



Memorandum from the Office of the Inspector General

December 9, 2010

Kimberly S. Greene, WT 7B-K

REQUEST FOR FINAL ACTION – AUDIT 2010-13021 – DISTRIBUTOR REVIEW OF PULASKI ELECTRIC SYSTEM

Attached is the subject final report for your review and action. Your written comments, which addressed your management decision and actions planned or taken, have been included in the report. Please notify us when final action is complete.

Information contained in this report may be subject to public disclosure. Please advise us of any sensitive information in this report that you recommend be withheld.

If you have any questions, or wish to discuss our findings, please contact Stephanie L. Simmons, Auditor, at (423) 785-4820 or Melissa M. Neusel, Acting Director, Distributor Audits, at (865) 633-7357. We appreciate the courtesy and cooperation received from your staff during the audit.

Robert E. Martin

Robert E. Martin
Assistant Inspector General
(Audits and Inspections)
ET 3C-K

SLS:HAC
Attachment

cc (Attachment):

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OIG File No. 2010-13021



Office of the Inspector General

Audit Report

To the Group President,
Strategy and External
Relations

DISTRIBUTOR REVIEW OF PULASKI ELECTRIC SYSTEM

Audit Team

Stephanie L. Simmons
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Audit 2010-13021
December 9, 2010

ACRONYMS AND ABBREVIATIONS

CSA	Central Service Association
EGC	Enhanced Growth Credit
FY	Fiscal Year
kW	Kilowatt
kWh	Kilowatt Hours
OIG	Office of the Inspector General
S&ER	Strategy and External Relations
SEDC	Southeastern Data Corporation
SMC	Small Manufacturing Credit
TVA	Tennessee Valley Authority

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GREENE TO ROBERT E. MARTIN



Audit 2010-13021 – Pulaski Electric System

EXECUTIVE SUMMARY

Why the OIG Did This Review

As part of the annual audit plan, the OIG (Office of the Inspector General) performed a review of the Pulaski Electric System, which is a distributor for Tennessee Valley Authority (TVA) power based in Pulaski, Tennessee. Annual revenues from electric sales were approximately \$41 million in fiscal year 2009. Pulaski also provides billing services for other city utilities and operates a broadband department that offers cable and Internet services. The objective of the review was to determine compliance with key provisions of the power contract between TVA and Pulaski.

What the OIG Found

Our review of Pulaski found improvements were needed in the areas of:

- **Customer Classification** – We identified 44 customer accounts not classified correctly that could impact (1) the proper reporting of electric sales and/or (2) nondiscrimination in providing power to members of the same rate class. We were able to estimate the monetary effect of the classification issues, and the monetary effect on Pulaski and TVA would not be significant.
- **Demand Calculation** – We found Pulaski overpaid TVA approximately \$104,000 for demand during the period April 2008 through September 2008. The overpayment was the result of an error in a spreadsheet formula used to calculate demand for one GSA classification reported on the Schedule 1.
- **Contract Compliance** – We identified four areas where Pulaski was not meeting the power contract requirements with TVA. Specifically, we found (1) costs were not allocated for billing services provided to other city departments in accordance with the last TVA joint cost study, (2) required applications and TVA approval were not obtained for customers receiving about \$1.25 million under the Small Manufacturing Credit (SMC) program, (3) the Enhanced Growth Credit (EGC) was not calculated correctly for all customers, which resulted in errors with credit amounts included on the Schedule 1 and applied to customers, and (4) required EGC documentation was not maintained.

In addition, we found Pulaski had enough cash on hand to provide a cash reserve of about 8.5 percent, which is slightly above TVA's established guidelines for adequate cash reserves of 5 to 8 percent. We also noted Pulaski used electric system funds to pay expenses for the broadband department without TVA's approval or loan documents in place. Without executed loan documents, the electric department has no legal recourse to recover amounts expended to fund the broadband department.



Audit 2010-13021 – Pulaski Electric System

EXECUTIVE SUMMARY

Finally, we identified certain opportunities to enhance TVA's oversight of the distributors that have been reported in previous distributor audits. TVA is in the process of addressing these three findings, which include (1) the absence of a joint cost study being performed in over 20 years, (2) the lack of an adequately defined process to document approval of credits, and (3) providing definitive guidance for distributors on what constitutes prudent expenditures.

What the OIG Recommends

We recommend the Group President, Strategy and External Relations (S&ER), work with Pulaski to remediate classification issues and comply with various contract provisions related to use of funds and customer credits. In addition, the Group President, S&ER, should (1) review amounts associated with the demand calculation error and return overpayments to Pulaski, and (2) review the SMC and EGC and recover any amounts incorrectly credited to the distributor. Our detailed recommendations can be found later in this report.

Management's Comments

Pulaski and TVA management generally agreed with our recommendations and have taken or are taking actions to address these recommendations. See Appendix B for Pulaski's complete response and Appendix C for TVA's complete response.

