

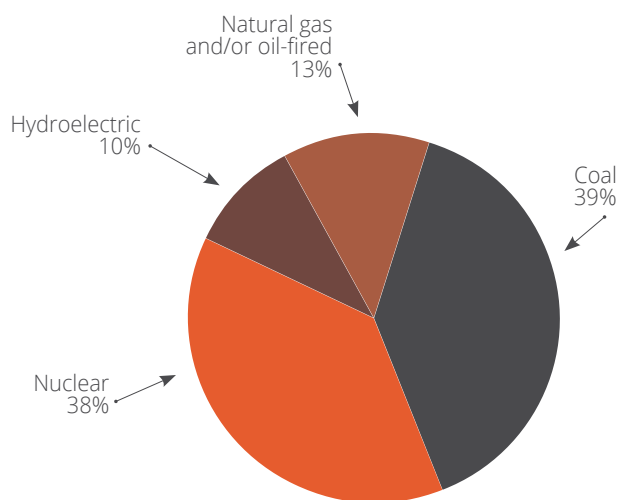


MAKING TVA BETTER





TVA POWER GENERATION FOR FISCAL YEAR ENDED SEPTEMBER 30, 2015 ***(in millions of kilowatt hours)***



- Coal - 56,017
- Nuclear - 54,543
- Hydroelectric - 13,812
- Natural gas and/or oil-fired - 17,893

*Nonhydro renewable resource is less than 1 percent for the period shown, and therefore not represented on the chart.

TABLE OF CONTENTS

Making TVA Better

Message from the Inspector General.	4
Special Feature	6
Noteworthy Undertakings	26
Executive Overview	28
Organization	32
Audits	36
Evaluations	46
Investigations	50
Legislation and Regulations	54
Appendices	56
Appendix 1 – Index of Reporting Requirements Under the Inspector General Act. . . .	57
Appendix 2 – Audit and Evaluation Reports Issued	58
Appendix 3 – Audit and Evaluation Reports Issued with Questioned and Unsupported Costs and Recommendations for Better Use of Funds. . . .	60
Appendix 4 – Audit and Evaluation Reports with Corrective Actions Pending.	62
Appendix 5 – Investigative Referrals and Prosecutive Results	65
Appendix 6 – Highlights	66
Appendix 7 – Government Contractor Audit Findings	67
Appendix 8 – Peer Reviews of the TVA OIG	67
Appendix 9 – Peer Review Conducted of Another OIG	67
Glossary	68
Abbreviations and Acronyms	70



MESSAGE FROM THE INSPECTOR GENERAL

On October 18, 2015, the Tennessee Valley Authority (TVA) Office of the Inspector General (OIG) celebrated its 30th anniversary. In those 30 years, the OIG, like TVA, has evolved. Our office was created as a Board-established office with a Board-appointed Inspector General (IG) during a time when TVA faced a crisis in the building of its nuclear plants. TVA, at the time, had a three-member full-time Board of Directors (Board), received federal appropriations, and employed more than 50,000 people.

Today, the TVA IG, like TVA Board members, is nominated by the President and confirmed by the United States (U.S.) Senate. Other changes over the years include TVA no longer receiving federal appropriations, moving from a full-time three-member Board to a nine-member part-time Board, and reducing its workforce to about 11,000 employees.

Thirty years since our office's inception, TVA is focused on (1) maintaining rates as low as feasible, (2) living within its means, (3) managing its assets to meet reliability expectations and providing a balanced portfolio, (4) being responsible stewards of the region's natural resources, and (5) improving performance and employee engagement.

Throughout these 30 years, the TVA OIG has stayed committed to providing an independent analysis of TVA operations and programs to help identify more efficient and effective ways to do business and to prevent and detect fraud, waste, and abuse. In our feature, "Making TVA Better," we take a look back at our office over the past 30 years, the changes in TVA and TVA OIG, and some of the contributions our office has made to help TVA save or recover money, reduce risks, and improve operations. Making TVA better is a mutual purpose we share with TVA management, employees, and the TVA Board. It is important to the 9 million people of the Tennessee Valley served by TVA that we approach our work with that purpose every day.

The relationship between a federal agency and an IG has been the subject of much comment over the last 30 years. This relationship is arguably one of the most challenging arrangements in the federal government. The natural tensions created by the IG being in the agency but publicly and independently reporting on matters that brings unwanted scrutiny on the agency has proven in TVA's case to be particularly challenging.

For us, this all means that we have to lean forward when it comes to communicating with our stakeholders. In other words, we have found it incumbent on us to initiate dialogue with our stakeholders, including TVA management and the TVA Board, rather than waiting for our stakeholders to ask us questions. We try to explain not just "what" we are doing but also answer the sometimes unspoken question from our stakeholders of "why" we are doing it. Staying in dialogue, despite the fact that there is sometimes disagreement over either the "what" or the "why," requires mutual respect and a united commitment to find a way to work toward our mutual purpose of serving the people of the Tennessee Valley. We appreciate the highly professional working relationship that the OIG enjoys with both the TVA Board and TVA management and their considerable investment in making our relationship productive for all our stakeholders.

With this report, I am pleased to present our work for the period April 1 to September 30, 2015. In this semiannual period, our audit, evaluation, and investigative activities identified more than \$12.7 million in funds to be put to better use, questioned costs, recoveries, savings, and penalties, as well as opportunities for TVA to improve its programs and operations. Highlights include:

- A contract compliance audit which questioned more than \$7.4 million in rate adjustments and labor costs and associated fees for using rates not included in the contract and a preaward review that identified \$2.1 million of potential savings related to overstated labor and burden rates and certain markup rates.
- Organizational effectiveness reviews in TVA's Information Technology (IT) organization which identified improvements made by the groups since previous reviews in 2011, as well as additional areas for improvement going forward.
- An audit of electronic communications by the TVA Board which determined current e-mail practices were consistent with the Presidential and Federal Records Act Amendments of 2014.
- An assessment of TVA's process for developing TVA's 2015 Integrated Resource Plan (IRP) which found the process was adequate in considering potential future uncertainties and associated responses.
- Several reviews that identified improvement opportunities in TVA processes or programs related to invoice approval, talent acquisition and deployment, contractor workforce management, the TVA protocol for handling requests for things of value by certain influential individuals, management of hydro generation obsolete equipment, nuclear outage performance, fire protection, overtime, and executive incentives.
- An investigation that led to a negotiated settlement to repay TVA \$1 million because of defective pricing and a rebid of a contract which yielded a savings of \$1.8 million.

On a personal note, I want to thank Rob Martin for his many contributions to the TVA OIG. Rob, our Assistant Inspector General for Audits and Evaluations, retired on September 29, 2015, after a distinguished career in government auditing of more than 30 years, including the last 8 years with our office. Rob's leadership and contributions made the OIG and TVA better. We thank you for your service, Rob.

I want to congratulate Dave Wheeler who has been selected as the new Assistant Inspector General for Audits and Evaluations. Dave, who joined our office in March 1987 as an auditor, most recently served as Deputy Assistant Inspector General for Audits. Dave's strong leadership and technical skills position him well to continue the tradition of excellence in Audits and Evaluations.

On July 28, 2015, Director Richard Howorth was nominated for a second term on the TVA Board. Director Howorth has served as the Chair of the People and Performance Committee, Customer and External Relations Committee, and External Relations Committee during his first term. We appreciate Director Howorth's understanding of the role of the OIG and the support he has given our office during his time on the Board. Also, on August 13, 2015, Eric Satz became the newest member of TVA's Board. We welcome Director Satz to the TVA Board and look forward to working with him toward our mutual purpose of making TVA better.

Finally, the TVA OIG lost a friend and supporter with the passing of former Tennessee Senator Fred Thompson on November 1, 2015. At a critical point in the life of the OIG, Senator Thompson stepped up and ushered through the Senate legislation to make the TVA IG a presidentially appointed position. Several years ago I was talking to the Senator and expressing my appreciation for what he had done, but he shrugged it off with typical Thompson humility. TVA is better because of Fred Thompson, and the OIG will cherish his memory.



Richard W. Moore
Inspector General

SPECIAL FEATURE

OIG CELEBRATES 30 YEARS OF MAKING TVA BETTER



On October 18, 2015, the TVA OIG marked 30 years of working to make TVA better. We pause to consider the difference that having an independent OIG has made in TVA history. Whatever value the OIG has added has been possible through a collaborative effort with the TVA Board and with TVA management. In many ways, our reflections on the accomplishments of the OIG over these 30 years are an acknowledgment of the good work done by many. We have been privileged to serve with very dedicated and proficient Board members and TVA employees who have worked alongside of us to make TVA better.

As a corporate body, TVA “wakes up” every morning knowing it has to earn the right to survive. The list of critics questioning the usefulness of TVA continues to grow. TVA has responded by going about the job of “keeping the lights on” in a workman-like fashion that often silences all but the harshest critics. TVA continues to contend with imposing challenges in carrying out its mission. Some of the challenges over the past 30 years included: (1) the shutdown and restart of the nuclear program in the late 1980s, (2) predictable enterprise-wide cost cutting and downsizing over the years, (3) periodic attempts to improve the work environment and culture, (4) the financial and reputational damage caused by the Kingston ash spill, (5) defending attempts to privatize the agency, (6) complying with environmental regulations, and (7) conflicting views about how to manage TVA’s debt.

We would like to think that some of what TVA has accomplished over the last 30 years was aided by the OIG. Some of the things TVA can take pride in include: (1) consistently providing reliable power at competitive rates, (2) the restart of Browns Ferry Unit 1, (3) the successful cleanup of the Kingston coal ash spill, (4) successfully expanding the power generation capabilities with combustion turbine generation, (5) reducing the number of aging fossil plants, (6) improving customer relationships, and (7) nearing completion of the first nuclear reactor in the 21st Century at Watts Bar Nuclear Plant (WBN).

This article will provide some background on why OIGs were created and, more specifically the creation of the TVA OIG, and give a brief history of the different periods throughout the OIG history, as well as a summation of what the OIG has been able to accomplish in carrying out the vision of Making TVA Better.

A MATTER OF PUBLIC TRUST

In 1993, Professor Paul C. Light’s seminal work, *Inspectors General and the Search for Accountability*, quickly became the authoritative source on the work of IGs. Light traced the origins of the federal IG concept and the sometimes unrealistic expectations placed on IGs to “clean up

government.” Congress expanded the number and size of the various OIGs in the late 1970s and into the 1980s in response to a series of scandals in federal agencies.

As Paul Light explains, the IG Act of 1978 was designed to do basically four things: consolidate the scattered audit and investigation divisions into an IG office for each federal agency; ensure a measure of independence by putting presidential appointees into the jobs; give the IGs wide latitude in the scope of their work and in how to organize their offices; and provide greater resources for the war on fraud, waste, and abuse.

According to Light, the effectiveness of the IG concept should be measured in terms of the “quality of life produced by the government.” Whether a better quality of life was being ushered in by the IGs could be addressed by asking these four questions: (1) Is anyone listening? (2) Is the public more trusting? (3) Is the government less vulnerable to fraud, waste, and abuse? and (4) Is the government producing outcomes of greater public value? Light concluded that at least back in the early 1990s the results were mixed.

With all due respect to Professor Light, those inquiries seem to impute far more power than IGs actually enjoy. IGs should be able to “move the needle” on the metrics that count in government, but much of the final results lie outside the scope of an IG’s work. Light recognized that measuring the effectiveness of OIGs is indeed tricky. Raw statistics rarely tell the whole story.

Ultimately, however, Professor Light’s conclusion that the work of an OIG should make life better for people seems right. For us, that means our work should improve the quality of life for the residents of the Tennessee Valley. It’s a matter of public trust.

THE OIG: BORN IN CONTROVERSY

In the mid-1980s, TVA was grappling with its encumbered nuclear program which led to the shutdown of all its nuclear operating plants, the cancellation of three unfinished plants,

and deferred construction on two other plants. To address these problems, a recommendation to hire a nuclear consultant and an IG was made. There were already 12 OIGs created by the IG Act of 1978. Consequently, there was a pervasive sentiment at the time that if TVA didn't create an OIG, Congress might consider creating one for them. As a result, Board Chairman Charles H. Dean and Director John B. Waters approved the OIG's creation stating there was a need to have an independent organization within TVA to receive complaints that reported directly to the Board and to Congress.

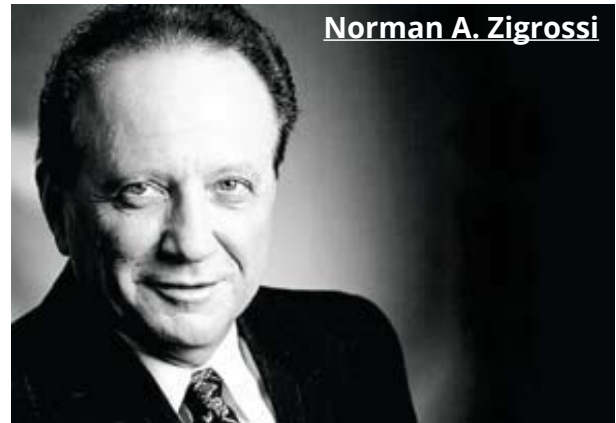
While the three-person Board approved the creation of the OIG with a vote of 2 to 0, one Board member, David Freeman, removed himself from the voting process. Mr. Freeman did not want to hinder progress in hiring an IG, but did not think an IG was a fit for a business like TVA. TVA employees were also divided on the decision to hire an IG.

Despite its controversy, the TVA OIG was created with the following parameters outlined in the Board's plan: The IG will be independent of TVA management, with a separate staff and budget, and will report directly to the Board. He or she can be removed from office only by the Board, which must justify the action to Congress. The IG will have access to all TVA records and can make "any investigation deemed necessary or desirable by the inspector general." To maintain employee confidentiality, "the Board intends for the IG to receive in confidence allegations about any aspect of TVA."

Former TVA General Manager Bill Willis began compiling a list of names for consideration to fill the role of the IG, who would be named on December 1, 1985.

First Inspector General **Norman A. Zigrossi, 1986 - 1992**

Norm Zigrossi, prior to becoming TVA's first IG, worked for the Federal Bureau of Investigation (FBI) for 23 years, including serving as the Special Agent in Charge of the FBI's Washington, D.C., and San Diego, California, field offices. Mr. Zigrossi reported for duty in January 1986 as TVA



Norman A. Zigrossi

continued to shut down its nuclear plants to address safety concerns. The basic problem with the nuclear program was soon recognized as a lack of effective management systems throughout the program. This would ultimately provide much of the basis for TVA OIG's initial caseload.

One of the first challenges facing the OIG involved nuclear-related employee concerns. TVA contracted with a company to investigate the issues in its nuclear program which resulted in more than 6,000 interviews of TVA employees and more than 5,000 concerns identified through those interviews. When TVA terminated its contract with that company, the concerns were transferred to the Nuclear Regulatory Commission (NRC) and the majority of the issues were ultimately turned over to the OIG, resulting in opening 605 investigations.

Shortly after the creation of TVA's OIG, President Ronald W. Reagan appointed Marvin T. Runyon the ninth chairman of the TVA Board. Mr. Runyon had previously served in executive roles at Ford Motor Company and Nissan, where he and other leaders attempted to boost morale, build a strong culture, and focus on quality.¹ When Mr. Runyon stepped into his position at TVA, he "... found an agency that was badly dated in its operations and practically crippled by a failed attempt to develop nuclear power."² Further, TVA had invested \$5 billion in the construction of three nuclear plants which were subsequently cancelled. Each of these events had serious negative impacts on TVA's public perception of TVA, customer and employee relationships, and operations.

¹ R. Earl Thomas and Neil E. Watson, *Marvin Runyon: A Commitment to Excellence*, <<http://www.anbhf.org/pdf/runyon.pdf>>, accessed on May 5, 2013.

² Fred S. Rolater, Marvin Runyon, Middle Tennessee State University, February 24, 2011.

To be able to continue as a viable organization, TVA needed to fundamentally change the way it conducted its business. Soon after beginning at TVA, Mr. Runyon determined that organizations were not aligned. Various groups within TVA were not cohesively working together toward one mission but were marching off in separate directions. Mr. Runyon outlined steps for change, such as reexamining TVA's purpose and establishing a clear plan for the future; restoring TVA's nuclear program; and improving leadership, teamwork, and communication within TVA. Mr. Runyon hoped these changes would result in "... greater responsibility and accountability in moving decision making to the lowest operating levels possible."³ TVA staffing levels at the height of construction was nearing 50,000 employees. Mr. Runyon began efforts to significantly reduce the size of TVA's workforce.

Also, in 1988, TVA froze wholesale rates, primarily due to dramatic rate increases during the previous two decades

and eroding public confidence. The rate freeze would continue for 10 years until 1997. While the rate freeze may have improved TVA's relations with its customers and residents of the Tennessee Valley in the short-term, it also increased TVA's financial pressures later.

During these challenging times at TVA, the OIG focused significant attention on investigating the nuclear-related employee concerns and identifying opportunities to achieve savings and cost reductions. One such opportunity was establishment of the contract preaward program which helped identify potential cost savings. Significant results from OIG audits also included the avoidance of a significant rate increase to customers as a result of a recommendation by the OIG to initiate a change in accounting policy. In addition, a number of program areas were identified where opportunities existed to improve effectiveness and achieve higher results.



