly a dam or a large industrial facility, with a blue overlay. The image shows a large body of water or a reservoir, with a long, straight structure extending into it. The surrounding area is a mix of land and water, with some buildings and infrastructure visible. The blue overlay is a semi-transparent layer that covers the entire image, giving it a monochromatic look.

Rebuilding the **Foundation.**

**Legislation** *and* **Regulations**

## Legislation and Regulations

In fulfilling its responsibilities under the IG Act of 1978, as amended, the OIG follows and reviews existing and proposed legislation and regulations that relate to the mandate, operations and programs of TVA. Although TVA's Office of the General Counsel reviews proposed or enacted legislation that could affect TVA activities, the OIG independently follows and reviews proposed legislation that affects the OIG and/or relates to economy and efficiency or waste, fraud, and abuse of TVA programs or operations.

Major pieces of legislation being followed by the TVA OIG during the past six months include:



### > H.R. 2454 – AMERICAN CLEAN ENERGY AND SECURITY ACT OF 2009

This comprehensive piece of legislation significantly impacts large producers of electric power, including TVA. The legislation covers many items, a few of which are as follows. The bill amends the Public Utility Regulatory Policies Act to establish a combined national renewable energy and energy efficiency resource standard, mandating those suppliers of electricity marketing more than 4 million megawatt-hours annually to obtain 20 percent of their supply from renewable energy credits and demonstrated energy efficiency savings by 2021 (starting at 6 percent in 2012 and increasing the annual renewable combined renewable target until it reaches 20 percent by 2021). No more than one-quarter of this amount may be met by efficiency savings. The

bill sets new set new energy-efficiency standards for lighting products, commercial furnaces, and appliances. The bill also requires federal agencies to get 20 percent of their electricity from renewable sources by 2020 and allows the federal government to enter into long-term power purchase agreements for renewable energy. The bill also contains provisions directed toward the control of greenhouse gas emissions. For example, new coal-fired power plants must reduce their emissions by at least 65 percent if they receive air permits after 2020. Plants permitted between 2009 and 2015 have to cut emissions by at least 50 percent within four years after a threshold amount of carbon capture and storage equipped capacity is operating. Coal plants, which

are the source of the overwhelming proportion of greenhouse gas from electric power producers, would have to capture 65 percent of their carbon emissions for plants built after 2020. The bill also encourages deployment of a smart grid to increase grid efficiency and to reduce utility peak loads. It directs the establishment of a federal policy on electric grid planning, including facilitating transmission to carry renewably-generated electricity, and it provides for the Federal Energy Regulatory Commission to have jurisdiction of interstate transmission projects in the Western Interconnection. The bill also establishes a cap-and-trade program to limit total emissions of carbon dioxide and other heat-trapping pollutants from major sources.

## > S. 1462 – AMERICAN CLEAN ENERGY AND LEADERSHIP ACT OF 2009

Similar to the legislation in the other chamber, this is a comprehensive energy bill. The legislation covers many items a few of which are pointed out herein. This bill also establishes a combined national renewable energy and energy efficiency resource standard, requiring those suppliers of electricity marketing more than 4 million megawatt-hours annually to obtain 15 percent of their supply from renewable energy credits or energy efficiency credits by 2021 (starting at 3 percent in 2011 and increasing the annual renewable combined renewable target until it reaches 15 percent by

2021). No more than 26.67 percent of this amount can be met with energy efficiency, making the renewable energy mandate effectively about 10 percent by 2021. However, unlike the House bill, the Senate bill contains no provisions for the control of greenhouse gas, i.e., cap and trade. The Senate bill affirms that the use of nuclear energy should be expanded and creates a National Commission on Nuclear Waste to carry out six studies related to the management and disposal of nuclear waste for both civilian and defense activities. A number of other studies are also called for by this bill including

one on the efficiencies and the annual CO<sub>2</sub> and other emissions output from electric generation facilities. The bill also provides for the Federal Energy Regulatory Commission to have jurisdiction over high-priority electric transmission facilities when states have been unable to resolve the matter and the bill also contains a number of provisions in regard to improving the electricity transmission grid.