Auditor's Response

The OIG concurs with actions taken and planned by Pulaski and TVA to correct the identified issues.

BACKGROUND

The Pulaski Electric System¹ is a distributor for Tennessee Valley Authority (TVA) power based in Pulaski, Tennessee, with revenues from electric sales of approximately \$41 million in fiscal year (FY) 2009. TVA relies on distributors to self-report customer usage and subsequently the amount owed to TVA (Schedule 1). Customers are generally classified as residential, commercial, manufacturing, and lighting. Within these classes are various rate classifications based on the customer type and usage. Table 1 shows the customer mix for Pulaski as of June 2009.

Pulaski's Customer Mix as of June 2009

Customer Classification	Number of Customers	Revenue	Kilowatt Hours Sold
Residential	11,618	\$18,563,156	177,928,822
General Power – 50 Kilowatt (kW) and Under (Commercial)	2,192	3,551,390	28,580,489
General Power – Over 50 kW (Commercial or Manufacturing)	203	18,581,794	203,034,914
Street and Athletic	54	398,839	3,243,358
Outdoor Lighting ²	79	334,536	2,838,760
Unbilled Revenue		36,317	
Total	14,146	\$41,466,032	415,626,343

Table 1

The distributors are required to establish control processes over customer setup, rate application, and measurement of usage to ensure accurate and complete reporting to TVA. Pulaski, like many other distributors, outsources its billing and invoice processing to a third-party processor, Central Service Association (CSA). Prior to September 2008, Pulaski outsourced its billing and invoice processing to Southeastern Data Corporation (SEDC). Pulaski previously used SEDC systems and currently uses CSA systems to establish and set up new customers, input customer meter information, perform the monthly billing process, and execute customer account maintenance. Additionally, SEDC and CSA systems include management reporting capabilities (e.g., exception reports). All other accounting and finance responsibilities are handled by Pulaski, which has a Board of Directors providing oversight and a manager and accountant managing the daily activities. Pulaski also provides billing services for other city utilities and operates a broadband department that offers cable and Internet services.

¹ The wholesale power contract is between the "City of Pulaski, Tennessee," and TVA. The "Pulaski Electric System," a department of the City of Pulaski, manages and operates the electric department for the City. We will use "Pulaski Electric System" rather than the "City of Pulaski" in this report.

² This customer count excludes those customers who have Outdoor Lighting accounts with Pulaski as well as accounts for other services. At June 30, 2009, there were 2,076 of these customers. The kilowatt hours (kWh) sold includes all kWh for all accounts.

FINDINGS

Our review of Pulaski found issues involving customer classification and a Schedule 1 calculation that could impact (1) the proper reporting of electric sales and/or (2) nondiscrimination in providing power to members of the same rate class. In addition, we found Pulaski had enough cash on hand to provide a cash reserve of about 8.5 percent, which is slightly above TVA's established guidelines for adequate cash reserves of 5 to 8 percent.

We also found improvements were needed to comply with contract provisions regarding (1) allocation of certain costs between service departments, (2) customer applications for credits, (3) calculation of credits, and (4) maintenance of customer credit documentation. Finally, we have identified certain opportunities to enhance TVA's oversight of the distributors.

PROPER REPORTING OF ELECTRIC SALES AND NONDISCRIMINATION IN PROVIDING POWER TO MEMBERS OF THE SAME RATE CLASS

As discussed below, we identified customer classification issues and an error in the calculation of the Schedule 1 report that could impact the proper reporting of electric sales. In addition, the customer classification issues could impact the ability to ensure nondiscrimination in providing power to members of the same rate class.³ We were able to estimate the effect of these issues, and the monetary effect on Pulaski and TVA was not significant. However, correcting classification issues is important to ensure all customers are placed in the correct rate classification and charged the same rate as other customers with similar circumstances.

Customer Classification Issues

We found 44 customer accounts that were not classified properly. Of the 44 accounts, 1 was a commercial customer account classified within the General Power Rate – Schedule GSA. The GSA schedule is divided into three

³ Section 5 Resale Rates subsection (a) of the power contract between TVA and Pulaski states that "power purchased hereunder shall be sold and distributed to the ultimate consumer without discrimination among consumers of the same class and that no discriminatory rate, rebate, or other special concession will be made or given to any consumer, directly or indirectly."

parts—Part 1, Part 2, and Part 3—based on electric usage and demand,⁴ and this customer account was incorrectly assigned within the GSA schedule. The remaining 43 customer accounts were classified as residential, although they should have been classified under the GSA schedule. The monetary impact of the classification issues below would not be significant to Pulaski or TVA. Specifically, we found:

- One customer account was classified as GSA Part 1⁵ instead of GSA Part 2. According to the GSA schedule, a customer should be classified as GSA Part 2 if (1) usage is over 15,000 kilowatt hours (kWh), (2) metered demand exceeds 50 kW, or (3) contract demand is greater than 50 kW. When a customer is moved to GSA Part 2, the customer must remain at that classification for 12 months after meeting the Part 2 criteria. This customer had metered demand over 50.01 kW at least one month during the audit period; therefore, the customer should have been classified as a GSA Part 2 for the next 12 months.

