August 10, 2010

Kimberly S. Greene, WT 7B-K

REQUEST FOR MANAGEMENT DECISION – AUDIT 2009-12510 – DISTRIBUTOR REVIEW OF ELECTRIC POWER BOARD OF THE CITY OF SCOTTSBORO

Attached is the subject final report for your review and action. We received management decisions on all recommendations except 2, 3, 5, 8, 9, and 18. You are responsible for working with Scottsboro Electric Power Board to determine management’s decision in response to these recommendations. Please advise us of your management decision within 60 days from the date of this report.

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 Andrea L. Williams, Senior Auditor, at (865) 633-7375 or Jill M. Matthews, Deputy Assistant Inspector General, Audits and Support, at (865) 633-7430. We appreciate the courtesy and cooperation received from your staff during the audit.

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

ALW:HAC
Attachment
cc (Attachment):
  Steve Byone, WT 4B-K
  Peyton T. Hairston, Jr., WT 7B-K
  Tom D. Kilgore, WT 7B-K
  Richard W. Moore, ET 4C-K
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  OIG File No. 2009-12510
Audit Report

Office of the Inspector General

To the Group President,
Strategy and External Relations

DISTRIBUTOR REVIEW
OF ELECTRIC POWER
BOARD OF THE CITY OF
SCOTTSBORO

Audit Team
Andrea L. Williams
Stephanie L. Simmons

Audit 2009-12510
August 10, 2010
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APPENDICES

A. OBJECTIVE, SCOPE, AND METHODOLOGY

B. LETTER DATED JUNE 15, 2010, FROM JAMES SANDLIN AND JOHN POWELL

C. MEMORANDUM DATED JULY 8, 2010, FROM KIMBERLY S. GREENE TO ROBERT E. MARTIN
Audit 2009-12510 – Electric Power Board of the City of Scottsboro

EXECUTIVE SUMMARY

Background

In 2002, Tennessee Valley Authority's (TVA) Board of Directors approved and made available to distributors six wholesale power contract flexibility options. One of these available options terminated TVA’s contract authority and obligations regarding retail rates. Four distributors, Scottsboro, Knoxville Utilities Board, Memphis Light, Gas and Water, and Meriwether Lewis Electric Cooperative, were granted this authority. As a result, these distributors have the authority to determine the retail rates charged to its customers with no or limited oversight by TVA. The TVA Board, however, did not relinquish the responsibility to ensure the power purchased is sold and distributed to the ultimate consumer without discrimination among consumers of the same class, and no discriminatory rate, rebate, or other special concession will be made or given to any consumer. According to agreements with Scottsboro, Knoxville, and Memphis, the options were provided (1) because the electric utility industry was undergoing changes and restructuring and (2) to prepare for the prospect of legislation further altering the industry and the relationship between TVA and its distributors.\(^1\) The decision previously made by the TVA Board of Directors to allow the four distributors to regulate their own retail rates significantly increases the reputational risk to TVA surrounding their role as a regulator. The Office of the Inspector General (OIG) will address this issue separately after additional reviews are undertaken.

The OIG performed a review of the Electric Power Board of the City of Scottsboro, Alabama, which is a distributor for TVA power based in Scottsboro, Alabama. Annual revenues from electric sales were approximately $25 million in fiscal year (FY) 2008. Scottsboro also operates a telecommunications department that offers cable, internet, and telephone services. The objective of the review was to determine compliance with key provisions of the power contract between TVA and Scottsboro.

What the OIG Found

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

- **Customer Classification, Metering, and Other Potential Power Discrimination Issues** – We identified nine customer accounts not classified correctly and two metering issues that could impact (1) the proper reporting of electric sales and/or (2) nondiscrimination in providing power to customers. We also identified two other potential power discrimination issues related to Scottsboro (1) providing a specialized industrial rate to only one customer and (2) not passing wholesale Fuel Cost Adjustments and wholesale rate increases/decreases to all customers. We were unable to estimate the monetary effect of all the classification and metering

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\(^1\) The agreement with Meriwether Lewis in 2004 did not specifically state why the option was provided to them.
issues because in some instances information was not available; however, for the one instance where information was available, we estimated Scottsboro owed TVA approximately $88,000 in wholesale demand charges.

- **Use of Revenues** – We found Scottsboro used electric system funds to pay for expenses of the telecommunications department without loan documents in place showing principal and interest payments and recourse protections. As of June 2008 and June 2009, the telecommunications department owed the electric department approximately $544,000 and $560,000, respectively.

In addition, we found Scottsboro had enough cash on hand to cover planned capital projects and provide a cash reserve of about 2 percent; however, this is less than TVA’s established guidelines for adequate cash reserves of 5 to 8 percent. As of June 30, 2008, Scottsboro reported about $2.36 million in cash and planned capital expenditures of about $1.82 million, which left cash reserves of about $544,000.

- **Contract Compliance** – We identified two areas where Scottsboro was not meeting power contract requirements with TVA. Specifically, we found (1) co-mingling of electric department funds and general ledger accounts with the telecommunications department and (2) costs not being allocated according to the most recent joint cost study.

- **Distributor Internal Controls** – We identified four areas where Scottsboro could strengthen internal controls. Specifically, we found improvements could be made in the (1) approval of retail rates, (2) documentation of retail rate schedules, (3) billing practices, and (4) customer contracts.