³ Roger L. Cole and Larry A. Pace, *Power to Change: The Case of TVA, Training and Development*, August 1991, p. 60.

Additionally, Mr. Zigrossi quickly established a hotline—known today as the EmPowerline (1-855-882-8585)—for TVA employees, contractor employees, or members of the public to anonymously or confidentially report any suspected waste, fraud, or abuse potentially affecting TVA.

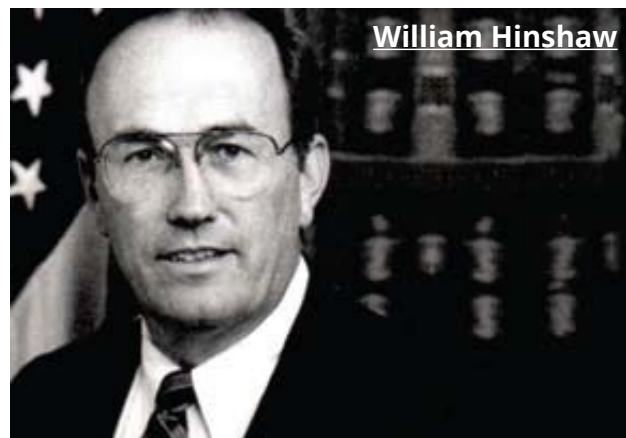
On October 18, 1988, President Reagan signed into law Public Law No. 100-504, IG Act Amendments, establishing the TVA OIG and 32 others as statutory IG offices. This law made the OIG responsible for TVA's audit and investigative activities.

Second Inspector General **William L. Hinshaw II, 1992 - 1994**

When Mr. Zigrossi resigned to become a TVA manager, William L. Hinshaw II, a 24-year veteran of the FBI, assumed the TVA IG role on May 1, 1992.

Mr. Hinshaw focused on initially establishing a greater OIG presence in the Valley as TVA operations and personnel were scattered throughout the region. So, in 1992, he directed the opening of satellite offices—first in Chattanooga, Tennessee, and Huntsville, Alabama, and then, in Memphis, Tennessee. Mr. Hinshaw was also focused on making the OIG more efficient and effective in the delivery of the OIG mission. Some of these actions included the formation of Quality Action Teams to address, among other things, OIG employees' issues and concerns about their career paths, performance appraisals, and employee development.

In 1993, he created an Inspections unit utilizing staff from Audits and Investigations. The intent of the Inspections team was to foster innovative approaches that were responsive to management's needs and provide timely services to enable management to promote economy, effectiveness, and efficiency within their own programs. The approach was designed to build constructive relationships with TVA management, assuring them that the OIG's primary goal was to effect positive change rather than finding fault for noncompliance with existing rules and regulations. TVA's challenges were evolving. In the 1990s, legislative action drove TVA's renewed focus on becoming more competitive in the utility industry. The Energy Policy Act of



1992 appeared to be paving the way for requiring utilities to wheel power from one another. Wheeling power would involve TVA transmitting power generated by another utility using TVA transmission lines while the customer pays the generating utility, not TVA, for the power. TVA was exempted from the Energy Policy Act of 1992 for power sold and consumed within the TVA "fence." However, there was legislative movement towards eliminating the TVA exemption, thus making TVA subject to wheeling power and introducing competition into the "fence." Additionally, neighboring private utilities, concerned that TVA's position as a federal utility would provide an unfair advantage in a deregulated marketplace, organized a lobbying group called TVA Watch. In 1995, TVA commissioned a report called "The Ties That Bind" which assessed the "... financial status, generating capacity and likely competitors within the region, and concluded that the "fence should come down." Intended to emphasize TVA's self-supporting nature, the report was viewed by TVA Watch as a preemptive strike indicating TVA planned to target other utilities' customer bases. Deregulation was expected to become reality and would plunge TVA into a competitive environment. Even if deregulation did not come to fruition immediately, TVA saw the need to become more competitive.

Significant OIG reviews during this time included a joint audit and investigation that resulted in \$8.37 million recovery from TVA's medical plan administrator; \$10 million in questioned costs related to price adjustment claims, and a review of the technology brokering program. The technology brokering program review resulted in Mr. Hinshaw testifying before Congress on TVA's role

in using cooperative agreements for procurement of unauthorized services for the U.S. Department of Defense.

Third Inspector General **George T. Prosser, 1994 - 2000**

On April 1, 1994, George T. Prosser became TVA's third IG and the first OIG employee to become the IG after having served in the office as the Assistant Inspector General, Investigations (AIGI) and as the Manager of Fraud Investigations. Prior to his roles in the TVA OIG, Mr. Prosser was a 15-year veteran of the FBI—serving as a supervisory special agent in the Terrorism Section at FBI Headquarters and as the Senior Special Agent in the FBI's Chattanooga resident agency. While serving as the AIGI, Mr. Prosser's efforts in detecting fraud and abuse in TVA's workers' compensation program received a public service award from the President's Council on Integrity and Efficiency (PCIE)—an IG community group.

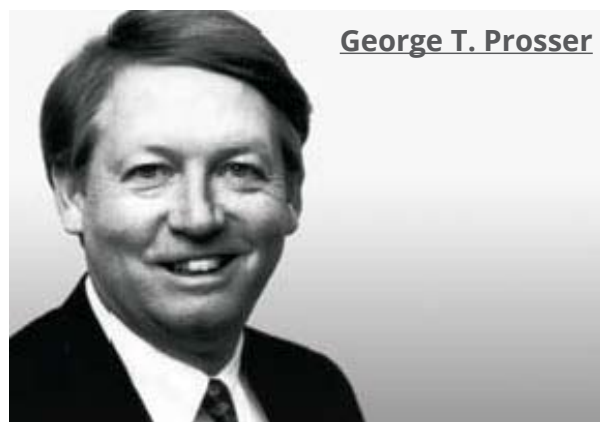
During the mid to late 1990's, TVA continued to deal with the challenges and controversies related to becoming more competitive in a deregulated market. As deregulation was being discussed, Enron began operations of some of its gas-fired combustion turbine plants located within the TVA fence. Additionally, the decade-long rate freeze that began in 1988 improved relations with TVA customers in the short-term, but it also resulted in unforeseen consequences. Presumably, the loss of potential revenue associated with the 10-year rate freeze placed pressure on TVA to cause it to increase its debt borrowing, resulting in high financing costs. The Office of Management and Budget began pressuring TVA to pay back existing debt and limit the growth of debt, at a time when environmental regulations were increasing in complexity and adding additional costs. In July 1997, TVA issued a 10-year-business plan. The plan attempted "...to position TVA to be more competitive by, among other things, reducing its high debt servicing and other fixed costs." The ultimate objective of the plan was to offer competitively priced power and reduce debt by about one-half (to approximately \$14 billion) by 2007. This plan proved to be unrealistic due to a number of factors including the U.S. Environmental Protection Agency requirements pursuant to the Clean Air Act to retrofit the fossil plants with expensive emissions control equipment.

Finally, internally, TVA faced a projected high attrition rate and loss of long-term employees and their knowledge. Change was on the horizon, and TVA needed a navigation plan for the future.

During this time, Congressional concerns arose related to a number of TVA management practices, including advertising, sole-source contracting, special events and entertainment, use of TVA airplanes, and other management practices. Congressman Zach Wamp engaged the OIG to review and provide greater oversight in all of these areas. Other challenges during this time included the indictment of the Chief Operating Officer who was later acquitted and controversy around the creation of the Center for Rural Studies which was established by TVA and funded with a \$30 million irrevocable trust. TVA subsequently revoked the funding and dissolved the organization.

During Mr. Prosser's time as IG, the TVA OIG worked on some impactful projects that significantly benefitted TVA. Some of the more significant projects included the following:

- In 1994, the OIG completed a comprehensive Concerns Resolution Staff program review. Then, in 1995, TVA Nuclear management asked the OIG to review the program at WBN due to the NRC's interest in the program. In both cases, the OIG's findings were generally positive. That September, an OIG special project team briefed senior NRC officials in Washington, D.C., on the results of the review. These reviews have continued through the ensuing years.



George T. Prosser

- During 1993 and 1994, the OIG participated in the “Federal Employees Compensation Act (FECA) Fraud Deterrence Group,” which was selected to receive the Secretary of Labor’s Exceptional Achievement Award for 1995. The group played a significant role in the enactment of Public Law 103-329, which bans payment of FECA benefits to claimants who are convicted of defrauding the program, suspends payment of benefits to incarcerated felons, and changes the FECA fraud statute from a misdemeanor to a felony.
- In 1997, special agents from the OIG became part of a newly formed federal and state Environmental Crimes Joint Task Force. This joining of forces soon bore fruit with three convictions in 1998. The work of the task force has continued through the years resulting in many more convictions for environmental crimes affecting TVA waterways and land.
- With year 2000 approaching, 1997 was the year the OIG began to review TVA’s year 2000 computer rollover activities, the success of which was critical to prevent disruption in the delivery of electric power. Any type of system failure could have resulted in anything from small customer inconvenience to electric power plant shutdown, affecting millions of customers. OIG reviews helped to assure the smooth transition to the 21st Century.

In 1999, a major event occurred that called into question whether the former TVA Board Chairman was trying to impede the independence of the IG, which was a TVA Board-appointed position. U.S. General Accounting Office, now known as the Government Accountability Office (GAO), investigated allegations against the former TVA Board Chairman as well as allegations the Chairman made against the IG related to misuse of a TVA credit card. GAO⁴ found (1) the Chairman’s actions “...could be viewed as an attempt to undermine the independence of the IG” and (2) “... no evidence of TVA credit card misuse by the IG.” As a result of this event, the late Senator Fred Thompson sponsored a bill to make the TVA IG a presidential appointment which Congress later enacted into law.

Mr. Prosser stepped aside as IG effective August 14, 2000, though he remained as an advisor to the new IG for several months. On September 14, 2000, an IG community group called the Executive Council on Integrity and Efficiency (ECIE) honored Mr. Prosser for outstanding contributions to the IG community.

Fourth Inspector General Richard F. Chambers, 2000 - 2002

Effective August 14, 2000, Richard F. Chambers became the fourth TVA IG. Mr. Chambers previously was at the U.S. Postal Service OIG, where he served as Assistant Inspector General of Audits and then Deputy IG. Prior to the Postal Service, Mr. Chambers worked for more than 20 years in positions of increasing audit and management responsibility, primarily with the U.S. Army, including as Director U.S. Army Internal Review and Chief, Internal Review and Audit Compliance, U.S. Forces Command.

During Mr. Chambers’ term, a number of Congressional concerns were raised. TVA OIG responded to several requests from congressmen to review aspects of interest in TVA operations.

- At Congressman Zach Wamp’s request, the OIG performed an updated review of TVA management practices in five areas: consulting contracts, advertising, special events—including barge events, executive air transportation, and the relocation of personnel and programs to Nashville, Tennessee.



Richard F. Chambers

⁴ U.S. General Accounting Office, Tennessee Valley Authority: Facts Surrounding Allegations Raised Against the Chairman and the IG, September 15, 1999 <http://www.gao.gov/products/OSI-99-20>.

- At the request of Senator Mitch McConnell, the OIG reviewed selected issues related to TVA's power rates and costs.
- At the request of Senator Jeff Sessions, the OIG assessed the reasonableness of TVA's decision to consolidate operations in Nashville in the Highland Ridge Tower (HRT) and build-out costs incurred by TVA. The OIG found TVA's decision to select HRT was not the least costly alternative, and TVA incurred some costs associated with the HRT build-out which were unnecessary or unreasonable.

Internally, Mr. Chambers created a separate IT Audit group to focus on cyber security and other IT-related risks, established a computer forensics lab, and focused on staff development.

Shortly after Mr. Chambers took the reigns as TVA IG, on November 1, 2000, President Bill Clinton signed Public Law 106-422, designating the position of TVA IG as presidentially appointed. Mr. Chambers retired from federal service on January 25, 2002. Pursuant to the Federal Vacancies Reform Act, the First Assistant to the IG, G. Donald Hickman, assumed the role of Acting IG.

Acting Inspector General **G. Donald Hickman, 2002 - 2003**

Subsequent to the tragic events of September 11, 2001, a major effort of the OIG was the initiation of a number of reviews to validate the effectiveness of TVA's security procedures and controls. These efforts were concluded under the direction of Acting IG Hickman.

The initial effort was a preliminary survey to assess the adequacy of TVA's security plans and actions taken in response to the terrorist attacks and related threats. The OIG found that TVA was taking or had taken appropriate measures to mitigate the risks associated with the security of TVA's nuclear and nonnuclear facilities. The OIG also made a major commitment to assist TVA management in developing a cost-effective plan to evaluate TVA computer security procedures and controls.



A considerable amount of legislation had been passed requiring federal agencies to review and improve security of its information, e.g., Federal Information Security Management Act (FISMA), and to report annually on its action plans for improvements. The same also requires OIGs to independently evaluate and report on agency compliance. A group of TVA OIG employees became part of an IT Security Assessment project team and by March 31, 2003, the team had conducted 23 self-assessments and 2 vulnerability assessments of TVA information security measures.

In 2002, an OIG audit team was given an Award of Excellence by the PCIE for the team's work in the area of TVA Long-Term Bulk Power Trading. The team produced two highly complex reviews of TVA's weekly, monthly, seasonal, annual, and multiyear trading in the wholesale electricity market. The reviews were especially timely, as several power marketers had either filed for or were on the brink of bankruptcy. In addition, Enron and other utilities were facing scrutiny due to questionable energy trading and practices.

The year 2002 saw the passage of the Homeland Security Act. Section 812 of the Act provided for law enforcement authority for TVA special agents under guidelines to be issued by the U.S. Department of Justice. To ensure a smooth transition, the OIG initiated and developed an intensive law enforcement skills refresher training program. In addition, the OIG began participating on the Joint Terrorism Task Force led by the FBI's Knoxville Field Division.

Additionally, in 2002, the Sarbanes-Oxley Act was enacted in response to the collapse of Wall Street giant Enron and other corporate failures and malfeasance. The Act was intended to protect investors by, among other things, requiring companies to make new disclosures on internal controls, ethics codes, and the makeup of their audit committees. Although the Act did not apply to TVA, TVA began a program to review controls and build the framework that would allow TVA to voluntarily comply, where possible with its provisions. In support of TVA, the OIG performed reviews to help assess TVA's controls over financial reporting. Finally, the OIG assumed budget responsibility for TVA's contract for external audit services and became the technical contract manager for the contract.

On April 22, 2003, President George W. Bush announced his intention to nominate Richard W. Moore to be the next TVA IG. Mr. Hickman returned to his position as the AIGI after confirmation by the U.S. Senate of Mr. Moore.

Fifth Inspector General and First Presidentially Appointed Richard W. Moore, 2003 - Present

Effective May 9, 2003, Richard W. Moore became TVA's first presidentially appointed IG. Prior to becoming the IG, Mr. Moore was an Assistant U.S. Attorney in the southern district of Alabama where he was Chief of the Criminal Division and the Senior Litigation Counsel for the U.S. Attorney's Office. After September 11, 2001, he also served as the Anti-Terrorism Task Force Coordinator. He was an Atlantic Fellow in Public Policy at Oxford University, Oxford, England, while still serving in the U.S. Justice Department.



In the dozen-plus years Mr. Moore has served as TVA's IG, his primary initiatives can be characterized by: (1) a focus on risk-based audits and investigations that produce positive change for TVA, (2) building trust with stakeholders, and (3) investing in a sustainable culture of innovation and continuous improvement for the OIG team.

Risk-Based Audits, Evaluations, and Investigations

The test for an OIG is whether its audits, evaluations, and investigations reduce the level of risks for a federal agency that could otherwise impede the accomplishment of the agency's mission. That starts with an assessment of the effectiveness of the Enterprise Risk Management (ERM) of TVA. The OIG, through its audits, evaluations, and investigations, has encouraged TVA to develop a more robust enterprise risk program.

TVA's ERM program has evolved over the years. In 1999, the OIG recommended TVA establish an ERM program and create a Chief Risk Officer position. Since then, the OIG has reviewed the program in 2003, 2008, and most recently, 2014. In 2008, the OIG review found the program needed to be driven further down into the organization. Three months later, the Kingston ash spill also demonstrated this same need. The Kingston disaster serves as an example of the importance of a properly designed ERM program supported by a healthy culture. The OIG report on Kingston pointed to significant risks that were associated with ash management and known internally as early as 1987, but that information was not captured in any risk matrix. The 2014 review found TVA had significantly improved its ERM program; however, several areas for improvement were identified based on best practices that if not addressed could prevent TVA from having a sustainable, viable, and effective ERM program.

During Mr. Moore's tenure, TVA has faced many challenges and continues to evolve both organizationally and culturally. The OIG has noted many areas where significant program improvement were warranted and made recommendations for improvement over the years. These areas have included supply chain, IT management, cyber security, capital project

management, organizational effectiveness, and various other major programs within TVA.

