

CULTURE ASSET OR LIABILITY?

OFFICE OF THE INSPECTOR GENERAL
TENNESSEE VALLEY AUTHORITY
SEMIANNUAL REPORT
OCTOBER 1, 2009 – MARCH 31, 2010

Tennessee Valley Region



TVA Power Generation (2009)

Coal - 76,794
Nuclear - 53,047
Hydroelectric - 11,421
Combustion turbine and diesel generators - 3,381
Non-hydro renewable resources - 29
(TVA Power Generation in millions of Kilowatt hours)

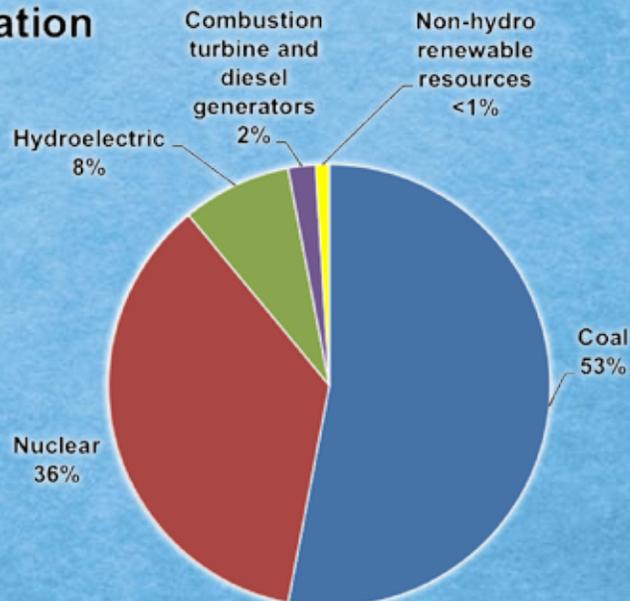


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Message *from the* Inspector General

Message From The Inspector General

The Tennessee Valley Authority continues to live under the cloud of the Kingston ash spill of December 2008. The Office of the Inspector General is reminded of this shadow every day through our continuing review of TVA's efforts to return the Kingston area to its former state. We see TVA making steady progress on the physical cleanup; but more importantly, we see signs of an improvement in the TVA culture that contributed to this unfortunate environmental event.

In this semiannual report, we ask the question, Culture: Asset or Liability? The Kingston incident demonstrated that a culture at a TVA fossil fuel plant which treats coal ash management like "taking out the garbage" can be a severe liability. Unfortunately, culture has been treated as a "soft" issue by both TVA and the Office of the Inspector General. While TVA has routinely taken a reading of culture through their "Cultural Health Index" reviews each year, there has been minimal effort until now to correct cultural problems. As one scribe noted in the aftermath of Kingston, "It takes a crisis." It is now clear that culture is not a "soft" issue that only affects employee retention or employee "satisfaction" ratings. Culture, in a very real way, has shown up on TVA's balance sheet. It can literally make or break a company.

TVA has not been alone in overlooking the impact of culture on its operations. The Office of the Inspector General has historically identified "control issues" in areas like Information Technology management, contracting, environmental reporting, and land management. But like TVA, we have traditionally viewed these issues as process problems to be addressed by a better set of controls and consistent compliance with those controls. It is easy to treat culture as a "soft" issue. We now recognize that the repeat findings we have chronicled over the years have emanated from a culture that promotes ad hoc solutions and eschews compliance with uniform standards. In Kingston, we saw plant

management opting for "a better way," without coordinating with TVA engineers despite clear professional engineering reports recommending specific design changes.

TVA must start at the beginning. The beginning is to identify the specific philosophy (or philosophies) of its employees that represent a shared set of convictions which either promote the mission of TVA or hinder that mission. That is the heart of culture. To start anywhere else is wasted effort.

The Office of the Inspector General at TVA has a role to play here. Through our audits, inspections, and investigations, we are routinely presented with evidence of the philosophy of TVA employees. TVA can institute a standard procedure, but without employee "buy-in" it is unlikely that the standard procedure will survive the culture. We can say this having seen this mode of operation repeated at TVA time after time.

To identify the cultural issues we find in the course of our audits and investigations, we are applying a new culture matrix with every report we do. We will go beyond the normal audit process to determine whether or not there is an underlying attitude present which is a hindrance to good performance. Our Empowerline hotline (1-877-866-7840 or oigempowerline.com) continues to be a source of useful tips about not only fraud and employee misconduct, but also about cultural attitudes that tipsters see displayed in their work areas. We are



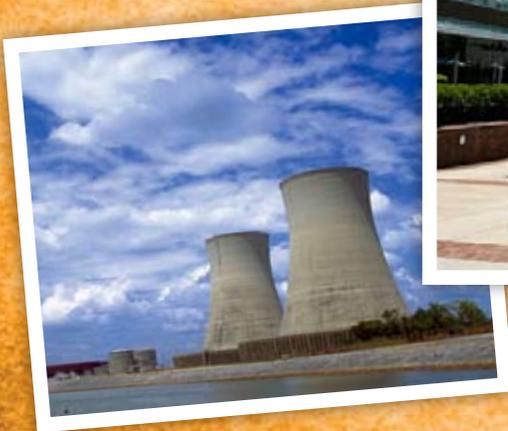
A handwritten signature in black ink that reads "Richard W. Moore". The signature is written in a cursive, flowing style.

Richard W. Moore
Inspector General

committed to distilling this data into a useful form in order for TVA to make a better assessment of the state of its culture. The goal is to surface what those employee values are (as opposed to perhaps the values statement on a poster in the plant) so that TVA can start to better align those values with the course set by the TVA Board and TVA leadership. As the special feature highlighting TVA's new Organizational Effectiveness Initiative demonstrates, TVA leadership has launched a robust program to tackle the culture issue. This is an initiative that receives broad support from the TVA Board and Tom Kilgore.

Our cover for this semiannual report is a depiction of a spiral staircase in a lighthouse leading up to the beacon. It is emblematic of the step-by-step journey TVA is on to build a better culture that will truly be a company asset. Just like a lighthouse guides seafarers to a safe harbor, the TVA Board and TVA management are sending a clear signal of the right direction for TVA. The Office of the Inspector General is dedicated to supporting this mission.

Special Feature & Noteworthy Undertakings



SPECIAL FEATURE:

The Culture Risk Connection

Every company has a culture. Risk assessment is something companies commonly claim to do. But, how many companies consider the impact culture itself has on risk assessment?

“Not many,” says Organizational/Industrial Psychologist Dr. Michael McIntyre, Ph.D., “at least not on paper,” he adds. “People usually know the difference between right and wrong, but they don’t always know how to or feel safe in applying the difference, especially when the culture supports turning a blind eye to what potentially could be a problem.”

McIntyre affirms there is a link between culture and organizational risk and that culture affects how risk is viewed. “For example, historically, companies that have operated as a monopoly, where they have little to no competition, can often get fixated on profit-margin and view customer service as a lower priority/low-risk area.” McIntyre explains. “This can work for a while if the company doesn’t have much competition, but as soon as there is a new game in town and customers have another viable option, the company, can and likely will, see a significant profit loss. Essentially, there needs to be a strategic and comprehensive approach to achieving organization-wide goals and assessing risk so that functions of the organization that are intrinsically-linked are considered equally in importance to achieving overall goals.”

In the case of the Tennessee Valley Authority (TVA), the organization has had an Enterprise Risk Management, or ERM, process that has been in place since 1999. However, the TVA Office of the Inspector General (OIG) released a report in July 2009 that concluded prior to the December 22, 2008, historic coal ash spill at TVA’s Kingston Fossil Plant and despite internal knowledge of risks associated with ash ponds, TVA 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.

The July 2009 report assessed TVA’s root cause analysis and evaluated TVA management’s role regarding ash storage and found that managing ash storage was a low priority. The report also concluded that 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.

Another conclusion of the OIG’s report was that the attitudes and conditions at TVA’s fossil fuel plants emanated from a legacy culture that 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.

Prior to the OIG issuing its report, TVA engaged Stantec, an engineering company, to rigorously inspect, evaluate, and make recommendations on ash storage facilities at all its fossil plants. In addition, TVA engaged McKinsey & Company, a consulting firm, to address the cultural issues brought to light as a result of the ash spill.

During our review, 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 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.

As a result of this resolution, TVA created the Organizational Effectiveness Initiative, OEI, under the responsibility of TVA Vice President John Thomas. Assisted by McKinsey and Company, TVA has started a major organizational restructuring effort that is being overseen by the OEI team. Thomas explained that McKinsey and Company is transitioning out of its active role in assisting with TVA’s cultural change initiative to allow TVA’s OEI Team to lead the charge.

Organizational
 **Effectiveness**
Initiative

Thomas explained the five-category approach to addressing culture change at TVA.

1. Organizational Restructuring

Align the business for optimal performance. This undertaking has already started with top-level executives and upper management.

2. Governance and Accountability

Create a clear framework around responsibilities and accountabilities for every employee.

3. Operating Policies and Procedures

Create and implement a consistent company-wide architecture to enhance clear decision-making.

4. Skill Sets

Develop processes to continually develop and identify skill gaps.

5. Rewards and Recognition

Improve performance management process to increase effectiveness and accountability.

In regard to decision-making which falls under the Operating Policies and Procedures category, Thomas indicated that employees needed clear understanding of what their decision rights were. In analyzing TVA culture, the OEI team found that people didn't really know what their decision rights were and that there were decisions that went high in the organization that could've been made at a lower level. Conversely, there were issues of significance that probably should have been elevated to a higher level that weren't.

"If it's not documented and it's not clear, then decision-making becomes individualistic," Thomas said. "People who are more conservative are going to go ask and people who are more emboldened are just going to go do. What we're trying to build is a well-thought out, conscience structure that guides the decision-making process."

Thomas indicated creating this awareness among employees empowers them to ask strategic questions in regard to risk such as: "What's the risk inherent in this decision? What's the financial impact of this decision? How many dollars are at stake here? How many people in the organization

is this going to impact? What's the reputational risk? What would be the perception of this decision on the external world?"

According to Thomas, this conscience structure will eliminate the individualistic decision model by having a structured, thought-out process for decision-making.

Thomas emphasized that the OEI team wants the culture change process to be transparent and in that spirit, they've created an internal Web site detailing

their progress so that TVA employees can readily access the information. They've even posted questions from TVA employees along with the OEI team's answers so all TVA employees can view them.

Thomas explained that though the cultural change process has started with TVA executives and upper management, the OEI team along with McKinsey and Company wanted to pilot their cultural change framework with frontline employees. He explained the criteria for selecting their test group included finding a TVA facility that was somewhat complex so that a representative sample size of employees could be obtained. It was equally as important to conduct the test at a facility where the management team was open to new ideas and would be engaged in the process. Paradise Fossil Plant in Kentucky fit the bill.

The goal of the pilot was to improve performance and accountability at



PARADISE FOSSIL PLANT



PARADISE FOSSIL PLANT



PARADISE EMPLOYEES, FROM LEFT, ARE SCOTT LAYNE, TODD ROBINSON, KELLY FREE, AARON MELDA AND WAYNE SCOTT. MELDA IS PLANT MANAGER, AND THE OTHERS ARE POWER HOUSE MAINTENANCE BOILERMAKERS.

every level. The pilot was intended to help employees and management identify ways to improve the most significant gaps in the plant's operational and organizational performance. Since the plant-effectiveness pilot at Paradise Fossil Plant began last December, almost 400 Paradise employees have contributed more than 1,300 ideas that could eventually save TVA more than \$60 million annually. The lessons learned from the pilot have been and will continue to be used to identify tools and techniques that can be applied across the organization and demonstrate examples of successful change.

When asked how culture change throughout TVA would eventually be measured, Thomas responded that the cultural health indexes TVA normally conducts yearly will be used as benchmarks to gauge culture change. But, as far as knowing if the culture has

changed, success would be apparent in the way TVA does business.

"Clarity in conversation can be a positive indicator of cultural change," Thomas said. "When people understand and can communicate exactly what their roles are, what's expected of them and how they are held accountable for performance, the change becomes apparent. At that point, you don't have to have a metric to know there's clear understanding where there wasn't before. Just like you don't need a metric to prove Tiger Woods has an image problem, the same is true for culture. When the culture is generally healthy, people talk about it. It becomes transparent and evident in the way we do business, the way we communicate internally and externally." ■

PARADISE: FACTS & FIGURES

- Paradise has three coal-fired generating units.
- Construction began in 1959 and was completed in 1970.
- The winter net dependable generating capacity is 2,273 megawatts.
- The plant consumes some 20,000 tons of coal a day.

NOTEWORTHY UNDERTAKINGS

> INSPECTOR GENERAL MOORE TESTIFIES TO CONGRESS ON DECEMBER 9, 2009

The Tennessee Valley Authority, the nation's largest public power provider, has been under intense congressional and public scrutiny since the coal ash spill of December 22, 2008, in which 5.4 million cubic yards of ash from its Kingston Fossil Plant poured onto adjacent land and into the Emory River. The spill has been deemed the largest environmental disaster in U.S. history.