**TVA Oversight Opportunities** – We identified three opportunities to enhance TVA’s oversight of the distributors, two of which (prudent expenditure guidance and performance of a current joint cost study) were also identified in previous distributor reports. As mentioned earlier, Scottsboro is one of four distributors to which TVA granted retail rate setting authority. For the four distributors with this authority, we found TVA has not developed guidance regarding necessary controls to ensure retail rates are properly designed, approved, and implemented to prevent discrimination or the perception of discrimination in providing power to customers.

**What the OIG Recommends**

We recommend the Group President, Strategy and External Relations (S&ER), take action to ensure Scottsboro (1) remediates classification, metering, and other potential power discrimination issues and institutes controls to prevent the issues from recurring; (2) executes loan documents for internal loans between the electric department and telecommunications department; (3) complies with contract provisions; and (4) improves internal controls.
Executive Summary

In addition, the Group President, S&ER, should (1) develop and provide guidance on controls over designing, approving, and implementing retail rates for distributors who have authority to set their own retail rates and (2) review and recover amounts due to TVA for one customer without a demand meter.

Management’s Comments

Scottsboro agreed with six recommendations, disagreed with seven recommendations, and did not respond to the remaining six recommendations. TVA agreed with 10 recommendations and did not address 11 recommendations related to the resale rates. TVA stated it could not implement the recommendations because TVA does not regulate Scottsboro’s resale rates. In other words, since TVA agreed to give up the wholesale power contract provisions that provided TVA the means by which to mandate requirements related to Scottsboro’s resale rates, TVA currently has no mechanism by which to mandate requirements related to Scottsboro’s resale rates except with respect to taking appropriate action to enforce the contract provisions that prohibit discrimination in the sale and distribution of power. TVA also indicated, at TVA’s request, Scottsboro has agreed to evaluate reinstatement of the retail rate regulation provisions in the power contract. See Appendices B and C for complete responses.

Auditor’s Response

In regard to the six recommendations Scottsboro agreed to implement, we concur with its planned actions. For the remaining recommendations in which Scottsboro disagreed or did not respond to, the OIG maintains that implementation of our recommendations would be beneficial to Scottsboro. Regarding the ten recommendations TVA agreed to implement, we concur with its planned actions. However, in regard to TVA’s contention that because it does not regulate Scottsboro’s resale rates, it cannot implement our recommendation regarding providing guidance on controls over designing, approving, and implementing retail rates for distributors who have authority to set their own retail rates, the OIG maintains that TVA does have responsibility to provide such guidance as part of its responsibility to ensure nondiscrimination. Also, the OIG concurs with TVA’s and Scottsboro’s planned actions to evaluate the reinstatement of the retail rate regulation provisions in the power contract.
BACKGROUND

The Electric Power Board of the City of Scottsboro, Alabama, is a distributor for TVA power based in Scottsboro, Alabama, with revenues from electric sales of approximately $25 million in FY 2008. 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 Scottsboro as of June 2008.

<table>
<thead>
<tr>
<th>Customer Classification</th>
<th>Number of Customers</th>
<th>Revenue</th>
<th>Kilowatt Hours Sold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>6,800</td>
<td>$8,662,276</td>
<td>105,434,709</td>
</tr>
<tr>
<td>General Power – 50 Kilowatt (kW) and Under (Commercial)</td>
<td>1,263</td>
<td>2,346,309</td>
<td>24,611,916</td>
</tr>
<tr>
<td>General Power – Over 50 kW (Commercial or Manufacturing)</td>
<td>223</td>
<td>13,383,709</td>
<td>184,309,307</td>
</tr>
<tr>
<td>Street and Athletic</td>
<td>25</td>
<td>289,742</td>
<td>2,592,792</td>
</tr>
<tr>
<td>Outdoor Lighting</td>
<td>2</td>
<td>282,059</td>
<td>2,400,452</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>8,311</strong></td>
<td><strong>$24,964,095</strong></td>
<td><strong>319,349,176</strong></td>
</tr>
</tbody>
</table>

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. Scottsboro, like many other distributors, outsources its billing and invoice processing to a third-party processor, Central Service Association (CSA). Scottsboro 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, CSA provides Scottsboro with management reporting capabilities (e.g., exception reports). All other accounting and finance responsibilities are handled by Scottsboro, which has a Board of Directors providing oversight and a manager and accountant managing the daily activities. Scottsboro also operates a telecommunications business that includes cable, telephone, and internet services.

Granting of Authority to Set Retail Rates

In 2002, TVA’s Board approved and made available to distributors six wholesale power contract flexibility options. One of these available options terminated TVA’s contract authority and obligations regarding retail rates. In 2004, Scottsboro and TVA agreed to a wholesale power contract amendment that granted Scottsboro authority to set its own retail rates. Three other distributors, Knoxville Utilities Board, Memphis Light, Gas and Water, and Meriwether Lewis

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2 This customer count represents those customers who only have Outdoor Lighting accounts with Scottsboro. Another 923 customers at June 30, 2008, had Outdoor Lighting accounts with Scottsboro as well as accounts for other services. The kilowatt hours sold include all kilowatt hours for all accounts.
Electric Cooperative, have also been granted this authority by TVA. As a result, these four distributors have the authority to determine the retail rates charged to its customers with no or limited oversight by TVA. The TVA Board, however, did not relinquish the responsibility to ensure the power purchased is sold and distributed to the ultimate consumer without discrimination among consumers of the same class, and no discriminatory rate, rebate, or other special concession will be made or given to any consumer. According to agreements with Scottsboro, Knoxville, and Memphis, the options were provided (1) because the electric utility industry was undergoing changes and restructuring and (2) to prepare for the prospect of legislation further altering the industry and the relationship between TVA and its distributors. The agreement with Meriwether Lewis in 2004 did not specifically state why the option was provided to them.