Information Technology and Supply Chain

In some instances the OIG's work has resulted in major program changes including the discontinuation of some programs. In other situations, the OIG continues to work with the organizations in ever changing conditions that result from technology advancements, organizational restructuring, and changes in leadership and management processes and controls. For example, the OIG has a continuous presence in the areas of supply chain and IT (including cyber security). The OIG has developed a trusting working relationship with these organizations while providing ongoing reviews and assistance in areas such as contract preaward and compliance reviews, process improvement reviews, and assurance that systems are operating as intended.

- In the area of supply chain, our compliance audits and preaward reviews have on average resulted in the identification of about \$30 million in annual questioned costs and funds to be put to better use. Additionally, many program improvement recommendations have been made including increased emphasis on employee training and development, quality assurance, and data analysis in supply chain areas of (1) contract administration, (2) contract awards, and (3) invoice review and approvals. While progress has been made,

the OIG work continues as TVA restructuring and staff reductions continue to present risks to the Supply Chain organization's progress.

- In the area of IT and cyber security, the OIG maintains a continuous presence because of the ever-changing technology that constantly increases the risk of cyber-attacks and regulatory landscape that increases the risk of fines and penalties due to noncompliance. A main focus of the OIG has been to provide some level of assurance testing around the critical infrastructure of TVA assets as well as the protection of personal data of employees and contractors to ensure these systems and data are being adequately protected. Another focus area has been the overall effectiveness of the IT organization and the effectiveness of their programs. The OIG has performed substantial reviews of the overall IT organizational effectiveness at three different points in time: 2008, 2011, and 2015. While more recent audit results have shown significant improvement, ever-evolving technology, major personnel changes, and other technological challenges continue to pose a level of risk that requires the attention of both TVA management and the OIG. Although the issues are daunting, TVA management has demonstrated a commitment to make the necessary changes.

IGs Norm Zigrossi, Donald Hickman, Richard Moore, William Hinshaw and George Prosser



Collaboration with TVA on Fraud Risk Assessments

In 2004, the OIG began conducting fraud risk assessments throughout TVA, i.e., a process for business process owners to identify and analyze fraud risk factors that may be common to general business practices and also specific to the organization and its operations. With the strong support of TVA management, the fraud risk assessment process has been successful in identifying potential risk areas and mitigation strategies for a number of TVA organizations.

Working collaboratively with TVA management, the OIG assisted them in identifying a number of areas where controls could be improved. TVA management subsequently developed remediation plans for those areas.

As noted previously, the OIG has focused on many significant challenges TVA has faced over the years. Discussed below are some highlights of the OIG work during Mr. Moore's tenure where significant problem areas were identified and recommendations for improvement were made.

• Kinder Morgan Case Results in a \$25 Million Settlement

A joint investigation and audit team investigated whether TVA was defrauded by three Kinder Morgan limited partnerships (collectively "Kinder Morgan") that provided coal and other energy transportation and distribution services at two coal terminals. The OIG received a tip about how Kinder Morgan was cheating TVA. In this case, TVA and other customers' coal was shipped by rail to terminals, where it was offloaded, stored, and eventually loaded onto barges for delivery. Kinder Morgan used two different weighing methods to show it was shipping out the same amount of coal as it had received. Kinder Morgan claimed the "excess" coal, therefore, belonged to it and it had the right to sell the coal and keep the profit. TVA's usual fly-over precautions did not detect the fraud. The OIG investigation led to a 2007 civil settlement in excess of \$25 million.

• Contractor Lies About the Number of Injuries on TVA Nuclear Sites

In 2009, TVA contractor Stone & Webster Construction, Inc. (SWCI), agreed to pay \$6.2 million to resolve a contract fraud investigation. SWCI, one of TVA's largest contractors during the period under review, was providing maintenance and modification work at TVA's nuclear power plants. SWCI records understated the number and severity of work-related injuries during the years 2004 through 2006. SWCI presented false or fraudulent claims to TVA for reimbursement for certain performance fee bonuses SWCI claimed for meeting safety goals at the three TVA nuclear plants located in Alabama and Tennessee, totaling nearly \$3.1 million. The settlement provided that SWCI would pay the U.S. \$6.2 million, the equivalent of double damages. In addition to the \$6.2 million payment, SWCI entered into a comprehensive two-year Corporate Integrity and Monitoring Agreement with the OIG to ensure that SWCI implements a Compliance and Ethics Program applicable to all work or service provided to TVA and that SWCI fully complied with TVA's policies and directives related to its contracts. This was the first Corporate Integrity and Monitoring Agreement in TVA history between the OIG and a TVA contractor.

• Review of TVA's Maintain and Gain Lakeshore Management Program

In August 2008, numerous newspaper articles questioned the fairness of a TVA Maintain and Gain transaction granting water access to The Cove at Blackberry Ridge, LLC (Blackberry)—a 4,200-acre water-lined resort development. Blackberry's primary investor was a congressman who served on the U.S. House Transportation Committee's Subcommittee on Water Resources and the Environment. This Subcommittee provided formal oversight over TVA. TVA's Maintain and Gain Lakeshore Management Program was designed to allow consideration of proposals to obtain lake access rights at the landowner's property by swapping access rights already available at other properties the landowner possessed. Questions were raised about whether the congressman used his position to influence TVA's decision to grant Blackberry's request for water access. Because

doubt was cast on the fairness of a TVA process, the TVA OIG conducted an inspection. We found no evidence of pressure on TVA from the congressman to give Blackberry water access on this lakefront project.

As a result of that inspection, TVA and TVA's Board agreed to develop a policy to provide a means to identify the potential of actual or apparent conflicts of interest or the appearance of the exertion of undue influence on the part of a person applying for a TVA benefit. TVA developed the "Obtaining Things of Value from TVA Protocol" to ensure that when something of value is being sought from TVA, the decision-making process is "fair, impartial, transparent, and evenhanded, both in fact and in appearance."

• **Kingston Ash Spill Reviews**

In 2009, TVA was continuing to deal with the financial consequences brought about by the December 2008 Kingston ash spill as it cleaned and restored the community to its pre-spill state. That year, the OIG issued two significant reports in regard to the cause of the spill and how TVA was responding to the cleanup.

- An initial OIG review of TVA's response to the Kingston ash spill found: (1) TVA had not properly implemented the National Incident Management System, which hampered communications and delayed

certain emergency response actions following the spill; (2) TVA's quick response to the media and public inquiry resulted in the release of inaccurate and inconsistent information, which resulted in criticism of TVA and caused reputational harm to the company; and (3) while TVA responded effectively to victims affected, failure to timely communicate TVA's claims policy and decisions increased settlement expectations for some.

- Our second review of the Kingston ash spill focused on a root cause study performed by a firm contracted by TVA for that purpose. The contract with TVA's expert restricted him from examining TVA's management of coal ash. We found: (1) the root cause analysis was handled by TVA in a manner that avoided full transparency and accountability and was done to preserve TVA's litigation strategy; (2) TVA was aware of "red flags" raised over a long period that signaled the need for safety modifications to the ash ponds which, if addressed, could possibly have prevented the spill; (3) factors other than a faulty "slimes" layer identified by TVA's expert as the trigger for the spill may have been of equal or greater significance; (4) despite internal knowledge of risks associated with the ash ponds and discussions of placing the ponds under TVA's Dam Safety Program, thereby subjecting the ponds to more rigorous



2013 TVA OIG Group Photo

inspections and engineering, TVA's risk management program failed to identify ash management as a risk; and (5) attitudes and conditions that emanated from a legacy culture resulted in ash being relegated to the status of garbage at a landfill rather than treated as a potential hazard to the public and the environment. TVA management generally agreed with OIG recommendations to address these findings.

• ***First Debarment in TVA History***

An OIG investigation found that a TVA technical contract manager received money from a TVA contractor. Criminal proceedings were taken against the former TVA technical contract manager. In addition, a report of administrative inquiry was issued to TVA management regarding the actions of the contractor, Holtec International, Inc., (Holtec) a company that supplied casks for spent nuclear fuel.

In response to the report, TVA created the position of Suspension and Debarment Officer. Based on the OIG investigation, TVA's Suspension and Debarment Officer issued the first debarment action in TVA history. Holtec received a 60-day debarment in 2010 and agreed to pay a \$2 million administrative fee to TVA. Holtec was also required to appoint a Corporate Governance Officer and an independent monitor (at the contractor's expense) to gauge what progress in business ethics the company was making, if any.

• ***Review of WBN Unit 2 - Cost and Schedule***

In August 2007, the TVA Board approved the completion of WBN Unit 2, at a cost of \$2.5 billion to be completed in 60 months. The TVA OIG, through joint audits and investigations, determined TVA's WBN construction was significantly behind schedule and grossly over budget, despite information released by TVA senior management to the contrary. We reported that employees and contractors who knew the information being sent to the Chief Executive Officer and to the Board was erroneous were silenced by TVA executives at WBN.

Perhaps equally critical to the resolution of the WBN problem was whether TVA would take responsibility for

what had happened. The OIG was in constant dialogue with TVA officials about what TVA would say publicly about the reason that the costs for the project would be so much higher and it would take so much longer to complete the project. The Kingston experience had demonstrated how a public institution can lose the trust of its stakeholders by not being transparent about a significant event. Whether TVA would acknowledge that TVA management was ultimately responsible for the



errors in the WBN project as opposed to TVA claiming that, as they did in Kingston, some intervening force had caused the problem was an open question.

TVA Chief Executive Officer Tom Kilgore ultimately held a press conference in April of 2012 and said that TVA had essentially miscalculated the costs and accepted

responsibility for the error. This demonstrated a new effort by TVA management to be transparent and accountable with its stakeholders. As a result, TVA replaced senior management on the project, performed a comprehensive review of the project, and publicly reported the revised schedule⁵ and budget numbers. One of the TVA executives involved later pled guilty to unrelated federal criminal charges from a separate case investigated by the OIG.



• ***Browns Ferry Nuclear Plant Extended Power Uprate***

In 2011, at the request of TVA management, the OIG reviewed the causes of the delays in the Browns Ferry Extended Power Uprate (EPU) project to increase generation capacity at Browns Ferry Nuclear Plant. The project began in 2001 and was expected to be

completed in two to four years based on industry-wide experience; however, the project remains incomplete. The OIG concluded TVA senior management's decisions early in the EPU project were the most significant factor in the lack of progress in the project. Specifically, in 2001, senior management directed staff to keep the EPU proposal within a certain cost, requiring the staff to report an artificially optimistic scope and ultimately, leading a contractor to propose use of a methodology that was not approved by the NRC. Additionally, senior management ignored concerns of TVA engineering staff related to the feasibility and safety of the proposed methodology.

TVA spent about \$97 million on direct EPU costs and \$26.5 million on incremental fuel costs since 2001. Additionally, TVA's marginal costs for replacement power ranged from \$373 million to \$448 million as a result of not achieving the EPU by the targeted dates. TVA executive management acknowledged cultural issues and stated they were committed to improving the culture of TVA through transformation initiatives and other actions including creating and maintaining an environment where all employees feel comfortable raising concerns to management or through any of the multiple available avenues.

Building Trust with Stakeholders

The work of the OIG is one of the most complex in the federal government due in part to the often competing interests of OIG stakeholders. In enacting the IG Act, Congress structured the powers and responsibilities of the IG so as to require intense communication not only of the "what" but the "how." In other words, both TVA and Congress are as interested in "how" the IG conducts audits, evaluations, and investigations as they are in the types of audits, evaluations, and investigations that we do. At the heart of this communication both with TVA and with Congress is often an unspoken question around what the intent of the IG is in allocating resources to one area of audit or investigation but not another. Here, over communicating becomes essential.

⁵ In April 2012, the TVA Board approved a revised cost estimate and schedule for completion of WBN Unit 2. The revised estimate was between \$4.0 and \$4.5 billion and was forecasted to come on line by December 2015 according to 2012 reports filed by TVA with the Securities and Exchange Commission.

Every year the OIG sits down with the TVA Board and TVA management to discuss what the perceived high risks are for the agency. Given that the OIG has limited resources, we have a vested interest in reaching as much agreement as possible about what areas to target with those limited resources. We always have to exercise our best independent judgment about how we do this, but we regularly follow up on recommendations made by either the TVA Board or TVA management as to areas of focus.

For the TVA OIG, Congress occasionally expresses an interest in the OIG audits, evaluations, and investigations that give the best assessment of how TVA is doing. Occasionally, Congress will ask for specific work to be done in a particular area. Again, like with the TVA Board and TVA management, we try to accommodate Congress whenever possible while maintaining our independent judgment as an organization led by a presidential appointee of the Executive Branch of the federal government.

A complicating factor for the TVA OIG, like all federal IGs, is the statutory requirement that the work of the OIG be made public. Transparency and accountability are hallmark characteristics of any OIG and publishing our work on a public Web site is an essential part of that transparency and accountability. What is included in an OIG report and the tone used to describe what we find has been an on-going matter of interest for both TVA and Congress. Here, we have made it a practice to listen carefully to all sides and then use our best judgment about essentially what we believe is the right thing to do under the circumstances. Because our work often involves examining “gaps” in TVA processes that put the agency at risk, these “gaps” can cause TVA to suffer reputational harm once they are made public. When we publicly report on matters that cause TVA to come under public scrutiny, a natural reaction at TVA has sometimes been to question the intent of the OIG. While we can only do so much to lessen any suspicion of bad intent on our part, we have made it a practice to ask TVA or Congress to sit down with us and have as much healthy dialogue as possible.

Being objective and accurate about the facts has been our focus and ultimately has served the TVA OIG well.

Our commitment to continually ask for more dialogue with both TVA and Congress springs from our belief that good government travels on trust. Our hallmark is being trustworthy. We do that by showing respect for opposing opinions; seeking out those who disagree with us to provide clarification, and ultimately by sticking to the facts. This “how” we do business is part of our identity and accounts for the good faith, on-going dialogue that we continue to enjoy with our stakeholders.

Investing in a Sustainable Culture of Innovation and Continuous Improvement for the OIG Team

Research shows that engaged employees get better results. This is true for TVA employees, and it is true for OIG employees. TVA and the OIG both rely on employee engagement surveys to assess how engaged their employees are. Due to the hard work and dedication of OIG employees, the 2015 Office of Personnel Management (OPM) Viewpoint scores for the TVA OIG show a highly engaged workforce. We believe that accountability for any government agency includes being transparent about the culture of its people. The TVA OIG results are available on our Web site at http://www.oig.tva.gov/2015_overall_report.pdf.

In 2014, American University in conjunction with the Council of the Inspectors General on Integrity and Efficiency (CIGIE) initiated a case study of the leadership principles that fostered such a healthy culture at the TVA OIG. The transition at the TVA OIG from a traditional “top down” and somewhat autocratic organization to a collaborative leadership organization produced a highly aligned and motivated team. This case study highlights the benefits of creating a healthy work environment that frees up employees to give their best to each other and to the organization.

The TVA OIG transformation has been good for TVA. Our engaged employees regularly give the type of discretionary effort that translates into better audits, better evaluations, and better investigations. Mutual trust and mutual respect within the OIG has been transported to our interactions with TVA employees. Starting at a trusting place enables

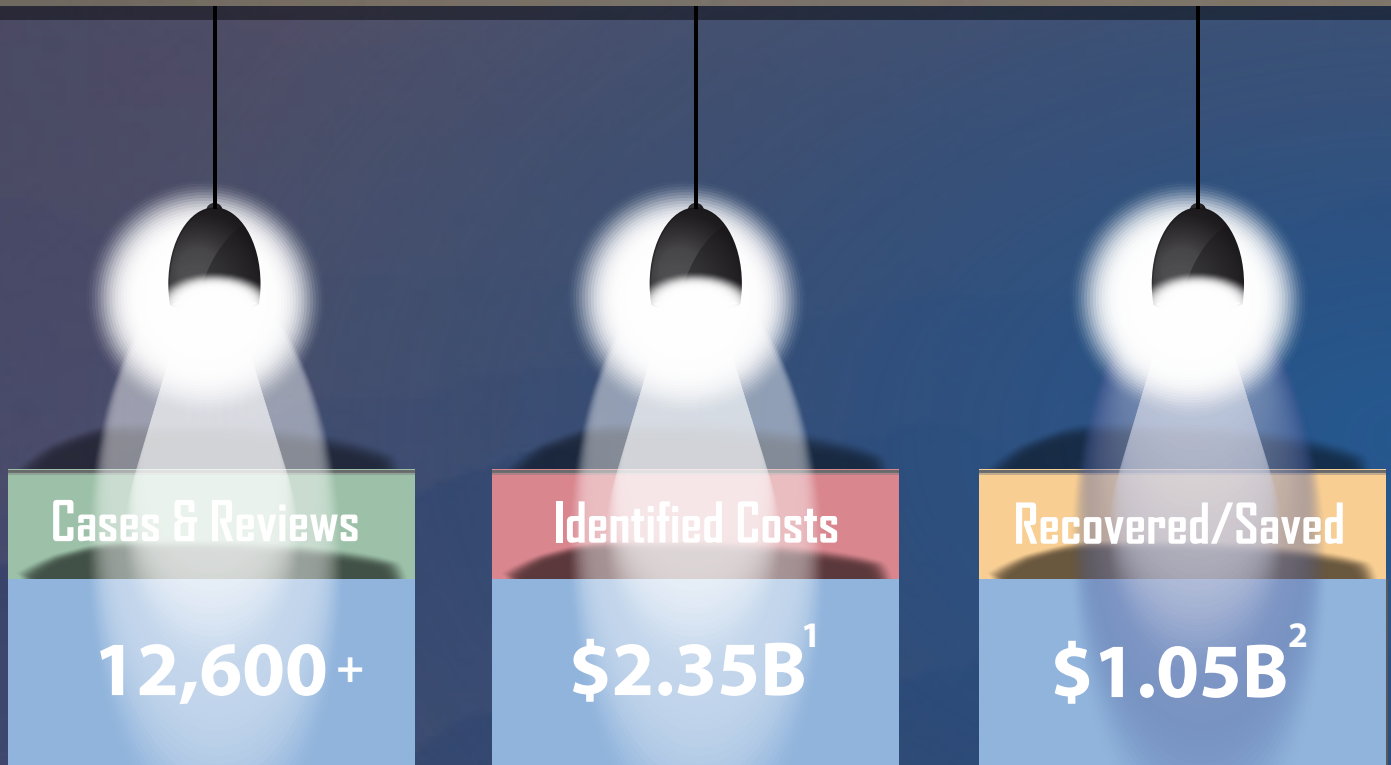
OIG employees and TVA employees to work better for the ultimate beneficiaries of their collective good work: the residents of the Tennessee Valley. We view this transformation as one of the most significant developments in the history of the TVA OIG. Sustaining that positive change requires empowering employees to invest in a healthy culture that is ultimately better for them and recognized as such by them. This is neither theory nor chance. It is hard work. It is mutual commitment of both OIG leadership and OIG employees. TVA OIG employees deserve the recognition they have received for creating a healthy and productive culture.



