Memorandum from the Office of the Inspector General

July 7, 2011

Kimberly S. Greene, WT 7B-K

REQUEST FOR FINAL ACTION – AUDIT 2010-13661 – DISTRIBUTOR AUDIT OF SEVIER COUNTY 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 me or Richard C. Underwood, Acting Director, Distributor Audits, at (423) 785-4824. 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

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Attachment
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OIG File No. 2010-13661

Office of the Inspector General

Audit Report

To the Group President, Strategy and External Relations

DISTRIBUTOR AUDIT OF SEVIER COUNTY ELECTRIC SYSTEM

Audit Team
Stephanie L. Simmons
Jessica L. Monroe

Audit 2010-13661
July 7, 2011

ACRONYMS AND ABBREVIATIONS

FY	Fiscal Year
kW	Kilowatt
OIG	Office of the Inspector General
SEDC	Southeastern Data Cooperative
TVA	Tennessee Valley Authority

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APPENDICES

Audit 2010-13661 – Sevier County Electric System

EXECUTIVE SUMMARY

Why the OIG Did This Audit

As part of our annual audit plan, the OIG (Office of the Inspector General) audited Sevier County Electric System's compliance with the power contract between the Tennessee Valley Authority (TVA) and Sevier, a power distributor based in Sevierville, Tennessee, for the audit period July 2008 through June 2010. Key contract provisions included (1) proper reporting of electric sales, (2) nondiscrimination in providing power, and (3) use of electric revenue for approved purposes. For fiscal year 2010, Sevier provided power to approximately 54,000 customers that resulted in electric sales revenue of approximately $134 million.

What the OIG Found

Sevier generally appears to be in compliance with the contract provisions for (1) proper reporting of electric sales, (2) nondiscrimination in providing power, and (3) use of electric revenue for approved purposes. However, areas for improvement in contract compliance were noted. Specifically, we found:

- 983 customer accounts that appeared to be potentially misclassified. Sevier reviewed a sample of 159 of these customer accounts and determined 28 accounts (17.6 percent) were misclassified. Although the monetary effect on Sevier and TVA was not significant, the misclassification of customer accounts could impact compliance with the proper reporting of electric sales and/or nondiscrimination power contract provisions. (Note: Sevier subsequently reclassified the 28 customer accounts.)
- Customer contracts were not obtained for some customers as required by TVA.

What the OIG Recommends

We recommend the Group President, Strategy and External Relations, work with Sevier to (1) implement procedures to assist in identifying and preventing classification issues, (2) review the remaining accounts identified as being potentially misclassified and correct where applicable, and (3) improve compliance with power contract provisions related to customer contracts.

Management's Comments

Sevier and TVA management agreed with our recommendations and have taken or are taking actions to address the recommendations. The target completion date for all corrective actions is June 2012. See Appendix B for Sevier's complete response and Appendix C for TVA's complete response.

Auditor's Response

The OIG concurs with actions taken and planned by Sevier and TVA to correct the identified issue.

BACKGROUND

Sevier County Electric System is a power distributor for the Tennessee Valley Authority (TVA) based in Sevierville, Tennessee, with revenues from electric sales of approximately $134 million in fiscal year (FY) 2010. Prior to April 1, 2011, TVA relied 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 Sevier as of June 2010.

Sevier's Customer Mix and Power Statistics as of June 2010

Customer Classification	Number of Customers	Revenue	Kilowatt Hours Sold
Residential	32,832	$44,714,741	503,772,437
General Power – 50 Kilowatt (kW) and Under (Commercial)	19,461	38,903,014	376,014,029
General Power – Over 50 kW (Commercial or Manufacturing)	1,253	48,524,881	564,523,880
Street and Athletic	143	565,877	7,010,814
Outdoor Lighting[1]	385	969,515	6,464,110
Unbilled Revenue		793,227	8,438,585
Total	**54,074**	**$134,471,255**	**1,457,785,270**