**FINDINGS**

Our review of Scottsboro found issues involving customer classification and metering that could impact (1) the proper reporting of electric sales and/or (2) nondiscrimination in providing power to customers. We also identified two additional potential power discrimination issues related to Scottsboro (1) providing a specialized industrial rate to only one customer and (2) not passing wholesale Fuel Cost Adjustments (FCA) and wholesale rate increases/decreases to all customers.

In addition, we found Scottsboro (1) had enough cash on hand to cover planned capital projects and provide a cash reserve of about 2 percent, which is less than TVA’s established guidelines for adequate cash reserves of 5 to 8 percent and (2) used electric system funds to pay for expenses of the telecommunications department without loan documents in place showing principal and interest payments and recourse protections.

We also found improvements were needed to comply with contract provisions in the areas of (1) co-mingling of funds and (2) allocation of costs. In addition, we identified four areas where Scottsboro’s internal controls could be strengthened including (1) approval of retail rates, (2) documentation of retail rate schedules, (3) billing practices, and (4) customer contracts. Finally, as we explain herein, we found certain opportunities to enhance TVA’s oversight of the distributors.

**PROPER REPORTING OF ELECTRIC SALES AND NONDISCRIMINATION IN PROVIDING POWER TO CUSTOMERS**

As discussed below, we identified customer classification and metering issues that could impact the proper reporting of electric sales. In addition to the classification and metering issues, we identified two other issues that could also
impact the ability to ensure nondiscrimination in providing power to customers.\(^3\) We were unable to estimate the monetary effect of all the issues because in some instances information was not available; however, for the instance where we could estimate the monetary effect, we estimate Scottsboro owes TVA approximately $88,000 for wholesale demand charges for our two-year audit period (July 2006 through June 2008). Additionally, correction of classification, metering, and other potential discrimination issues in providing power to customers are necessary 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 nine customer accounts that were not classified properly. Of the nine accounts, two were commercial customer accounts classified within the General Power Rate – Schedule GSA. The GSA schedule is divided into three parts—Part 1, Part 2, and Part 3—based on electric usage and demand,\(^4\) and these customer accounts were incorrectly assigned within the GSA schedule. The remaining seven 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 material to Scottsboro or TVA. Specifically, we found:

- Two customer accounts were classified as GSA Part 1\(^5\) 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 is greater than 50 kW, or (3) the customer’s billing demand is less than 50 kW and its energy takings for any month during such period exceed 15,000 kWh.

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\(^3\) Section 2 Resale Rates subsection (a) of the power contract between TVA and Scottsboro, dated February 1, 2004, 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.”

\(^4\) 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 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.”

\(^5\) Under the General Power Rate – Schedule GSA adopted by Scottsboro, 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.
demand exceeds 50 kW, or (3) contract demand is greater than 50 kW. When a customer is moved to GSA Part 2, they must remain at that classification for 12 months after the usage meets the Part 2 criteria. These customers had metered demand of over 50.01 kW 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 Orbit system used by Scottsboro does 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. One of these customer accounts was automatically upgraded to GSA Part 2 by the billing system the next month when the demand reached 51.2 kW. The other customer account did not have demand that exceeded 50.499 kW for the remainder of the audit period; therefore, the customer account was not automatically upgraded to GSA Part 2 by the billing system. Scottsboro personnel were aware the threshold for metered demand in the CSA system was 50.499 kW rather than 50.01 kW; however, Scottsboro did not change the customer account to GSA Part 2 at the time the demand exceeded 50.01 kW. In response to previous audits, CSA modified the billing system to address this issue.

- Seven customer accounts were classified as residential customers instead of GSA customers. Specifically, we noted:
  - One customer account was a flashing traffic light for the City of Scottsboro that should be classified as commercial.
  - Four customer accounts were commercial businesses.
  - Two customer accounts with separately metered structures, a workshop and a shed at different residences, should have been classified as commercial.

Scottsboro personnel reclassified the seven customers from residential to commercial (GSA schedule) during our audit.

**Metering Issues**

In addition to the customer classification issues, our review of billing agency data noted the following two issues related to metering of customers at Scottsboro. We were unable to estimate the monetary effect because in some instances meters were not in place that would provide information to make the estimates. Specifically, we found:

- Three customers classified as GSA Part 2 had energy usage in excess of 25,000 kWh but were not measured for demand. On February 9, 2010, in response to a finding in a previous report, TVA issued guidance to distributors in Alabama on how to evaluate whether a demand meter is needed when a customer’s usage reaches 25,000 kWh.