Fontana Lake
Photo Credit Frank Kehren



PROJECTS/CASES SUMMARY



Over the past 30 years, OIG reviews have focused on helping TVA improve the efficiency and effectiveness of TVA operations, save or recover money, and serve as a deterrent to misconduct and fraud. While the results from some reviews are difficult to quantify, the results impacted many areas of TVA including: (1) improving key business processes; (2) improving governance functions and regulatory activities; (3) improving the protection of critical infrastructure and privacy information; and (4) improving the effectiveness of risk mitigation activities on areas of high risk. Even without a monetary value attached, these reviews provide information to help TVA operate in the most efficient manner and avoid losses from risks that are not properly mitigated. In addition, much of our reviews, primarily in the contract compliance audits and contract preaward reviews and certain investigations, have helped TVA recover and save substantial money. Highlights of audit, evaluation, and investigation activities as well as results follow.



¹ Identified Costs: Sum of investigative waste identified, investigative recoveries/projected savings and audit/evaluations findings.

² Recovered/Saved: Sum of investigative recoveries/projected savings and audit/evaluation recoveries/savings.

PROJECTS/CASES DETAIL



Investigations

9,900+ Cases Closed

Prosecutive Actions

342

Indictments

332

Convictions

24

Pre-Trial
Diversions

Management Actions

900+

Process
Improvements

1,270

People
Disciplined

6

Debarred
Vendors

Audits/Evaluations

2,700+ Projects Completed

2,100

Reports
Issued

600

Other
Projects

Waste identified

\$507M

Recoveries/Projected Savings

\$219M³

Findings

\$1,622M⁴

Recoveries/Savings

\$826M⁵

In November 2000, President Bill Clinton signs into law a bill making TVA's Inspector General a presidentially appointed position

2000

The Homeland Security Act is passed and gives law enforcement authority to TVA OIG Special Agents

2002

Richard Moore becomes the first presidentially appointed TVA IG

2003

³ Investigative recoveries/projected savings: Sum of investigative recoveries and savings/projected savings .

⁴ Audit/Evaluation findings: Sum of questioned costs and funds to be put to better use.

⁵ Audit/Evaluations recoveries/savings: Sum of questioned costs recovered by TVA and savings realized by TVA.



AWARDS

1999 Award

- Special Agent James F. Farr received a citation for outstanding work in a Health Care Fraud Case presented by the Special Agent in Charge of the Knoxville Division of the FBI.

2000 ECIE Awards

- George T. Prosser, IG, for outstanding contributions to the IG community.
- G. Donald Hickman, AIGI, Investigations, for his leadership and sustained contributions to the law enforcement community.
- Tool Management Program Team for outstanding teamwork and efforts in a complex audit/investigation of fraud related to TVA's Tool Management Program.
- Work in resolving a complex product substitution case.
- Workers' Compensation Team for their achievements in identifying and eliminating fraud in TVA's workers' compensation program.
- Environmental Crimes Joint Task Force for outstanding work in fighting environmental crimes from July 1, 1999, to June 30, 2000.

2001 ECIE Awards

- Clean Air Compliance Program Team for their contribution to TVA's Clean Air Compliance Program.
- Significant Review and Analysis Conducted at the Request of Congress Team for their work in conducting a congressionally requested review and analysis of power rate and cost issues.
- Office Space Team for their outstanding contributions toward improving TVA's decision-making processes related to property and office facilities.
- Investigation Regarding a Senior Manager's Misconduct Team for working together to develop, analyze, and report complex findings regarding significant misconduct by a senior manager.
- The East Tennessee Health Care Fraud Team for outstanding teamwork in a multi-agency effort to investigate and prosecute health care fraud by a medical provider in the Federal Judicial District of Eastern Tennessee.

2002 PCIE Award

- Long-Term Bulk Power Trading Team for producing two highly complex reviews of TVA's weekly, monthly, seasonal, annual, and multi-year trading in the wholesale electricity market.

2005 PCIE Award

- SOX Review Team for performing process-control reviews to assist TVA management in evaluating the design and operating effectiveness of financial reporting controls.

2006 PCIE Awards

- Fraud Risk Assessment Team for developing and implementing an action plan to perform fraud risk assessments, innovative and valuable tools to prevent and detect waste, fraud, and abuse.
- Contract Audits Team for using proactive and innovative best practices to consistently identify significant cost savings, recoveries, and process improvements for TVA.



2007

PCIE Award

- Initiation of best practices sharing sessions with other OIGs.

2008

PCIE Awards

- IT Organizational Effectiveness Audits Team for work on reviewing the effectiveness of TVA's IS organization and IT Security function.
- An Investigations and Audit Team, working jointly, on a product substitution case that resulted in a \$25 million recovery.

2009

Award

- Joint investigation of a complex loan fraud that resulted in the conviction of two Tennessee businessmen for bank fraud, mail fraud, and money laundering.

2010

Awards

- The National Association of Government Communicators recognized the TVA OIG fraud video as one of the 2010 winning entries of the Blue Pencil & Gold Screen Awards Competition.
- The poster advertising the TVA OIG's fraud video received two ADDY awards for color photography and the Bronze Citation of Excellence.

2011

CIGIE Award

- A review of TVA's Dam Safety Program to identify if TVA adequately addressed significant risks and was in compliance with applicable laws and regulations.

2013

CIGIE Awards

- A joint investigation and inspection identifying and notifying TVA that the WBN Unit 2 construction project was behind schedule and over budget.
- An investigation leading to the conviction of a contractor company's nuclear plant safety manager who falsified injury rates at TVA nuclear plants to collect more than \$2.5 million in safety bonuses.

2014

Award

- Senior Special Agent Meagan Sands receives award from the U.S. Attorney's Office for her exemplary performance as a law enforcement agent in two notable cases.

NOTEWORTHY UNDERTAKINGS



TVA OIG Hotline Redesign

The OIG's hotline, the EmPowerline, was created to facilitate the expression of concerns by TVA employees, contractors, and the general public related to fraud, waste, and abuse in TVA programs. EmPowerline is administered by a third party, and users can anonymously report concerns anytime by phone or online.

➔ In an effort to educate potential complainants about fraud, we created videos that inform users about the process of reporting fraud, waste, and abuse and what fraud looks like. This effort also included redesigning the EmPowerline Web site with a more simple, straight-forward design.

During July 2015, we launched the retooled Web site, which features three primary links. The first link directs users to a video that explains what happens when fraud is reported to the OIG. The second link leads to an online form to report a concern confidentially or anonymously with the OIG. The third link leads to a series of brief videos providing examples

of what fraud may look like at TVA. The videos were produced by TVA's Digital and Creative Services and are based on past TVA OIG cases. TVA OIG also created a poster that has been distributed throughout the Valley to accompany the launch of the new Web site. It encourages employees and contractors to "Watch, Learn, and be EmPowered."

OIG Supports the Community through Acts of Caring

In recognition of TVA OIG's 30th anniversary, our office participated in community service days and supported the charities of Habitat for Humanity (Habitat), Ronald McDonald House, and Second Harvest Food Bank (Second Harvest) in addition to charities included in TVA's Combined Federal Campaign drive.



OIG employees are supporting the Ronald McDonald House through household donations, including toiletries, that are provided to families of children receiving life-saving medical care who are residing in nearby homes provided by the charity.

The Days of Service involved physical labor to support Habitat and Second Harvest. On October 8, 20, and 22, TVA OIG employees gathered at the Habitat warehouse in Knoxville, Second Harvest in Knoxville, and at a Habitat building site in Chattanooga, respectively. The Knoxville Habitat team worked on building sheds and shed doors as well as painting columns and sorting nails for working



families who are receiving assistance from Habitat in buying their first constructed home. The Second Harvest team worked on bagging cereal and labeling cans – bagging 2,667 cereal bags that were to be provided to hungry families in the area and labeling some 3,756 cans. The Chattanooga Habitat team worked at a homesite installing a deck and painting and repairing wood to benefit a family receiving assistance from Habitat.

"I really enjoyed being out of the office and engaging in that kind of physical work with OIG team members for a worthy cause," said OIG IT auditor Michael Newport, of his participation in the first Day of Service. "It's a gratifying experience to come together and serve our community and be able to see the results of your efforts right there on the spot, knowing it will make a difference to families in the community."



EXECUTIVE OVERVIEW



This semiannual report to Congress reports on a theme that is our vision to make TVA better. In understanding the role of an IG, this simple statement clarifies our mutual purpose with TVA. In this edition, our intention is to guide the reader through the ways our office continues to support TVA in achieving its operational goals while keeping an eye toward its greatest assets—its employees—in optimizing their abilities to contribute to TVA’s operational performance and outcomes, ultimately benefitting the more than 9 million ratepayers served by TVA throughout the Tennessee Valley. This edition focuses not only on what we do, but why we do it and highlights our office’s contributions since its inception, some 30 years ago on October 18, 1985.

AUDITS

The TVA OIG Audit organization completed 22 audit, review, and agreed-upon procedures engagements. This work identified nearly \$7.6 million in questioned costs for TVA to recover and \$2.1 million in funds the company could put to better use. We also identified several opportunities for TVA to improve the effectiveness and efficiency of its programs and operations.

Contract Audits

To support TVA management in negotiating procurement actions, we completed a review of the cost proposal submitted by a company to provide hydro modernization, unit rehabilitation, and functional support services in support of TVA's hydro facilities. Our review identified \$2.1 million of potential savings opportunities for TVA to negotiate. We also completed three compliance audits of contracts with expenditures totaling \$113.1 million related to (1) engineering, licensing, construction, and startup operation services in support of completion of TVA's Bellefonte Nuclear Plant; (2) environmental services for Kingston Fossil Plant; and (3) remediation work at Blue Ridge Dam. These audits identified potential overbillings of \$7.6 million. In addition, we completed audits of (1) TVA's invoice approval process and (2) a contractor's potential rework and damages liability in association with work performed at WBN Unit 2. The Contract Audits section begins on page 37 of this report.

Corporate Governance and Finance Audits

With a focus on TVA's regulatory activities, compliance with applicable laws and regulations, and financial reporting, we completed audits of TVA executive incentives and overtime at TVA. In addition to our audit work, we monitored the work of the external auditor in its review of TVA's second and third quarter financial

information for fiscal year (FY) 2015 to assure compliance with *Government Auditing Standards*. We also provided assistance to the external auditor during interim testing for the year-end financial statement audit. The Corporate Governance and Finance Audits section begins on page 38 of this report.

IT Audits

IT Audits (1) completed four IT organizational effectiveness audits, (2) assessed electronic communication practices of the TVA Board, (3) reviewed the implementation of a new system managing TVA's coal supply chain as well as an upgrade to an enterprise application, and (4) conducted an application audit of a system included in the process for controlling physical access to TVA assets. The IT Audits section begins on page 40 of this report.

Operational Audits

Operational Audits completed reviews of (1) TVA's process for developing its IRP, (2) the efficiency of TVA's hiring process, (3) the effectiveness of TVA's process for addressing nuclear emerging regulatory issues, (4) compliance with TVA's Obtaining Things of Value protocol, (5) the contractor workforce management process, and (6) TVA's compliance with green power accreditation requirements. The Operational Audits section begins on page 42 of this report.

STATISTICAL HIGHLIGHTS

April 1, 2015 - September 30, 2015

Audit Reports Issued	22
Evaluations Completed	6
Questioned Costs	\$7,598,913
Questioned Costs Agreed to by TVA	\$2,156,279
Questioned Costs Recovered by TVA	\$2,981,453
Funds to be Put to Better Use	\$2,106,300
Savings Realized by TVA	\$142,000
Investigations Opened	126
Investigations Closed	142
Recoveries/Fines/Savings/Projected Savings	\$3,025,204
Criminal Actions	2
Administrative Actions (No. of Subjects)	14

EVALUATIONS

During this semiannual period, Evaluations completed six reviews. These evaluations included reviews of (1) TVA transmission fire protection, (2) Hydro Generation fire protection, (3) Hydro Generation obsolete equipment, (4) nuclear outage performance, and (5) firearms and ammunition. The other review completed during this period is not included due to its sensitive nature. The Evaluations section begins on page 46 of this report.

INVESTIGATIONS

This reporting period, we opened 126 cases and closed 142. Our investigative results include recoveries, savings, fees, and projected savings of more than \$3 million, one indictment, and one conviction. The Investigations section begins on page 50 of this report.

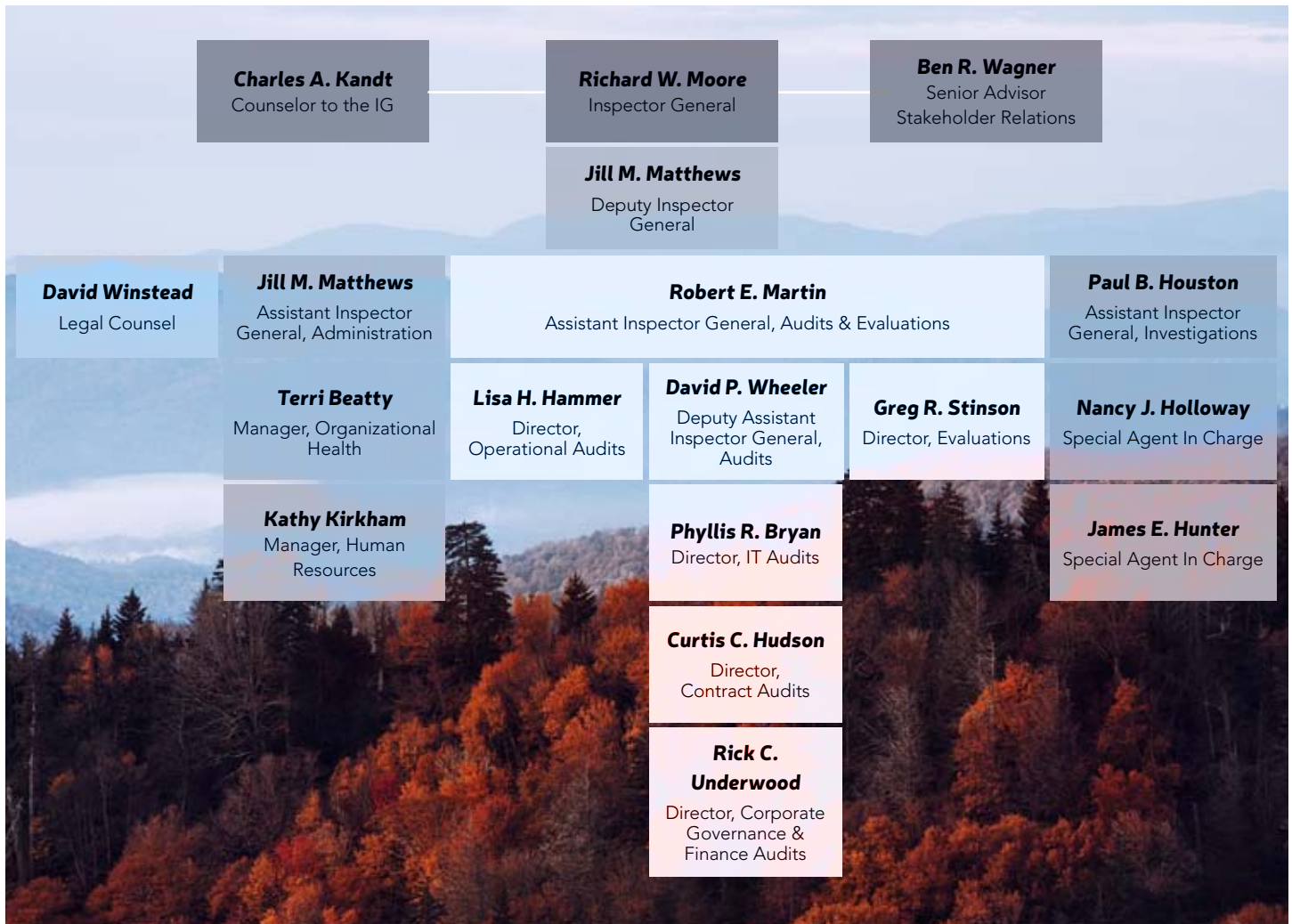


Fontana Dam
Photo Credit Frank Kehren

Bull Run Fossil Plant



ORGANIZATION



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

TVA OIG Office Locations

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

The OIG has strategically located its offices near all major TVA offices throughout the Tennessee Valley. We are headquartered in TVA's East Tower, opposite TVA's corporate offices, overlooking downtown Knoxville.