## > H.R. 1507 – WHISTLEBLOWER PROTECTION ENHANCEMENT ACT OF 2009

This bill amends federal personnel law relating to whistleblower protections for federal employees by expanding the concept of protected disclosure to include lawful disclosures without restriction to time, place, form, motive, context, forum, or prior disclosures, including a disclosure in the ordinary course of an employee's duties. It also expands the protections to cover contractor employees. Significantly, if a federal employee or contractor employee experiences retaliation and the administrative process fails to provide relief within 180 days the bill would allow the employee to file a case with a federal district court and

have the matter decided by a jury. As to cases decided by the Merit Systems Protection Board, the whistleblower can file an appeal within 90 days. The bill provides for a choice of appellate forums other than the Federal Circuit Court of Appeals. Prevailing whistleblowers can be awarded back pay and compensatory damages.

The bill defines evidentiary standards applicable to whistleblower disclosures. The bill requires an agency IG to either make a determination that a complaint alleging reprisal is either frivolous or submit a report within 180 days after receiving the complaint. The person alleging the reprisal shall have access

to the complete investigation file of the IG in accordance with the Privacy Act. And the investigation of the IG shall be deemed closed for purposes of disclosure when an employee files an appeal to an agency head or a court of competent jurisdiction. IG's would also be required to issue annual reports of their agencies' compliance with the enacted statute.



## > S. 372 – WHISTLEBLOWER PROTECTION ACT OF 2009

This proposed legislation also expands the definition as to what constitutes a “protected disclosure,” and unlike the House bill it creates a Whistleblower Ombudsman in every IG office to advocate for federal whistleblowers. The bill is also different from the proposal in the House in a number of significant aspects. It exempts from protected disclosures violations of law which are minor or inadvertent, negates a claim of reprisal when a supervisor shows that the personnel action in question would have been taken in the absence of any protected activity,

lowers the agencies burden of proof from “clear and convincing evidence” to the “preponderance of the evidence” caps compensatory damages, and creates a sixty-day statute of limitations for filing claim of retaliation. It also provides a different methodology of protection to those employed by national security agencies through the establishment of an adjudicatory system within the defendant agency. The proposed legislation provides the Merit System Protection Board with a summary judgment procedure (with a five-year sunset provision to test its

workability), and includes a provision whereby a federal employee may ask the MSPB to certify their case for federal court prior to the full MSPB hearing. The review before the court is not de novo and MSPB’s denial of certification is examined by the appellate court using the standard of “arbitrary, capricious or an abuse of discretion.” It limits jury trials, and contains a five-year sunset provision for that provision granting employees the right of appeal to the federal circuit court of appeals where they reside.

## > H.R. 493 – COAL ASH RECLAMATION, ENVIRONMENT, AND SAFETY ACT OF 2009

This bill orders the Secretary of the Interior to prescribe federal design, engineering, and performance standards on new coal ash impoundments; and orders an inventory of existing coal ash impoundments and the risks each

poses to groundwater, human health, and the environment. It also requires monitoring and inspection regimes for both existing and future coal ash impoundments.

## > S. 942 – THE GOVERNMENT CHARGE ABUSE CARD ABUSE PREVENTION ACT OF 2009

This proposed legislation requires agency IG to conduct periodic assessments of their agencies’ purchase card or convenience check programs and to report their findings and recommendations to agency heads and the Office of Management and Budget. ■



Rebuilding the **Foundation.**

## Appendices

# Appendix 1

## INDEX ON REPORTING REQUIREMENTS UNDER THE IG ACT

REPORTING	REQUIREMENT	PAGE
Section 4(a)(2)	Review of Legislation and Regulations	42-45
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Section 5(a)(4)	Matters Referred to Prosecutive Authorities and the Prosecutions and Convictions That Have Resulted	Appendix 5
Section 5(a)(5) and 6(b)(2)	Summary of Instances Where Information Was Refused	None
Section 5(a)(6)	Listing of Audit and Inspection Reports	Appendix 2
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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	None