In response to the spill, the TVA OIG released two reports in 2009--one on June 12 critiquing TVA's response to the ash spill and another on July 23 evaluating TVA's root cause analysis of the spill. These reports are posted on the TVA OIG Web site at oig.tva.gov/2009audits.html.

TVA Inspector General Richard Moore has been at the forefront of the discourse about these reports, briefing Congressional staffers and Congress as requested. Inspector General Moore's testimony is posted at oig.tva.gov/testimony.htm.



RICHARD MOORE TESTIFIES TO CONGRESS

Excerpt from Inspector General Moore's December 9, 2009 Congressional Testimony to the House Subcommittee on Water Resources and Environment of the Committee on Transportation and Infrastructure

This is not the first time that TVA has been under the microscope nor the first time that findings and recommendations for significant change have been made. The McKenna report aptly points out that in 1987, in response to TVA's nuclear safety issues and sustained regular increases in TVA's rates, The Southern States Energy Alliance Board created an advisory committee which found some of the same problems with TVA in the 1980's as we are finding today. The McKenna report also notes that my office has issued reports citing process problems at TVA that continue to resurface over the years.

While it is true that none of the attempts to reform TVA focused on culture and risks to the extent that has been done in the aftermath of the Kingston spill, it is clear that there are some recurring themes in TVA history. One is that TVA has suffered from an insular culture that shuns views outside the "Valley." This defensive and protectionist philosophy has produced a tunnel vision that eschews input that might have aided in changing the very culture that has contributed to TVA's current woes. That same culture resisted system-wide standards and accountability. All of this is based on an underlying philosophy that TVA's uniqueness as a hybrid government agency exempted it from adherence to standards and uniform process.

My point here this morning is simply this: the challenge for TVA is a culture that is highly resistant to reform. The Kingston spill demonstrated that in a dramatic way. Changing a culture takes time. The same culture that existed on December 22, 2008, still exists today. Its residual effect is likely to be felt for years to come.

Despite all of this, I remain optimistic that the current efforts to effect meaningful changes at TVA will be successful for four reasons: (1) the kinds of reforms being implemented at TVA are system-wide process changes that have worked well in private sector companies and that have not had the system failures TVA has experienced; (2) TVA management has demonstrated a willingness to solicit input from culture experts outside the Valley, and they appear to be taking all of this very seriously; (3) TVA management has recently gone through an extremely robust evaluation of risks that is unparalleled in TVA history; and (4) TVA management has made personnel changes that, to me, provide credible evidence of a commitment to do whatever it takes to get this right.

> TVA INSPECTOR GENERAL ADDRESSES THE TOPIC OF ETHICS TO TVA FUEL SUPPLY VENDORS

TVA Inspector General Richard Moore highlighted his desire to build relationships with TVA employees as well as TVA vendor contract employees at the TVA Fuel Supply Vendor Ethics



RICHARD MOORE BRIEFING TVA FUEL SUPPLY VENDORS

and Compliance Forum on Friday, December 4, 2009. The presentation was part of a series of educational forums on ethics for contractor employees.

Moore presented along with TVA Procurement General Manager of Fuel Supply Jacky D. Preslar; Executive Vice President of Power Supply and Fuels Van M. Wardlaw; TVA Assistant General Counsel Ralph E. Rodgers; Senior Vice President of Corporate Responsibility and Diversity Peyton T. Hairston, Jr.; TVA Chief Financial Officer Kim Greene; TVA Power Supply and Fuels Compliance Manager Mark Creech; and TVA Fuel Assurance Manager Don Drumm.

Moore emphasized that TVA and TVA OIG have been clear about their expectations in regard to personal ethics, but indicated he wanted to be clear about what to do if someone discovers “rogue” employees in the organization. “We want you to tell us about it,” he said. “I have an

appreciation for the difficulty surrounding this situation. In a sense we’re asking you to trust us.”

Moore explained the psychology of fraud by using a recent news story about famed golfer Tiger Woods, who was accused of being unfaithful to his wife, as an example of how people are lured into questionable behaviors. “He’s the gold standard in the golfing world,”

Inspector General Moore said in reference to Woods. “People say, ‘how does this happen?’”

Moore then introduced the concept of the “Fraud Triangle” in relation to decision-making. “An opportunity presents itself,” he explained. “Apparently, Tiger had a lot of opportunity. There’s opportunity to cheat at TVA. A lot of people see opportunity, but they don’t have the motivation, which is the second piece of the triangle.”

THE FRAUD TRIANGLE



“The third piece of the triangle is a critical piece,” Inspector General Moore continued, revealing people rationalize their bad behavior. “Rationalization is the third piece of the fraud triangle.”

Moore used the example of an employee rationalizing fraudulent behavior by thinking, “I should’ve gotten that performance award. I deserve it,” adding that rogue decision-making “happens in good companies.”

“We’re looking to make examples out of people who’ve cheated us,” Moore continued. “We’re looking to partner with people who don’t believe in fraud. As much as I want to make an example out of someone who cheats us, we want to make an example out of someone who cooperates with us.”

“My message is: if we address this, it’s better for you, it’s better for me, and it’s better for the organization,” Inspector General Moore concluded. “Don’t make us just own this. You own this too. So, call us and we’ll work with you.”

The TVA OIG’s fraud-tip hotline, called the Empowerline, is operated away from TVA by a third-party contractor and allows people to register a concern and remain completely anonymous if they so choose. Contact the Empowerline at 1-877-866-7840 or <https://www.oigempowerline.com>. The Empowerline is operated 24 hours a day, seven days a week.

EMPOWERLINE™
 A confidential connection for reporting fraud, waste or abuse affecting TVA.
www.OIGempowerline.com
1-877-866-7840

EmPowerline™ is sponsored by the Office of the Inspector General and operates independently of TVA.

> ASSESSING AND AUDITING CATASTROPHIC RISK

Inspector General Richard Moore and Deputy Inspector General Ben Wagner spoke at the March 2010 General Audit Management Conference of the Institute of Internal Auditors to about 70 participants. They shared the TVA OIG's experience with the aftermath of the Kingston coal ash spill when more than five million cubic yards of wet coal ash spilled out of a retaining pond into the Emory River and Watts Bar Reservoir and onto adjoining land.

The presentation by Inspector General Moore and Deputy Inspector General Wagner was titled "Assessing and Auditing Catastrophic Risk." It highlighted the challenges in enterprise risk management related to the identification, assessment, and prevention of catastrophic risk; the keys to success; and, owning up to and addressing the consequences when a catastrophic event occurs.

> ETHICS AREN'T EASY

Doing what's right isn't always easy, just ask John McKay, who was the opening speaker at the TVA OIG's ethics conference that took place this past fall at the University of Tennessee's Conference Center in downtown Knoxville.

McKay, a Law Professor at Seattle University, was dismissed by the Department of Justice under the Bush Administration as U.S. Attorney for the Western District of Washington in 2006, along with seven other U.S. Attorneys. The controversy generated an onslaught of media attention including an article in the *Washington Post* that questioned the motivation for McKay's dismissal. The March 26, 2007, article



JOHN MCKAY, LAW PROFESSOR

indicates that in 2004 McKay decided not to bring voter fraud charges that could have undermined a Democratic victory in a closely-fought gubernatorial race. McKay said he was asked about three months before he was fired why Republicans in the state of Washington might be angry with him. McKay indicated that he didn't bring forth voter fraud charges because there was no evidence to support such allegations.

Another March 21, 2007, *Seattle Times* article read, "In the span of less than a month last summer, John McKay went from a candidate for a federal judgeship with the support of his boss, Attorney General Alberto Gonzales, to an out-of-favor employee who was about to lose his job."

McKay warned at the OIG ethics conference that doing the right thing often means becoming unpopular and risking being labeled a "trouble maker" or someone who's not a "team player." But, in the end, despite political pressure, doing the right thing was the only thing McKay believed he could do and still feel good about himself.

McKay's conviction to follow his own ethical compass was perhaps rewarded in a 2008 Department of Justice Office of Inspector General investigative

report on the removal of nine U.S. Attorneys, including McKay, in 2006. The report ascertained that evidence suggested the primary reason for McKay's removal was a disagreement with his then boss, Deputy Attorney General Paul McNulty.

The report directed attention to the fact that Gonzales, who was the primary driver in the firings, stated in a Congressional testimony that he didn't remember the November 2006 meeting where he approved the dismissals.

In 2008, Attorney General Michael Mukasey, Gonzales' successor, announced that, at best, the firings of the nine attorneys general were haphazard, arbitrary, and unprofessional.

McKay now draws from his experience as an ousted U. S. Attorney in talks across the country. He also tells audiences that doing what they know is right takes courage, and it could cost them their jobs one day, just as it cost him his; but, being fired for doing what's right is better than remaining employed for doing what's wrong.

The common theme of courage was reiterated throughout the day by the other guests who joined McKay in a panel discussion on ethics moderated by Dr. Michael McIntyre, Director of the University of Tennessee's MBA program, including:

- Dr. Daniel Klingensmith, Ph.D., an Associate Professor of History and ethics teacher at Maryville College;
- Dr. Bart Victor, Ph.D, a Cal Turner Professor of Moral Leadership at Vanderbilt University; and
- Mr. Frederick Talbott, a published author, 1994-2009 clinical professor of management communications at Vanderbilt University, former

investigative journalist who covered the Ku Klux Klan, government mismanagement and the Iran Contra scandal, and member of the South Carolina Bar Association.



FREDERICK TALBOTT, AUTHOR

Talbott was the keynote speaker during lunch at the ethics conference. Talbott emphasized the theme of courage in talking about his father, who was a used car salesman. Talbott explained his dad refused to sell a customer anything he wouldn't drive himself. Even when he felt pressured to fudge on the worth of vehicles to make a sale, he wouldn't do it.

Talbott explained his dad's view of ethics lives on through him. Talbott has authored a number of books, including *Churchill on Courage*.

"The quality of speakers we had at this conference and the depth of the wisdom they imparted to us was inspiring," said TVA Inspector General Richard Moore. "Life lessons such as the ones presented by these ethics pioneers stick with us and remind us on a very human and authentic level that doing the right thing is always the right thing to do."

> TVA OIG POSTER WINS ADDY® AWARD

The poster advertising the TVA Inspector General's fraud video received two awards at Knoxville's 45th Annual ADDY Awards dinner that took place Saturday, February 20, 2010, at the Crowne Plaza Hotel in Knoxville, Tennessee.

The first award for the TVA OIG poster was the Silver ADDY Award for color photography, and the second award was a Bronze Citation of Excellence. The poster was used to promote TVA Inspector General Richard Moore's message throughout TVA on what employees can do if they suspect fraud is occurring in a TVA program or operation. It was submitted to the ADDY competition by TradeMark Advertising.

"The more TVA employees understand they can help us fight fraud against TVA by reporting suspicious actions, the more effective we will be," said Inspector General Moore. "I am thankful that our effort in conveying this message is getting noticed, and that the quality of the work in advertising the message is so high."

The American Advertising Federation, a not-for-profit industry association conducts the ADDY Awards through its 200-member advertising clubs and 15 districts. With more than 60,000 entries annually, the ADDY Awards are billed as the world's largest and, arguably, toughest advertising competition.

To watch the video go to: oig.tva.gov/int-highres.html ■



INSPECTOR GENERAL MOORE WITH AWARD WINNING POSTER

Executive Overview

With more than 12,000 employees, changing the organizational culture is a sizeable feat for TVA; however, high-level structural changes and the establishment of a program called the Organizational Effectiveness Initiative, OEI, are indicative of a serious commitment to transformation. These changes were launched to address the organizational cultural issues identified by the OIG in its reports on the ash spill at Kingston and at other TVA locations. The feature article beginning on page 6 highlights the significance of culture and details some of the steps TVA has undertaken to address the issue.

STATISTICAL HIGHLIGHTS	
October 1, 2009 ~ March 31, 2010	
Audit Reports Issued	26
Questioned Costs	\$979,959
Disallowed Costs	\$2,255,467
Funds Recovered	\$2,998,971
Funds to be Put to Better Use	\$9,702,600
Funds Realized by TVA	\$480,450
Investigations Opened	168
Investigations Closed	198
Fines/Recoveries/Restitution	\$47,679
Criminal Actions	9
Administrative Actions (No. of Subjects)	7
Inspections Completed	3

During the period of October 1, 2009, to March 31, 2010, our inspection, audit, and investigation teams acted to promote greater economy, effectiveness, and efficiency at TVA while detecting and preventing fraud, waste, and abuse. In total, we identified more than \$10 million in recoveries, fines/penalties, potential savings, questioned costs, or funds which could be put to better use, as outlined in the chart above.

> INSPECTIONS

The Inspections team completed three significant reviews during this period that focus on TVA's operational performance, the legitimacy of the

highest college degrees listed on resumes submitted for employment, and TVA's criteria for the adjustment of tributary water levels in TVA-managed bodies of water.