The OIG has field offices in Chattanooga, Tennessee, where the Evaluations unit, members of the Corporate Governance and Finance team, and several special agents are located, as well as in Nashville, Tennessee, and Huntsville, Alabama. We also have office locations at Watts Bar Nuclear Plant in Spring City, Tennessee; and Sequoyah Nuclear Plant in Soddy Daisy, Tennessee. Staff work in these locations as needed. As of September 30, 2015, the OIG had a total staff of 106.

ADMINISTRATION

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

AUDITS AND EVALUATIONS

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

Paradise Fossil Plant



TYPES OF AUDIT & EVALUATION ISSUES

Corporate Governance and Finance Audits

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

Operational Audits

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

IT Audits

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

Evaluations

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

Contract Audits

- Inflated Proposals
- Contract Overpayments
- Inferior Performance
- Fraud

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

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

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

- Corporate Governance and Finance Audits has lead responsibility for oversight of TVA's (1) financial statement audit and related services performed by TVA's external auditor and (2) regulatory activities. This team also conducts operational reviews to assess the results, as well as the economy and efficiency of TVA programs.
- IT Audits has lead responsibility for audits relating to the security of TVA's IT infrastructure, application controls, and general controls associated with TVA systems. This team also performs operational reviews of the effectiveness of IT-related functions.
- Operational Audits focuses on risk and impact-driven operational audit work. The team performs audits of operational effectiveness and efficiency, as well as TVA compliance with laws and regulations.

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

and effectiveness of operations, and conducting inquiries into allegations of fraud, waste, abuse, and mismanagement.

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

INVESTIGATIONS

The Investigations team proactively and reactively uncovers activity related to fraud, waste, and abuse in TVA programs and operations. This team performs its investigations in accordance with the *Quality Standards for Investigations* as prescribed by the CIGIE, applicable U.S. Attorney General Guidelines, and other guiding documents. The special agents maintain liaisons with federal and state prosecutors and notify the U.S. Department of Justice whenever the OIG has reason to believe there has been a violation of

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

LEGAL

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

MAJOR CATEGORIES OF INVESTIGATIONS

Contract Fraud

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

Theft of Government Property and Services

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

Environmental Crime

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

Health Care Fraud

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

Unauthorized Access Into TVA Computer Systems

Accessing a TVA computer without authorization or exceeding authorized access.

Workers' Compensation Fraud

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

Employee Misconduct

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

Special Projects

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

SUMMARY OF REPRESENTATIVE AUDITS



During this reporting period, the TVA OIG audit organization completed 22 audit, review, and agreed-upon procedures engagements. This work identified nearly \$7.6 million in questioned costs for TVA to recover and \$2.1 million in funds the company could put to better use. We also identified several opportunities for TVA to improve the effectiveness and efficiency of its programs and operations.

CONTRACT AUDITS

Preaward Contract Reviews

To support TVA management in negotiating procurement actions, we completed a review of the cost proposal submitted by a company to provide hydro modernization, unit rehabilitation, and functional support services in support of TVA's hydro facilities. Our review identified \$2.1 million of potential savings opportunities for TVA to negotiate. The savings opportunities were primarily related to overstated labor and burden rates and certain markup rates.

Contract Compliance Reviews

During this semiannual period, we completed three compliance audits of contracts with expenditures totaling \$113.1 million and identified potential overbillings of \$7.6 million. Highlights of our completed compliance audits follow.

- We audited a contractor's calendar year 2012 and 2013 rate adjustments which totaled more than \$5.1 million based on \$104.2 million of billed costs. The contract, which provided for the contractor to complete engineering, licensing, construction, and startup operations of a single Bellefonte Nuclear Plant unit, required the contractor to adjust its labor and general and administrative billing rates to its actual costs incurred each year. We determined the contractor's 2012 and 2013 rate adjustments were overstated by \$1.8 million. In addition, we found the contractor billed more than \$5.6 million in labor costs, along with associated fee, using cost-center rates not included in the contract.
- We audited \$6 million in costs paid by TVA between November 14, 2011, and May 1, 2014, to a contractor for providing professional environmental services. We determined the contractor overbilled TVA \$162,307, including (1) \$95,425 in travel costs and (2) \$66,882 in miscellaneous expenses. Additionally, we found the contractor (1) did not obtain advance written

approval from TVA's Contracting Officer for \$333,556 in subcontract costs billed and (2) billed TVA \$32,386 using lump-sum pricing provisions not provided for in the contract.

- We audited \$2.9 million in costs and fee billed by a contractor for remediation work performed at Blue Ridge Hydro Dam. TVA disputed a portion of the amount billed and requested an audit. We found the \$2.9 million in costs billed to TVA were in accordance with the contract's terms and conditions. TVA and the contractor reached a final settlement on June 11, 2015, for the disputed amount.

Review of Invoice Approval Process

The OIG audited TVA's invoice approval process to (1) assess TVA's policies and procedures related to the review and approval of invoices; (2) determine compliance with applicable policies and procedures; and (3) determine if TVA's invoice approvers have adequate information, including clear contractual-compensation provisions and sufficient invoice detail to effectively perform their role. Our scope included non-receiving contracts and purchase orders with FY 2013 payments totaling nearly \$3.4 billion. We found policies and procedures were not followed to ensure effective review and approval of supplier invoices. Specifically, our review of 143 invoices totaling more than \$184 million found inadequate reviews were performed on 104 invoices or 73 percent. Based on our review, we identified several possible underlying causes for ineffective invoice reviews: (1) contracts contained unclear and/or conflicting compensation provisions; (2) some contracts do not provide specific requirements regarding invoice detail and for those contracts that do, the requirements are not being followed or enforced; (3) not all relevant contract and purchase orders are attached to the invoice or available in TVA's Enterprise Asset Management (EAM) system; (4) the required field invoice approver (FIA) training does not include details on how to access and approve invoices in TVA's EAM system; (5) clear and frequent communication does not always exist between the FIA and contracting officer (CO); (6) an approval stamp used at a nuclear plant incorrectly implied the OIG reviews the invoices; and

(7) the current invoice review process is a manual process within an automated system.

We recommended TVA management: (1) develop a contract quality assurance program to ensure clear, concise, and easy to follow compensation terms; (2) ensure the FIAs and contract technical stewards have the most up-to-date terms and conditions of a contract by developing an approach to provide access (dependent upon business need) to contract documents; (3) require training for those accessing and approving invoices in TVA's EAM system; (4) revise policies to require the CO to confirm FIAs understand their responsibilities in approving invoices for payment; and (5) revise policies to clarify CO responsibility for monitoring the invoice approval process and verifying the contractor's invoices contain adequate detail in a format that facilitates the review.

Additionally, we recommended TVA management utilize the technology available to expedite and improve the invoice review process by implementing automated steps in the process, where possible, including: (1) requiring electronic data from vendors that allows for 100 percent review; (2) setting parameters to identify exceptions; (3) following up on items identified as exceptions before making payment on those items; (4) establishing automatic notifications be sent to FIAs, contract managers, and others regarding exceptions to ensure the exceptions are reviewed; and (5) establishing automated analytical reviews, as necessary. TVA management generally agreed with our findings and stated they would take action to address our recommendations.

Review of Contractor's Rework and Damages Liability

At the request of the TVA's Supply Chain and WBN Unit 2 construction management, we reviewed a contractor's potential rework and damages liability in association with work performed at WBN Unit 2. Our objective was to determine the reasonableness of TVA's methodology for identifying and estimating the contractor's rework and damages liability. In summary, we found TVA's methodology could be improved and recommended TVA management take actions to improve its processes for identifying and estimating the contractor's rework and damages liability. TVA management agreed with our findings and is taking action to address the recommendations.

CORPORATE GOVERNANCE AND FINANCE AUDITS

During this semiannual period, Corporate Governance and Finance Audits completed audits of (1) TVA's executive incentives and (2) employee overtime. In addition, the team provided oversight of and assistance to TVA's external auditor.

TVA Executive Incentives

In October 2014, the OIG completed an audit of TVA's executive retention. As a follow up to that audit, we initiated an audit of TVA's executive incentives to determine (1) if executive incentives align with TVA's objectives and goals and (2) whether processes for establishing executive incentive performance measures are followed.

TVA currently has two executive incentive plans, the Executive Annual Incentive Plan (EAIP) and the Executive Long-Term Incentive Plan (ELTIP), which include performance-based incentives tied to the achievement of TVA's goals and objectives. The performance measures associated with EAIP are based on the accomplishment of approved goals identified in TVA's Winning Performance Team Incentive Plan balanced scorecards. Since the performance measures associated with EAIP are not





Shawnee Fossil Plant

executive specific, we focused this audit on alignment and development of ELTIP performance measures.

The OIG determined the long-term performance measures included in the ELTIP aligned with three of the five strategic imperatives included in TVA's Strategic Plan. However, we noted two of the five strategic imperatives, Debt and People and Performance Excellence, were not incentivized in the ELTIP. In our opinion, aligning long-term incentives with all strategic imperatives would (1) benefit TVA by promoting accountability in all areas identified as crucial to the achievement of TVA's mission in TVA's Strategic Plan and (2) continue to emphasize these areas as members cycle off of the TVA Board and executives leave TVA.

We also reviewed the process for establishing long-term performance measures for the ELTIP and found the process was followed by TVA and the Board. However, one

potential area for improvement was noted regarding the inclusion of additional information in the plan documents that clearly describe the ELTIP performance measures development process.

Based on the findings, we made recommendations to the People and Performance Committee of the Board and TVA management to promote accountability in all areas identified as crucial to achieving TVA's mission and to provide information to their successors regarding development of executive incentive measures. The Committee and TVA management generally agreed with our findings and recommendations and provided action plans to address these issues.

TVA Employee Overtime

OIG data-monitoring efforts noted some TVA employees appeared to be compensated for unusually high amounts

of overtime. As a result, the OIG initiated a review of overtime to (1) analyze overtime payments at TVA and identify any trends or areas where overtime payments were concentrated and (2) identify individuals compensated for excessive amounts of overtime in any areas identified and determine if (a) overtime had been approved by managers and supervisors in accordance with applicable guidelines and (b) controls were in place to prevent situations where fatigue could reduce the ability of operating personnel to work in a safe condition. Our audit scope included all overtime paid at TVA from October 1, 2013, through August 31, 2014.

During our audit, we found overtime hours were not passed to TVA's payroll system for payment until these hours had been approved in TVA's time-reporting system. In addition, we determined 86 percent of the total overtime hours paid during the audit period were to employees in Transmission and Power Supply, TVA Nuclear, and Power Operations organizations. Our analysis of overtime paid for the three organizations during our 11-month audit scope noted excessive amounts of overtime being worked. Specifically, we noted 1,053 employees with at least 500 hours of reported overtime and 31 employees with at least 1,000 hours of reported overtime. Although the post approval process appeared adequate, we found inconsistent methods for documenting preapproval of overtime. Additionally, we noted TVA lacked organizational guidance for managing fatigue and work-hour limits in all operational areas other than TVA Nuclear.

We made recommendations for TVA to implement a common procedure for preapproval of overtime, develop guidance for all of TVA for managing fatigue and controlling work hours, and review positions within the organization where employees are working excessive amounts of overtime on a regular basis and determine whether safety and/or productivity are a concern. TVA management agreed with our findings and recommendations and is taking corrective actions to address these issues.

IT AUDITS

During this semiannual period, IT Audits (1) completed four IT organizational effectiveness audits; (2) assessed electronic communication practices of the TVA Board; (3) reviewed the implementation of a new system managing TVA's coal supply chain, as well as an upgrade to an enterprise application; and (4) conducted an application audit of a system included in the process for controlling physical access to TVA assets.

IT Organizational Effectiveness Audits

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

Currently, we are conducting a series of audits to assess the IT organizations' (1) current effectiveness, including alignment with TVA values; (2) sustainability of actions taken in response to the 2011 OIG audit; and (3) outcomes of the IT1K program. To date, we have completed audits in the following organizations within TVA IT: Enterprise Information Security and Policy; Enterprise Architecture and Programs; Operations Solutions Delivery; and Enterprise Customer Operations.

In summary, we found:

- Enterprise Information Security and Policy operations have improved since the 2011 audit, but effectiveness could be improved around compliance and risk management activities and engagement in IT application implementation projects. Additionally, we recommended improvements around staffing within the organization.

- Enterprise Architecture and Programs also showed improved effectiveness since the 2011 audit; however, we noted program enhancements which would improve the quality of IT project delivery.
- Operations Solutions Delivery was formed as a new group within IT during a TVA reorganization conducted since the 2011 audit. We noted this group is operating at a high level of effectiveness; however, as technologies expand and support needs increase, the current staff level may need to be reassessed to continue successfully meeting customer needs.
- Enterprise Customer Operations has worked to improve the IT end-user experience by adopting industry standard best practices, building a new customer operations center, offering expanded self-services options to end users, and providing strong and constructive leadership. While the group has succeeded in many efforts, improvements are needed in the areas of physical asset management and service-level management. TVA management agreed with the findings and is taking action to implement the recommendations.

Electronic Communications of TVA Board

We performed an audit of electronic communications conducted by the TVA Board. In summary, we determined current TVA Board e-mail practices are consistent with the Presidential and Federal Records Act Amendments of 2014 federal law. In addition, we found the third-party service used to distribute sensitive documents to the Board had appropriate processes and controls in place as reported by another independent audit company. However, improvements could be made to reduce the risk of exposing sensitive TVA business information. The Board agreed with the findings and will continue to explore options around the recommendations.

Implementation Projects

We completed two audits associated with system implementation or upgrades described as follows. The first implementation project was for a new application to manage TVA's coal supply chain. In summary, we

determined the TVA project team followed TVA systems development processes and included consideration of business processes during implementation. During the audit, items of potential risk and concern identified by the OIG were communicated to TVA. The project team addressed all findings by either implementing our recommendations or accepting the risk to the project prior to the time the new system went into production.

The second implementation project was to upgrade TVA's EAM system to a new version. This version upgrade provided performance improvements, reduced customizations, maintainability, and kept the TVA application at a supported level. In summary, we determined the TVA project team followed TVA systems development processes and included consideration of business processes during implementation. However, we found (1) some weaknesses in our review of two security groups, (2) group memberships were not maintained consistently, and (3) integration for historical documents was not completed. Other items of potential risk and concern were communicated to management during the audit and were addressed prior to the time the new system went into production.

TVA management agreed with our findings in both audits and is in the process of identifying or has taken actions to implement the recommendations.

Application Audit

We audited a TVA application that is part of the process for controlling access of personnel with authorized unescorted physical access to sensitive TVA assets. In summary, we determined (1) logical security controls were generally operating effectively, and (2) controls around granting physical access to sensitive TVA locations were operating in accordance with TVA policy. However, we found (1) electronic forms were not stored properly, (2) system administrator access appeared to be greater than what was needed, and (3) documentation of periodic access reviews was not maintained. TVA management agreed with our findings and is taking actions to implement the recommendations.



Allen Fossil Plant

OPERATIONAL AUDITS

During this semiannual reporting period, Operational Audits assessed TVA's process for developing its IRP, evaluated the efficiency of TVA's hiring process, assessed the effectiveness of TVA's process for addressing nuclear emerging regulatory issues, assessed compliance with TVA's Obtaining Things of Value protocol, evaluated the contractor workforce management process, and verified TVA's compliance with green power accreditation requirements.

Integrated Resource Planning Process

The TVA developed its IRP to guide the organization in meeting future energy demands. The first IRP developed by TVA, referred to as Energy Vision 2020, was published in December 1995. The stated purpose of this IRP was to be a "roadmap for meeting the energy needs of its customers for the next 25 years with economical and environmentally sound energy choices." In March 2011, TVA issued a 20-year IRP referred to as TVA's Environmental and Energy Future. The purpose of the March 2011 IRP was to aid TVA in becoming one of the nation's leading providers of low-cost and cleaner energy by 2020. Additionally, TVA published a Supplemental Environmental Impact Statement (SEIS) reflecting the potential impacts of the IRP contents on the environment, as required by the National Energy Policy Act of 1992.

TVA personnel updated the IRP in 2015 due to significant changes in the electric industry and within TVA. These changes included abundant natural gas supplies from shale deposits, a decline in electricity demand growth across the industry and within the Tennessee Valley, a new schedule for completing WBN Unit 2, TVA's clean-air commitments,⁶ industry changes in areas such as distributed generation and energy efficiency and demand response, and more stringent environmental requirements. In addition to updating the IRP, TVA personnel updated the 2011 Environmental Impact Statement and issued the 2015 SEIS.