Table 1

TVA's distributors are required to establish control processes over customer setup, rate application, and measurement of usage to ensure accurate and complete reporting to TVA. Sevier, like many other distributors, outsources its billing and invoice processing to a third-party processor, Southeastern Data Cooperative (SEDC). Sevier uses SEDC systems to establish and set up new customers, input customer meter information, perform the monthly billing process, and maintain customer account information. Additionally, SEDC provides Sevier with management reporting capabilities (e.g., exception reports) designed to ensure the accuracy and completeness of the customer invoice and the purchased power invoice (Schedule 1) to TVA. All other accounting and finance responsibilities are handled by Sevier, which has a Board of Directors who provide oversight and a Superintendent and management team who manage the daily activities.

[1] The "Number of Customers" represents those customers who only have Outdoor Lighting accounts with Sevier at June 30, 2010. In addition, another 4,176 customers had Outdoor Lighting accounts as well as accounts for other services. However, the totals for "Revenue" and "Kilowatt Hours Sold" include both categories of Outdoor Lighting customers.

FINDINGS

Sevier generally appears to be in compliance with the contract provisions for (1) proper reporting of electric sales, (2) nondiscrimination in providing power, and (3) use of electric revenue for approved purposes. However, we found improvements were needed (1) in customer classification that could impact compliance with the proper reporting of electric sales and/or nondiscrimination power contract provisions and (2) to comply with contract provisions related to obtaining customer contracts as required by TVA.

As of June 30, 2010, Sevier had enough cash on hand to cover planned FY 2011 capital expenditures and provide a cash reserve equivalent to a cash ratio of about 7 percent, which is within TVA's established guidelines for an adequate cash ratio of 5 to 8 percent.

IMPROPERLY CLASSIFIED CUSTOMERS IDENTIFIED

We identified customer classification issues that could impact the (1) proper reporting of electric sales and/or (2) ability to ensure nondiscrimination in providing power to members of the same rate class.[2] The monetary effect on Sevier and TVA was not significant. However, correcting customer 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.

We noted 983 customer accounts that appeared to be potentially misclassified based on customer name and/or the existence of multiple accounts at the same address. At our request, Sevier reviewed a sample of 159 of these customer accounts that we judgmentally selected and determined 28 accounts (17.6 percent) were incorrectly classified. The 28 customer accounts were classified under the Residential Rate – Schedule RS,[3] although they should have been classified under the General Power Rate – Schedule GSA.[4] The GSA

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2 Section 5 Resale Rates subsection (a) of the power contract between TVA and the Municipality of Sevierville states "…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."

3 Under the Residential Rate – Schedule RS, customers are classified based on the following requirement: "This rate shall apply only to electric service to a single-family dwelling (including its appurtenances if served through the same meter), where the major use of electricity is for domestic purposes such as lighting, household appliances, and the personal comfort and convenience of those residing herein."

4 Under the General Power Rate – Schedule GSA, 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) the customer's monthly energy takings for any month during such period do not exceed 15,000 kilowatt hours.
- 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 kilowatt hours.
- 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.

schedule is divided into three parts—Part 1, Part 2, and Part 3—based on electric usage and demand.[5] The monetary impact of the classification issues detailed below would not be significant to Sevier or TVA. Specifically, we noted:

- Seventeen customer accounts were separately metered structures, such as a barn, garage, workshop, maintenance room, etc., that should be classified within the appropriate part of the GSA schedule based on usage and demand takings.
- Five customer accounts were overnight rentals. According to Sevier policy, overnight rental accounts should be classified within the appropriate part of the GSA schedule based on usage and demand takings.
- Three customer accounts were group homes. According to TVA personnel, a group home is not considered a single-family dwelling; therefore, the RS schedule does not apply. Group homes should be classified within the appropriate part of the GSA schedule based on usage and demand takings.
- Three customer accounts were businesses that should have been classified within the appropriate part of the GSA schedule based on usage and demand takings.