Based on information provided by billing agency personnel, the CSA system used by Pulaski did not automatically change a customer from GSA Part 1 to GSA Part 2 based on metered demand until after demand exceeds 50.499 kW rather than the 50 kW as stated under Part 2 of the GSA schedule. This customer account was later automatically upgraded to GSA Part 2 by the billing system when the demand exceeded 50.499 kW. In response to previous audits, CSA modified the billing system to correct this issue.

⁴ Demand is a measure of the rate at which energy is consumed. The demand an electric company must supply varies with the time of day, day of the week, and the time of year. Peak demand seldom occurs for more than a few hours or fractions of hours each month or year, but electric companies must maintain sufficient generating and transmission capacity to supply the peak demand. Demand charges represent the high costs electric companies pay for generating and transmission capacity that sits idle most of the time. Demand charges are based on the amount of energy consumed in a specified period of time known as a demand interval. Demand intervals are usually 15 or 30 minutes. (Engineering Tech Tips, December 2000, Dave Diezinger, Project Leader, United States Department of Agriculture Forest Service, Technology & Development Program, <http://www.fs.fed.us/eng/pubs/htmlpubs/htm00712373/index.htm>.) For TVA distributors, the commercial and manufacturer Schedules of Rates and Charges direct that metered demand be calculated as “the highest average during any 30-consecutive-minute period of the month of the load metered in kW.”

⁵ Under the General Power Rate – Schedule GSA adopted by Pulaski, customers are classified based on the following requirements:

- GSA Part 1 – If (a) the higher of (i) the customer’s currently effective contract demand, if any, or (ii) its highest billing demand during the latest 12-month period is not more than 50 kW and (b) customer’s monthly energy takings for any month during such period do not exceed 15,000 kWh.
- GSA Part 2 – If (a) the higher of (i) the customer’s currently effective contract demand or (ii) its highest billing demand during the latest 12-month period is greater than 50 kW but not more than 1,000 kW or (b) the customer’s billing demand is less than 50 kW and its energy takings for any month during such period exceed 15,000 kWh.
- GSA Part 3 – If the higher of (a) the customer’s currently effective contract demand or (b) its highest billing demand during the latest 12-month period is greater than 1,000 kW.

- Forty-three customer accounts were classified as residential customers instead of GSA schedule customers. These accounts consisted of service to a commercial business or other separately metered structures, such as barns, shops, garages, pumps, etc., which do not qualify as a single family dwelling. Pulaski personnel stated they plan to contact the customers and reclassify the accounts from residential to commercial (GSA schedule).

Demand Calculation

We found a spreadsheet used by Pulaski to calculate electric sales reported to TVA contained an error causing demand in one GSA classification to be overstated on the Schedule 1. The error began in April 2008 and continued until September 2008 when use of this spreadsheet was discontinued due to a change in billing agencies. The total impact of the error was an overpayment to TVA in the amount of approximately \$104,000.

USE OF ELECTRIC SYSTEM REVENUES

Under the TVA power contract, approved uses of revenues from electric system operations, including any surplus, are (1) operating expenses, (2) debt service, (3) tax equivalent payments, and (4) reasonable reserves for renewals, replacements, and contingencies. As discussed further below, and on the following page, we noted Pulaski (1) had enough cash on hand to provide a cash reserve of about 8.5 percent and (2) used electric system funds to pay for expenses of the broadband department without TVA approval or loan documents in place.

Cash Reserves

As of June 30, 2009, Pulaski reported about \$3.2 million in its cash and cash equivalent accounts. According to Pulaski personnel, planned capital expenditures for FY 2010 were postponed until FY 2011. Table 2 shows Pulaski's cash reserves were about 8.5 percent, which is slightly above TVA's established guidelines for adequate cash reserves of 5 to 8 percent.⁶

Pulaski's Cash Accounts and Cash Ratio

	Cash and Cash Equivalents
FY 2009	\$3,193,768
Cash Ratio	8.47%

Table 2

⁶ TVA reviews the cash ratios of distributors as part of its regulatory rate review function. Cash ratio is calculated as follows:
$$\frac{\text{Cash} + \text{Cash Equivalents}}{\text{Total Variable Expenses (Operations and Maintenance + Purchased Power)}}$$

According to TVA records, over the past five years Pulaski was approved for rate increases in 2005 and 2006. Table 3 shows the rate increases received by Pulaski and the cash position and cash ratio at June 30 prior to the effective date of the rate increase.