The most significant of these reports is the review of TVA's operational performance. It is the third in our series of reviews that benchmark TVA's performance in key areas. As noted in our prior reports on the ash spill at Kingston, over TVA's 75-year history some cultural traits have developed which serve to undermine TVA's mission and safety record. Cultural issues have also been identified as contributing to findings in other OIG reviews.

In this report on TVA's operational performance, in addition to the legacy cultural issue, we found TVA performed exceptionally well in terms of system reliability, delivering electric service with 99.999 percent reliability. TVA also performed better than the industry at large in all its key reliability performance metrics. However, in terms of system efficiency, we found that higher than average forced outage rates, especially for its fossil units, have negatively impacted TVA's system efficiency performance. We also found that, based on the number of recordable injuries per 200,000 hours worked, TVA ranked in the first quartile of those utilities against which TVA was measured.

> FINANCIAL AND OPERATIONAL AUDITS

During this semiannual period, Financial & Operational Audits completed 11 projects, including three audits, one attestation engagement, and seven other projects. The audits and attestation engagement included work in the following areas: (1) TVA's Hearing Conservation Program; (2) risks related to TVA's Pension system; and (3) agreed-upon procedures for TVA's Winning Performance measures. We also provided oversight of TVA's external auditors conducting the audit of TVA's financial statements.

The review of TVA's Hearing Conservation Program has not only significant safety and economic findings, but also again shows the impact of culture on achieving organization-wide goals. In TVA's Hearing Conservation Program

we found, among other things, the existence of an employee culture which encourages some TVA employees to file nonwork related hearing loss claims. We also found that TVA's Hearing Conservation Program, as written, complies with the significant provisions of Occupational Safety and Health Administration's (OSHA) "Occupational Noise Exposure" regulations, but that certain TVA sites did not follow or ensure all program requirements were being met consistently.

> DISTRIBUTOR AUDITS

During this semiannual period, the OIG completed four reviews of TVA distributors. We found distributors were not complying with all contract requirements and, as a result, TVA management is planning to change the requirements for customer contracts as part of the rate change process with the distributors. We noted the distributors had more than enough cash on hand to fund planned capital expenditures and provide a cash reserve. Additionally, we identified several areas where internal controls could be strengthened to improve completeness, accuracy, and validity of the billing data. Finally, we also found several opportunities for TVA to enhance oversight of the distributors and an opportunity for TVA to correct a billing error.

> IT AUDITS

During this semiannual period, we completed six audits in the IT environment pertaining to: (1) the OIG's annual review of the Federal Information Security Management Act (FISMA), and (2) the effectiveness of TVA's backup and recovery process. We also completed 13 audits in support of

TVA's FY 2009 efforts to comply with the Sarbanes-Oxley Act of 2002 (SOX).

In our annual review of TVA's information security program, we found TVA had generally improved in the area of establishing its inventory of systems requiring certification and accreditation and general security awareness training for network users. However, we identified several areas during this year's audit in which (1) performance had declined, or (2) TVA had not completed actions from the prior year's audits. We reviewed five TVA business units as to their controls over backup and recovery of applications, data, network device configurations, and control system configurations. We found TVA had significant weaknesses in the controls over backup and recovery of network device and control system configurations.

> CONTRACT AUDITS

During this semiannual period, Contract Audits completed (1) five preaward audits of cost proposals submitted by prospective contractors that identified \$9.7 million of potential savings opportunities for TVA to negotiate, and (2) four compliance audits of contracts with expenditures totaling \$184 million and identified potential overbillings of \$806,000. We also reviewed TVA's decision to construct a gas plant in northeast Tennessee.

> INVESTIGATIONS

During this semiannual reporting period, Investigations continued to work closely with Audits on contract-related issues and with Inspections on ongoing issues from the Kingston ash spill. Additionally, Investigations

continued to focus on major fraud cases, and we participated on task forces with other federal, state, and local agencies. We conducted numerous administrative inquiries resulting in program improvements for TVA and disciplinary actions against TVA employees. The findings of these cases and involvements can be found in the Investigations section, starting on page 34 of this report.

Also during this semiannual period, the OIG's Data Mining program conducted a more detailed review of previous findings in regard to TVA credit card transactions. Two separate reviews were conducted to identify potential fraudulent or unauthorized charges. One review included over \$322,000 in transactions made from March 2006 to April 2009 at a major electronic retailer. Although all of the transactions were approved by management, many appeared to violate TVA's policy on hospitality. TVA management agreed with the majority of our findings and implemented recommendations to strengthen controls and increase monitoring in this area. ■

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

PERFORMANCE

- Perform timely reviews that address stakeholder concerns and areas of highest risk
- Focus efforts on areas of highest impact and risk
- Ensure processes are efficient and effective
- Stay abreast of emerging issues and industry trends
- Stay abreast of stakeholder concerns
- Produce work that is timely, relevant, and of high quality

WORKFORCE

- Cultivate and retain a highly skilled, productive, and fully engaged workforce
- Hire and retain a well qualified workforce
- Maintain competitive pay and award programs that allow for rewarding team and individual contributors
- Develop leadership, team and technical skills of each employee
 - Ensure accountability in individual performance
 - Promote effective communications within OIG

STAKEHOLDER

- Improve stakeholder awareness of OIG
- Ensure stakeholders are kept informed
- Ensure stakeholders have an opportunity to provide input in the annual audit planning process and each individual review, as appropriate

Office *of the* Inspector General

The OIG's most important resources are its people. Our team is made up of experienced auditors, investigators, and administrative staff. The OIG is an independent office within TVA and is headquartered opposite TVA in TVA's East Tower, overlooking downtown Knoxville.

Inspector General Richard Moore believes that in order to effectively provide oversight to TVA, we must be strategic in our placement of OIG employees. As such, Inspector General Moore has worked to ensure that our office has a presence at or near all major TVA offices throughout the Tennessee Valley.

The OIG has a satellite office in the Edney Building in Chattanooga, Tennessee, where the Inspections unit and several investigators are located. There are also staffed field offices at the Watts Bar Nuclear Plant in Tennessee; and also in Nashville, Tennessee; Huntsville, Alabama; and Mayfield, Kentucky.

As of March 31, 2010, the OIG had a total staff of 105. The Audit and Inspections units are composed of 66 individuals, the Investigations unit includes 29 individuals, and the Administrative unit is comprised of 10 individuals.

The number of personnel located at each staffed office is as follows: Knoxville-78, Watts Bar Nuclear Plant-2, Chattanooga-18, Nashville-2, Huntsville-4, and Mayfield, Kentucky-1.

> ADMINISTRATION

The administrative section works closely with the IG, Deputy IG, and



OIG STAFF

Assistant IGs to address the day-to-day operations of the OIG and to develop policies and procedures designed to drive and enhance productivity in achieving office goals. Responsibilities include 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 these 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 developing an

annual work plan. The group's plan considers TVA's strategic plans, major management challenges, their enterprise risk management process, 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, or abuse. This focus extends to the field of Information Technology and risk assessment related to a potential malicious or other intrusion of TVA's IT infrastructure.

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—Financial/Operational Audits, Contract Audits, Distributor Audits, and Information Technology Audits.

- 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.
- Contract Audits has lead responsibility for contract compliance and preaward audits. In addition, this group performs reviews of TVA's contracting processes and provides claims assistance as well as 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.

- 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.

The Inspections group, based in Chattanooga, serves a unique function. We refer to our Inspections group as the "Light Calvary." This group was created when Inspector General Moore recognized the need for an auditing team that could provide a quick, yet thorough review of TVA functions. The methodology utilized by this group allows them to complete these reviews quicker than traditional audits, by limiting the scopes of the reviews. However, the team can and does provide standard audit reviews when needed and seeks to ensure that program objectives and operational functions are achieved effectively and efficiently.

In accordance with the Quality Standards for 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/or 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 below shows some representative examples of issues commonly reported.

> INVESTIGATIONS

The Investigations group is vigilant in its search for activity related to fraud, waste, and abuse in TVA programs and operations. This highly skilled team performs investigative activity in accordance with the Quality Standards for Investigations. The investigators

TYPES OF AUDIT AND INSPECTION ISSUES



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 partner 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. ■

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 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.

Summary *of* Representative Inspections

Summary of Representative Inspections

During this period, Inspections completed three reviews. Specifically, Inspections reviewed TVA's operational performance, the legitimacy of the highest college degrees listed on the resumes submitted for employment, and TVA's criteria for the adjustment of tributary water levels in TVA-managed bodies of water.



INSPECTIONS TEAM

> REVIEW OF TVA'S OPERATIONAL PERFORMANCE RESULTS

This review was the third in a series of reviews that benchmark TVA's performance in key areas and answers the question, "How is TVA doing in regard to operational performance?" In conducting this review, we: (1) assessed key performance measures and their alignment with key strategic objectives; (2) evaluated TVA's performance relative to key performance indicators by using target metrics and available benchmark information; and (3) identified key management challenges confronting TVA.

Our report found TVA's performance is positive with respect to system reliability and safety; however, both system efficiency and management culture could be improved. As noted in our recent report on conditions surrounding the ash slide at Kingston, attitudes and conditions at TVA's fossil plant that emanate from a legacy culture impacted the way TVA handled coal ash. Cultural issues have also been identified as contributing to findings in

other OIG reviews. Over TVA's 75-year history, cultural traits have developed that if not identified and addressed can undermine the best policies and procedures. The importance of recognizing cultural limitations cannot be overemphasized.

For TVA's continued success, we believe the culture must be accurately assessed, compliance with new policies and procedures must be faithfully measured with appropriate metrics, and employees must be educated to think differently about TVA business, operational, and safety practices. As a result of reports from both McKenna Long & Aldridge and the OIG, TVA has recently begun implementing actions to assess the culture and drive change management.

This benchmarking report on TVA's operational performance assesses the performance of TVA's power system in the ensuing three key areas and can be summarized as follows:

- Reliability: One of TVA's primary responsibilities is to serve as a

reliable and cost competitive source of electric power to its customers. TVA has performed exceptionally well in terms of system reliability, delivering electric service with 99.999 percent reliability. TVA also performed better than the industry at large in all its key reliability performance metrics. In addition, TVA has maintained an adequate capacity reserve margin, which has contributed to this strong reliability performance.

- Efficiency: Additional focus is warranted in the area of system efficiency, which is a measure of the effectiveness of TVA's expenditures on the operations and maintenance of its generation fleet. Specifically, higher than average loss of electrical generation due to unplanned equipment or transmission failures or problems, especially for its fossil units, have negatively impacted TVA's system efficiency performance. In addition, while TVA's delivered cost of power ranked in the second quartile of a selected peer group, its average nonfuel operations and

maintenance costs ranked only in the third quartile. High operations and maintenance costs coupled with low plant availability combined to depress TVA's efficiency metrics. Two things clearly impacting TVA's efficiency performance included: (1) an aging fossil generation fleet and (2) reduced availability of hydroelectric power.

- **Safety:** The recent death of a contractor employee involved in the Kingston Fossil Plant ash spill cleanup effort emphasizes that safety must be the first priority in everything TVA does. Notwithstanding the above event, TVA ranked in the first quartile on safety, based on the number of recordable injuries per 200,000 hours worked, according to data provided by the Occupational Safety and Health Administration and comparable data provided by the 2007 Edison Electric Institute Benchmark Data.

Finally, TVA faces many significant management challenges in attaining and maintaining operational excellence. Our report discusses the areas of: (1) an aging generation fleet and transmission system; (2) an aging work force; (3) generation mix; and (4) management culture.

> REVIEW OF EDUCATIONAL DEGREES FOR CONTRACTORS ASSIGNED TO THE WBN U2 PROJECT

An article published July 30, 2008, by the *Spokesman-Review* (i.e., the *Spokesman-Review* is the daily newspaper in Spokane, Washington) listed almost 10,000 people identified by the Department of Justice who had purchased phony and counterfeit high school and college degrees. One of the people included in the list, an employee of a company which operates two nuclear plants in Minnesota, was

found to have counterfeit degrees in engineering and accounting. We conducted our review of this potential issue to validate the highest degrees listed on employee resumes.

Specifically, we conducted a review of Bechtel and subcontractor employees assigned to the WBN U2 Project. Our objective was to validate, for selected personnel, the highest educational degree listed on the resumes submitted for employment. Our review found no instances where an employee was hired based on a fraudulent degree. However, neither Bechtel nor the OIG was successful in verifying one employee's degree. In addition, three employees in our sample had only a copy of their degree on file as their verification. We recommended the Vice President, WBN U2, in conjunction with the Bechtel Project Director, ensure that employees' educational degrees are verified if the degree is required for the position for which they are hired. Furthermore, a copy of a diploma supplied by an employee should not be considered adequate verification.