6 Under Part 2 of the GSA schedule and the Wholesale Power Rate – Schedule WS with TVA, there would be no effect on the revenues for TVA or the distributor unless the customer demand exceeded 50 kW. Without demand meters in place or
evidence indicating other circumstances exist that would prevent a customer from exceeding demand of 50 kW, we could not determine if two of these customers would have exceeded 50 kW.

The remaining customer previously had a demand meter under Part 2 of the GSA schedule until the customer requested a specialized industrial Stone, Clay, and Glass (SC&G) time-of-use retail rate that does not include a demand component. Even though Scottsboro was granted authority to determine the components of its retail rates (i.e., usage and demand thresholds, amounts to charge, etc.) in 2004, the revised wholesale power contract did not change the Schedule 1 reporting requirements (i.e., usage and demand for the various rate classifications). Therefore, demand must be reported on the monthly Schedule 1 for all customers meeting the Wholesale schedule GSA Part 2 criteria. Using historic demand data for the customer, we estimated approximately $88,000 in demand charges were not reported on the Schedule 1 for the audit period. This customer has not been metered for demand since 2005.

- According to Scottsboro personnel, not all customers have demand meters that measure kilovolt-ampere (kVA). Also, according to Scottsboro personnel, Scottsboro adopted the TVA retail rate schedules, including the GSA schedule. The GSA schedule requires customers whose power factor falls below 85 percent have a demand meter that measures kVA to properly determine demand charges on the customer bill. While the lack of a kVA measurement would not impact wholesale information reported on Schedule 1, this could impact demand charges billed to the distributor’s customers and therefore electric sales stated on the distributor’s financial reports to TVA. However, without a kVA measurement to compare to metered demand, we could not estimate the monetary impact of this issue.

Other Potential Power Discrimination Issues

In addition to the customer classification and metering issues, our review noted two additional issues that may impact Scottsboro’s ability to ensure nondiscrimination in providing power to customers. Specifically, we found:

- A specialized rate was provided for one customer but not for any other customers or industries in the Scottsboro system. A specialized time-of-use retail rate schedule was created for the SC&G industry at the request of a local quarry customer. This customer is currently the only customer provided

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7 A volt-ampere is the measure of apparent power, or the total power, in an AC circuit. The practical unit of apparent power is the kVA. Real power, measured in watts, is the actual power used by the load. The power factor is obtained by dividing the real power by the apparent power.

8 Monthly metered demand readings in kilowatts are included on Schedule 1. KVA is used only to determine the monthly demand charge billed to the customer.
electric service under the SC&G schedule. According to Scottsboro personnel, the SC&G schedule was modeled after Alabama Power’s SC&G schedule. The customer for whom the SC&G rate was provided would not qualify for the Alabama Power SC&G rate since the customer does not meet the Standard Industry Classification requirements of that rate schedule. Additionally, we found one additional Scottsboro customer that could receive the Alabama Power SC&G rate.

Alabama Power currently offers four other specialized industrial time-of-use rates in addition to the SC&G schedule. These rate schedules include Textile and Apparel, Poultry, Fabricated Metals, and Primary Metals. Scottsboro currently has 12 customers who would qualify for service under the additional Alabama Power specialized industrial rate schedules. We also found Scottsboro did not include the SC&G schedule in the listing of available retail rate classifications on their Web site. Without the posting of this schedule, a similarly situated customer may not know the rate is available.

- The quarterly FCA charged by TVA beginning in January 2007 and the wholesale rate increases and decreases were being passed to all customer classifications except the one customer in the SC&G schedule. According to the Section 2 Resale Rates subsection (a) of the power contract between TVA and Scottsboro, electric power “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.” The Scottsboro Board approvals for the FCA and the wholesale rate increases and decreases did not indicate any rate classification was excluded from either type of rate change.

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 on the next page, we noted Scottsboro (1) had enough cash on hand to cover planned capital projects and provide a cash reserve of about 2 percent, which is below TVA’s established guidelines for adequate cash reserves of 5 to 8 percent,9 and (2) used electric system funds to pay for expenses of the telecommunications department without loan documents in place showing principal and interest payments and recourse protections.

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

\[
\text{Cash + Cash Equivalents} \quad \text{Cash + Cash Equivalents}
\]

Total Variable Expenses (Operations and Maintenance + Purchased Power)
Cash Reserves Were About 2 Percent
We found Scottsboro had enough cash on hand to cover planned capital projects and provide a cash reserve. As of June 30, 2008, Scottsboro reported about $2.4 million in its cash and cash equivalent accounts, and the cash reserve after planned capital projects was about 2 percent, which is below TVA’s established guidelines for adequate cash reserves of 5 to 8 percent. Table 2 shows information about plans for major capital expenditures obtained from Scottsboro’s Finance Manager.

Scottsboro’s Planned Capital Expenditures

<table>
<thead>
<tr>
<th>Capital Expenditure Plans</th>
<th>Project Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transmission System</td>
<td>$1,515,118</td>
</tr>
<tr>
<td>Security/Street Lights</td>
<td>115,569</td>
</tr>
<tr>
<td>Generation Facility</td>
<td>166,109</td>
</tr>
<tr>
<td>Miscellaneous Equipment</td>
<td>21,521</td>
</tr>
<tr>
<td><strong>Total Planned Capital Expenditures</strong></td>
<td><strong>$1,818,317</strong></td>
</tr>
</tbody>
</table>

Table 2

When compared to Scottsboro’s capital expenditure plans for the foreseeable future, the balance in Scottsboro’s cash accounts was enough to pay for these items and leave about $544,000 as a reserve, as shown in Table 3. Table 3 also shows Scottsboro’s cash ratio percentage was about 10 percent before accounting for planned capital expenditures and about 2 percent after accounting for them.