Pulaski's Rate Increases, Cash Position, and Cash Ratio

Cash on Hand Equivalent to an 8% Cash Ratio	Cash and Cash Equivalents ⁷ and Cash Ratio	Rate Increase ⁸		
		Additional Revenue	Percent	Effective Date
\$2,092,004	\$4,211,210 (CR = 16.10%)	\$691,247	2.34%	10/1/2005
\$2,444,509	\$4,431,085 (CR = 14.50%)	\$179,580	0.61%	10/1/2006

Table 3

Discussions with Pulaski management indicated their operating philosophy is to consider debt for projects of lasting value or those necessary to respond to system growth.

Use of Funds for Broadband Business

We found Pulaski (1) used electric system funds to pay for expenses of the broadband department without approval from TVA and (2) did not have loan documents in place between the electric department and the broadband department that specified interest rates, payment amount, and recourse protections. Without an executed loan document, the electric department has no legal recourse to recover amounts expended to fund the broadband department.

In 2007, Pulaski established its broadband department. Since 2007, the electric department has paid for all broadband expenses exceeding revenues in a given year. The expenses paid by the electric department, on behalf of the broadband department, were tracked in a separate account. Pulaski personnel informed us interest was not being charged to the broadband department for use of the electric system funds. The balance due from the broadband department to the electric department was highest as of June 30, 2007, at \$704,805 and lowest as of June 30, 2010, at \$9,566.

As previously stated, under the TVA power contract, approved uses of revenues from electric system operations, including any surplus, are (1) operating expenses, (2) debt service, (3) tax equivalent payments, and (4) reasonable reserves for renewals, replacements, and contingencies. The TVA power contract also states Pulaski is prohibited against furnishing, advancing, lending, pledging, or otherwise diverting electric system funds, revenues, credit, or

⁷ The cash and cash equivalents and cash ratio were computed based on information from Pulaski's annual report as of June 30 prior to the effective date of the rate increase.

⁸ These are the rate increases requested by and approved for the distributor. These increases do not include any rate increases or decreases made by TVA, including fuel cost adjustments, which were passed through by the distributor to the customer.

property to other departments. TVA allows distributors to request approval to use electric funds for nonelectric purposes. If approved, TVA and the distributor put appropriate protections in place, such as a joint use agreement and loan agreement.

In March 2008, Pulaski sought approval from TVA for the electric department to loan the broadband department up to \$2,000,000 to be used for capital expenditures and working capital. However, Pulaski personnel decided the loan would not be necessary and did not pursue approval from TVA. Pulaski personnel stated no formal loan or line of credit agreements with interest rates, payment terms, electric department recourse, etc., had been established between the electric department and the broadband department.

OTHER CONTRACT COMPLIANCE ISSUES

We noted four instances where Pulaski was not meeting the requirements of the power contract with TVA. Specifically, we found Pulaski did not (1) allocate certain costs to other city departments in accordance with the last TVA joint cost study, (2) obtain required applications for customers receiving the Small Manufacturing Credit (SMC), (3) correctly calculate the Enhanced Growth Credit (EGC) for all customers, and (4) maintain required EGC documentation. Below is further discussion on these items.

Allocation of Joint Costs

We found Pulaski did not allocate joint costs in accordance with the last TVA joint cost allocation study, which occurred in 1988. Specifically, the joint cost study addressed how costs associated with billing services provided for other city departments should be charged to the city. The 1988 joint cost study set an amount to be charged to the city for each bill sent and collected on behalf of the water, sanitation, and natural gas departments. In 2007, Pulaski negotiated with the city to increase the per bill amounts by 3 percent; however, TVA has not approved the increase. Under the power contract, the distributor is allowed to “use property and personnel jointly for the electric system and other operations, subject to agreement between Municipality and TVA as to appropriate allocations.”

When Pulaski entered into the broadband cable and Internet business in 2007, a cost allocation manual was prepared by Pulaski and approved by TVA for the allocation of costs between the electric and broadband departments. We found the allocations between the electric and broadband departments appeared reasonable and were consistently applied.

SMC Applications

We found all seven customers receiving the SMC did not complete the required application for the credit, and Pulaski did not obtain TVA approval that the customer was eligible to receive the credit. According to Pulaski personnel, the distributor did not require applications for the SMC, and the credit was automatically applied if a customer's demand exceeded 1,000 kW in a given month. Under the agreement between Pulaski and TVA, "credits shall not be allowed by distributor for any account until a completed application is received and approved by TVA." According to the Schedule 1s for the audit period, the seven customers received credits totaling \$1,250,131. Without the completed application, we were unable to determine if any of the customers would not have been eligible for the credit and if so, the amount that was improperly credited to the customer by Pulaski and to Pulaski by TVA.