# Appendix 2

## OIG AUDIT REPORTS ISSUED DURING THE SIX-MONTH PERIOD ENDED SEPTEMBER 30, 2009

Report Number and Date	Title	Questioned Costs	Unsupported Costs	Funds to be Put to Better Use
<b>CONTRACT AUDITS</b>				
2008-12159 04/30/2009	Preaward Review - Proposal for Steam Generator Replacement at Sequoyah Nuclear Plant	\$ 0	\$ 0	\$3,498,100
2009-12496 05/20/2009	Preaward Review - Proposed Billing Rates for Security Services	0	0	889,000
2008-11721 05/28/2009	ALSTOM Power Inc., Air Preheater Company – Air Preheater Equipment for TVA Fossil Plants	2,232,780	2,025,739	0
2008-11506 06/10/2009	Siemens Westinghouse Power Corporation – Turbine Generator Outage and Other Support Services	281,023	274,294	0
2009-12359 06/17/2009	Preaward Review – Proposal to Provide Combustion Turbine Generators	0	0	0
2009-12473 06/26/2009	Preaward Review – Proposal for Nuclear Steam Supply Side Alliance Agreement	0	0	0
2009-12582 07/14/2009	Preaward Review – Proposal to Provide Modification, Outage, and Supplemental Maintenance Services	0	0	9,900,000
2008-11828 07/16/2009	Page Clearing, Inc. – Right-of-Way Clearing Services	34,678	5,753	0
2009-12587 08/13/2009	Preaward Review – Proposal to Provide Modification, Outage, and Supplemental Maintenance Services	0	0	14,300,000
2007-001C-02 08/14/2009	Analytic Stress Relieving, Inc. – Technician Services	1,350	1,350	0
2007-001C-01 09/01/2009	Shaw Group, Inc. – Subcontracted Technician Services	1,075,020	580,346	0
2009-12584 09/01/2009	Preaward Review – Proposal to Provide Modification, Outage, and Supplemental Services	0	0	14,819,000
2009-12726 09/03/2009	Preaward Review – Proposal to Provide Maintenance and Modification Services at Watts Bar Nuclear Plant, Unit 2	0	0	495,029
2009-12756 09/03/2009	Preaward Review – Proposal for Watts Bar Nuclear Plant Unit 2 Maintenance and Modification Project	0	0	330,000
2009-12380 09/14/2009	Preaward Review – Proposal for Nuclear Steam Supply Side Alliance Agreement	0	0	6,339,000
2008-11999 09/23/2009	Electric Power Research Institute – Research and Development Services	1,209,371	84,371	0
2008-11510 09/25/2009	Stone & Webster Construction, Inc. – Nuclear Modification and Construction Services	1,909,396	0	0
<b>DISTRIBUTOR AUDITS</b>				
2008-12036 08/31/2009	City of Oxford Electric Department	\$ 0	\$ 0	\$ 0
2008-12039 09/29/2009	Hickman-Fulton Counties Rural Electric Cooperative Corporation	0	0	0