Scottsboro’s Cash Accounts Compared to Planned Capital Expenditures

<table>
<thead>
<tr>
<th></th>
<th>Cash and Cash Equivalents</th>
<th>Planned Capital Expenditures</th>
<th>Reserve After Planned Capital Expenditures</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2008</td>
<td>$2,362,098</td>
<td>$1,818,317</td>
<td>$543,781</td>
</tr>
<tr>
<td>Cash Ratio Percentage</td>
<td>10.06%</td>
<td></td>
<td>2.32%</td>
</tr>
</tbody>
</table>

Table 3

In 2004, TVA ceded retail rate setting authority to Scottsboro. According to Scottsboro records, over the past five years, Scottsboro had one minimal increase in 2005 and two rate decreases in 2006 and 2008. Table 4 shows the rate increases/decreases received by Scottsboro and the cash position and cash ratio at June 30 prior to the effective date of the rate change.
Scottsboro’s Rate Increases/Decreases, Cash Position, and Cash Ratio

<table>
<thead>
<tr>
<th>Cash on Hand Equivalent to an 8% Cash Ratio</th>
<th>Rate Increase/Decrease</th>
<th>Cash and Cash Equivalents(^{11}) and Cash Ratio</th>
<th>Change in Revenue</th>
<th>Percent</th>
<th>Effective Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>$1,617,084</td>
<td>$2,153,410 (CR = 10.65%)</td>
<td>$66</td>
<td>0%</td>
<td>10/1/2005</td>
<td></td>
</tr>
<tr>
<td>$1,865,473</td>
<td>$1,073,704 (CR = 4.60%)</td>
<td>$(49,059) (1.14)%</td>
<td>04/1/2008</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$1,808,326</td>
<td>$1,266,328 (CR = 5.60%)</td>
<td>$(301,096) (6.27)%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4

Additionally, we noted Scottsboro’s FY 2009 cash ratio falls to approximately negative 2 percent after taking into consideration planned FY 2010 capital projects. Scottsboro’s cash reserves are lower than TVA’s guidelines for adequate cash reserves of 5 to 8 percent. Distributors usually have cash reserves as a hedge against the risks of unforeseen costs from an aging infrastructure (e.g., equipment failure), potential loss of revenue from the economic impact on commercial and industrial customers, and unpredictable weather. Scottsboro’s management stated that cash reserves were deliberately kept low because their operating philosophy was to set retail rates as low as possible to allow more funds to be invested in the local economy.

Electric Funds Used for Telecommunications Business

We found Scottsboro used electric system funds to pay for expenses of the telecommunications department without loan documents in place showing principal and interest payments and recourse protections. Without executed loan documents, the electric department has no legal recourse to recoup the funds expended to establish and fund the telecommunications department. In 1999, the telecommunications department issued $4 million in bonds to finance the initial expenses of establishing the telecommunications department. Additionally, the electric department has paid for all telecommunications expenses that exceeded the revenues collected in a given year. The expenses covered by the electric department on behalf of the telecommunications department totaled approximately $544,000 as of June 2008 and approximately $560,000 as of June 2009.

According to a 1998 TVA agreement with Scottsboro relating to providing telecommunication services, any electric system revenues used to finance the telecommunications department after the first three years would be repaid with interest accrued at the same rate as the telecommunications bonds. We found no interest was being charged to the telecommunications department for use of

\(^{10}\) These are the rate increases/decreases enacted by the distributor. These increases/decreases do not include any rate increases or decreases made by TVA, including FCAs, which were passed through by the distributor to the customer.

\(^{11}\) The cash and cash equivalents and cash ratio were computed based on information from Scottsboro’s annual report as of June 30 prior to the effective date of the rate increase.
the electric system funds. In addition, Scottsboro was unable to provide any loan documents supporting the amounts provided to the telecommunications department by the electric department that indicated interest rates, payment terms, electric department recourse, etc.

**CONTRACT COMPLIANCE ISSUES**

We noted two areas where Scottsboro was not meeting the requirements of the power contract with TVA. Specifically, we found the (1) electric department and telecommunications department funds and general ledger accounts were co-mingled, and (2) costs were not allocated between departments in accordance with the most current joint cost study. Below is further discussion on these items.

**Co-Mingling of Funds**

We found general ledger cash accounts contained cash collections for telecommunications services in addition to cash collections for electric services. As a result, cash collected for providing telecommunications services could be in the cash balances reported as electric department assets. We also found accounts receivable and accounts payable included customer receivables and amounts due to vendors related to telecommunication services. Section 1, Purpose of Contract, of the power contract between TVA and Scottsboro stated, “electric system funds and accounts shall not be mingled with other funds or accounts of Municipality.” According to TVA personnel, TVA has allowed the practice of the distributor using the same bank account(s) for all business activities; however, TVA personnel stated electric services and nonelectric services should be recorded in separate general ledgers.