EGC Calculation

We found the EGC was calculated incorrectly for six of the seven customers receiving the credit, which resulted in Pulaski (1) including about \$4,400 in credits on the Schedule 1s that were not due and (2) applying an estimated total of \$4,000 in credits that were not due to customers. In addition, we noted during the period October 2008 through March 2009 Pulaski may have (1) included about \$7,800 in credits on the Schedule 1s that were not due and (2) applied approximately \$7,100 in credits that were not due to customers. Specifically, we found:

- The EGC agreement states the credit is applied to each kW of actual firm demand,⁹ excluding any kW in excess of contract demand.¹⁰ Pulaski personnel stated their understanding of the application of the credit was if a customer's metered demand¹¹ exceeded the contract demand, then the customer was not eligible to receive any of the EGC for that month. Therefore, when one customer had metered demand exceeding their contract demand, Pulaski did not give the customer credit for the portion of actual firm demand that was not in excess of the contract demand. We estimated over the audit period Pulaski should have (1) included an additional \$4,900 in credits on the Schedule 1s and (2) applied an additional \$4,500 in credits to the customer.

⁹ According to the EGC agreement between Pulaski and TVA, actual firm demand under standard service is equal to the highest billing demand for firm power in any month computed under the Power Supply Contract but without regard to the exception language (Demand Ratchet) set out in the section headed "Determination of Demand" of that rate schedule. Firm power is defined as "power or power producing capacity intended to be available at all times during the period covered by a commitment to deliver."

¹⁰ According to the EGC agreement between Pulaski and TVA, contract demand is the amount of firm power made available to a customer under the customer's power contract.

¹¹ Under the General Power Rate – Schedule GSA adopted by Pulaski, metered demand for any month shall be the highest average during any 30-consecutive-minute period of the month of the load metered in kW.

- The EGC was calculated incorrectly for five additional customers for the month of September 2008. The EGC was applied to these customers' metered demand instead of their actual firm demand. Additionally, the incorrect per kW credit amount was applied for two of these five customers. Pulaski personnel stated the errors were caused by the billing agency transition from SEDC to CSA and were corrected the following month.

According to the EGC agreement between Pulaski and TVA, in the event that information becomes available, which establishes that any retail credits were incorrectly applied to a customer's bill for any reason, the distributor and TVA shall fully cooperate in (1) making appropriate adjustments to the retail power bill, (2) endeavoring to collect from the customer any amounts due as a result of the adjustment to the retail bill, and (3) making appropriate adjustments to the wholesale power bill to pass through to TVA amounts collected from the customer.

Pulaski did not request refunds of the erroneous credit amounts from customers. We estimated in September 2008 Pulaski (1) included about \$11,600 in credits on the Schedule 1 that were not due and (2) applied about \$10,600 in credits to customers that were not due.

- For one of the five customers noted above, the EGC was not applied in accordance with the effective date of the customer's participation agreement. The effective date of the participation agreement was November 2004; however, Pulaski began applying the credit in October 2004. The customer chose an eight-year declining credit where the credit amount per kW is decreased annually. Therefore, application of the annual adjustment to the credit amount was made one month early each October. We estimated over the audit period Pulaski should have (1) included an additional \$2,300 in credits on the Schedule 1s and (2) applied an additional \$2,100 in credits to customers.
- Pulaski may have miscalculated the EGC during the period October 2008 through March 2009. Our recalculation of the EGC indicated Pulaski may have (1) included about \$7,800 in credits on the Schedule 1s that were not due and (2) applied about \$7,100 in credits to customers that were not due. Pulaski management is researching the cause of the discrepancy.

Pulaski is investigating the issues noted and/or whether adjustments were made to the Schedule 1 to return credits incorrectly applied to TVA.

EGC Documentation

Pulaski did not maintain the required participation agreement for one of the seven customers receiving the EGC. According to the EGC agreement between Pulaski and TVA, the distributor shall enter into a participation agreement with each qualifying customer. The participation agreement includes necessary information for calculation of the credit and a certification of the customer's eligibility. We noted the remaining documentation necessary to receive the credit and other eligibility requirements were met for this customer.

TVA OVERSIGHT OPPORTUNITIES

We found opportunities to enhance TVA's oversight of this distributor; however, the issues noted for this distributor were the same as those reported in previous Office of the Inspector General (OIG) distributor reports. Specifically, we noted TVA has not:

- Performed a joint cost study in over 20 years when the TVA Accountant's Reference Manual calls for one to be performed every three to four years or when major changes occur that affect joint operations.
- Adequately defined the process for granting the SMC to ensure proper documentation, including evidence of approval, is submitted and maintained.
- Provided definitive guidance for distributors on what constitutes prudent expenditures.

In response to the previous reports, TVA agreed to take corrective actions on these issues. Full discussion of these issues and TVA's planned actions can be found in prior OIG distributor reports on our Web site, www.oig.tva.gov.