According to Sevier personnel, the 28 customer accounts have been reclassified from residential to the appropriate part of the GSA schedule.

CUSTOMER CONTRACTS NOT OBTAINED CONSISTENTLY

Sevier did not have a customer contract on file for six of the fifteen GSA Part 3 or higher customer accounts. The power contract requires all customers who exceed 50 kW per month to sign a formal contract. However, in February 2011 TVA issued guidance to distributors changing the contract requirement threshold from 50 kW to 1 megawatt with flexibility for distributors to implement a lower limit. The guidance also stated currently effective, signed contracts should be retained in customer files for all customer accounts that meet the threshold requirement. Each customer contract includes a contract demand that is used in placing the customer in the correct classification. Contract demand is also used in calculating the customer's billed demand and minimum bill.

[5] 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 Dieziger, 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."

CASH RESERVES FALL WITHIN TVA GUIDELINES FOR ADEQUATE CASH RATIO

Section 6 of the TVA power contract, “Use of Revenues,” states approved uses of revenue from electric system operations, including any surplus, are (1) operating expenses, (2) debt service, (3) reasonable reserves for renewals, replacements, and contingencies, and (4) tax equivalent payments. As discussed below, we found Sevier had enough cash on hand at June 30, 2010, to cover planned FY 2011 capital expenditures and provide a cash reserve equivalent to a cash ratio of about 7 percent, which is within TVA’s established guidelines for an adequate cash ratio of 5 to 8 percent.

As of June 30, 2010, Sevier reported about $18.1 million in its cash and cash equivalent accounts.[6] Sevier management provided the planned FY 2011 capital expenditures, as shown in Table 2 below.

Sevier's FY 2011 Planned Capital Expenditures

Capital Expenditure Plans	Project Cost
Substations	$4,000,000
Line Extensions	5,000,000
Trucks	392,000
Other General Items	218,000
Total Planned Capital Expenditures	**$9,610,000**

Table 2

When compared to Sevier's planned capital expenditures for FY 2011, the balance in Sevier's cash accounts at June 30, 2010, was enough to pay for these items and leave about $8.5 million as a reserve. Table 3 shows Sevier's cash ratio was about 15 percent before accounting for planned FY 2011 capital expenditures and about 7 percent after accounting for them.

Sevier's Cash Accounts and Cash Ratio

	Cash and Cash Equivalents	FY 2011 Planned Capital Expenditures	Reserve after Planned Capital Expenditures
FY 2010	$18,127,197	$9,610,000	$8,517,197
Cash Ratio	14.92%		7.01%

Table 3

[6] TVA reviews the cash ratios of distributors as part of its regulatory rate review function. Cash ratio is calculated as follows:

$$\frac{\text{Cash + Cash Equivalents}}{\text{Total Variable Expenses (Operations and Maintenance + Purchased Power)}}$$

According to TVA records, over the past five years Sevier was approved for four rate increases. Table 4 shows the rate increases received by Sevier and the cash position and cash ratio at June 30 prior to the effective date of each rate increase.

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

Cash on Hand Equivalent to an 8% Cash Ratio	Cash and Cash Equivalents[7] as Reported and Cash Ratio	Rate Increase[8]		
		Additional Revenue	Percent	Effective Date
$9,717,776	$15,327,197 (CR = 12.62%)	$966	0.001%	1/1/2010
$10,342,908	$11,175,829 (CR = 8.64%)	$6,436	0.01%	9/1/2008
$8,759,612	$8,475,725 (CR = 7.74%)	$3,670,923	3.25%	4/1/2008
$8,126,199	$6,398,095 (CR = 6.30%)	$3,946,670	4.55%	10/1/2006

Table 4

Discussions with Sevier management indicated its operating philosophy is generally conservative. Sevier prefers to keep a low debt to cash ratio, but management is comfortable entering into debt, where appropriate. Sevier's goal is to maintain 40 to 50 days cash on hand.