FINANCIAL AND OPERATIONAL AUDITS					
2009-12432 05/04/2009	Maintain Fossil Fuel Master File – Sarbanes-Oxley 404 Testing	\$	0	\$	0
2009-12440 05/06/2009	Pensions, Employee Benefits & OPEBs Process – Sarbanes-Oxley 404 Testing		0		0
2009-12430 05/07/2009	Depreciating Fixed Assets – Sarbanes-Oxley 404 Testing		0		0
2009-12445 05/12/2009	Asset Retirement Fund Administration – Sarbanes-Oxley 404 Testing		0		0
2009-12444 05/20/2009	Alternative Procurement Methods-Miscellaneous Vouchers – Sarbanes-Oxley 404 Testing		0		0
2009-12442 05/21/2009	Alternative Procurement Methods-Purchasing Card – Sarbanes-Oxley 404 Testing		0		0
2009-12424 05/22/2009	Energy Trading – Sarbanes-Oxley 404 Testing		0		0
2009-12437 05/22/2009	Perform Transaction Processing (Feeder Files) – Sarbanes-Oxley 404 Testing		0		0
2009-12590 06/01/2009	2008 Green Power Accreditation		0		0
2009-12436 06/04/2009	Receiving Fossil Fuel Inventory – Sarbanes-Oxley 404 Testing		0		0
2009-12449 06/08/2009	Disbursing Payroll – Sarbanes-Oxley 404 Testing		0		0
2009-12434 06/16/2009	Fossil Fuel Burn – Sarbanes-Oxley 404 Testing		0		0
2009-12447 06/17/2009	End-Use Billing – Sarbanes-Oxley 404 Testing		0		0
2009-12448 06/17/2009	Pay Employees – Sarbanes-Oxley 404 Testing		0		0
2009-12435 06/18/2009	Costing Fossil Fuel Inventory – Sarbanes-Oxley 404 Testing		0		0
2009-12422 06/19/2009	Account Set-up and Monitoring – Sarbanes-Oxley 404 Testing		0		0
2009-12438 06/19/2009	Perform Transaction Processing (Including JEs) – Sarbanes-Oxley 404 Testing		0		0
2009-12441 06/19/2009	Processing Accounts Payable – Sarbanes-Oxley 404 Testing		0		0
2009-12431 06/23/2009	Lease Transactions – Sarbanes-Oxley 404 Testing		0		0
2009-12443 06/23/2009	Alternative Procurement Methods-Gold Cards – Sarbanes-Oxley 404 Testing		0		0
2009-12429 06/25/2009	Acquire/Develop/Dispose of Fixed Assets – Sarbanes-Oxley 404 Testing		0		0
2009-12450 06/26/2009	Maintaining Payroll Master Files – Sarbanes-Oxley 404 Testing		0		0
2009-12451 06/26/2009	Recording Time – Sarbanes-Oxley 404 Testing		0		0
2009-12433 06/30/2009	Manage Fossil Fuel Inventory – Sarbanes-Oxley 404 Testing		0		0
2009-12425 07/02/2009	Gas: Physical – Sarbanes-Oxley 404 Testing		0		0

## Appendix 2 (Continued)

2009-12446 07/02/2009	Manage Contracting – Sarbanes-Oxley 404 Testing	0	0	0
2009-12428 07/07/2009	Approval Capital and Expense Projects – Sarbanes-Oxley 404 Testing	0	0	0
2009-12423 07/27/2009	Alternative Procurement Methods-Convenience Checks – Sarbanes-Oxley 404 Testing	0	0	0
<b>INFORMATION TECHNOLOGY AUDITS</b>				
2009-12470 05/29/2009	Manage Changes/Install and Accredited Solutions and Changes – Sarbanes-Oxley 404 Testing	\$ 0	\$ 0	\$ 0
2009-12471 05/29/2009	Manage Operations – Sarbanes-Oxley 404 Testing	0	0	0
2008-12046 06/04/2009	Effectiveness of Security Monitoring	0	0	0
2009-12588 06/15/2009	Fuelworx Application – Sarbanes-Oxley 404 Testing	0	0	0
2009-12472 06/17/2009	Passport Application – Sarbanes-Oxley 404 Testing	0	0	0
2009-12581 06/17/2009	CWMI Application and Interfaces – Sarbanes-Oxley 404 Testing	0	0	0
2009-12575 06/18/2009	eRemittance Application – Sarbanes-Oxley 404 Testing	0	0	0
2009-12580 06/24/2009	WebTrader Application – Sarbanes-Oxley 404 Testing	0	0	0
2009-12631-01 06/24/2009	eFMS Business Process Automated Controls – Sarbanes-Oxley 404 Testing	0	0	0
2009-12631-02 06/25/2009	eFMS Business Process Automated Controls – Sarbanes-Oxley 404 Testing	0	0	0
2009-12631-03 06/26/2009	eFMS Business Process Automated Controls – Sarbanes-Oxley 404 Testing	0	0	0
2009-12583 06/29/2009	PowerBilling Application – Sarbanes-Oxley 404 Testing	0	0	0
2009-12576 06/30/2009	eCash Application – Sarbanes-Oxley 404 Testing	0	0	0
2009-12589 06/30/2009	MV90 Application – Sarbanes-Oxley 404 Testing	0	0	0
2009-12468 07/10/2009	DS5 Ensure Systems Security – Sarbanes-Oxley 404 Testing	0	0	0
2009-12338-01 07/13/2009	DS11 Manage Data – Sarbanes-Oxley 404 Testing	0	0	0
2008-12127 09/24/2009	Control System: General, Physical, and Security Controls Review	0	0	0
2009-12338-03 09/24/2009	Enterprise Backup and Recovery-River Operations	0	0	0
2008-11792 09/29/2009	Pre-implementation Review of Enterprise Asset Management System	0	0	0
<b>TOTAL AUDITS (66)</b>		<b>\$6,743,618</b>	<b>\$2,971,853</b>	<b>\$50,570,129</b>