RECOMMENDATIONS

We recommend the Group President, Strategy and External Relations (S&ER), work with Pulaski to improve compliance with the contract. Specifically, Pulaski should:

1. Correct customer misclassifications identified and implement procedures to assist in identifying accounts that need to be reclassified as commercial when service starts or changes to a nonresidential type (i.e., business or a separately metered structure).

Pulaski's Response – Pulaski conducted field inspections and notified customers that their accounts are being moved to GSA Part 1 where applicable. Pulaski also stated controls are in place to determine the appropriate classification for new facilities, and they believe it is unlikely this error will be common in the future. See Appendix B for Pulaski's complete response.

TVA Management's Comments – TVA agreed that electric service should be provided in accordance with the availability provisions of the rate schedules. The target completion date for this is September 2011. See Appendix C for TVA's complete response.

Auditor's Response – The OIG concurs with the actions taken by Pulaski.

2. Request approval from TVA to use electric system funds for support of the broadband department.

Pulaski's Response – Pulaski is working with TVA to execute an agreement that fully complies with the requirements of the wholesale power contract. See Appendix B for Pulaski's complete response.

TVA Management's Comments –TVA stated that if the distributor proposes to use electric system funds for the purposes set forth in the power contract, TVA would be happy to work with the distributor to put in place agreements to help prevent misuse of electric system funds or assets in violation of the standard power contract provisions and to ensure compliance with the standard use of revenues provisions in Section 6 of the power contract and other standard provisions of the power contract. The target completion date for this is September 2011. See Appendix C for TVA's complete response.

Auditor's Response – The OIG concurs with the planned actions.

3. Execute loan documents between the electric department and broadband department that include interest rates to be paid by the broadband department, terms for payback, recourse available to the electric department if the broadband department is unable to make payment on a timely basis, and any other protections necessary to protect involved parties including the electric rate payer.

Pulaski's Response – Pulaski is working with TVA to execute a loan agreement that includes interest on the funds owed to the electric division. See Appendix B for Pulaski's complete response.

TVA Management's Comments – TVA agreed that to the extent that such loans are an appropriate investment of the electric department's reserve funds, the distributor should execute loan documents to cover the terms under which the loan from the electric department to the broadband department is being made. TVA and Pulaski had started to process a loan request from the electric division to the broadband division. This process will be restarted, and formal approval as well as loan documents will be executed. The target completion date for this is September 2011. See Appendix C for TVA's complete response.

Auditor's Response – The OIG concurs with the planned actions.

4. Obtain proper documentation for any customers receiving credits under a TVA credit program, such as the SMC and EGC.

Pulaski's Response – Pulaski is working with customers to complete the SMC applications. Pulaski also will work with TVA on how to best resolve missing EGC documentation. See Appendix B for Pulaski's complete response.

TVA Management's Comments – TVA agreed that the distributor should obtain proper documentation for customers receiving credits under a TVA credit program, such as the SMC and EGC. The target completion date for this is September 2011. See Appendix C for TVA's complete response.

Auditor's Response – The OIG concurs with the planned actions.

5. Implement a process to ensure the EGC is calculated in accordance with customer agreements.

Pulaski's Response – Pulaski has contacted its billing agency and confirmed the EGC is calculated using the customer's measured demand. In addition, Pulaski believes the reported miscalculations revolve around the fact that Pulaski initiated EGCs on the month listed as the first eligible month on the TVA award letter, which is a different month than the effective date on the customer's EGC Participation Agreement. See Appendix B for Pulaski's complete response.

TVA Management's Comments – TVA agreed that the distributor should calculate the EGC in accordance with customer agreements. The target completion date for this is September 2011. See Appendix C for TVA's complete response.

Auditor's Response – The OIG concurs with the actions taken by Pulaski.

The Group President, S&ER, should:

6. Review amounts associated with the demand calculation error and return overpayments to Pulaski.

TVA Management's Comments – TVA agreed that any billing amounts incorrectly calculated should be reviewed and credited/debited correctly to parties affected. TVA has reviewed the demand calculation, and the demand calculation error resulting in an overpayment to TVA has been corrected. See Appendix C for TVA's complete response.

Auditor's Response – The OIG concurs with the actions taken by TVA.

7. Review the SMC and EGC and recover any amounts incorrectly credited to Pulaski.

TVA Management's Comments – TVA agreed that any SMC and EGC calculations incorrectly calculated should be reviewed and credited/debited correctly to parties affected. The target completion date for this is September 2011. See Appendix C for TVA's complete response.

Auditor's Response – The OIG concurs with the planned actions.