TVA's current IRP, issued in draft in July 2015 and approved by the TVA Board in August 2015, is considered by TVA personnel as "a comprehensive study of how TVA might meet future energy and capacity needs beyond what can be met with existing energy resources in a variety of future environments." The goal of the IRP is to balance the objectives of TVA's overall mission while ensuring a diversified electricity-generation mix.

We evaluated the adequacy of TVA's development process for the 2015 IRP, including demand-side and supply-side strategies. The scope of the audit included commencement of the IRP process on October 31, 2013, through IRP approval by TVA's Board on August 21, 2015, and the corresponding SEIS. To evaluate the adequacy of the IRP process, we attended IRP team meetings and meetings with external stakeholders to observe the vetting of

⁶ These commitments included the retirement of less-efficient coal capacity by 2019, which resulted from a settlement with the Environmental Protection Agency, effective June 13, 2011.

decisions made in the development of the IRP. We also compared IRP inputs to authoritative industry sources, such as the Energy Information Administration, and assessed benchmarking information provided by TVA's consultant. At specific milestones within the IRP process, we provided the analysis of those observations to TVA so recommendations could be implemented throughout the process. Based on our observations and work performed, we determined TVA's process for developing the 2015 IRP was adequate in considering potential future uncertainties and associated responses. Specifically, we determined the IRP project team met stakeholder input objectives by engaging numerous stakeholders and incorporating public opinions into the development of the IRP. We also determined the IRP team considered project risks, including those related to project management, and incorporated practices commonly seen in integrated planning processes, as well as best practices, into the IRP.

In our opinion, the IRP team improved integrated resource planning efforts as lessons learned from the development of the 2011 IRP that were incorporated into the 2015 IRP. Additionally, we determined that scenario and strategy development and consideration of IRP inputs were consistent with those of other organizations. Our assessment of steps taken to analyze and evaluate the IRP, including development of metrics and to develop the SEIS, found actions were reasonable.

TVA's Talent Acquisition and Deployment Process

At the request of the Vice President of Human Resources (HR), we evaluated the efficiency of the hiring process related to time-to-fill for TVA annual employee positions. In addition, we assessed TVA's reporting capabilities and functionality to identify gaps within the talent acquisition and deployment process. Time-to-fill is measured from the time the need to hire an employee is identified until the person is available to start work at TVA. Our audit scope covered the hiring process as of August 2014 for internal and external candidates and direct-fill and competitive positions filled from January 2014 through August 2014.

We found (1) process inefficiencies that can extend the hiring process and (2) issues impacting the usefulness of the time-to-fill metric. In addition, we identified areas where TVA's HR information system could be improved to better support the hiring process and two areas where TVA did not comply with OPM requirements related to Selective Service registration and internal requirements for psychological evaluations for system operators and dispatchers.

Additional matters, not directly related to our audit objectives or within the scope of our planned audit, came to our attention during the audit related to completing psychological evaluations and motor vehicle checks for certain positions. TVA management generally agreed with our recommendations and provided planned actions for addressing those recommendations.

Effectiveness of TVA's Process to Address Nuclear Regulatory Risk

In TVA ERM's FY 2013 fourth quarter documentation, we noted TVA's Nuclear Power Group (NPG) had identified several risks associated with compliance with regulatory requirements. Based on the identified risks, we initiated an audit related to TVA's nuclear regulatory program to assess the effectiveness of TVA's process for addressing nuclear emerging regulatory issues (ERI). TVA defines an ERI as "...an external development that may result in significant impact to NPG resources. This typically includes changes to nuclear regulations or the nuclear operating regulatory environment that could affect NPG's performance or require a modification to its business or operating practices." For purposes of this audit, we limited our scope to NRC proposed rulemaking. Specifically, our audit covered TVA's process for identifying, tracking, and monitoring potential NRC rules and regulations that could be applicable to TVA. Accordingly, we did not include in our audit scope TVA's process for complying with newly-enacted or previously-enacted NRC rules and regulations.

We determined the process for addressing nuclear ERIs is generally effective. During the period of our review, September 26, 2009, through September 26, 2014, we identified no instances where TVA overlooked an

ERI related to NRC-proposed rulemaking; however, we did identify areas where TVA's internal policy related to emerging regulatory issues was not being followed. Specifically, (1) the ERI Monitoring Table was not being filled out completely and consistently, (2) formal executive briefings were not consistently occurring, and (3) executive sponsors were not being assigned to ERIs with significant impacts on NPG resources. As a result of our audit, TVA began taking corrective action by issuing a revised internal procedure.

We also noted two opportunities to improve the effectiveness of the process related to providing additional dates and explanations to the ERI Monitoring Table and enhancements to keep the list of industry working groups and participants as up-to-date as possible. TVA management agreed with our recommendations and provided planned actions for addressing those recommendations.

Obtaining Things of Value from TVA

In August 2008, numerous newspaper articles questioned the fairness of a TVA Maintain and Gain⁷ transaction granting water access to Blackberry. Blackberry's primary investor was a congressman who served on the U.S. House Transportation Committee's Subcommittee on Water Resources and the Environment, a Congressional panel that provides formal oversight of TVA. The articles raised questions about whether the congressman used his position to influence TVA's decision to grant Blackberry's request for water access. Because doubt was cast on the fairness of a TVA process, the TVA OIG conducted an inspection and found no evidence of pressure on TVA from the congressman to give Blackberry water access on this lakefront project.

As a result of that inspection, TVA and the TVA Board agreed to develop a policy to provide a means to identify the potential of actual or apparent conflicts of interest or the appearance of the exertion of undue influence on the

part of a person applying for a TVA benefit. TVA developed the "Obtaining Things of Value from TVA Protocol" (Protocol) in June 2009. According to the Protocol, its purpose is to ensure that "when something of value is being sought from TVA, the decision-making process needs to be fair, impartial, transparent, and evenhanded, both in fact and in appearance."

The Protocol requires the applicant requesting a "thing of value" to self-disclose whether a "covered person" stands to benefit if the request is approved. According to the Protocol, a "thing of value" is defined as (1) any interest in real property held by TVA in the name of the U.S., (2) any Section 26a permit,⁸ (3) a sole-source contract with a monetary value greater than \$25,000, (4) a donation with a monetary value greater than \$10,000, or (5) surplus or excess property with a monetary value greater than \$10,000. A "covered person" is defined as any of the following individuals or an immediate family member of any one of the following individuals: (1) an elected government official, (2) a policy-making level employee of an entity that regulates TVA or its activities, (3) a management-level employee of a power customer of TVA, (4) a TVA director, or (5) a TVA employee.

The Protocol includes a process to handle requests and inquiries related to a "covered person" requesting a "thing of value," including documenting any communication with the "covered person." The Protocol requires this information be disclosed to the Chief Ethics Officer and the OIG. The Chief Ethics Officer's role is to review the information to ensure the covered persons' transactions are "fair, impartial, transparent, and evenhanded, both in fact and in appearance." The OIG also receives covered persons' request notifications for additional independent oversight.

This audit was initiated to determine whether the Protocol (1) design provides reasonable assurance of meeting its intended purpose and (2) was implemented as required.

⁷ The Maintain and Gain program was designed to allow consideration of proposals to obtain lake access rights at the landowner's property by swapping access rights already available at other properties the landowner may possess. The policy, as written, required the transactions to result in no net loss or, preferably, a net gain of public shoreline to TVA.

⁸ Section 26a of the TVA Act, passed by Congress in 1933, requires TVA approval be obtained before any construction, operation, and maintenance activities can be carried out that affect navigation, flood control, or public lands along the shoreline of the TVA lakes or in the Tennessee River or its tributaries. Examples of structures and projects that require TVA approval include boat docks, piers, boat ramps, shoreline or stream bank stabilization, bridges, culverts, commercial marinas, barge terminals and mooring cells, water intake and sewage outfalls, and fill or construction within the river floodplain. These requests are called Section 26a permits.

We determined the design does not provide assurance of meeting its intended purpose and the Protocol was not implemented as required. Specifically, the Protocol does not provide assurance TVA is reducing the risk of undue influence. We found the Protocol: (1) was not effectively designed to meet its intended purpose; (2) was not consistently incorporated into TVA policies and procedures and instances of noncompliance with some Protocol requirements are occurring; (3) contains no consequences for the applicant's noncompliance with self-disclosure; and (4) contains no instructions on how an employee is to disclose knowledge of actual or apparent undue influence related to the Protocol limits, reducing the likelihood of identifying and preventing actual or apparent undue influence. In addition, we identified additional improvements to the Protocol documentation.

TVA's Contractor Workforce Management (CWM)

The TVA relies on a combination of TVA employees and contractors to meet its labor needs. We audited TVA's Contractor Workforce Management (CWM) process for acquiring craft and noncraft staff augmentation labor to determine (1) whether the process was operating as intended and (2) risks were being adequately mitigated. The process' intended purpose, according to TVA's CWM policy, is to "maintain the highest performing contractor workforce at the lowest total cost of ownership."

We found no assurance the process is operating as intended, and some risks are not adequately mitigated. Specifically, we found (1) the process is primarily a mechanism for acquiring and processing contractor employees to augment TVA staff rather than a process to ensure TVA's broader objective of maintaining a high performing, low-cost contractor workforce; (2) controls around the duration of contractor employment can be improved; (3) numerous exceptions to a control that capped noncraft staff augmentation contractor salaries were being granted; (4) hiring managers were able to choose job positions in the system with higher pay rates than the position actually being filled; (5) performance metrics specific to the CWM process were not being calculated; and (6) contractor data inaccuracies and errors exist

within TVA's HR system and contractor hiring and invoicing system.

We also identified three CWM process risks that, in our opinion, may not be adequately mitigated. These risks include:

- Opportunity to avoid TVA's Citizenship Requirements policy.
- Potential for unintended employer-employee relationships.
- Reliance on contractors to comply with U.S. Citizenship and Immigration Services guidance.

We made recommendations to TVA management. TVA management agreed with our recommendations and is taking corrective action.

Verification of TVA's Compliance with the Green Pricing Accreditation Program Requirements for Calendar Year 2014

TVA's Green Power Switch Program supports the production of electric power from renewable resources such as solar, wind, and methane gas, and adds such sources to TVA's power mix. TVA certifies the Green Power Switch program with the CRS which promotes the development of renewable energy. The OIG completed agreed-upon procedures to assist the CRS in determining TVA's compliance with the annual reporting requirements of the CRS Green Pricing Accreditation Program for the year ended December 31, 2014.

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

SUMMARY OF REPRESENTATIVE EVALUATIONS



During this semiannual period, Evaluations completed six reviews in the areas of Hydro Generation obsolete equipment, Nuclear outage performance, fire protection systems at Transmission and Hydro Generation facilities, and firearms and ammunition. One review is not included in this discussion due to its sensitive nature.

Hydro Generation Obsolete Equipment

Based on TVA's aging equipment and the risk of parts being unavailable, we scheduled a review of Hydro Generation obsolete equipment. The objective of our review was to determine if Hydro Generation is effectively managing obsolete equipment.

According to TVA, though hydroelectric power is only about 10 percent of TVA's power generation capacity, its value to the TVA system cannot be measured by megawatts alone. Hydropower has other advantages that make it extremely valuable in an increasingly competitive utility industry where low-cost generation and reliable service are critical priorities. TVA has 29 conventional hydropower plants with 109 individual units, which play a vital role in achieving TVA's mission of providing affordable and reliable electricity, managing a thriving river system, and supporting sustainable economic development.

During our review, we found Hydro Generation could more effectively manage obsolete equipment. We found no documented guidance to specify how obsolete equipment should be managed. In addition, we found obsolete equipment has extended outage durations. We also found some equipment condition assessments include an "Availability of Spare Parts" indicator, which measures the availability and willingness of the original equipment manufacturer to support existing, installed equipment with parts and service; however, it is not included in the condition assessments for all equipment. TVA management agreed with our recommendations and is taking corrective action.

Nuclear Outage Performance

This review was initiated to assess recent efforts of the TVA NPG to improve outage performance. The objective of the review was to determine whether (1) the initiatives implemented by the NPG to improve outage performance have achieved planned results and (2) current improvement efforts are adequate.

TVA's three nuclear plants contribute about 6,600 megawatts of electricity, about 30 percent of TVA's power supply, to the power grid, making the NPG an integral part of the seven-state power system. According to TVA, as nuclear performance improves across the industry, NPG's challenge is to continue its mission to ensure safe plant operations and achieve its vision of being the best multi-site, nuclear power operator in the world.

According to the International Atomic Energy Agency, the competitive environment for electricity has significant implications for nuclear power plant operations including, among others, the need for efficient use of resources and effective management of plant activities such as on-line maintenance and outages. Nuclear power plant outage management is a key factor for good, safe, and economic nuclear power plant performance. There are many aspects to outage management including plant policy, coordination of available resources, nuclear safety, regulatory requirements, technical requirements, etc. TVA's NPG had recent initiatives aimed at improving outage performance, the main measures of which include dollars, duration, and dose. Current goals for refueling outages are to meet or exceed industry top quartile of less than 29.67 days duration and operations and maintenance cost of less than \$36 million.

We found cost structure development and controls initiatives have improved outage performance with respect to cost; however, outage duration and dose continue to miss business plan goals. Additionally, we found outage performance initiatives have continually changed and excellence/improvement initiative plans do not include all planned actions. While some initiatives have been completed, others are ongoing and have rolled over to different plans, making it challenging to tie changes to measurable results. TVA management agreed with our recommendations and is taking corrective action.

Transmission Fire Protection

Fires in substations can severely impact the supply of power to customers and utilities' revenue and assets. These fires can also create a fire hazard to utility personnel, emergency personnel, and the general public. There are 14 sites

managed by Transmission that have fire protection systems to protect their 500-kilovolt transformers. This review was initiated based on findings from a previous review of fire protection at coal plants. The objective of this review was to determine if fire protection systems are established and maintained to effectively manage fires within the TVA transmission system.

According to TVA management, fire protection systems have been established where needed; however, the current systems have antiquated equipment that is being replaced as funding allows. These upgrades do not include modifying the water supply. The current system's water supply does not meet National Fire Protection Association code or TVA policy requirements. However, TVA management indicated that TVA is not required to meet national code. The risk fire protection systems will not function effectively is increased because of the condition of systems and the systems not meeting national code or TVA requirements.

Additionally, according to TVA management, maintenance is performed or requested by personnel at the Transmission Service Center; however, maintenance is not always documented. We found there are no requirements to track the fire protection systems or their condition. In addition, the inspections that are part of the preventive maintenance program are not conducted consistently. There is an increased risk that an issue could go unrecognized if systems are not being consistently inspected and the condition tracked. TVA management generally agreed with our recommendations and is taking corrective action.

Hydro Generation Fire Protection

This review was initiated based on findings from a previous review of fire protection at coal plants. The objective of our recent review was to determine whether fire protection systems are adequately maintained and mitigating actions are taken to minimize the impacts of fires at TVA hydro generation plants.

Wilson Dam



TVA's 29 conventional hydropower plants and Raccoon Mountain Pumped-Storage Plant play a strategic role in TVA's mission of providing affordable, reliable electricity, managing a thriving river system, and supporting sustainable economic development. Although TVA's hydroelectric generation is only 10 percent of generation capacity, it offers other advantages such as being emissions free and the least expensive source of generation.

While the likelihood of fire is lower at hydro plants than at coal plants, they are not without fire risk. Hydroelectric stations share many of the same fire hazards as coal plants such as oil-filled transformers, electrical cables and switchgear, air-cooled generators, and large quantities of combustible hydraulic oil. Hydro plants pose extreme safety issues and rescue risks because of limited building access, lack of natural lighting, and embedded structures, all of which increase the potential for a fire on a higher level to trap workers on a lower level.

During our review, TVA indicated that fire protection systems and equipment are generally being maintained and in good condition with some exceptions. Additionally, Hydro Generation is making improvements to condition assessments of fire protection equipment. However, we found mitigating actions to decrease the impact of fires could be strengthened in four areas: (1) risk assessment reports indicated that hydro plants could use more fire protection equipment and process enhancements to documentation of inspection, testing, and maintenance are still needed; (2) TVA indicated fire drills are being conducted on a routine basis, but are not documented as required, fire incidents are not being tracked, and lessons learned are being shared inconsistently; (3) TVA has not fully implemented the Emergency Response Liaison role; and (4) the increased risk from replacing the liaison role has not been included as a TVA enterprise risk. TVA management generally agreed with our recommendations and is taking corrective action.

Firearms and Ammunition

In response to the increasing workplace violence incidents throughout the country, we initiated a review of TVA's firearms and ammunition. TVA Police and Emergency Management (TVAP&EM) is charged with providing security and crisis/emergency management services for all TVA personnel, facilities, and other assets. Part of accomplishing this mission requires that firearms and ammunition are properly accounted for and safeguarded. The objective of our review was to determine if firearms and ammunition are properly accounted for and safeguarded. Our review found TVAP&EM is accounting for and safeguarding firearms and ammunition. Firearms not issued are safeguarded in secured storage areas; these firearms, and those issued to TVAP&EM employees, are accounted for through an annual hands-on inventory. Also, during testing, TVAP&EM was able to provide documentation for a sample of firearms either destroyed or transferred.