**Allocation of Joint Costs**

We found allocations between the electric department and telecommunications department were not made in accordance with the most recent joint cost study. 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.” The last cost study with TVA was conducted in May 2000. This study did not include operation and maintenance expenses as part of the amount calculated for rent attributable to the telecommunications department. Rather, the cost study directed that operation and maintenance expenses be allocated between the electric department and telecommunications department on a case-by-case basis according to the allocation percentages set forth in the cost study.

According to Scottsboro personnel, it was assumed operation and maintenance costs, other than payroll, advertising, and professional services, were included in the rent charged to the telecommunications department; therefore, Scottsboro was not allocating these expenses between the departments as the expense
occurred. Finally, we found the electric department was covering the entire cost of some larger, heavy-equipment-related\(^{12}\) expenses used by both the electric department and telecommunications department since Scottsboro determined the electric department would be using the purchased item the majority of the time.

**DISTRIBUTOR INTERNAL CONTROL ISSUES**

We identified four areas where Scottsboro’s internal controls could be strengthened. Specifically, we found improvements could be made with respect to (1) approval of retail rates, (2) documentation of retail rate schedules, (3) billing practices, and (4) customer contracts.

**Approval of Retail Rate Increases**

We found Scottsboro implemented retail rate increases without approval by the Scottsboro Board. Specifically, (1) an adjustment applied to the FCA passed from TVA to one or more of the end-use customers by Scottsboro increased the total FCA amount above the Board-approved amount, and (2) retail rate increases for the SC&G schedule were implemented without Board approval.

**Documentation and Approval of Retail Rate Schedules**

We found retail rate schedules for retail customer classifications were not formally documented and approved by the Scottsboro Board. Retail rate schedules typically include which customers the rate classification is available to, the energy and demand thresholds, retail rates and charges, how demand is determined, minimum bill requirements, and any other special charges that may apply (facilities charge, reactive power, etc.). According to Scottsboro personnel, it was assumed the retail rate schedules provided by TVA prior to 2004 and the terms of service contained therein were still being used. However, Scottsboro could not provide documentation of approval of these retail rate schedules by the Scottsboro Board. Additionally, there was no documentation of (1) the retail rate schedule for the SC&G classification created by Scottsboro or (2) approval of the SC&G schedule by the Scottsboro Board.

**Billing Practices**

We found Scottsboro’s billing practices could be improved to ensure customer bills were accurate. Scottsboro (1) incorrectly calculated and billed demand for one customer, (2) incorrectly calculated and billed reactive power for one customer, and (3) manually calculated one customer’s bill outside the billing system. Specifically, we noted:

\(^{12}\) This includes a forklift, a fuel dispensing system, and several trailers.
• One Manufacturing Service Rate – Schedule MSB\textsuperscript{13} customer’s demand was incorrectly calculated and billed since November 2007. This customer has multiple meters with multiple demand readings each month. TVA previously read this customer’s meters and provided 30-minute interval demand data for each meter during the month. The interval data was provided electronically to Scottsboro and uploaded into the billing system that combined the data for each interval to determine the simultaneous peak demand across all of the customer’s meters.

When this customer revised its retail contract in November 2007 to remove optional energy products, TVA stopped reading the meter and providing the interval data to Scottsboro. After November 2007, Scottsboro did not obtain interval data from the meters and read only the peak 30-minute interval demand from each meter that could be for different times during the month. As a result, Scottsboro had nonsimultaneous peak demand readings. The nonsimultaneous peak demand readings were then manually combined in the billing system by Scottsboro personnel to obtain one demand reading for the customer. While the single point of delivery determined in this customer’s retail contract legally allows the demand readings to be combined, technically, the appropriate method to determine the simultaneous peak demand is to combine the demand readings for all meters in each 30-minute interval, and then select the 30-minute interval with the highest total. The manner in which Scottsboro is calculating demand using nonsimultaneous peaks could result in a higher bill for the customer and a higher wholesale bill for the distributor. Without interval demand data from each of the customer’s meters, we could not estimate the monetary effect of this issue on either TVA or the end-use customer.

• The same MSB customer’s reactive power charges have also been incorrectly calculated and billed each month since November 2007. Reactive power charges for MSB customers are separate charges on the customer’s bill based on reactive power readings from the meter. TVA previously read this customer’s meters and provided these readings from each meter. The readings were provided electronically to Scottsboro and uploaded into the billing system that determined any applicable reactive power charges.

When this customer revised their retail contract in November 2007 to remove optional energy products, TVA no longer read the meter and provided the data to Scottsboro. Scottsboro obtained the readings from the customer’s meters but did not apply reactive power charges correctly. The customer’s reactive power charges were calculated using the GSA schedule rules instead of the MSB schedule. Under the GSA schedule, the reactive power charges are included in the base demand charge and applied to the customer by replacing the metered demand reading with 85 percent of kVA when

\textsuperscript{13} Under the Manufacturing Service Rate – Schedule MSB customers are classified as MSB where (a) a customer’s currently effective contract demand is greater than 5,000 kW but not more than 15,000 kW, and (b) the major use of electricity is for activities conducted at the delivery point serving that customer which are classified with a 2-digit Standard Industrial Classification Code between 20 and 39, inclusive.
85 percent of kVA exceeds the metered demand. Since reactive power data was not available, we could not estimate the monetary effect of this issue on the customer. There would be no monetary effect on TVA since reactive power charges at the customer location are not included on Schedule 1.