OBJECTIVE, SCOPE, AND METHODOLOGY

This audit was initiated as a part of our annual workplan. The objective was to determine compliance with key provisions of the power contract between the Tennessee Valley Authority (TVA) and Pulaski Electric System including:

- Proper reporting of electric sales by customer class to facilitate proper revenue recognition and billing by TVA.
- Nondiscrimination in providing power to members of the same rate class.
- Use of revenues, including any surplus, for approved purposes, such as:
 - Operating expenses
 - Debt service
 - Tax equivalent payments
 - Reasonable reserves for renewals, replacements, and contingencies

To achieve our objective, we:

- Obtained Pulaski electronic billing information from Southeastern Data Corporation and Central Service Association (CSA) for the audit period. The information was not complete because CSA does not maintain historical rate information for inactive customers. We used the information available to generate reports of exceptions related to classification and metering and conducted further review of documentation or discussed with management.
- Limited our work on internal controls to those control deficiencies identified as contributing to noted instances of noncompliance with the power contract and/or the TVA Act.
- Determined through inquiry and review of documentation whether Pulaski had any nonelectric, system-related business interests supported by electric system funds.
- Reviewed disbursements to determine if electric system funds were used for any items not allowed under the TVA power contract.
- Reviewed cash and cash equivalents in relation to planned capital expenditures and other business uses of cash.
- Used nonstatistical sampling methods as needed to perform the tests above.

When evaluating results of our audit work, we used both qualitative and quantitative factors when considering the significance of an item. For the purposes of this audit, the quantitative factor considered in determining an item's significance is whether the item exceeds 3 percent of the average annual purchased power from TVA for the audit period. Also for the purposes of this audit, we considered any errors identified as systemic or intentional as significant.

OBJECTIVE, SCOPE, AND METHODOLOGY (cont.)

The scope of the review was for the period July 2007 through June 2009. Fieldwork was conducted May 2010 through July 2010. This performance audit was conducted in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.



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September 23, 2010

Mr. Robert E. Martin
Assistant Inspector General
Tennessee Valley Authority
Office of Inspector General
400 Summit Hill Drive
Knoxville, TN 37902-1401

Dear Mr. Martin:

Pulaski Electric System (PES) has received a draft report for the Distributor Review Audit prepared by your office dated August 31, 2010. PES appreciates the skill and professionalism of the audit team consisting of Ms. Simmons, Ms. Monroe and Mr. Underwood.

PES strives to maintain accurate records and properly comply with all pertinent regulations. We do not tolerate sloppy or ineffective work that negatively affects our customers. However, from time to time circumstances and simple mistakes may cause an error, but rest assured we address and resolve problems quickly once they are discovered.

Customer Classification Issues

The report noted that 43 electric accounts were misclassified as RS when they should have been listed as GSA-1. We have conducted field inspections and sent letters to all the affected customers notifying them that their accounts are being moved to the GSA-1 rate class. A few customers have provided satisfactory evidence that warrants keeping them on the RS schedule, but most have been reclassified. We have controls in place to determine the appropriate classification for new facilities served by PES, and we believe it is unlikely this error will be common in the future.

Your report also noted that one account did not transfer from GSA-1 to GSA-2 after the account set a demand of 50.01 kW. We have discussed this issue with our billing software provider, Central Services Association (CSA), and they are working on addressing this issue.

Use of Funds for Broadband Business

The report stated that PES makes use of some electric funds for broadband operations. However, I feel it is necessary to state clearly that PES does not subsidize its broadband operations with electric revenue. Both the electric division and the broadband division operate through the same accounts payable. At the end of each month, the PES accounting department determines the amount of money that is owed to one division or

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the other. At present, the amount the broadband division owes the electric division is quite small, but it can grow based on financial circumstances.

PES is currently working with TVA to execute a loan agreement that calculates interest on the funds owed to the electric division. It is our intention to execute an agreement with TVA that fully complies with the requirements of the wholesale power contract.

Allocation of Joint Costs

The report noted that PES currently provides services to the City of Pulaski related to its water, wastewater, natural gas and sanitation departments. The report noted that the last joint cost study for these services was conducted in 1988. PES intends to work with TVA in the future when they are prepared to conduct an updated joint cost study for the services that PES provides other city departments.

SMC Applications

It was stated that PES had not completed the required application for seven customers receiving the Small Manufacturing Credit (SMC). Honestly, no one at PES was aware that an application was required. We have now received the application from TVA, and we are working with all seven customers to complete the applications.

EGC Calculations

It was noted that PES had miscalculated some Enhanced Growth Credit (EGC) payments. The report states that PES personnel misunderstood how the EGC calculation is affected when a customer's metered demand exceeds its contract demand. PES has contacted CSA and confirmed that the CSA billing system calculates the EGC using the customer's measured demand. Measured demand is defined as the higher of either the standard metered demand or 85% of the kVA demand (for loads under 5,000kVA).