Our work, however, did identify opportunities for improvement in certain areas. While TVAP&EM guidelines require all TVA-issued firearms to be carried while on duty, one employee was unable to initially provide a firearm for physical inventory. Additionally, while TVAP&EM was able to provide documentation for destroyed and transferred firearms, some improvements could be made in relation to compliance with the guidelines for the documentation of transfers. Finally, there were a few instances in the guidelines regarding firearms and ammunition responsibility that did not match actual practice. TVA management agreed with two of the three recommendations and is taking corrective action. Management disagreed with the third recommendation but did change a work instruction to address the finding.

SUMMARY OF REPRESENTATIVE INVESTIGATIONS



This reporting period, we opened 126 cases and closed 142. Our investigative results include recoveries, savings, fees, and projected savings of more than \$3 million, one indictment, and one conviction. Significant representative activities are following.

Related OIG Investigations Net \$1 Million Recovery and \$1.8 Million Savings to TVA

This investigation was initiated after TVA OIG received an allegation that a TVA contract employee had engaged in inappropriate behavior associated with his role in the TVA Energy Services Company (ESCO) program. The former TVA ESCO program provided energy efficiency services to customers such as military installations and schools.

During a previous reporting period, our investigation determined the contract employee had accepted tickets to a college football game from an ESCO vendor. In response to our findings, TVA Industrial Marketing Senior Management terminated this individual's contract and initiated a comprehensive review of the ESCO program.

Our investigation into TVA ESCO personnel regarding contract-related misconduct found, in addition to the acceptance of college football tickets, (1) misuse of government property, (2) unethical conduct, and (3) loss of confidence in ability to perform the job.

Subsequent investigation into one of the primary TVA ESCO contractors determined that one contractor had overbilled TVA and had included clearly unallowable costs. TVA Office of the General Counsel and Supply Chain management personnel were briefed on the findings and pursued a defective pricing claim. As a result, TVA and the contractor entered into a negotiated supplemental agreement whereby the contractor will repay TVA a total of \$1 million.

As a result of a related OIG investigation, TVA changed associated processes and controls which led to the rebid of the contract and resulted in a savings of \$1.8 million.

Ethics Violation and Document Security Breach

OIG investigative work revealed a senior executive advisor violated ethics policies by engaging in an inappropriate relationship with a TVA vendor, including coaching the vendor on how to respond to TVA to gain a competitive advantage, revealing "TVA Confidential" information

involving other vendors, and making damaging comments about TVA coworkers who were part of the bidding process. We reported our findings to TVA management. The individual's employment was immediately terminated with a restriction should the individual seek reemployment at TVA.

During the course of the inquiry, we also discovered documentation the former employee had improperly disclosed to a vendor which had been obtained from TVA personnel who, in the course of their duties, routinely provided confidential data to various offices within TVA and to external entities. Those persons were not implicated in unethical behavior; however, we discovered a majority of the confidential information the former manager obtained and improperly disclosed had not been marked "TVA Confidential" as required.

We reported this finding to management; and, as a result, supervising managers in this organization completed required reading of the TVA Information Management Policy, and routine reports have been reviewed and updated to include the applicable marking as required to enhance and maintain security.

Tool Room Thefts Adjudicated

Sequoyah Nuclear Plant reported drills, saws, and other materials valued at more than \$3,000 missing from its tool room. Video surveillance was reviewed, which assisted in identifying two contractor employees leaving the plant with large bags filled with unknown contents. The discharged former contractors both were indicted on one count of theft of more than \$1,000 in Tennessee state court on February 19, 2014. One of the individuals made restitution to TVA of approximately \$900, thus avoiding prosecution. On May 18, 2015, the other individual pled guilty to a lesser count of theft, was ordered to make equivalent restitution, and was sentenced to 11 months and 29 days of confinement; however, the sentence was suspended. Both are restricted from future TVA employment.

Former TVA Employee Indicted on Wire Fraud, Embezzlement Charges

An OIG investigation of TVA credit card abuse uncovered a variety of unauthorized payments, possibly totaling more than \$60,000, to a former employee. On September 1, 2015, the former employee was indicted in federal court on charges of 10 counts of wire fraud and 1 count of embezzlement. The indictment charges the individual with using his TVA-assigned credit card to purchase hotel stays unconnected to his TVA duties and to purchase diesel fuel for third parties in exchange for cash. The final count of the indictment charges the former employee with embezzlement for converting TVA property valued at more than \$1,000 to his personal use. Prosecutive action is ongoing.

Civil Agreement Garners More Than \$100,000

Based on our investigation, a Valley medical provider, TVA, and the U.S. Department of Justice entered into an agreement whereby the provider paid the U.S. \$123,036.38—\$59,672.64 of which was paid to TVA as restitution and the remainder in penalties and fees.

The provider's patients included local TVA employees and retirees, whose medical care is ultimately paid by TVA (through BlueCross BlueShield, which administers TVA's medical benefits plan). The parties to the settlement agreed that the provider lacked documentation for several key facets of its billing during a three-year period. In addition to the settlement, the OIG investigation resulted in a projected five-year savings to TVA of \$97,134, based on the provider's inability to continue past billing practices.

UPDATES

Police Corruption Probe Concluded

We previously reported six former Knoxville-area law enforcement officers, including a former TVA Police (TVAP) officer, pled guilty to misusing their positions of authority by personally receiving payment to protect high-stakes gambling, most notably a \$1 million poker game during November 2009. In addition to the former TVAP officer, other former officers were members of the University of

Tennessee Police Department (UTPD), the Knox County Sheriff's Office (KCSO), or the Pigeon Forge Police Department (PD).

Sentencing for all involved individuals concluded this reporting period. Two were sentenced during the prior period—the former TVAP officer to two months of home detention and three years of probation; the former UTPD officer to six months of home detention and three years of probation. During April 2015, two former members of KCSO were sentenced to two months of home detention and three years of probation. One former KCSO deputy was sentenced to one year of probation, and the former Pigeon Forge PD detective was ordered to serve nine months of home detention and three years of probation. The high-stakes poker games were one element of a long-term undercover operation conducted by the FBI with assistance from TVA OIG and other agencies.

Former TVA Vendor Debarred from Participating in Federal Contracts

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

During this reporting period, Mr. Conn and two associated businesses—Conn Equipment Rental Company, Inc., and Vegetation Management Services—were debarred from participating in federal contracts until June 30, 2018.



Nottley Dam

LEGISLATION AND REGULATIONS



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

In this section of our semiannual report, it is our intent to address only current and pending legislation which relates to the economy or efficiency of TVA operations when we have recommendations or comments to make to Congress regarding the legislation. At times, we may direct

recommendations to general positions and issues, particularly when there are multiple bills dealing with the issue. At other times, we anticipate making recommendations relating to particular statutes and bills and their particular wording.

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



Kingston Fossil Plant

APPENDICES



INDEX ON REPORTING REQUIREMENTS UNDER THE IG ACT

REPORTING	REQUIREMENT	PAGE
Section 4(a)(2)	Review of Legislation and Regulations	54-55
Section 5(a)(1)	Significant Problems, Abuses, and Deficiencies	36-52
Section 5(a)(2)	Recommendations With Respect to Significant Problems, Abuses, and Deficiencies	36-52
Section 5(a)(3)	Recommendations Described in Previous Semiannual Reports on Which Corrective Action Has Not Been Completed	Appendix 4
Section 5(a)(4)	Matters Referred to Prosecutive Authorities and the Prosecutions and Convictions That Have Resulted	Appendix 5
Section 5(a)(5) and 6(b)(2)	Summary of Instances Where Information Was Refused	None
Section 5(a)(6)	Listing of Audit and Evaluation Reports	Appendix 2
Section 5(a)(7)	Summary of Particularly Significant Reports	36-52
Section 5(a)(8)	Status of Management Decisions for Audit and Evaluation Reports Containing Questioned Costs	Appendix 3
Section 5(a)(9)	Status of Management Decisions for Audit and Evaluation Reports Containing Recommendations That Funds Be Put to Better Use	Appendix 3
Section 5(a)(10)	Summary of Audit and Evaluation Reports Issued Prior to the Beginning of the Reporting Period for Which No Management Decision Has Been Made	None
Section 5(a)(11)	Significant Revised Management Decisions	None
Section 5(a)(12)	Significant Management Decisions With Which the Inspector General Disagreed	None
Section 5(a)(13)	Information Under Federal Financial Management Improvement Act of 1996	Not Applicable
Section 5(a)(14)	Appendix of results of any peer review conducted by another Office of the Inspector General during the reporting period, and if none, a statement of the date of the last peer review.	Appendix 8
Section 5(a)(15)	List of outstanding recommendations from any peer review conducted by another Office of the Inspector General, including a statement describing the status of the implementation and why implementation is not complete.	None
Section 5(a)(16)	List of peer reviews conducted of another Office of the Inspector General during the reporting period, including a list of any outstanding recommendations made from any previous peer review that remain outstanding or have not been implemented.	Appendix 9

APPENDIX 2

OIG AUDIT REPORTS • Issued During the Six-Month Period Ended September 30, 2015

Report Number and Date	Title	Questioned Costs	Unsupported Costs	Funds Put To Better Use
CONTRACT AUDITS				
2014-15239 04/14/2015	AREVA NP, Inc. – Review of Annual Rate Adjustments – Contract No. 004027	\$7,436,606	\$0	\$0
2014-15042 04/22/2015	Geosyntec Consultants, Inc.	162,307	0	0
2014-15031 06/23/2015	Adequacy of Invoice Approval Process	0	0	0
2014-15248 06/23/2015	Hayward Baker, Inc. – Contract No. 6902	0	0	0
2015-15309 08/04/2015	Proposal For Hydro Modernization, Unit Rehabilitation, and Functional Support Services	0	0	2,106,300
2014-15240 08/11/2015	Contractor's Rework and Damages Liability	0	0	0
CORPORATE GOVERNANCE AND FINANCE AUDITS				
2014-15024 09/09/2015	TVA Employee Overtime	\$0	\$0	\$0
2015-15307 09/28/2015	TVA Executive Incentives	0	0	0
OPERATIONAL AUDITS				
2015-15295 06/01/2015	Agreed-Upon Procedures to Verify TVA's Compliance with the Green Pricing Accreditation Program Requirements for Calendar Year 2014	\$0	\$0	\$0
2014-15078 06/25/2015	Effectiveness of TVA's Process to Address Nuclear Emerging Regulatory Issues	0	0	0
2014-15234 06/25/2015	TVA's Talent Acquisition and Deployment Process	0	0	0
2014-15242 09/29/2015	TVA Contractor Workforce Management	0	0	0
2014-15080 09/30/2015	Integrated Resource Planning Process	0	0	0
2014-15224 09/30/2015	Obtaining Things of Value	0	0	0

OIG AUDIT REPORTS • Issued During the Six-Month Period Ended September 30, 2015 (CONTINUED)

Report Number and Date	Title	Questioned Costs	Unsupported Costs	Funds Put To Better Use
INFORMATION TECHNOLOGY AUDITS				
2014-15211 04/09/2015	COMTRAC Implementation	\$0	\$0	\$0
2014-15063-01 06/04/2015	Information Technology Organizational Effectiveness – Enterprise Information Security and Policy	0	0	0
2015-15292 06/25/2015	Electronic Communication by the TVA Board of Directors	0	0	0
2014-15063-02 08/04/2015	Information Technology Organizational Effectiveness – Enterprise Architecture and Programs	0	0	0
2015-15279 08/19/2015	Area Access Manager	0	0	0
2014-15063-03 09/03/2015	Information Technology Organizational Effectiveness – Operations Solutions Delivery	0	0	0
2014-15062 09/10/2015	Maximo 7.5 Upgrade	0	0	0
2014-15063-04 09/22/2015	Information Technology Organizational Effectiveness – Enterprise Customer Operations	0	0	0
TOTAL AUDITS (22)		\$7,598,913	\$0	\$2,106,300

OIG EVALUATION REPORTS • Issued During the Six-Month Period Ended September 30, 2015

Report Number and Date	Title	Questioned Costs	Unsupported Costs	Funds Put To Better Use
2015-15269 07/16/2015	Transmission Fire Protection	\$ 0	\$ 0	\$ 0
2015-15265 07/24/2015	Hydro Generation Obsolete Equipment	0	0	0
2015-15271 07/24/2015	Firearms and Ammunition	0	0	0
2015-15273 07/24/2015	Nuclear Outage Performance	0	0	0
2015-15294 07/24/2015	Hydro Generation Fire Protection	0	0	0
2015-15272 09/29/2015	Significant Changes in TVA Dispatch Cost Compendium	0	0	0
TOTAL EVALUATIONS (6)		\$ 0	\$ 0	\$ 0

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

APPENDIX 3

TABLE I • TOTAL QUESTIONED AND UNSUPPORTED COSTS • AUDITS

Audit Reports	Number of Reports	Questioned Costs	Unsupported Costs
A. For which no management decision has been made by the commencement of the period	0	\$0	\$0
B. Which were issued during the reporting period	2	\$7,598,913	\$0
Subtotal (A+B)	2	\$7,598,913	\$0
C. For which a management decision was made during the reporting period	2 ¹	\$7,598,913	\$0
1. Dollar value of disallowed costs	2	\$2,156,279	\$0
2. Dollar value of costs not disallowed	1	\$5,442,634	\$0
D. For which no management decision has been made by the end of the reporting period	0	\$0	\$0

TABLE I • TOTAL QUESTIONED AND UNSUPPORTED COSTS • EVALUATIONS

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

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

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

Audit Reports	Number of Reports	Funds To Be Put To Better Use
A. For which no management decision has been made by the commencement of the period	1	\$1,067,000
B. Which were issued during the reporting period	1	\$2,106,300
Subtotal (A+B)	2	\$3,173,300
C. For which a management decision was made during the reporting period	1	\$1,067,000
1. Dollar value of recommendations agreed to by management	1	\$1,067,000
2. Dollar value of recommendations not agreed to by management	0	\$0
D. For which no management decision has been made by the end of the reporting period	1	\$2,106,300

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

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

AUDIT AND EVALUATION REPORTS WITH CORRECTIVE ACTIONS PENDING

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

Audit Report Number and Date	Report Title and Recommendation(s) for Which Final Action is Not Complete
2010-13132 06/15/2011	Physical and Logical Access for Contractors TVA agreed to create a matrix to cross-reference TVA roles to assets and identify the associated qualification and background requirements needed to gain access to that asset and develop a process to restrict contractor access to sensitive data and assets until the proper clearances have been obtained. Management expects to complete final action by June 30, 2016.
2012-14567 01/30/2013	Building and Infrastructure Failure Risks TVA agreed to enhance Tririga functionality and other tools for building asset information and address weaknesses in the Tririga production database. Management expects to complete final action by December 31, 2015.
2013-15104 02/12/2014	PowerWAN Security and Architecture TVA Management agreed to develop policies and practices to ensure legitimate traffic is traversing the PowerWAN network. Management expects to complete final action by April 1, 2016.
2013-14959 08/07/2014	TVA Environmental Risk Management TVA Environment and Energy Policy group will update TVA's Environmental Management System to better describe environmental review processes and responsibilities. Management expects to complete final action by September 30, 2017.
2014-15036 09/03/2014	Bartlett Holdings, Inc. – Bechtel Power Corporation Subcontract TVA agreed to recover \$1,484,582 in questioned payroll tax and insurance costs and related fee; \$60,287 in ineligible costs for an employee who did not maintain a permanent residence more than 60 miles from his assigned workplace; and \$2,565 in ineligible labor costs and fee. Management expects to complete final action by March 31, 2016.
2014-15065 09/23/2014	Network Security Zones and Perimeter Architecture TVA agreed to design a new cable plant system and install new conduit and cables. Management expects to complete final action by March 18, 2016.
2014-15037 11/17/2014	Bechtel Power Corporation TVA agreed to recover \$923,231 in overbilled labor and related costs; \$938,928 in ineligible or unsupported relocation, permanent and temporary assignment and travel costs; and \$204,336 in ineligible or unsupported affiliate company and subcontractor costs. Management expects to complete final action by March 31, 2016.
2014-15044 11/19/2014	Nexant, Inc. TVA agreed to pursue recovery of \$269,009 in excessive labor costs; \$144,570 in ineligible labor costs; \$18,267 in ineligible employee travel costs; and \$67,189 in ineligible incentive costs, of which, to date, TVA has recovered \$15,685. Management expects to complete final action by November 19, 2015.