TVA management agreed with our findings and recommendations. According to Bechtel, they have verified the degree for the individual employee whose file was missing this documentation. Bechtel provided the verification directly to an on-site

OIG representative. For the three employees with only a copy of their degree on file, the copies and/or the employee files should have included an annotation by the Human Resources (HR) representative performing the verification that an original educational degree was provided by the employee at the time of hire. Bechtel does not accept copies of educational degrees from an employee as adequate verification.

> REVIEW OF TVA'S RESERVOIR OPERATIONS PROGRAM

TVA is responsible for managing a range of programs in the Tennessee River Valley for the use, conservation, and development of the water resources related to the Tennessee River. In carrying out this mission, TVA operates a system of dams and reservoirs with associated facilities--its water control system. As directed by the TVA Act, TVA uses this system to manage the water resources of the Tennessee River for the purposes of navigation, flood control, power production and, consistent with those purposes, for a wide range of other public benefits. Based upon questions posed to OIG personnel regarding TVA's criteria for the adjustment of tributary water levels, we initiated a review of TVA's Reservoir Operations.



CHICKAMAUGA RESERVOIR IS ON THE TENNESSEE RIVER JUST NORTH OF CHATTANOOGA. THE RESERVOIR STRETCHES 59 MILES UPRIVER FROM CHICKAMAUGA DAM TO WATTS BAR DAM.

Our objectives were to determine: (1) whether criteria exist to balance the competing objectives of managing water in TVA reservoirs; (2) how those objectives compare to those of the U.S. Army Corps of Engineers; and (3) whether TVA was following its criteria. This report encompasses TVA-managed lakes, tributaries, and overall Reservoir Operations.

Our review of TVA's Reservoir Operations revealed TVA has Board-approved guidelines that were developed with public input in 2004. We noted in discussion with two offices of the U.S. Army Corps of Engineers that they balance similar objectives and manage their reservoirs in a

similar manner to TVA. We performed testing based upon the approved TVA guidelines and found no issues. Specifically, we found that there were no issues related to the following summer criteria: (1) Recreational Releases (water releases to enhance recreational opportunities); (2) Chickamauga Flow (the required flow through Chickamauga Dam); and (3) Tributary Balancing (ensuring that no individual tributary is disproportionately affected when meeting river system minimum flow goals).

Lastly, we found there were no issues related to the following nonsummer criteria: (1) Minimum Flow

Commitments, which is measured in pulse commitment violations (a pulse represents a release of an agreed-upon amount of water, and a violation is an instance where TVA does not provide the pulse on time); and (2) Flood Storage Availability (flood storage is defined as the volume, or capacity, in a reservoir that is reserved for the storage of flood water, and anytime a tributary's headwater elevation exceeds the flood guide, it is in violation).

Since we had no recommendations, this report was issued for informational purposes only. ■

HIWASSEE: FACTS & FIGURES

- Construction of Hiwassee Dam began in 1936 and was completed in 1940.
- The dam is 307 feet high and stretches 1,376 feet across the Hiwassee River.
- In the year with normal rainfall, the water level in Hiwassee Reservoir varies about 43 feet from summer to winter to provide seasonal flood storage.
- The reservoir has a flood-storage capacity of 205,600 acre-feet.
- The hydroelectric power plant at Hiwassee Dam consists of two generating units.



HIWASSEE RESERVOIR IS LOCATED ON THE HIWASSEE RIVER IN WESTERN NORTH CAROLINA, STRETCHING 22 MILES NORTHWEST TO SOUTHEAST. IT IS IMMEDIATELY UPSTREAM FROM APALACHIA RESERVOIR.

CHICKAMAUGA: FACTS & FIGURES

- Construction of Chickamauga Dam began in 1936 and was completed in 1940.
- The dam is 129 feet high and stretches 5,800 feet across the Tennessee River.
- Chickamauga Reservoir has 784 miles of shoreline and about 36,240 acres of water surface. It has a flood-storage capacity of 345,300 acre-feet.
- In order to maintain the water depth required for navigation, the minimum winter elevation for Chickamauga Reservoir is 675 feet. The typical summer operating range is between 681.5 and 682.5 feet.
- Chickamauga and other reservoirs on the Tennessee and its tributaries have prevented nearly \$5 billion in flood damage in the city of Chattanooga alone.
- The 60x360 foot lock at Chickamauga lifts and lowers river craft about 50 feet between Nickajack and Chickamauga reservoirs.
- The hydroelectric power plant at Chickamauga consists of four generating units.

Summary of Representative Audits

Summary of Representative Audits

During this reporting period, we completed 26 audits which identified more than \$10 million in questioned costs and funds which could be put to better use. We also identified numerous opportunities for TVA to improve program operations. Our audits included: (1) financial and operational audits; (2) preaward and postaward contract audits; (3) reviews of TVA distributors; and (4) IT reviews.

Financial and Operational Audits reviewed TVA's Hearing Conservation Program and TVA's Pension system. It also applied agreed-upon procedures this period to TVA's Winning Performance measures in addition to monitoring TVA's financial statements audit performed by external auditors. In total, the group completed 11 reviews of various financial and operational activities by TVA.

Contract Audits succeeded in identifying more than \$9.7 million of potential savings opportunities for TVA to negotiate. Those savings opportunities were primarily related to overstated cost recovery rates and misclassified labor categories. Contract Audits also completed four compliance audits of contracts with expenditures totaling \$184 million and identified potential overbillings of \$806,000. Additionally, Contract Audits reviewed TVA's decision to construct a gas plant in Northeast Tennessee.

Distributor Audits completed four audits of TVA power distributors to



FINANCIAL AND OPERATIONAL AUDITS TEAM

assess compliance with key power contract provisions. Through these reviews, this group identified contract compliance issues, distributor internal control issues as well as opportunities for TVA to improve oversight of the distributors.

Information technology is used in every facet of TVA's operations. The IT Audits group assessed the effectiveness of TVA's backup and recovery process. This group also performed its annual review of TVA's information security program. This work was in addition to tests of general computer and application controls and a design review that was completed in support of TVA's compliance with SOX. In total, the IT Audits group completed six audits in the IT environment and 13 audits in support of TVA's FY 2009 efforts to comply with SOX.

A more detailed description for the engagements completed this semiannual period by the four departments follows.

Financial and Operational Audits

> TVA'S HEARING CONSERVATION PROGRAM

Hearing loss claims at TVA have increased from 65 claims in 1997 totaling \$1.1 million to 689 claims in 2008 totaling \$6.5 million. Thus, there are significant safety and economic reasons to periodically review this program.

TVA's Hearing Conservation Program (Program) was established to "prevent employee hearing loss from exposure to high noise levels," by "reduc[ing] noise levels where feasible and... provid[ing] the means for protection from noise in areas where the levels remain high." In general, the Program has four major components: (1) the development and implementation of a noise monitoring (sound level survey) program; (2) the provision for adequate hearing protection devices and its proper use; (3) the development and implementation of an audiometric

testing program; and (4) regular training and education.

All employees and former employees who sustain injuries, including hearing loss, while on duty are entitled to the benefits of the Federal Employees' Compensation Act (FECA). FECA provides for the Office of Workers' Compensation Programs of the U.S. Department of Labor to make all claim decisions and payment of benefits. Approximately \$33.6 million were paid to TVA claimants (representing 3,734 claims) for hearing losses during the five-year period ending September 30, 2008. During this same five-year period, there were 1,316 new hearing loss claims filed.

As part of our FY 2009 audit plan, we reviewed the TVA's Hearing Conservation Program (Program) to determine whether: (1) it complies with OSHA's regulations, and (2) TVA organizations are in compliance with Program guidelines. We also reviewed a prior OIG report to determine whether or not its recommendations have been implemented.

In summary, we found:

- TVA's Hearing Conservation Program, as written, complies with the significant provisions of 29 CFR Part 1910.95, "Occupational Noise Exposure," issued by OSHA.
- Certain TVA sites did not: (1) perform and/or use sound level surveys in accordance with the Program; (2) adhere to Program hearing protection requirements and/or discipline employees when hearing protection was not worn in designated areas; (3) ensure Program individuals' annual audiogram and training requirements were met; and (4) record loggable Standard Threshold Shifts (STS) on

the OSHA 300 log, i.e., a work-related hearing loss above a threshold specified in the Hearing Conservation Program.

We also determined: (1) TVA's current organizational structure does not allow for enforcement of the Program by Corporate Health and Safety; and (2) confirmed the existence of an employee culture which promotes the filing of hearing loss claims by some TVA employees who believe they are entitled to a hearing loss award at the end of their TVA career, without regard to whether the employee believes such loss was work-related, nonwork-related, or due to the natural aging process. The OIG reported this culture in a separate report issued in March 2009.

➤ REVIEW OF TVA'S PENSION RISK

Established in 1939, Tennessee Valley Authority Retirement System (TVARS) is a defined benefit plan (Plan) covering most full-time and part-time annual employees. TVARS is a separate legal entity from TVA and is administered by an independent, seven-member Board of Directors. TVA is to contribute to TVARS the amounts necessary on an actuarial basis to provide TVARS with assets sufficient to meet TVA-financed benefit obligations to be paid to members. A member's retirement benefit consists of a pension benefit provided by TVA's contributions and earnings on Plan assets.

As part of our annual audit plan, our office reviewed the risks associated with the TVA's pension plan and how those risks are mitigated. Our audit covered areas, such as: (1) controls designed to mitigate pension risk; (2) the TVARS financial statement audit performed by their external auditor as it relates to the existence and valuation of assets; (3) the work

of TVARS' actuary in determining TVA's pension liability; (4) funding and benefits decisions and other factors impacting the financial status of TVARS; and (5) concerns raised during the audit by TVARS members.

Our review determined TVARS': (1) controls were suitably designed and operating with sufficient effectiveness to provide reasonable assurance that the control objectives specified were achieved; (2) external auditors performed the work according to their audit program, and we found nothing to question their work or conclusions; and (3) method used to calculate the pension liability and funding contribution was acceptable.

We also determined that a combination of factors resulted in TVARS experiencing a significant shortfall between assets and projected obligations and being funded at a lower level relative to obligations than most other comparison utilities. Four factors contributed to this shortfall: (1) not making contributions to TVARS in six years; (2) adding significant benefits to the plan; (3) making TVARS rules that had the effect of enticing employees to retire; and (4) the market crash of 2008 and early 2009. These events constituted a near "perfect storm" that created a financially unhealthy system with a funding shortfall of approximately \$3 billion and annual retirement benefit payments of about \$575 million as of December 31, 2008.

During our review, TVA and TVARS were in negotiations regarding the fiscal year 2010 contribution to TVARS and potential benefit reductions. Our office was contacted by several TVARS members expressing concerns on the impact the reductions might have. Most of these concerns were related to perception issues, such as: (1) the fairness of proposing cuts to

TVARS' benefits without cuts to the Supplemental Executive Retirement Plan (SERP) or the Federal Employees Retirement System (FERS); (2) past benefit decisions encouraging employees to retire early, which increased the benefit payments by TVARS, and then hiring some of those retirees back under contract; and (3) lack of independent legal counsel to assist in determining whether certain benefits are vested.

> AGREED-UPON PROCEDURES APPLIED TO 2009 WINNING PERFORMANCE PAYOUTS

TVA's Winning Performance (WP) Incentive Plan is a performance management program designed to promote teamwork, focus on continued high performance, and motivate and reward employees for achieving strategic objectives and critical success factors. The WP program is based on the principle that operational improvements, reduced costs, and improved revenues can be obtained by applying management focus and offering monetary incentives. We performed agreed-upon procedures, which were requested solely to assist management in determining the validity of the Winning Performance payout awards for the FY ended September 30, 2009.

In summary, we found:

- The FY 2009 WP goals were properly approved. The TVA Board approved the elimination of any payout based on the TVA level scorecard metrics, which accounted for 30 percent of the potential payout, during the February 12, 2009, Board meeting. During this same meeting, the Board requested the Chief Executive Officer (CEO) to revisit the remaining incentivized metrics that the CEO approved

on January 23, 2009. The CEO subsequently approved the revised FY 2009 Payout Business Rules, Payout Report, and Strategic Business Unit and Business Unit (BU) scorecards on March 6, 2009. We noted these revised scorecards included the removal of 43 metrics from the January 2009 approved scorecards and the addition of 14 metrics not previously approved for the respective scorecard.

- Actual year-to-date inputs for all the metrics agreed with the respective supporting documentation with one exception which did not affect the respective WP payout.
- The payout percentages were mathematically accurate. Subsequent changes to actual data were submitted through November 5, 2009. We recalculated the payout percentages based on the revised data without exception. We noted one of the actual year-to-date inputs that appeared on several scorecards was not rounded using the same rounding convention as the respective goal. However, this discrepancy did not affect the WP payout. We also noted the changes to one goal which were approved subsequent to fiscal year-end on October 29, 2009, resulted in a payout percentage increase for the BU of 6.25 percent and for the TVA BU Average of 0.21 percent.