PES transitioned from the SEDC billing system to the CSA billing system in September of 2008. During this transition, we misapplied Enhanced Growth Credits during the month of September 2008 for customers who elected to receive the declining credit. This error resulted in some customer's receiving a larger credit than was appropriate. This also resulted in an inaccurate Schedule 1. PES will work with TVA to adjust the Schedule 1 to reflect the proper amount. By our calculations, this will result in an adjustment to the Schedule 1 of \$14,030.81.

It was stated that PES had some other EGC miscalculations; however, we believe that the reported miscalculations revolve around the fact that PES initiated EGCs on the month listed as the "first eligible month" on the TVA award letter. For some customers, the "first eligible month" is a different month than the effective date of the customer's EGC Participation Agreement. However, we understood that we were correct in starting credits on the "first eligible month" since it was clearly identified as such.

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Finally, PES could not locate a signed EGC Participation Agreement for one customer receiving an EGC. PES has the customer's signed and dated certification statement, but we do not have the Participation Agreement or the TVA award letter. We will work with TVA on how to best resolve this matter.

Again, PES takes any error seriously. We will continue to strive to provide accurate and complete data, without mistakes or omissions.

Regards,



R. Wesley Kelley
President/CEO

December 7, 2010

Robert E. Martin, ET 3C-K

REVISED RESPONSE TO DRAFT AUDIT REPORT 2010-13021 – DISTRIBUTOR
REVIEW OF PULASKI ELECTRIC SYSTEM

This is in response to your memorandum dated August 31, 2010. We have revised our response to recommendation number 2. The responses to all other recommendations are unchanged.

Agreement or disagreement with all facts, conclusions, and recommendations are stated first, followed by the actions planned or taken and completion dates for each of the recommendations.

Recommendations

1. Correct customer misclassifications identified and implement procedures to assist in identifying accounts that need to be classified as commercial when services starts or changes to a nonresidential type.
 - o TVA management agrees that electric service should be provided in accordance with the availability provisions of the rate schedules.
 - o **Actions taken or planned, and completion dates:** The distributor has stated that they plan to contact the customers that are classified incorrectly and reclassify the accounts correctly. The target completion date for this is September 2011.
2. Request approval from TVA to use electric system funds for the support of the broadband department.
 - o If the distributor proposes to use electric system funds for the purposes set forth in the power contract, TVA would be happy to work with the distributor to put in place agreements to help prevent misuse of electric system funds or assets in violation of the standard power contract provisions and to ensure compliance with the standard use of revenues provisions in section 6 of the power contract and other standard provisions of the power contract.
 - o **Actions taken or planned, and completion dates:** See response to recommendation number 3.
3. Execute loan documents between the electric department and broadband department that includes interest rates to be paid by the broadband department, terms for payback, recourse available to the electric department if the broadband department is unable to make payment on a timely basis, and other protections necessary to protect involved parties including the electric rate payer.

Robert E. Martin
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- To the extent that such loans are an appropriate investment of the electric department's reserve funds, TVA management agrees that the distributor should execute loan documents to cover the terms under which the loan from the electric department to the broadband department is being made.
 - **Actions taken or planned, and completion dates:** TVA and Pulaski had started to process a loan request from the electric division to the broadband division. This process will be restarted and formal approval as well as loan documents will be executed. The target completion date for this is September 2011.
4. Obtain proper documentation for any customers receiving credits under a TVA credit program, such as the small manufacturing credit (SMC) and an enhanced growth credit (EGC).
- TVA management agrees that the distributor should obtain proper documentation for customers receiving credits under a TVA credit program, such as the SMC and EGC.
 - **Actions taken or planned, and completion dates:** Pulaski plans on obtaining proper documentation from the seven SMC and one EGC customer receiving these credits. The target completion date for this is September 2011.
5. Implement a process to ensure the EGC is calculated in accordance with customer agreements.
- TVA management agrees that the distributor should calculate the EGC in accordance with customer agreements.
 - **Actions taken or planned, and completion dates:** Pulaski is investigating the issues noted on the EGC calculation and will take action to correct any errors found. The target completion date for this is September 2011.

The Group President, Strategy and External Relations, should:

6. Review amounts associated with the demand calculation error and return the overpayments to Pulaski.
- TVA management agrees that any billing amounts incorrectly calculated should be reviewed and correctly credited/debited to parties affected.
 - **Actions taken or planned, and completion dates:** TVA has reviewed the demand calculation, and the demand calculation error resulting in an overpayment to TVA has been corrected on the distributor's June Schedule 1- \$109,067.23.

Robert E. Martin
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7. Review the SMC and EGC and recover any amounts incorrectly credited to Pulaski.
 - o TVA management agrees that any SMC and EGC calculations incorrectly calculated should be reviewed and correctly credited/debited to parties affected. **Actions taken or planned, and completion dates:** TVA and the distributor are working to review the SMC and EGC errors and make corrections as needed. The target completion date for this September 2011.



John G. Trawick
Senior Vice President
Commercial Operations & Pricing
WT 3D-K

VB:TP

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