AUDIT AND EVALUATION REPORTS WITH CORRECTIVE ACTIONS PENDING (continued)

Audit Report Number and Date	Report Title and Recommendation(s) for Which Final Action is Not Complete
2014-15059 01/13/2015	<p>2014 Federal Information Security Management Act</p> <p>TVA agreed to implement Interconnection Service Agreements (ISA) for each contractor system as appropriate and document justifications for systems that have not implemented ISAs. TVA agreed to update or create procedures as appropriate to address the program for training users who have been designated as having significant security responsibilities. TVA also agreed to document the FIPS 199 rating of systems and maintain documentation of the System Security Plan or status for those systems, including controls selected, system role holders, and projected dates for system authorization completion. TVA agreed, where appropriate, to document and implement a Continuous Monitoring Plan for the system. Finally, TVA agreed to generate remediation tickets to the appropriate responsible parties for addressing deviations. Quarterly tickets will be generated for Compute, Network, and Database areas to review vulnerability and baseline configurations deviations. Tasks will then be added to remediate or accept any deviations found. TVA agreed to also update TVA-SPP-12.04, TVA Cyber Security Patch & Vulnerability Management Program, to clarify Time to Remediate and define expectations for remediation. Management expects to complete final action by December 11, 2015.</p>
2014-15060 02/19/2015	<p>Biennial Review – Use and Protection of Personally Identifiable Information</p> <p>TVA agreed to (1) modify policy and automate annual access review by managers, who will also conduct periodic clean desk reviews and report findings to the privacy office; (2) review systems containing restricted personally identifiable information (RPII) and make necessary classification changes and track the disposition of RPII surveys and document resolution; and (3) align training for information owners and privacy system security officers with other ongoing training efforts. Management expects to complete final action by February 29, 2016.</p>
2015-15278 03/05/2015	<p>Contractor Rate Review</p> <p>TVA agreed to negotiate fringe benefits which more accurately reflect the contractor's actual historical costs, use the Hourly Craft Superintendent classification provided for in TVA's labor agreements as a lower cost option, when available, and seek recovery of any over-billed charges. Management expects to complete final action by March 4, 2016.</p>
Evaluation Report Number and Date	Report Title and Recommendation(s) for Which Final Action is Not Complete
2012-14535 03/21/2013	<p>Master Key Program Management – Energy Delivery</p> <p>TVA agreed to secure facilities protected by master keys to minimize the risk posed by keys outside TVA's control and develop specifications for the purchase of a new system. A contract has been awarded and management expects to complete final action by June 30, 2017.</p>
2012-14636 08/28/2013	<p>Master Key Program Management – Property & Natural Resources</p> <p>TVA agreed to develop standard policies and procedures. Management expects to complete final action by October 15, 2015.</p>
2013-14950 09/19/2013	<p>TVA's Succession Planning</p> <p>TVA management agreed to (1) continue to evaluate ways to improve cross-pollination using a system to reduce preparation time and plan to submit a proposal for a new system during fiscal year 2016 business planning, and (2) identify critical executive positions. Management expects to complete final action by September 30, 2016.</p>
2012-14587 10/17/2013	<p>Nuclear Power Group and Coal and Gas Operations Critical Spare Parts Program</p> <p>TVA agreed to (1) develop the appropriate procedures to define the roles, responsibilities, and accountabilities of key persons, and define the decision and approval process in regard to the procurement of critical spares; (2) define maintenance program accountabilities for inventory including critical spares; (3) take steps to follow up on actions recommended by the management consulting firm; and (4) define the decision and approval process for the removal of the critical spare designation from spare parts in inventory. Management expects to complete final action by November 5, 2015.</p>

AUDIT AND EVALUATION REPORTS WITH CORRECTIVE ACTIONS PENDING (continued)

Evaluation Report Number and Date	Report Title and Recommendations for which Final Action is Not Complete
2013-15157 06/05/2014	Actions to Address River Operations Systems and Components with Poor Ratings TVA agreed to develop a 10-year asset management plan to further document risks and develop a long-term strategy for addressing major components with poor ratings across the non-nuclear fleet. Management expects to complete final action by September 30, 2016.
2013-15135 07/30/2014	Actions to Address Coal Plant Systems and Programs with Poor Ratings TVA agreed to (1) document justification when actions are not taken to address systems and programs with red and yellow ratings, (2) reinforce the importance of consistent documentation of system health reports, and (3) consider the potential impact of eliminating the requirement to do asset health assessments on TVA's non-nuclear asset condition risk and determine a schedule for completing health assessments that will adequately mitigate the risk of equipment failure. Management expects to complete final action by March 31, 2016.
2014-15056 09/25/2014	Nuclear Groundwater Review TVA agreed to form a groundwater working group with representatives from all sites to address outstanding program weaknesses. Management expects to complete final action by September 30, 2016.
2014-15053 09/29/2014	Coal Plant Preventive Maintenance TVA agreed to (1) increase preventive maintenance (PM) completion and reduce deviations from PM schedules and reinforce the importance of PM activities, (2) develop a way to more accurately capture and report PM compliance and other appropriate PM tracking metrics, (3) expedite maintenance basis optimization efforts, and (4) consider the potential impact of having PM governed only by guidelines and not requirements. Management expects to complete final action by April 15, 2016.
2014-15216 09/29/2014	Follow-Up Review of Coal Fire Protection TVA agreed to prioritize impairments and establish a due date for long-term fire impairments or make a formal decision to not pursue repair; train employees on work management priorities for fire impairments; track high-priority fire impairments to resolution using a monthly scorecard; revise policies and procedures (Standard Programs and Processes [SPP]) to allow a formal non-conformance process; take inventory to determine baseline equipment status; revise SPPs to include a standard equipment list and develop an action plan to replace or purchase needed equipment to fill gaps; revise SPPs to require a Problem Evaluation Report when minimum staffing is not met; revise SPPs to require capturing and sharing of lessons learned for all fires; and revise SPPs to include a new rating calculation and process for sharing assessment data with Power Operations senior leadership. Management expects to complete final action by December 31, 2016.
2012-14882 09/30/2014	Injury Reporting at TVA TVA agreed to improve the reporting of injuries including establishment of a process for reconciling Form 1444 to Form 17719. Additionally, TVA agreed to evaluate the potential influence of the corporate multiplier on the reporting of recordable injuries. Management expects to complete final action by March 31, 2016.
2014-15048 12/22/2014	Natural Gas Monitoring Fuel Accounting agreed to contact the vendor for the return of money due. Management expects to complete final action by October 16, 2015.

INVESTIGATIVE REFERRALS AND PROSECUTIVE RESULTS¹

Referrals	
Subjects Referred to U.S. Attorneys	18
Subjects Referred to State/Local Authorities	2
Results	
Subject Indicted/Information Filed	1
Subjects Convicted	1
Pretrial Diversion	0
Federal Referrals Declined	14
State Referrals Declined	0

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



**Colbert
Fossil Plant**

HIGHLIGHTS – STATISTICS

	SEPT 30, 2015	MAR 31, 2015	SEPT 30, 2014	MAR 31, 2014	SEPT 30, 2013
AUDITS					
AUDIT STATISTICS					
Carried Forward	28	28	24	28	38
Started	21	11	20	17	21
Canceled	(1)	(0)	(1)	(1)	(1)
Completed	(22)	(11)	(15)	(20)	(30)
In Progress at End of Reporting Period	26	28	28	24	28
AUDIT RESULTS (Thousands)					
Questioned Costs	\$7,599	\$8,908	\$2,612	\$635	\$2,916
Disallowed by TVA	\$2,156	\$8,908	\$2,612	\$308	\$647
Recovered by TVA	\$2,981	\$89	\$484	\$164	\$2,447
Funds to Be Put to Better Use	\$2,106	\$1,067	\$512	\$9,584	\$36,522
Agreed to by TVA	\$1,067	\$512	\$414	\$20,938	\$23,100
Realized by TVA	\$142	\$7,375	\$13,114	\$375	\$2,479
OTHER AUDIT-RELATED PROJECTS					
Completed	7	5	10	5	5
Cost Savings Identified/Realized (Thousands)	\$0	\$0	\$0	\$0	\$0
EVALUATIONS					
Completed	6	1	10	3	6
Cost Savings Identified/Realized (Thousands)	\$0	\$0	\$0	\$0	\$0
INVESTIGATIONS¹					
INVESTIGATION CASELOAD					
Opened	126	126	134	112	173
Closed	142	146	123	148	158
In Progress at End of Reporting Period	134	152	163	150	179
INVESTIGATIVE RESULTS (Thousands)					
Recoveries	\$1,064.0	\$522.2	\$89.1 ²	\$10,874.7 ³	\$899.9
Savings/Projected Savings	\$1,897.1	\$403.3	\$125.0	\$0	\$550.4
Fines/Penalties/Fees	\$64.1	\$0.2	\$0.8	\$1	\$603.8
Other Monetary Loss	\$0	\$0	\$0	\$0	\$519.3
MANAGEMENT ACTIONS					
Disciplinary Actions Taken (Number of Subjects)	14	10	14	22	18
Counseling/Management Techniques Employed (Number of Cases)	9	17	11	14	20
Debarment	3	0	0	0	0
PROSECUTIVE ACTIVITIES (Number of Subjects)					
Referred to U.S. Attorneys	18	8	16	14	18
Referred to State/Local Authorities	2	0	0	2	0
Indicted/Information Filed	1	6	0	5	0
Convicted	1	6	0	1	2
Pretrial Diversion	0	0	0	1	0

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

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

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

GOVERNMENT CONTRACTOR AUDIT FINDINGS

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

PEER REVIEWS OF THE TVA OIG

Audits Peer Review

IG audit organizations are required to undergo an external peer review of their system of quality control at least once every three years, based on requirements in the *Government Auditing Standards*. Federal audit organizations can receive a rating of pass, pass with deficiencies, or fail. TVA OIG underwent its most recent peer review of its audit organization for the period ended September 30, 2013. The review was performed by the Special Inspector General for the Troubled Asset Relief Program (SIGTARP). The SIGTARP issued the report, dated March 31, 2014, in which it concluded the TVA OIG audit organization's system of quality control for the fiscal year ended September 30, 2013, was suitably designed and complied with to provide the OIG with reasonable assurance of performing and reporting in conformity with applicable professional auditing standards in all material respects. Accordingly, the TVA OIG received a rating of pass. The peer review report is posted on our Web site at <http://www.oig.tva.gov/PDF/PeerReviewReport03312014>.

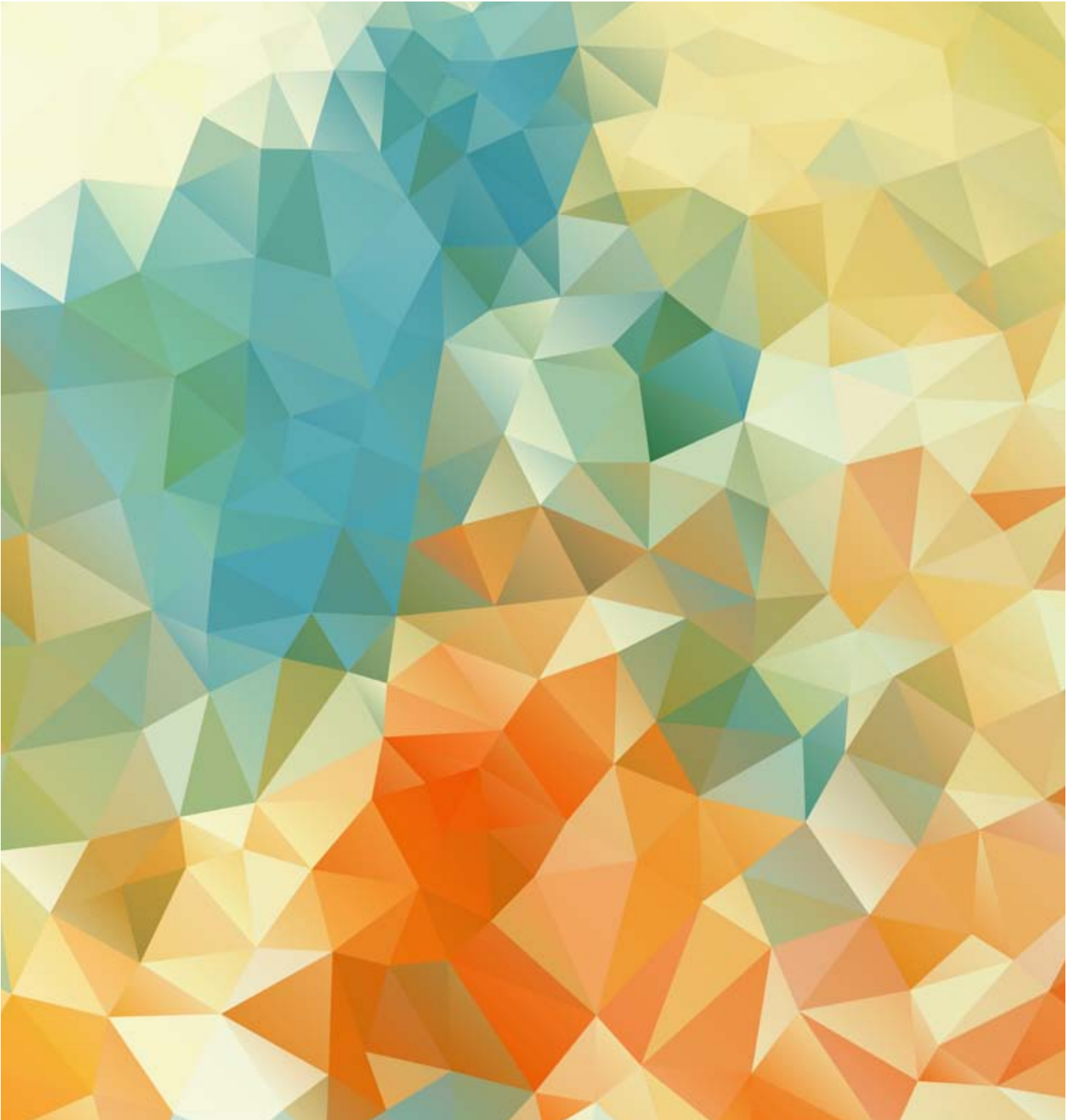
Investigations Peer Review

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

PEER REVIEW OF INVESTIGATIVE OPERATIONS, U.S. DEPARTMENT OF STATE AND BROADCASTING BOARD OF GOVERNORS OFFICE OF THE INSPECTOR GENERAL

The TVA OIG completed a peer review of Investigative Operations, U.S. Department of State and Broadcasting Board of Governors Office of the Inspector General (DOS OIG) during this semiannual period. We issued our final report to DOS OIG on April 20, 2015. We reviewed the organization's internal safeguards and management procedures in effect for the annual period ending January 31, 2015, and found the organization in full compliance with the quality standards established by the Council of the Inspectors General on Integrity and Efficiency and applicable Attorney General Guidelines.

GLOSSARY



Disallowed Cost

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

Final Action

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

Funds Put To Better Use

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

Improper Payment

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

Management Decision

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

Questioned Cost

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

Unsupported Costs

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

ABBREVIATIONS & ACRONYMS

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

AIGI	Assistant Inspector General Investigations
Blackberry.....	The Cove at Blackberry Ridge, LLC
Board	TVA Board of Directors
CIGIE	Council of the Inspectors General on Integrity and Efficiency
CO	Contracting Officer
CRS	Center for Resource Solutions
CWM	Contractor Workforce Management
DOS OIG	U.S. Department of State and Broadcasting Board of Governors Office of the Inspector General
EAIP	Executive Annual Incentive Plan
EAM.....	Enterprise Asset Management
ECIE.....	Executive Council on Integrity and Efficiency
ELTIP.....	Executive Long-Term Incentive Plan
EPU.....	Extended Power Uprate
ERI	Emerging Regulatory Issues
ERM.....	Enterprise Risk Management
ESCO	Energy Services Company
FBI	Federal Bureau of Investigation
FECA	Federal Employees Compensation Act
FIA	Field Invoice Approver
FISMA.....	Federal Information Security Management Act
FY	Fiscal Year
GAO	Government Accountability Office
Habitat.....	Habitat for Humanity
HR	Human Resources
HRT	Highland Ridge Tower
IG	Inspector General
IRP	Integrated Resource Plan
ISA	Interconnection Service Agreements
IT	Information Technology
IT1K.....	1,000 Days to Success
ITSA.....	IT Security Assessment
KCSO.....	Knox County Sheriff's Office
Kinder Morgan	Kinder Morgan Limited Partnership
NPG.....	Nuclear Power Group
NRC	Nuclear Regulatory Commission
OIG	Office of the Inspector General
OPM	Office of Personnel Management
PCIE.....	President's Council on Integrity and Efficiency
PD	Police Department
PER.....	Problem Evaluation Reports
PM	Preventive Maintenance
Protocol.....	Obtaining Things of Value from TVA Protocol
QAR.....	Quality Assessment Review
RPPI	Restricted Personally Identifiable Information
Second Harvest	Second Harvest Food Bank
SEIS	Supplemental Environmental Impact Statement
SIGTARP	Special Inspector General for the Troubled Asset Relief Program

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

SPP	Standard Programs and Processes
SWCI.....	Stone & Webster Construction, Inc.
TVA.....	Tennessee Valley Authority
TVAP	TVA Police
TVAP&EM.....	TVA Police and Emergency Management
U.S.....	United States of America
UTPD.....	The University of Tennessee Police Department
WBN	Watts Bar Nuclear Plant



OFFICE of the INSPECTOR GENERAL

400 West Summit Hill Drive
Knoxville, Tennessee 37902

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

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

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

Report Concerns to the OIG EmPowerline

WATCH, LEARN AND BE **EMPOWERED**

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



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





Office of the Inspector General
TENNESSEE VALLEY AUTHORITY
Semiannual Report
April 1, 2015 - September 30, 2015