> FY 2009 FINANCIAL STATEMENT AUDIT COMPLIED WITH STANDARDS

TVA contracted with the independent public accounting firm of Ernst & Young to audit TVA's balance sheet as of September 30, 2009, and the related statements of income, changes in proprietary capital, and cash flows for the year then ended. In addition, the con-

tract called for the review of TVA's FY 2009 interim financial information filed on Form 10-Q with the Securities and Exchange Commission (SEC). The contract required the work be performed in accordance with generally accepted government auditing standards. Our monitoring of this work disclosed no instances where Ernst & Young did not comply, in all material respects, with generally accepted government auditing standards.

Contract Audits

> TVA'S DECISION TO CONSTRUCT A GAS PLANT IN NORTHEAST TENNESSEE

We reviewed TVA's decision to construct a gas plant in northeast Tennessee to determine if TVA's analysis supporting its decision was reasonable. TVA's decision was initiated by a court-ordered accelerated schedule to install emission control equipment at John Sevier Fossil Plant which would require TVA to shut down units at the plant for about 20 months during the construction. Although TVA evaluated various alternatives, TVA's need to preserve the reliability of the power system was the most significant factor influencing its decision. In summary, we determined TVA's analyses appeared reasonable to make the decision to construct the gas plant in northeast Tennessee.

> PREAWARD CONTRACT REVIEWS

To support TVA management in negotiating procurement actions, we completed five preaward audits of cost proposals submitted by companies proposing to provide: (1) retiree staff augmentation services and

(2) engineering and design services for TVA power production and transmission operations. Our audits identified \$9.7 million of potential savings opportunities for TVA to negotiate. The savings opportunities were primarily related to reducing proposed indirect cost recovery rates to better reflect the company's actual cost experiences.

> CONTRACT COMPLIANCE REVIEWS

During this semiannual period, we completed four compliance audits of contracts with expenditures totaling \$184 million and identified potential overbillings of \$806,000. Highlights of our completed compliance audits follow.

- We audited \$25 million of costs billed to TVA by a contractor for the administration of TVA's dental benefit plan. In summary, we found TVA had been overbilled \$25,591 including: (1) \$17,713 in duplicate claim payments; (2) \$832 for claims which exceeded plan limits; and (3) \$7,046 for ineligible orthodontic payments. In addition, due to the high amount (\$132,000) of additional coinsurance that was billable to members during our audit period, we determined the "Alternative Benefits" provision in TVA's dental benefit plan might be unclear as it relates to the member's responsibility when alternate procedures are used. We recommended TVA management: (1) recover \$25,591 in overbilled costs from the contractor and (2) revise the dental benefit plan to more clearly define the member's responsibility as it relates to alternative procedures.

The contractor and TVA management agreed TVA had been overbilled \$25,591. In addition, TVA management



CONTRACT AUDITS TEAM

agreed to consider revising the dental benefit plan to clearly define the member's responsibility as it relates to alternative procedures.

- We audited \$147.7 million of costs billed by a contractor for providing security services from January 2005 through July 2009 and found TVA had overpaid or been overbilled \$286,881 as follows:
 - (1) \$206,531 had been overpaid by TVA due to an erroneous payment for costs related to another contract.
 - (2) \$72,645 had been overbilled for miscellaneous unsupported and ineligible costs.
 - (3) \$7,705 had been overbilled due to inaccurate provisional billing adjustments for 2007 and 2008.

The contractor subsequently refunded \$247,438 to TVA and TVA management plans to recover the remaining \$39,443.

- We audited \$10.16 million of costs billed by a contractor for providing

engineering and technical support services in regard to the *Detailed, Scoping, Estimating, and Planning* study related to the potential completion of Unit 2 at Watts Bar Nuclear Plant. In summary, we found TVA had been overbilled \$184,487 including: (1) \$175,094 of home office labor costs that should have been recovered through the contractor's overhead rate and (2) \$9,393 of miscellaneous unsupported or ineligible billings. We also found TVA had paid the contractor an additional \$33,000 in fees due to conflicting contract language regarding the application of fee to travel costs.

We recommended TVA management: (1) take action to recover \$184,487 in overbilled costs from the contractor and (2) determine the appropriateness of including travel costs in the contractor's fee base. TVA management is reviewing our findings to determine the amounts to be recovered from the contractor.

- We audited the prices billed to TVA by a contractor for certain equipment

related to dry cask storage systems for spent nuclear fuel at Sequoyah and Browns Ferry Nuclear (BFN) Plants, and found TVA had been overbilled \$276,000 because the contractor overstated the price of a vertical crawler that had been delivered to BFN. The overstatement resulted because the contractor did not follow the contract’s pricing criteria which required the price of the BFN crawler to be set at cost plus 10 percent. We recommended TVA management recover the \$276,000 overbilling from the contractor. TVA management is reviewing our findings to determine the amounts to be recovered from the contractor.



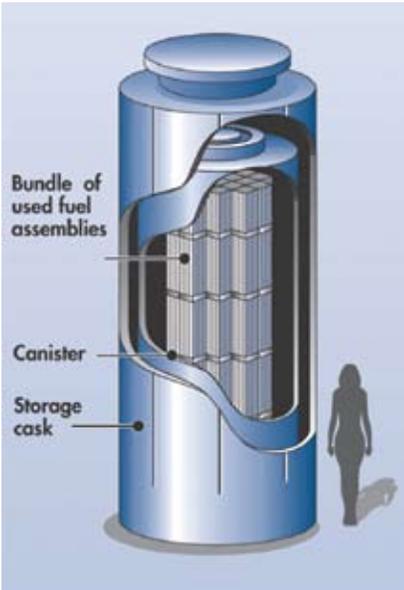
DISTRIBUTOR AUDITS TEAM

> CLASSIFICATION AND METERING

We noted instances where: (1) customers were not classified properly; (2) similar customers were not classified the same; (3) customers were not metered for demand; and (4) 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. We also noted that the billing system software used by a large group of TVA distributors was not properly moving one class of customers to the next rate classification because of a coding error. 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) cost allocations for joint use of property and services agreed to with TVA were not being applied, other

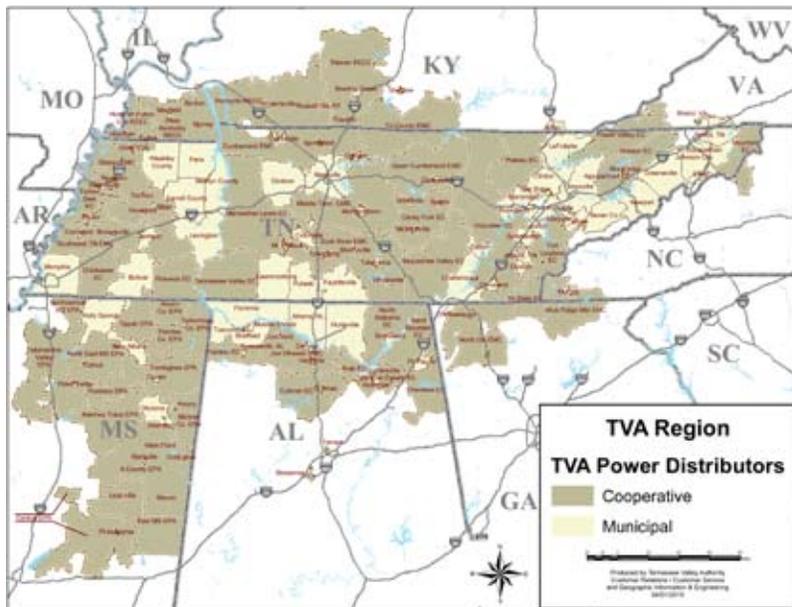


DRY CASK STORAGE SYSTEM

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. Following are issues noted in one or more of these reviews.

Distributor Audits

TVA has 155 distributors—municipal utility companies and cooperatives—that resell TVA power to consumers. Sales of power through these distributors account for about 85 percent of TVA’s total revenue. The Distributor Audits group performs audits of distributors to assess



allocation methods not approved by TVA were used, and/or allocations were applied improperly; (2) contracts were not in place with all customers required by the power contract; (3) comingling of electric department funds with those of other city departments was occurring; and (4) proper documentation was not being retained to allow verification of compliance with the TVA small manufacturing company credit.

As a result of contract compliance issues noted in these and previous audits, TVA management is planning to change the requirements for customer contracts as part of the rate change process with the distributors. In addition, TVA management stated they allowed distributors to keep electric and nonelectric funds in the same bank account as long as the collections and payables were accounted for separately in the general ledger. The distributors generally agreed to take actions to address the other issues noted above.

> 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. All four distributors reviewed had cash ratios exceeding the minimum guidelines of 5 to 8 percent. TVA agreed to establish these guidelines.

We also found a distributor paid for a feasibility study for a nonelectric line of business using electric system funds prior to obtaining TVA approval. After obtaining TVA approval to loan funds to

the nonelectric department, funds were transferred, but no document with loan terms (interest rate, payment terms, payback period, electric department recourse, etc.) was executed. TVA and the distributor agreed to take action to put agreements in place.

> DISTRIBUTOR INTERNAL CONTROL ISSUES

At each of the distributors audited, we identified areas where internal controls could be strengthened to improve completeness, accuracy and validity of the billing data. The following issues were noted at one or more of the distributors: (1) inaccurate or missing contract demand in billing systems; (2) distributors not using, and/or no management review of, exception reports showing changes to customer data in the billing system, zero usage for monthly readings, and/or negative usage for monthly readings; (3) lack of documented policies and errors in billing for well pumps; (4) lack of policies over expenditures; and (5) inaccurate data in meter management systems. The distributors generally agreed to take actions to address these issues.

> TVA BILLING ERROR

TVA incorrectly billed a distributor for the Competitive Index Rate (CIR) credit. According to the wholesale contract with the distributor, the retail rates used in calculating the CIR credit were to be changed in line with the rate changes of the competing system. However, the distributor's retail contract with the end-use customer provided fixed retail rates for a five-year period regardless of rate changes made by the competing system. The competing system's rates changed in May 2006; however, TVA did not adjust the CIR credit because: (1) the inconsistencies between the wholesale

and retail contracts may have resulted from poor communications between TVA and the distributor about program requirements; and (2) TVA customer service personnel had signed the retail contract between the distributor and the customer.

While the signatures reflected approval to only one section of the contract and not of the contract in its entirety, TVA took the position that the signatures could compromise its legal position in the event of litigation. If the rates had been adjusted in accordance with the wholesale contract provisions, TVA would have reduced the amount credited to the distributor by approximately \$174,000 during the audit period. The position TVA took on this issue in 2006 would likely compromise its ability to pursue recovery of the \$174,000 at this time. According to distributor personnel, the customer left the distributor in 2008.

TVA management did not pursue recovery of the \$174,000 because they believed litigation would not be successful. Instead TVA stated the focus was on putting procedures and processes in place to assure pricing programs are implemented as intended in the future. In addition, TVA reviewed other customer contracts for the CIR at other distributors and took action to make necessary adjustments.

> OPPORTUNITIES FOR TVA OVERSIGHT IMPROVEMENTS

We found opportunities for TVA to enhance oversight of the distributors. Specifically, we noted 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 a timely manner; and (5) had not defined at what point a demand meter is required for certain commercial rate class customers. TVA agreed to take action on all identified issues.

IT Audits

> AREAS OF IMPROVEMENT NOTED IN FEDERAL INFORMATION SECURITY MANAGEMENT ACT

FISMA was meant to bolster computer and network security within the federal government. As a part of FISMA, the OIG performs an annual review of TVA's information security program. In comparison to the FY 2008 FISMA report, we found TVA had generally improved in the area of establishing its inventory of systems requiring certification and accreditation and general security awareness training for network users. However, we identified several areas during this year's audit in which: (1) performance had declined, or (2) TVA had not completed actions from the prior year's audits. Specifically, we noted improvements were needed in the following areas: (1) the oversight and evaluation of contractor systems; (2) the plan of action and milestones process; (3) the certification and accreditation process; (4) incident reporting; and (5) security awareness training. TVA management generally agreed with our findings and has taken or is in the process of taking corrective action to remediate issues noted in this audit.



IT AUDITS TEAM

> BACKUP AND RECOVERY CONTROLS NEED IMPROVEMENT

We reviewed the controls over backup and recovery of applications, data, network device configurations, and control system configurations for five business units. We found TVA had significant weaknesses in the controls over backup and recovery of: (1) network device and (2) control system configurations. We also found the controls for the backup and recovery of data were effective; except in the areas of: (1) monitoring of partially completed backups; (2) initial backup and restore testing for new servers; and (3) remote media management. Finally, we noted areas for improvement related to storage and destruction of backup media in one business unit and backup of Remote Terminal Units in another business unit. TVA management generally agreed with our findings and has taken or is in the process of taking corrective action to remediate issues noted in these audits.