RECOMMENDATIONS

We recommend the Group President, Strategy and External Relations, work with Sevier to improve compliance with the contract provisions. Specifically, Sevier should:

1. Implement procedures to assist in identifying accounts that need to be reclassified and prevent classification issues from recurring.

   Sevier's Response – Procedures are in place to help prevent misclassifications of accounts. The accounts that were identified in the audit were aged accounts that had not or were not addressed during our conversion to SEDC. Today, during the sign up of a new account, the Customer Service Representatives ask specific questions as to the intent of the account, and once Sevier personnel make a site visit, they look for any discrepancies as to what the meter order states. Also, the sign up requires the customer to specifically check the intent use of the electricity. On an

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7 The cash and cash equivalents and cash ratio were computed based on information from Sevier'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.

annual basis, Sevier staff will review reports that may reflect multiple accounts for one location address or corporate accounts with residential classifications. See Appendix B for Sevier's complete response.

TVA Management's Comments – TVA management agreed that the power contract requires consistent classification of customers in accordance with the provisions of the applicable rate schedule. TVA will discuss this recommendation with Sevier. The target completion date for this is June 2012. See Appendix C for TVA's complete response.

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

2. Review the remaining accounts identified by TVA's Office of the Inspector General as potentially misclassified based on customer name and/or the existence of multiple accounts at the same address and correct misclassifications where applicable.

   Sevier's Response – Of the 983 customer accounts identified as potentially misclassified, we eliminated 388 customers from the list based on the intent of actual electric usage. These accounts were apartment and condominium complexes that temporarily connect into the managing entities' name until a new tenant moves in or were a foreclosed property that now resides in a financial institution's name. This now brings the total number of customers to be reviewed to 436 (159 were reviewed, with 28 being corrected as mentioned in the audit statement). The balance of these accounts will be reviewed by System personnel, and any misclassification will be corrected. See Appendix B for Sevier's complete response.

   TVA Management's Comments – TVA management agreed that the power contract requires consistent classification of customers in accordance with the provisions of the applicable rate schedule. TVA will discuss this recommendation with Sevier. The target completion date for this is June 2012. See Appendix C for TVA's complete response.

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

3. Obtain contracts for all customers with actual or contract demand in excess of 1 megawatt.

   Sevier's Response – The System attempted to acquire power contracts on customers with 1 megawatt requirements, where a power contract was not already on file, in early January 2011. On May 31, 2011, we sent a notification letter and contract for signature. See Appendix B for Sevier's complete response.

TVA Management's Comments – TVA management agreed that Sevier should obtain contracts with customers with actual or contract demand in excess of 1 megawatt. Sevier will work with customers whose contract demand exceeds 1 megawatt to obtain signed contracts. The target completion date for this is June 2012. 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 Sevier County 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 electronic billing data for the audit period. To validate the reliability of the billing data, we compared the data to the information reported to TVA on the Schedule 1. No significant differences were noted, therefore the data was deemed reliable.
- Performed queries on data to identify classification, metering, and contract compliance issues. Reviewed results of the queries and, using nonstatistical sampling, selected accounts for further analysis and follow-up to determine whether misclassification, metering issues, or noncompliance with contract requirements occurred. Since nonstatistical sampling was used, projection of the results was not appropriate.
- 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 Sevier had any nonelectric, system-related business interests supported by electric system revenues.
- Obtained disbursements listings for the audit period. Reviewed and analyzed disbursements to identify instances where electric system funds may have been used for purposes not allowed under the TVA power contract. Used nonstatistical sampling to select questionable disbursements for further analysis and follow-up. Since nonstatistical sampling was used, projection of the results was not appropriate.
- Reviewed cash and cash equivalents in relation to planned capital expenditures and other business uses of cash.

OBJECTIVE, SCOPE, AND METHODOLOGY (cont.)

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. For this audit, this amount equaled $3,314,614. Also for the purposes of this audit, we considered any errors identified as systemic or intentional as significant.