## OIG INSPECTION REPORTS ISSUED DURING THE SIX-MONTH PERIOD ENDED SEPTEMBER 30, 2009

Report Number and Date	Title	Questioned Costs	Unsupported Costs	Funds to be Put to Better Use
2008-12007 05/13/2009	Monroe County Electric Power Administration – Distributor Review	\$ 0	\$ 0	\$ 0
2008-12040 05/13/2009	Lewisburg Electric System – Distributor Review	0	0	0
2008-12003 05/15/2009	Maintain and Gain Transactions Review	0	0	0
2008-12283-01 06/12/2009	Kingston Fossil Plant Ash Slide – Interim Report	0	0	0
2007-11399 06/23/2009	Review of TVA's Financial Performance Results	0	0	0
2008-12283-02 07/28/2009	Kingston Fossil Plant Ash Spill – Root Cause Study and Observations about Ash Management	0	0	0
2009-12695-01 09/29/2009	Cherokee Dam Campground Review	0	0	0
2009-12695-02 09/29/2009	Douglas Dam Headwater Campground Review	0	0	0
2009-12695-03 09/29/2009	Douglas Dam Tailwater Campground Review	0	0	0
2009-12695-04 09/29/2009	Foster Falls Campground Review	0	0	0
2009-12695-05 09/29/2009	Melton Hill Dam Campground Review	0	0	0
2009-12695-06 09/29/2009	Barton Springs Campground Review	0	0	0
2009-12695-07 09/29/2009	Loyston Point Campground Review	0	0	0
2009-12695-08 09/29/2009	Pickwick Dam Tailwater Campground Review	0	0	0
2009-12695-09 09/29/2009	Watauga Dam Tailwater Campground Review	0	0	0
2009-12695-10 09/29/2009	Mallard Creek Campground Review	0	0	0
2009-12695-11 09/29/2009	Wilson Dam Lower Rockpile Campground Review	0	0	0
2009-12702 09/30/2009	Coal Contracts Review – Rio Tinto Energy America-Antelope Mine	0	0	0
2009-12703 09/30/2009	Coal Contracts Review – Rio Tinto Energy America-Jacobs Ranch Mine	0	0	0
2009-12704 09/30/2009	Coal Contracts Review – Powder River Coal-North Antelope Rochelle Mine	0	0	0
2009-12705 09/30/2009	Coal Contracts Review – Thunder Basin Coal Company-Black Thunder Mine	0	0	0
<b>TOTAL INSPECTIONS (21)</b>		0	0	0

Note: A summary of or link to the full report may be found on the OIG's website at <http://www.tvaog.gov>.

## Appendix 3

**TABLE I: TOTAL QUESTIONED AND UNSUPPORTED COSTS  
AUDITS**

<b>Audit Reports</b>	<b>Number of Reports</b>	<b>Questioned Costs</b>	<b>Unsupported Costs</b>
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	7	\$6,743,618	\$2,971,853
<b>Subtotal (A+B)</b>	<b>7<sup>1</sup></b>	<b>\$6,743,618</b>	<b>\$2,971,853</b>
C. For which a management decision was made during the reporting period	5 <sup>2</sup>	\$2,833,678	\$2,315,795
1. Dollar value of disallowed costs	5	\$2,798,657	\$2,312,148
2. Dollar value of costs not disallowed	2	\$35,021	\$3,647
D. For which no management decision has been made by the end of the reporting period	4	\$3,909,940	\$656,058
E. For which no management decision was made within six months of issuance	0	\$0	\$0