> FY 2009 IT SOX 404 TESTING IDENTIFIED OPPORTUNITIES FOR IMPROVEMENT

During the first half of the semiannual period, we completed: (1) year-end remediation and nonoccurrence testing for 18 IT general controls and 31 application controls, which were initiated at the end of the previous FY, and (2) a design review of IT general controls in place to address financial reporting risks. We noted opportunities to improve SOX documentation, operating effectiveness of controls, and areas where control gaps existed. Additionally, we found documented risks have not been updated since the inception of the TVA SOX compliance program. We recommended TVA management perform a top-down risk analysis to better align the risks, control objectives, and control activities with financial reporting risks. TVA management generally agreed with our findings and has taken or is in the process of taking corrective action to remediate issues noted in these audits. ■

Summary of Representative Investigations

Summary of Representative Investigations

During this semiannual period, we completed 198 investigations of criminal and administrative matters covering a wide range of topics including conflict of interest, workers' compensation fraud, theft of government property, and safety reporting issues to name a few. Specifically, the criminal investigations resulted in four indictments with two involving workers' compensation fraud, one involving conflict of interest, and another involving destruction of government property. In addition, three convictions and two pretrial diversions were obtained during this period. One of the convictions entailed a conflict of interest by a TVA Economic Development manager, another involved theft of TVA property, and a third case involved the destruction of TVA property (not included in narrative below). One of the pretrial diversions concerned forged and falsified invoices by a TVA manager and one included theft of TVA property. Twenty-one investigations led to changes in management procedures or actions to reinforce existing policies. As a result of our investigations, disciplinary action was taken against seven individuals.



INVESTIGATIONS TEAM

We also continued our data mining efforts to identify potential areas for investigation. Two data mining projects focused on TVA credit card transactions. One involved purchases of electronics and the other entailed purchases associated with entertainment, golfing, and athletic venues. These reviews resulted in changes to TVA's policies and increased program monitoring by TVA demonstrating that the work of Investigations not only results in criminal sanctions, but often results in a better TVA.

> FORMER TVA ECONOMIC DEVELOPMENT PROJECT MANAGER PLEADS GUILTY TO CONFLICT OF INTEREST

A former TVA Economic Development project manager pled guilty in United States District Court for the Eastern District of Tennessee on January 19, 2010, to two counts of violating 18 United States Code, Sec. 208(a), a federal criminal conflict of interest statute. While employed by TVA as a technical services project

manager, the former Economic Development manager's duties included overseeing environmentally-friendly development projects and approving invoices submitted by contractors who performed work on the TVA project he supervised. The former manager admitted that in the course of performing his official duties, he personally approved two invoices to TVA from the Center for Economic Development and Resource Stewardship (CEDARS). Prior to the approval of these invoices, he personally loaned \$2,500 to CEDARS as "start up" money and loaned CEDARS \$5,000 on behalf of Eginuity Development Group, LLC, a limited liability company of which he was a member. The former manager admitted he knew he had a financial interest in CEDARS and had violated the federal conflict of interest statute by approving the invoices.

Sentencing for this case is scheduled for June 2010 at which time, the former TVA manager could receive up to five years imprisonment and a \$250,000 fine for each of two counts alleging

violation of the conflict of interest statute. The former manager resigned from TVA in April 2008 after a management alert was issued by our office.

> **FORMER TVA NUCLEAR ASSURANCE PROGRAM MANAGER ENTERS PRETRIAL DIVERSION PROGRAM**

In the last semiannual report, we reported that a former TVA program manager at Watts Bar Nuclear Plant was indicted on August 3, 2009, in Circuit Court in Rhea County, Tennessee, on one criminal count alleging forgery and passing forged instruments. The former manager created and submitted a false invoice to TVA, claiming property damage during a move of his personal household goods related to his TVA employment. On January 8, 2010, the former TVA manager entered into a pretrial diversion program for a one-year period. In addition, the OIG issued a report to TVA management, recommending TVA consider including an employment restriction in TVA's personnel security records to ensure that the results of this investigation are considered if the former manager seeks future employment with TVA.

> **FLAWED PROCEDURE LEADS TO TVA EMPLOYEE BEING REHIRED AFTER PLEADING GUILTY TO THEFT**

A TVA maintenance foreman at Colbert Fossil Plant (COF) used a TVA purchase request to buy a 50-gallon hot water heater for the plant, which the employee later took and installed in his home. The OIG investigated the matter in conjunction with the TVA Police and the investigation culminated

in the foreman confessing to stealing the water heater, resigning his position at TVA, and pleading guilty in state court to a theft charge. The OIG later learned that the plant HR department failed to timely note his ineligibility for rehire, and that he had regained employment at the COF through a contractor. The OIG advised plant HR personnel of the matter, and the rehire status was quickly rescinded. The OIG followed up with a Report of Administrative Inquiry, recommending changes in process to ensure that employment eligibility is properly and timely addressed. The recommendations were accepted and set for implementation fleet-wide.

> **CHEMIST AT TENNESSEE COMPANY SENTENCED FOR ENVIRONMENTAL VIOLATION**

A chemist at a Tennessee chemical company was indicted in federal court and pled guilty on a Clean Water Act violation as previously reported. The chemist falsely represented that wastewater at the company's plant in Etowah, Tennessee, had been analyzed for aluminum when it had not. The company's water is discharged into the Hiwassee River, which is a part of TVA watershed area. On October 19, 2009, the chemist was sentenced to one year probation, 100 hours of community service as a special condition of probation, and received a \$5,000 fine. The United States Attorney declined prosecution against the corporation because they met Department of Justice guidelines for self disclosure. This investigation was conducted jointly by TVA OIG and the EPA Criminal Investigation Division in conjunction with the Eastern District Environmental Crimes Task Force.

> **COPPER THEFTS AT TVA'S HARTSVILLE FACILITY LEAD TO FEDERAL CHARGES**

TVA OIG and TVAP jointly conducted an investigation into copper thefts at TVA's Hartsville facility by two local residents resulting in losses totaling \$35,786. The investigation revealed that on 11 occasions the two men took TVA copper to a recycling business in LaFayette, Tennessee. Both men were arrested and indicted in federal court. One of the individuals entered into an 18-month pretrial diversion agreement. The other was convicted in federal court and sentenced to five months at a halfway house, five months' home confinement, and three years' probation. They were assessed joint restitution totaling \$35,876. During an interview of one of the subjects, suspicious activity was observed by the OIG Agents. District drug task force officers were notified and further inquiry resulted in the arrest and indictment of 10 individuals, including the person being interviewed, on drug related charges.

> **CONTRACTOR AT KINGSTON FOSSIL PLANT OPERATING WITHOUT A VALID BUSINESS LICENSE**

The OIG investigated allegations that an Alabama contractor did not have a valid Alabama business license while performing work at TVA. We determined the contractor had a valid Alabama business license; however, the contractor was performing work at TVA's Kingston Fossil Plant and did not have a valid Tennessee business license. We recommended management remove the contractor from the site until a valid license could be obtained. Management agreed and also implemented other recommended actions to verify future contractors' licenses.

> TVA DOCUMENTS NOT PROPERLY STAMPED BY TVA ENGINEER

Documents reviewed during the review of the the Kingston ash containment pond failure revealed that a TVA engineer had used his professional licensing stamp on some of the documents, but had failed to affix his signature to the stamp. In addition, other documents were missing his stamp and signature entirely. We recommended TVA review its practice on the use of stamping engineering documents, and TVA management agreed with our recommendations.

> PRACTICES OF TVA MANAGEMENT IN EMPLOYEE INJURY CASES QUESTIONED

The OIG investigated two highly complex cases concerning:

- (1) questionable injury reporting;
- (2) employee compensation;
- (3) workers' compensation; and
- (4) interrelated OSHA regulations.

Both cases involved seriously injured workers, who required substantial medical attention following on-the-job accidents, including being placed on reduced, or "light," duty. Both investigations concluded that, while no violation of criminal law was evident, there was a disconnect between

- (1) TVA policies and procedures, and
- (2) federal regulations regarding light duty and lost time resulting from the accidents.

Additionally, there was an issue of knowledge and practice of the requirements by TVA Power Service Shop management and supervisors. The OIG sent a Report of Administrative Inquiry to TVA management, who responded positively by noting the changes that had taken place between the date of injury and the date of the

report, and by implementing required training for affected supervisory personnel.

> INVESTIGATION OF FALSIFICATION OF DOCUMENTATION DURING SOX AUDIT

OIG Investigations received an allegation originating with IT Engineering and IT Audits that information reported to OIG IT Audits personnel may have been falsified. The information bore directly on a Sarbanes-Oxley related audit. The investigation confirmed that an employee had changed the date of a restore log in two locations from October 12, 2009, to July 6, 2009. Criminal prosecution was declined, and the OIG issued a report recommending TVA Management revise existing policies and procedures to ensure that Sarbanes-Oxley data is maintained for a reasonable time period to allow for adequate testing, and that security measures are implemented to ensure that future falsifications cannot occur. Management agreed with the issues presented, and the responsible party's employment was terminated.

> INVESTIGATION OF WORKERS' COMPENSATION FRAUD

The OIG continued to conduct investigations of workers' compensation fraud. Two investigations in this area led to indictments during this semiannual period. In one of these investigations, a former TVA employee receiving workers' compensation benefits was indicted in Tennessee state court on two counts of theft. The former TVA employee violated OWCP regulations by having his daughter collect and cash his

compensation-benefits checks while he was incarcerated on an unrelated felony.

In another workers' compensation investigation, a now former Widows Creek Fossil Plant employee was indicted in federal court in the Northern District of Alabama on two counts of making false statements. The former plant worker claimed he was injured on the job but later confessed he had been previously treated by his personal physician for the same symptoms. TVA terminated his employment as a result of our investigation.

> OIG DATA MINING PROGRAM RESULTS

The OIG continued to use data mining to identify instances of waste, fraud, and abuse of TVA resources. We completed two projects related to TVA credit card transactions. These are outlined below along with management action taken as a result of our recommendations.

• *Charges at Best Buy*

A review of transactions from March 2006 to April 2009 identified a high volume of credit card purchases from Best Buy, a major electronics retailer. Specifically, we identified 371 transactions totaling more than \$322,000 in purchases including televisions, digital recorders, GPS units, Apple ipods®, MyBook hard drives, and other small electronics. More than \$126,000 of these items were purchased for employee recognition. Because of potential abuse and negative publicity for TVA, we recommended TVA establish an inventory tracking process for these items and similar electronic purchases.

Management responded to our report and stated TVA has strengthened controls to reduce the number of

cards outstanding by 25 percent. In addition, merchant codes for electronic equipment will be blocked, preventing these types of purchases in the future. TVA also agreed to establish a tracking process and is working to incorporate these items with TVA's new IT Asset Management Program. TVA immediately identified and tagged select items and established a process to track new purchases.

• **Golfing, Entertainment, and Athletic Venues in Credit Card Data**



Earlier reviews of credit card transactions identified numerous items associated with entertainment, golfing, and athletic venues. As a follow up, we performed a more detailed review of previous findings in order to determine the causes and approvals of the expenditures and to make corrective recommendations. We reviewed transactions from January 1, 2007, to July 31, 2009, where TVA hosted stakeholders, business prospects, contractors, politicians, and employees with entertainment, including the following:

- (1) Golf outings and related expenditures totaling \$84,410; and

- (2) Numerous athletic venues including:
 - A music concert at Ford Field in Detroit Michigan;
 - 24 tickets to a major league baseball game;
 - A professional football game;
 - Season tickets to SEC football games; and
 - Hunting events.

Although all of the reviewed transactions were approved, many appeared to violate TVA's policy on hospitality. In light of the fact such expenditures have been discussed by the news media and can create a negative image of TVA to the public, we recommended TVA officials review the practices governing the use of credit cards and the types of allowable transactions.

TVA management agreed with the majority of our findings and was already aware of these issues as a result of the Freedom of Information Act (FOIA) requests on this subject. TVA's Compliance & Advisory Services (CAS) performed a detailed analysis of 74 percent of the transactions in the OIG inquiry and identified more than \$37,000 in transactions that were disallowed by TVA policies, practices, and procedures. CAS is in the process of completing a comprehensive review of the Hospitality and the Gold Card programs. Their preliminary review indicated that enhancements, clarifications and further guidance are needed to better enforce compliance. Though TVA expected to issue a final report in November 2009, the review was expanded to include the period ending February 2010. TVA additionally incorporated the review as part of an ongoing initiative of continuous monitoring.

• **Three Investigations of Hospitality Expenditures**

From this data mining effort, three separate investigations were opened. The investigations concluded that a substantial number of the questioned charges resulting from the data mining review fell within accepted hospitality expenditure guidelines. Other charges, while technically falling within TVA guidelines for expenditures, created real or apparent risks in that some recipients could run afoul of state ethics laws regarding the receipt of gifts in their official capacities. In all cases, TVA-sponsored attendees should be documented. The OIG sent a report to management outlining the findings and suggestions to which management responded positively.