- One customer’s monthly bill was manually calculated outside of the billing system. This customer was provided service under the SC&G schedule. The retail rates for this customer classification were not included in the billing system; therefore, the customer’s monthly bill was manually calculated outside of the billing system by Scottsboro personnel. The calculated amount was then manually entered into the billing system. Manual calculations (1) increase the risk of a billing error that would affect the customer and Schedule 1 to TVA and (2) are not included in the billing controls tested in the Statement on Auditing Standard (SAS) 70 report.

**Customer Contract Issues**

We noted four issues related to customer contracts at Scottsboro. Customer contracts did not (1) easily identify the applicable customer account or location, (2) include certification for manufacturing customers, (3) clearly identify the applicable retail customer classification, and (4) contain the same contract demand entered into the billing system. Specifically, we found:

- Customer contracts did not clearly identify the customer’s account or location that was applicable to the contract. Some customers had multiple contracts for multiple meters or locations that were not easily tied to the billing system data.
- Certification was not included as part of the contract file documentation for customers under manufacturing service schedules. The power contract between TVA and Scottsboro requires the customer certify to Scottsboro on a TVA-approved form that it meets all the requirements of the manufacturing classification.
- One customer contract did not clearly identify the applicable retail rate classification. Based on the contract demand listed in the contract and lack of manufacturing certification described above, the customer could have been classified under the General Power Rate – Schedule GSB; however, the contract states the customer will be provided service under the GSA schedule. Further, the customer was billed under the MSB schedule rather than the GSB or GSA schedule.
- One customer’s contract demand did not match the contract demand entered into the billing system. The contract demand amount in the billing system was used to calculate both the monthly demand charge and the minimum bill amount.

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14 Under the General Power Rate – Schedule GSB customers are classified as GSB where a customer’s currently effective contract demand is greater than 5,000 kW but not more than 15,000 kW.
TVA OVERSIGHT OPPORTUNITIES

We found opportunities to enhance TVA’s oversight of this distributor. We noted one new oversight opportunity in addition to two issues noted for this distributor which were also reported in previous OIG distributor reports. Specifically, we noted TVA has not:

- Provided guidance to the four distributors who have been granted authority to set their own retail rates regarding necessary controls to ensure retail rates are properly designed, approved, and implemented to prevent discrimination or the perception of discrimination in providing power to customers. In TVA’s regulatory role, TVA is charged with ensuring there is no discrimination in the sale and distribution of electric power. As discussed earlier, Scottsboro did not have documented retail rate schedules with qualifying criteria approved by the Scottsboro Board that were posted for the public.

The potential issues related to the nondiscrimination requirement noted above (the special rate class for one customer and decision not to pass through the full FCA to that customer) illustrate the challenges to TVA with respect to its requirement to ensure nondiscrimination where it has ceded authority to regulate resale rates. This exposes TVA to significant reputational risk. The OIG will address this issue separately after additional reviews are undertaken.

- Provided definitive guidance for distributors on what constitutes prudent expenditures.

- Performed a current joint cost study.

In response to the previous reports, TVA agreed to take corrective actions on the prudent expenditures and joint cost study 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, S&ER, work with Scottsboro to improve compliance with the contract and/or strengthen internal controls. Specifically, Scottsboro should:

1. In accordance with the TVA Guidance on Installing Demand Meters issued in February 2010, review the customers’ usage greater than 25,000 kWh and install demand meters, if needed.

   **Scottsboro’s Response** – Scottsboro stated two of the three customers with usage greater than 25,000 kWh were reviewed by the engineering department and determined it was not cost effective to install demand meters at these locations. Scottsboro stated the third customer identified in the report with demand consistently over 25,000 kWh is on a specialized retail rate schedule that does not include a demand component. See Appendix B for Scottsboro’s complete response.

   **TVA Management’s Comments** – TVA agreed with our recommendation and stated the distributor should review customer usage greater than 25,000 kWh and install demand meters, if needed. TVA also stated while the distributor has retail rate setting authority, the wholesale rate currently requires Scottsboro to track and pay for customers whose demand exceeds 50 kW. TVA management will discuss with Scottsboro how to implement TVA recommendations in this area. No target completion date for this action was provided. See Appendix C for TVA’s complete response.

   **Auditor’s Response** – The OIG maintains that Scottsboro should install demand meters for customers who meet the criteria outlined in the TVA Guidance on Installing Demand Meters in order to comply with the wholesale power contract that requires wholesale demand to be reported to TVA monthly on the Schedule 1. In regard to the customer on a specialized retail rate schedule, the OIG agrees the retail rate does not include a demand component; however, the wholesale rate classification for this customer requires demand to be reported and paid to TVA.

2. Install meters that measure kVA at all customer locations billed for demand.

   **Scottsboro’s Response** – Scottsboro’s response did not address this recommendation.

   **TVA Management’s Comments** – TVA management did not address this recommendation and stated TVA could not implement recommendations related to Scottsboro’s resale rates since TVA agreed to give up the authority to regulate Scottsboro’s resale rates. See Appendix C for TVA’s complete response.
Auditor’s Response – The OIG maintains that meters which measure reactive power installed at customer locations billed for demand are good utility practice.

3. Consider developing retail rate schedules for other specialized industries in the Scottsboro area or documenting why retail rate schedules for other specialized industries are not developed.