**TABLE I: TOTAL QUESTIONED AND UNSUPPORTED COSTS  
INSPECTIONS**

<b>Audit Reports</b>	<b>Number of Reports</b>	<b>Questioned Costs</b>	<b>Unsupported Costs</b>
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
<b>Subtotal (A+B)</b>	<b>0</b>	<b>0</b>	<b>0</b>
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
E. For which no management decision was made within six months of issuance	0	0	0

<sup>1</sup> The subtotal of reports (A+B) differs from the sum of C and D when the same report(s) contain recommendations for which a management decision was made and others for which a management decision was not made by the end of the semiannual period.

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

**TABLE II: FUNDS TO BE PUT TO BETTER USE  
AUDITS**

<b>Audit Reports</b>	<b>Number of Reports</b>	<b>Funds to be Put to Better Use</b>
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	8	\$50,570,129
<b>Subtotal (A+B)</b>	<b>8<sup>3</sup></b>	<b>\$50,570,129</b>
C. For which a management decision was made during the reporting period	4 <sup>4</sup>	\$10,682,129
1. Dollar value of recommendations agreed to by management	3	\$6,593,129
2. Dollar value of recommendations not agreed to by management	3	\$5,959,150
D. For which no management decision has been made by the end of the reporting period	5	\$39,888,000
E. For which no management decision was made within six months of issuance	0	\$0

**TABLE II: FUNDS TO BE PUT TO BETTER USE  
INSPECTIONS**

<b>Audit Reports</b>	<b>Number of Reports</b>	<b>Funds to be Put to Better Use</b>
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
<b>Subtotal (A+B)</b>	<b>0</b>	<b>0</b>
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
E. For which no management decision was made within six months of issuance	0	0

<sup>3</sup>The subtotal of reports (A+B) differs from the sum of C and D when the same report(s) contain recommendations for which a management decision was made and others for which a management decision was not made by the end of the semiannual period.

<sup>4</sup>The total number of reports for which a management decision was made during the reporting period differs from the sum of C(1) and C(2) when the same report(s) contain both recommendations agreed to by management and others not agreed to by management.



# Appendix 4

## AUDIT AND INSPECTION REPORTS WITH CORRECTIVE ACTIONS PENDING

As of the end of the semiannual period, final corrective actions associated with six audits and five inspections were not completed within one year of the final report date. Presented below for each audit and inspection are the report number and date and a brief description of the open recommendation(s) and the date management expects to complete final action, if available.

<b>Audit Report Number and Date</b>	<b>Report Title and Recommendation(s) for Which Final Action is Not Complete</b>
<b>2007-11348-01</b> 03/26/2008	<b>IT Security Organizational Effectiveness</b>  TVA management agreed with our recommendations and has completed actions on three of the six recommendations. TVA is in the process of implementing program and organizational improvements. Action plans are scheduled for completion by March 30, 2010.
<b>2007-11216</b> 06/02/2008	<b>Actions to Protect Social Security Numbers and Eliminate Unnecessary Use</b>  TVA management has completed final action for one recommendation. According to Information Services, it is on track to meet the action deadlines for the remaining two recommendations (June 2010).
<b>2008-11754</b> 06/13/2008	<b>Computer Operations-Manage Facilities – SOX 404 Testing</b>  Management has completed actions to address three of the five recommendations. Corrective action for the remaining two recommendations is on track for completion in September 2010.
<b>2007-11388</b> 08/21/2008	<b>Sequoyah Nuclear Plant – Cyber Security Assessment</b>  TVA management from Nuclear Power Group and Information Services provided corrective action plans to address the recommendations and indicated all corrective actions would be completed by October 2010.
<b>2008-11809</b> 08/21/2008	<b>Manage Site Material and Record Inventory Movement – SOX 404 Testing</b>  According to TVA management, as of September 30, 2009, TVA had implemented additional inventory controls to address the two outstanding findings and recommendations. TVA is preparing related documentation and testing the associated controls. Final action is expected to be completed by October 15, 2009.
<b>2008-11964</b> 09/25/2008	<b>Federal Information Security Management Act Evaluation</b>  Management agreed with our findings and recommendations and plans to complete final action by November 30, 2009.