> **REPEATED USE OF PARTIALLY COMPLETED DAILY MONITORING LOGS AT KINGSTON FOSSIL PLANT INVESTIGATED**

Following the ash spill at Kingston Fossil Plant, a review of documents revealed that daily monitoring logs from the dredge cell seep repair area appeared to be copies of previous logs with only the time, date, and weather data at the top of the logs being changed, giving the appearance that the logs may have been falsified. Some logs contained minor changes such as additional check marks, answers with strikethroughs, or brief comments or single words added. Others were exact copies of previously used logs with no additional information added. The Tennessee Department of Environment and Conservation expressed extreme concern over the issue.

Our investigation determined that most of the documents had been prepared by one TVA employee, but this employee explained he made copies of the logs to use as a guide during the inspections to avoid having to redo a new form each day. He stated that conditions on Swan Pond Road frequently did not change from day to day. However, if any changes were noticed, he added additional comments, as applicable, to accurately reflect the changes. He further stated that the pre-written answers, as copied, remained accurate unless otherwise noted. The employee denied ever completing a Daily Inspection Log without actually completing an inspection. After the inspection was completed, he placed the logs in a binder at the plant, but the employee's supervisor was not aware of the use of either the forms or the binder; consequently, the logs were never reviewed by anyone. The investigation revealed a lack of clarity in the division of responsibility for the dredge cell seep repair area between the Heavy Equipment Division and the By-Products Group, as well as the role of a TVA contractor.

The OIG issued a report to management which included four recommendations, all of which were addressed in management's response to the report. The recommendations included: (1) use of a new checklist and entry for each inspection; (2) review of inspections by a supervising official; (3) steps to assure issues noted during inspections are addressed as appropriate and documentation of TVA's response to those issues is retained in an easily retrievable system of records; and (4) procedures to assure inspections are conducted routinely and not only when a certain crew is on duty, as appears to have been the case with the dredge cell seep repair area at the Kingston Fossil Plant.

> INADEQUATE CONTROLS OVER LIMESTONE DELIVERIES IDENTIFIED AT PARADISE

The OIG received a report that a TVA contract supplier was overbilling for limestone delivered at the Paradise Fossil Plant. Limestone is used in the plant's scrubbers and is delivered by the supplier at a rate of approximately 25 tons per truckload. The OIG investigated the matter by observing and recording the number of truckloads of limestone delivered by the supplier to the plant over a 17-day period. The number of deliveries was then compared to the invoices submitted to the plant by the supplier. Over the 17 day period, it appeared that TVA was overbilled for four truckloads of limestone. However, the tare weight on the invoices was not reliable. Interviews of plant employees showed that TVA primarily relied on the unverified delivery weights provided by the supplier.

Due to poor controls at Paradise, the OIG was unable to conclude with certainty whether or not the plant had been shorted limestone by the supplier. A report was submitted to TVA management which included recommendations to improve controls relating to truck traffic and load weight verification. In response to the report, TVA assigned a security guard to check receipts as trucks enter the plant grounds and is investigating installing a card reader to automate the process. We are following up with management on the issue regarding the weights. ■



PARADISE FOSSIL PLANT

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:

> S. 1745 – NON-FEDERAL EMPLOYEE WHISTLEBLOWER PROTECTION ACT OF 2009

This legislation expands the whistleblower provisions under Section 1553 of the American Recovery and Reinvestment Act of 2009 (P.L. 111-5) which cover whistleblowing reprisal allegations by state, local, and contractor employees whose employers receive covered stimulus funds. S. 1745 would amend the Federal Property and Administrative Services Act of 1949, 41 U.S.C. § 265, to expand protections to employees of private contractors or grantees who receive funds or property from the Federal Government.

The Bill, with certain exceptions, would require IGs to investigate reprisal complaints and submit a "report of the findings of the investigation" to the complainant, his/her employer, and the head of the agency.

> H.R. 4983, TRANSPARENCY IN GOVERNMENT ACT

This legislation would amend Section 5(a) (3) of the Federal Funding Accountability and Transparency Act to provide that: each agency inspector general: (1) reviews a statistically representative sample of agency Federal awards every 6 months for the first three years following enactment of this section, and annually thereafter, to determine whether agencies have appropriate measures in place to review Federal Funding Accountability and Transparency data submissions for accuracy and completeness; (2) reports to the Director of the Office of Management and Budget and the head of the agency the findings of the review, including recommendations for corrective action; and (3) makes publicly available, including through the Web site created by this Act, the findings of the review."

The legislation would also require the disclosure by any Executive agency of its sponsorship for any advertisement or communication in the communication itself. In addition, the legislation amends the Freedom of Information Act (FOIA) so that all information included in the agency's response to a FOIA request shall be made available to the public electronically, free of charge through each agency's Web site.

> S. 2995 – CLEAN AIR AMENDMENTS ACT OF 2010

This legislation amends the Clean Air Act to establish a national uniform air pollutant regulatory program for the electric generating sector in the 48 contiguous states and the District of Columbia. The intent of the bill is to benefit people's health and environment by reducing the adverse effects of energy production and use. The bill calls for the promulgation of emission standards that aim to reduce emissions from coal-fired power plants of mercury by 90 percent by 2015, of sulfur dioxide by 80 percent by 2018, and of nitrogen oxides by more than 50 percent by 2015.

> H.R. 4858, THE PUBLIC INFORMATION ACT OF 2010

This legislation would require executive branch agencies, including government corporations and other establishments in the executive branch, to make their public records available on the internet at no charge to the public. Section 7(d) of the bill would require IGs to conduct periodic reviews of their agencies' compliance with the internet publication requirements at least once every four years and to post the results of the reviews on the internet.

> H.R. 5026 GRID RELIABILITY AND INFRASTRUCTURE DEFENSE ACT

This legislation has as its purpose strengthening the defenses of the nation's critical electric infrastructure against cyber-threats. The bill would grant the Federal Energy Regulatory Commission (FERC) emergency powers when the nation's president identifies an imminent grid security threat. In addition, the bill directs FERC in consultation with the appropriate Federal agencies, and after notice and opportunity to comment, to implement actions to protect the reliability of the nation's electric bulk power system for any identified grid security vulnerability which has not been addressed by the North American Electric Reliability Corporation. The legislation also directs the nation's president to designate not more than 100 domestic critical defense facilities most vulnerable to a disruption of electricity. If FERC determines there is an unaddressed electric infrastructure vulnerability serving that facility, than FERC is to order measures to protect the facility against the identified vulnerability.

> S. 976 – A BILL AMENDING SUBCHAPTER I OF CHAPTER 35 OF TITLE 44

This legislation would exempt from the Paperwork Reduction Act, 44 U.S.C. § 3501 et seq., the collection of information during any investigation, audit, inspection, evaluation, or other review by federal Inspector General Offices.

Appendices

Appendix 1

INDEX ON REPORTING REQUIREMENTS UNDER THE IG ACT

REPORTING	REQUIREMENT	PAGE
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Section 5(a)(2)	Recommendations With Respect to Significant Problems, Abuses, and Deficiencies	22-39
Section 5(a)(3)	Recommendations Described in Previous Semiannual Reports in Which Corrective Action Has Not Been Completed	Appendix 4
Section 5(a)(4)	Matters Referred to Prosecutive Authorities and the Prosecutions and Convictions That Have Resulted	Appendix 5
Section 5(a)(5) and 6(b)(2)	Summary of Instances Where Information Was Refused	None
Section 5(a)(6)	Listing of Audit and Inspection Reports, Showing Dollar Value of Questioned Costs, Unsupported Costs, and Recommendations as to Funds to be Put to Better Use	Appendix 2
Section 5(a)(7)	Summary of Particularly Significant Reports	22-39
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Section 5(a)(9)	Status of Management Decisions for Audit and Inspection Reports Containing Recommendations That Funds Be Put to Better Use	Appendix 3
Section 5(a)(10)	Summary of Audit and Inspection Reports Issued Prior to the Beginning of the Reporting Period for Which No Management Decision Has Been Made	None
Section 5(a)(11)	Significant Revised Management Decisions	None
Section 5(a)(12)	Significant Management Decisions With Which the Inspector General Disagreed	None
Section 5(a)(13)	Information under Federal Financial Management Improvement Act of 1996	None

Appendix 2

OIG AUDIT REPORTS ISSUED DURING THE THE SIX-MONTH PERIOD ENDED MARCH 31, 2010

Report Number and Date	Title	Questioned Costs	Unsupported Costs	Funds to be Put to Better Use
CONTRACT AUDITS				
2009-12306 11/17/2009	Blue Cross Blue Shield of Tennessee Contract for Administration Services for Dental Benefits	\$25,591	\$17,713	\$0
2009-12689 11/24/2009	Review of TVA's Decision to Construct a Gas Plant in Northeast Tennessee	\$0	\$0	\$0
2009-12871 12/04/2009	Preaward Review – Retiree Staff Augmentation Services	\$0	\$0	\$854,000
2009-12908 12/17/2009	Preaward Review – Proposal to Provide Engineering Design and Support Services	\$0	\$0	\$6,500,000
2008-12050 01/20/2010	Pinkerton Government Services, Inc, Review of Costs Billed Under Contract Nos. 17952 and 17935	\$286,881	\$6,665	\$0
2009-12907 01/26/2010	Preaward Review – Proposal to Provide Engineering Design and Support Services	\$0	\$0	\$2,200,000
2008-11973 02/04/2010	Bechtel Power Corporation Costs Billed Under Contract No. 58949 for WBN Unit 2 DSEP	\$217,487	\$0	\$0
2009-12909 02/04/2010	Worley Parsons Proposal for Engineering Design and Support and Services	\$0	\$0	\$0
2009-12905 02/18/2010	Preaward Review – Proposal to Provide Engineering Design and Support Services	\$0	\$0	\$148,600
2007-028C 03/17/2010	Holtec International, Inc.	\$276,000	\$0	\$0
DISTRIBUTOR AUDITS				
2008-12037 10/15/2009	Distributor Review of Bolivar Energy Authority	\$0	\$0	\$0
2008-12042 01/19/2010	Distributor Review of Tullahoma Utilities Board	\$0	\$0	\$0
2008-12041 01/20/2010	Distributor Review of Princeton Electric Plant Board	\$0	\$0	\$0
2008-12038 02/19/2010	Distributor Review of Murphy Electric Power Board	\$174,000	\$0	\$0
FINANCIAL AND OPERATIONAL AUDITS				
2009-12893 11/09/2009	Agreed-Upon Procedures for TVA Fiscal Year 2009 Performance Measures	\$0	\$0	\$0
2009-12326 02/12/2010	Review of the Tennessee Valley Authority Retirement System	\$0	\$0	\$0
2009-12296 02/18/2010	Review of Green Power Marketing	\$0	\$0	\$0
2009-12292 02/25/2010	TVA's Hearing Conservation Program	\$0	\$0	\$0

INFORMATION TECHNOLOGY AUDITS

2009-12338-04 11/30/2009	Enterprise Backup and Recovery – Nuclear Power Group	\$0	\$0	\$0
2009-12747 12/08/2009	Sarbanes-Oxley Remediation Testing – IT General Controls and Application Control Narratives	\$0	\$0	\$0
2009-12338-06 12/09/2009	Enterprise Backup and Recovery – Nuclear Security and Access Control	\$0	\$0	\$0
2009-12338-08 01/19/2010	Enterprise Backup and Recovery –Power Systems Operations	\$0	\$0	\$0
2009-12697 01/25/2010	Federal Information Security Management Act Evaluation	\$0	\$0	\$0
2009-12338-05 01/26/2010	Enterprise Backup and Recovery–Information Services	\$0	\$0	\$0
2009-12338-07 01/26/2010	Enterprise Backup and Recovery –Fossil Power Group	\$0	\$0	\$0
2009-12994 03/02/2010	Sarbanes-Oxley IT Control Design Review	\$0	\$0	\$0
TOTAL AUDITS (26)		\$979,959¹	\$24,378	\$9,702,600

OIG INSPECTION REPORTS ISSUED DURING THE SIX-MONTH PERIOD ENDED ENDED MARCH 31, 2010

Report Number and Date	Title	Questioned Costs	Unsupported Costs	Funds to be Put to Better Use
2007-11400 11/23/2009	Review of TVA's Operational Performance Results	\$0	\$0	\$0
2008-11995 12/03/2009	Review of Educational Degrees for Contractors Assigned to the Watts Bar Nuclear Plant Unit 2 Construction Completion Project	\$0	\$0	\$0
2009-12652 01/07/2010	Review of TVA's Reservoir Operations Program	\$0	\$0	\$0
TOTAL INSPECTIONS (3)		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>.

¹Includes \$33,000 of unrecoverable costs.