The scope of the audit was for the period July 2008 through June 2010. Fieldwork was conducted February 2011 through April 2011 and included visiting Sevier's offices in Sevierville, Tennessee. 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.

SEVIER COUNTY
ELECTRIC SYSTEM
The power behind our community

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June 30, 2011

Robert E. Martin
Assistant Inspector General (Audits and Inspections)
Office of the Inspector General
Tennessee Valley Authority,
400 West Summit Hill Drive,
Knoxville, Tennessee 37902-1401

Dear Mr. Martin,

Please see below Sevier County Electric System's response to the findings within the audit conducted by the Office of the Inspector General.

1. **Implement procedures to assist in identifying accounts that need to be reclassified and prevent classification issues from recurring.** Sevier County Electric System's management response - Procedures are in place to help prevent misclassification of accounts. The accounts that were identified in the audit were aged accounts that had not or were not addressed during our conversion to SEDC. Today, during the sign up of a new account, the CSR's ask specific questions as to the intent of the account and once SCES personnel make a site visit, they look for any discrepancies has to what the meter order states. Also, the sign up requires the customer to specifically check the intent use of the electricity. On an annual basis, Sevier County Electric System staff will review reports that may reflect multiple accounts for one location address or corporate accounts with residential classifications.

2. **Review the remaining accounts identified by TVA's Office of the Inspector General as potentially misclassified based on customer name and/or the existence of multiple accounts at the same address and correct misclassified where applicable.** Sevier County Electric System management is in agreement with the Office of the Inspector General in part on this finding. Of the 983 customer accounts identified as potentially misclassified, we eliminated 388 customers from the list based on the intent of actual electric usage. These accounts were apartment and condominium complexes that rent to tenants on a monthly basis and temporarily connect into the managing entities name until a new tenant moves in or were a foreclosed property that now resides in a financial institutions name. This now brings the total number of customers to be reviewed to 436. (159 were reviewed, with 28 being corrected as mentioned in the audit statement). The balance of these accounts is being reviewed by System personnel and any misclassifications should be corrected by 8/01/2011.

3. **Obtain contracts for all customers with actual or contract demand in excess of 1 MW.** Sevier County Electric System management is in agreement with the Office of the Inspector General's findings pertaining to customer power contracts not obtained consistently. The System attempted to acquire power contracts on customers with 1MW requirements, where a power contract was not already on file, in early January 2011. On May 31, 2011 we sent a notification letter and contract for signature for all accounts that meet the 500 kW or larger requirement. Please see attached sample letter and contract.

Sincerely,

Superintendent

Allen E. Robbins

Secretary/Treasurer

June 30, 2011

Robert E. Martin, ET 3C-K

RESPONSE TO DRAFT AUDIT REPORT 2010-13661 – DISTRIBUTOR AUDIT OF SEVIER COUNTY ELECTRIC SYSTEM

This is in response to your memorandum dated June 1, 2011.

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. Implement procedures to assist in identifying accounts that need to be reclassified and prevent classification issues from recurring.
   - TVA management agrees that the Power Contract requires consistent classification of customers in accordance with the applicable rate schedule.
   - Actions planned or taken, and completion dates: We will discuss this recommendation with the distributor. Target completion date is June 2012.
2. Review the remaining accounts identified by TVA's Office of the Inspector General as potentially misclassified based on customer name and/or the existence of multiple accounts at the same address and correct misclassifications where applicable.
   - TVA management agrees that the Power Contract requires consistent classification of customers in accordance with the applicable rate schedule.
   - Actions planned or taken, and completion dates: We will discuss this recommendation with the distributor. Target completion date is June 2012.
3. Obtain contracts for all customers with actual or contract demand in excess of 1 megawatt.
   - TVA management agrees with this recommendation.
   - Actions planned or taken, and completion dates: The distributor will work with customers whose contract demand exceeds one megawatt to obtain signed contracts. Target completion date is June 2012.

Kim S. Greene

Kimberly S. Greene
Group President
Strategy & External Relations
WT 7B-K

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