<b>Inspection Report Number and Date</b>	<b>Report Title and Recommendation(s) for Which Final Action is Not Complete</b>
<b>2005-5181</b> 08/31/2005	<b>Physical and Environmental Controls for the Chattanooga Data Center</b>  Information Services has developed a Unified Communications Strategy and Project Plan that includes replacing the telephone system by the end of 2012.
<b>2005-5221</b> 06/13/2006	<b>TVA's Role as a Regulator</b>  The original findings of the OIG report have been addressed, but full implementation will take time. Recommendations for all of the OIG findings from the report have been developed. The TVA Regulatory Work Group comprised of officers of the company has been established to implement the recommendations. The TVA Board is keenly interested in this topic and has requested additional information on TVA regulatory authority and scope which has been provided. The OIG has provided recommendations on these issues. Recommendations on TVA's role as regulator were provided to the Audit, Governance, and Ethics Committee of the Board in August 2009. TVA will be presenting recommendations to the TVA Board in November 2009. An estimated completion date for final action will be established once the Board has reviewed TVA management recommendations and provided guidance.
<b>2007-11428-08</b> 08/07/2008	<b>Normandy Cedar Point Public Use Area lease Agreement</b>  Environmental Stewardship Relations has sent the lessee a letter outlining areas of compliance that must be addressed. If documentation is not submitted for corrective action, required investment and performance bond, Environmental Stewardship Relations will proceed with terminating the lease and take possession of the TVA properties.
<b>2008-11874</b> 09/12/2008	<b>Contractor's Accounting for the Watts Bar Nuclear Plant Unit 2 Construction Project</b>  The remaining enhancements require programmer development and have not been completed as originally forecasted. The programmer that originally developed the billing program has been contacted and has submitted a proposal to improve the billing process and control points. A request was recently approved by TVA to fund the program enhancement activities identified in the programmer's proposal. The improvements are scheduled to be completed by November 30, 2009.
<b>2007-11443</b> 09/30/2008	<b>Contractor Background Checks Applicable to the Watts Bar Nuclear Plant Unit 2 Construction Project</b>  Nuclear Power Group and Human Resources are currently working to determine what changes are necessary to the background checks for Watts Bar Nuclear Plant Unit 2 contractor employees and if any changes are required to TVA Business Practice 29.

## Appendix 5

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

#### Referrals

Subjects Referred to U.S. Attorneys	45
Subjects Referred to State/Local Authorities	6

#### Results

Subject Indicted	3
Subjects Convicted	3
Referrals Declined	34

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

# Appendix 6

## HIGHLIGHTS - STATISTICS

	SEPT 30, 2009	MAR 31, 2009	SEPT 30, 2008	MAR 31, 2008	SEPT 30, 2007
<b>AUDITS</b>					
<b>AUDIT STATISTICS</b>					
Carried Forward	70	28	47	35	36
Started	46	59	53	52	72
Canceled	(6)	(3)	(2)	(2)	(7)
Completed	(66)	(14)	(70)	(38)	(66)
In Progress at End of Reporting Period	44	70	28	47	35
<b>AUDIT RESULTS (Thousands)</b>					
Questioned Costs	\$6,744	\$1,226	\$3,609	\$774	\$4,635
Disallowed by TVA	2,799	829	1,802	370	3,324
Recovered by TVA	909	644	676	3,339	1,274
Funds to Be Put to Better Use	\$50,570	\$0	\$28,653	\$100,990	\$19
Agreed to by TVA	4,723	0	28,120	53,987	8,529
Realized by TVA	4,395	0	26,460	53,987	948
<b>OTHER AUDIT-RELATED PROJECTS</b>					
Completed	16	8	7	6	17
Cost Savings Identified/Realized (Thousands)	\$0	\$0	\$0	\$0	\$0
<b>INSPECTIONS</b>					
Completed	21	4	16	8	16
Cost Savings Identified/Realized (Thousands)	\$0	\$0	\$0	\$0	\$15