Appendix 3

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

Audit Reports	Number of Reports	Questioned Costs	Unsupported Costs
A. For which no management decision has been made by the commencement of the period	4	\$3,909,940	\$656,058
B. Which were issued during the reporting period	5	\$979,959	\$24,378
Subtotal (A+B)	9¹	\$4,889,899	\$680,436
C. For which a management decision was made during the reporting period	9 ²	\$4,714,805	\$680,436
1. Dollar value of disallowed costs	8	\$2,255,467	\$680,436
2. Dollar value of costs not disallowed	3	\$2,459,338	\$0
D. For which no management decision has been made by the end of the reporting period	1	\$175,094	\$0
E. For which no management decision was made within six months of issuance	0	\$0	\$0

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

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

¹ 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 other recommendations for which a management decision was not made by the end of the semiannual period.

² 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 other not agreed to by management.

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

Audit Reports	Number of Reports	Funds to be Put to Better Use
A. For which no management decision has been made by the commencement of the period	5	\$39,888,000
B. Which were issued during the reporting period	4	\$9,702,600
Subtotal (A+B)	9	\$49,590,600
C. For which a management decision was made during the reporting period	8 ³	\$49,442,000
1. Dollar value of recommendations agreed to by management	3	\$8,852,500
2. Dollar value of recommendations not agreed to by management	6	\$40,589,500
D. For which no management decision has been made by the end of the reporting period	1	\$148,600
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**

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

³The 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 seven audits and three 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.

Audit Report Number and Date	Report Title and Recommendation(s) for which Corrective Action has Not Been Completed
2007-11348-01 03/26/2008	IT Security Organizational Effectiveness 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 June 30, 2010.
2007-11216 06/02/2008	Actions to Protect Social Security Numbers and Eliminate Unnecessary Use TVA management has completed final action for one recommendation. According to Information Services, it is on track to meet the action deadline of June 2010 for the remaining two recommendations.
2008-11754 06/13/2008	Computer Operations—Manage Facilities – SOX 404 Testing 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.
2007-11388 08/21/2008	Sequoyah Nuclear Plant – Cyber Security Assessment 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. Management has completed final actions on six of the fifteen recommendations.
2008-11945 11/20/2008	TVA Telework Initiatives The Vice President, Human Resources, issued a TVA-wide policy on December 28, 2009. Other recommendations related to conducting an assessment and working with TVA organizations to specifically identify the positions that are a good fit for teleworking are ongoing.
2008-11964 09/25/2008	Federal Information Security Management Act Evaluation Management agreed with our findings and has completed actions for one of the four recommendations. Remediation is targeted for completion by August 31, 2010.
2008-11965 02/04/2009	Contractor Workforce Management – Access and General Control Review Because of commitments to implementing MAXIMO for the Nuclear organization, TVA plans to test and evaluate the functionality of the upgraded software by March 2010. Pending positive test results, the implementation of the software will follow within the next few weeks. TVA expects that the upgrade, testing, evaluation, and implementation should be complete by April 2010.

Inspection Report Number and Date	Report Title and Recommendation(s) for which Corrective Action has Not Been Completed
2005-518I 08/31/2005	Physical and Environmental Controls for the Chattanooga Data Center Information Services has developed a Unified Communications Strategy and Project Plan to replace the telephone system by the end of 2010.
2005-522I 06/13/2006	TVA's Role as a Regulator Initial planned completion of the recommendations was scheduled for December 31, 2006. On March 26, 2010, Compliance Advisory Services indicated that the new target date for final action would be September 30, 2010.
2007-11443 09/30/2008	Contractor Background Checks Applicable to the Watts Bar Nuclear Plant Unit 2 Construction Project Nuclear Power Group and Human Resources are currently working to determine what changes are necessary to the background checks for the Watts Bar Nuclear Plant Unit 2 project related to contractor employees and if any changes are required to TVA Business Practice 29.

Appendix 5

INVESTIGATIVE REFERRALS AND PROSECUTIVE RESULTS¹

Referrals

Subjects Referred to U.S. Attorneys	18
Subjects Referred to State/Local Authorities	2

Results

Subject Indicted	4
Subjects Convicted	3
Pretrial Diversions	2
Referrals Declined	19

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

Appendix 6

HIGHLIGHTS - STATISTICS

	MAR 31, 2010	SEPT 30, 2009	MAR 31, 2009	SEPT 30, 2008	MAR 31, 2008
AUDITS					
AUDIT STATISTICS					
Carried Forward	44	70	28	47	35
Started	46	46	59	53	52
Canceled	(4)	(6)	(3)	(2)	(2)
Completed	(26)	(66)	(14)	(70)	(38)
In Progress at End of Reporting Period	60	44	70	28	47
AUDIT RESULTS					
Questioned Costs	\$980	\$6,744	\$1,226	\$3,609	\$774
Disallowed by TVA	2,255	2,799	829	1,802	370
Recovered by TVA	2,999	909	644	676	3,339
Funds to Be Put to Better Use	\$9,703	\$50,570	\$0	\$28,653	\$100,990
Agreed to by TVA	\$8,853	4,723	0	28,120	53,987
Realized by TVA	480	4,395	0	26,460	53,987
OTHER AUDIT-RELATED PROJECTS					
Completed	10	16	8	7	6
Cost Savings Identified/Realized (Thousands)	\$0	\$0	\$0	\$0	\$0
INSPECTIONS					
Completed	3	21	4	16	8
Cost Savings Identified/Realized (Thousands)	\$0	\$0	\$0	\$0	\$0
INVESTIGATIONS¹					
INVESTIGATION CASELOAD					
Opened	168	194	171	161	155
Closed	198	223	91	135	121
In Progress at End of Reporting Period	189 ²	251	280	200	174
INVESTIGATION RESULTS (Thousands)					
Recoveries	\$41.8	\$20.6	\$10,725.3	\$632.6	\$25,262
Savings	0	472.1	0	0	4,137
Fines/Penalties	5.9	.4	352.7	1.6	206
MANAGEMENT ACTIONS					
Disciplinary Actions Taken (# of Subjects)	7	6	3	15	9
Counseling/Management Techniques Employed (# of Cases)	25	10	1	6	16
PROSECUTIVE ACTIVITIES (# of Subjects)					
Referred to U.S. Attorneys	18	45	18	7	19
Referred to State/Local Authorities ³	2	6	--	--	--
Indicted	4	3	4	14	4
Convicted	3	3	3	3	3
Pretrial Diversion	2	0	0	1	0

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

² Adjusted from the previous period.

³ Category added in semiannual period ended September 30, 2009.

Appendix 7

Statement of Richard W. Moore
Inspector General, Tennessee Valley Authority
before the
Subcommittee on Water Resources and Environment
of the
Committee on Transportation and Infrastructure
United States House of Representatives
December 9, 2009

Madam Chairwoman Johnson, Ranking Member Boozman, and members of the Subcommittee, I appreciate the opportunity to testify before you on the eve of the one year anniversary of the Kingston ash spill. My written testimony covers the specifics of our assessment of the degree to which TVA has responded to the findings and recommendations in the recent OIG reports concerning the coal ash spill, clean-up operations, and TVA's overall environmental management. My statement this morning, however, will be a broader, higher level analysis of the current status of TVA.

As you know, my office issued two reports. The first report issued in June of this year evaluated TVA's (1) initial emergency response, (2) response to the media, and (3) reparations to the victims and restoration of the community. The second report was issued on July 23, 2009, and focused on (1) providing an independent peer review of the root cause analysis utilizing the services of Marshall Miller & Associates, and (2) reviewing TVA's ash management practices. These reports resulted in nine very broad recommendations designed to (1) improve specific business processes, (2) develop a more robust risk management program, and (3) take actions that would change TVA's culture to be more focused on developing sound business practices and driving compliance throughout the TVA organization.

Over the past year, we have seen TVA devote an extraordinary amount of time, money, and focus to addressing not only the recommendations of the OIG, but also the recommendations of the McKenna law firm which in many respects paralleled our findings and recommendations. TVA has extracted all of the detailed findings and recommendations, and they have cross-referenced the findings to develop a Gap Analysis and a tracking matrix. TVA has detailed the specific actions that need to be taken to address all findings and recommendations. They have contracted with a consultant to develop the necessary policies and procedures, and they are benchmarking other companies, including identifying best practices related to dry ash storage. TVA has hired another consultant, McKensey and Company, to analyze TVA's culture and to assist TVA in effectively changing the culture that contributed to the Kingston ash spill. Beyond these procedural changes are changes that are perhaps more difficult to measure but are just as significant. Changes in personnel, changes in the tempo of how quickly things are done, and changes in attitudes are evident to us as we track the work of TVA management.

This all leads me to believe that TVA is marching in the right direction. As you know, we have been perhaps TVA's harshest critic in terms of how they handled coal ash storage and how they handled the crisis after the fact. In many ways, the Kingston ash spill was TVA's darkest hour. Our impression now, however, is that TVA management is not just reacting to criticism to emerge from a crisis, but they are committed to transforming TVA into what we all hope it can be.

I would like to offer, however, some historical perspective on TVA in crisis. This is not the first time that TVA has been under the microscope nor the first time that findings and recommendation for significant change have been made. The McKenna report aptly points out that in 1987, in response to TVA's nuclear safety issues and sustained regular increases in TVA's rates, The Southern States Energy Alliance Board created an advisory committee which found some of the same problems with TVA in the 1980's as we are finding today. The McKenna report also notes that my office has issued reports citing process problems at TVA that continue to resurface over the years.

While it is true that none of the attempts to reform TVA focused on culture and risks to the extent that has been done in the aftermath of the Kingston spill, it is clear that there are some recurring themes in TVA history. One is that TVA has suffered from an insular culture that shuns views outside the “Valley.” This defensive and protectionist philosophy has produced a tunnel vision that eschews input that might have aided in changing the very culture that has contributed to TVA’s current woes. That same culture resisted system-wide standards and accountability. All of this is based on an underlying philosophy that TVA’s uniqueness as a hybrid government agency exempted it from adherence to standards and uniform process.

My point here this morning is simply this: the challenge for TVA is a culture that is highly resistant to reform. The Kingston spill demonstrated that in a dramatic way. Changing a culture takes time. The same culture that existed on December 22, 2008, still exists today. Its residual effect is likely to be felt for years to come.

Despite all of this, I remain optimistic that the current efforts to effect meaningful changes at TVA will be successful for four reasons: (1) the kinds of reforms being implemented at TVA are system-wide process changes that have worked well in private sector companies and that have not had the system failures TVA has experienced; (2) TVA management has demonstrated a willingness to solicit input from culture experts outside the Valley, and they appear to be taking all of this very seriously; (3) TVA management has recently gone through an extremely robust evaluation of risks that is unparalleled in TVA history; and (4) TVA management has made personnel changes that, to me, provide credible evidence of a commitment to do whatever it takes to get this right.

Ultimately, the Office of Inspector General will measure the progress that TVA makes, and we will report the facts as we find them. We appreciate this Subcommittee’s efforts to protect the citizens of the Tennessee Valley by focusing on these important issues. My office will work with this Subcommittee to track TVA’s progress and to issue reports that may be helpful to you.

I look forward to answering any questions that you may have.

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:

BFN	Browns Ferry Nuclear Plant
CAS	Compliance & Advisory Services
CEDARS	Center for Economic Development and Resource Stewardship
CEO	Chief Executive Officer
CIR	Competitive Index Rate
COF	Colbert Fossil Plant
EPA	Environmental Protection Agency
Ernst & Young	Ernst & Young LLP
FECA	Federal Employees' Compensation Act
FERC	Federal Energy Regulatory Commission
FERS	Federal Employees Retirement System
FISMA	Federal Information Security Management Act
FOIA	Freedom of Information Act
FY	Fiscal Year
HR	Human Resources
IG Act	Inspector General Act Amendments of 1988
IT	Information Technology
OEI	Organizational Effectiveness Initiative
OIG	Office of the Inspector General
OSHA	Occupational Safety and Health Administration
OWCP	Office of Workers' Compensation Programs
Program	Hearing Conservation Program
SERP	Supplemental Executive Retirement Plan
SOX	Section 404 of the Sarbanes-Oxley Act of 2002
STS	Standard Threshold Shifts
TVA	Tennessee Valley Authority
TVARS	Tennessee Valley Authority Retirement System
TVAP	TVA Police
WBN U2 Project	Watts Bar Nuclear Plant Unit 2 Construction Completion Project
WCF	Widows Creek Fossil Plant
WP	Winning Performance

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
- 33,716 megawatts (summer net capability)
- 145 billion kW hours generated (FY 2009)
- \$11.1 billion in annual revenue (FY 2009) from sale of electricity
- 12,219 employees (FY 2009)

> Transmission

- 99.999 percent reliability for ten consecutive years
- 80,000 square-mile service area
- 15,954 miles of transmission line

> Customers

- 155 power distributors (municipalities and cooperatives)
- 56 directly served customers
- 11 utility power exchange arrangements
- 9 million people served

> Stewardship

- Nation's fifth-largest river system
- 800 miles of commercially navigable water transporting more than 50 million tons of cargo
- 49 dams and reservoirs
- 293,000 acres of public land
- 11,000 miles of reservoir shoreline
- Over 100 public recreation facilities

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 at 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**

OIG.TVA.GOV