<b>INVESTIGATIONS<sup>1</sup></b>					
<b>INVESTIGATION CASELOAD</b>					
Opened	194	171	161	155	113
Closed	223	91	135	121	121
In Progress at End of Reporting Period	251	280	200	174	140
<b>INVESTIGATION RESULTS</b>					
Recoveries	\$20.6	\$10,725.3	\$632.6	\$25,262	\$27
Projected Savings	472.1	0	0	4,137	575
Fines/Penalties	.4	352.7	1.6	206	1
Disciplinary Actions Taken (# of Subjects)	6	3	15	9	8
Counseling/Management Techniques Employed (# of Cases)	10	1	6	16	3
Referred to U.S. Attorneys	45	18	7	19	5
Referred to State/Local Authorities <sup>2</sup>	6	--	--	--	--
Indicted	3	4	14	4	6
Convicted	3	3	3	3	2

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

<sup>2</sup> Category added in semiannual period ended September 30, 2009.



# GLOSSARY ABBREVIATIONS AND ACRONYMS

**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.

**Management Decision** – The 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.

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

<b>AECOM</b> .....	AECOM Technology Corporation
<b>BFN</b> .....	Browns Ferry Nuclear Plant
<b>CIGIE</b> .....	Council of the Inspectors General on Integrity and Efficiency
<b>CEO</b> .....	Chief Executive Officer
<b>CRS</b> .....	Center for Resource Solutions
<b>DOL</b> .....	Department of Labor
<b>ERM</b> .....	Enterprise Risk Management
<b>ERP</b> .....	<i>energy right</i> ® Program
<b>IG</b> .....	Inspector General
<b>IG Act</b> .....	Inspector General Act, as amended
<b>MSPB</b> .....	Merit System Protection Board
<b>IT</b> .....	Information Technology
<b>Marshall Miller</b> .....	Marshall Miller & Associates
<b>NIMS</b> .....	National Incident Management System
<b>NRC</b> .....	Nuclear Regulatory Commission
<b>O&amp;M</b> .....	Operation and Maintenance
<b>OIG</b> .....	Office of the Inspector General
<b>PSAs</b> .....	Public Service Announcements
<b>SOX</b> .....	Section 404 of the Sarbanes-Oxley Act of 2002
<b>TVA</b> .....	Tennessee Valley Authority

# WHAT IS TVA?

## > Power Generation

- A federal government corporation, created on May 18, 1933, serving a seven-state region
- Nation's largest public power system
- Composed of:
  - 29 hydroelectric plants
  - 1 pumped-storage plant
  - 3 nuclear sites
  - 11 coal-fired power plants
  - 11 combustion turbine plants
  - 2 diesel generator sites
  - 1 wind energy site
  - 1 digester gas site
  - 1 biomass co-firing site
  - 15 solar energy sites
- 33,925 megawatts capacity
- 158 billion kW hours generated (FY 2008)
- \$10.4 billion in annual revenue (FY 2008)
- 12,219 employees

## > Transmission

- 99.999 percent reliability for nine years in a row
- 80,000 square-mile service area
- 15,856 miles of transmission line

## > Customers

- 158 power distributors (municipalities and cooperatives)
- 62 directly served customers
- 11 power exchange arrangements
- 9 million people served

## > Stewardship

- Nation's fifth-largest river system
- 293,000 acres of public land
- 800 miles of commercially navigable water transporting more than 50 million tons of cargo
- 49 dams and reservoirs

The OIG is an independent organization charged with conducting audits, inspections, 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 (1-877-866-7840) or over the Web [www.oigempowerline.com](http://www.oigempowerline.com). You may report your concerns anonymously or you may request confidentiality.

**Report Concerns to the OIG Empowerline.**







TENNESSEE VALLEY AUTHORITY  
OFFICE OF THE **INSPECTOR GENERAL**

**400 WEST SUMMIT HILL DRIVE  
KNOXVILLE, TENNESSEE 37902**