Scottsboro’s Response – Scottsboro’s response did not address this recommendation.

TVA Management’s Comments – TVA management agreed specialized rates can raise issues of potential discrimination, and while TVA does not have resale rate authority over Scottsboro, TVA does have responsibility to regulate potential discrimination issues. TVA management stated they will further investigate this matter. No target completion date for this action was provided. See Appendix C for TVA’s complete response.

Auditor’s Response – The OIG maintains that developing additional specialized retail rate schedules or documenting why additional specialized retail rate schedules are not developed prevents any potential discrimination issues that would result in noncompliance with the wholesale power contract.

4. Publicly post all effective retail rate classifications and corresponding rate schedules, and update the public posting whenever approved rate classification and/or rate schedule changes occur.

Scottsboro’s Response – Scottsboro stated all retail rate schedules are posted on the Web site and are updated anytime the retail rate schedules change. See Appendix B for Scottsboro’s complete response.

TVA Management’s Comments – TVA management did not address this recommendation and stated TVA could not implement recommendations related to Scottsboro’s resale rates since TVA agreed to give up the authority to regulate Scottsboro’s resale rates. See Appendix C for TVA’s complete response.

Auditor’s Response – As of July 14, 2010, the Scottsboro Web site did not list all effective retail rate classifications and the corresponding schedules. The specialized SC&G classification is not included on the Web site. Additionally, the Web site did not include corresponding rate schedules for the retail rate classifications listed on the Web site. The OIG maintains that all current retail rate classifications and corresponding schedules should be publicly posted.
5. Pass all FCA and wholesale rate increases/decreases to all customers in all rate classifications.

Scottsboro’s Response – Scottsboro’s response did not address this recommendation.

TVA Management’s Comments – TVA management did not address this recommendation and stated TVA could not implement recommendations related to Scottsboro’s resale rates since TVA agreed to give up the authority to regulate Scottsboro’s resale rates. See Appendix C for TVA’s complete response.

Auditor’s Response – The OIG maintains that passing the FCA and wholesale rate increases/decreases to all customers in all rate classifications prevents potential discrimination issues that would result in noncompliance with the wholesale power contract. We do not agree that giving up the authority to regulate Scottsboro’s resale rates would preclude TVA from working with Scottsboro to implement this recommendation. TVA still has a responsibility to ensure nondiscrimination in the sale and distribution of power.

6. Execute loan documents between the electric department and telecommunications department for loaned amounts that include interest rates to be paid by the telecommunications department, terms for payback, recourse available to the electric department if telecommunications is unable to make payment on a timely basis, and any other protections available to the electric rate payer.

Scottsboro’s Response – Scottsboro agreed with the recommendation and stated an internal loan document will be created between the electric department and telecommunications department and will include loan terms and conditions, recourse provisions, and interest. No target completion date for this action was provided. See Appendix B for Scottsboro’s complete response.

TVA Management’s Comments – TVA management stated TVA is investigating whether the loaned amounts were an appropriate use of electric system reserve funds. TVA further stated correction of loaned amounts will be pursued if the loaned amounts are determined to be an inappropriate investment of electric system funds. No target completion date was provided, as the action by TVA will be based on the results of the investigation. See Appendix C for TVA’s complete response.

Auditor’s Response – The OIG concurs with the planned actions.
7. Create an independent general ledger and independent general ledger accounts for the telecommunications department.

Scottsboro’s Response – Scottsboro disagreed with the recommendation and stated it felt complete separation of the electric department’s and telecommunications department’s general ledgers would require the two department services to be billed separately and separate payroll and payables systems to be maintained. Scottsboro also stated this separation would increase operating costs and, therefore, increase power costs for end-use customers as well as create customer inconvenience with two separate bills. See Appendix B for Scottsboro’s complete response.

TVA Management’s Comments – TVA management agreed with the recommendation to the extent necessary for Scottsboro’s electric department to comply with Section 1 of the Terms and Conditions of the power contract. TVA will discuss the issue with Scottsboro to better understand how the books are maintained and if any changes are required. Target completion date for this action is May 2011. See Appendix C for TVA’s complete response.

Auditor’s Response – The OIG maintains that independent general ledgers and independent general ledger accounts should be created for the telecommunications department to ensure compliance with the power contract. OIG believes maintaining separate ledgers and accounts would not require separate billing or payroll systems.

8. Allocate all operation and maintenance costs between the electric department and telecommunications department according to the percentages documented in the joint cost study.

Scottsboro’s Response – Scottsboro’s response did not address this recommendation.

TVA Management’s Comments – TVA management agreed with the recommendation and plans to pursue the execution of an appropriate joint use agreement. Target completion date for this action is May 2011. See Appendix C for TVA’s complete response.

Auditor’s Response – The OIG concurs with TVA’s planned actions.

9. Allocate all large expenses between the electric department and telecommunications department according to percentage of use by each department.

Scottsboro’s Response – Scottsboro’s response did not address this recommendation.
TVA Management’s Comments – TVA management agreed with the recommendation and plans to pursue the execution of an appropriate joint use agreement. Target completion date for this action is May 2011. See Appendix C for TVA’s complete response.

Auditor’s Response – The OIG concurs with TVA’s planned actions.

10. Implement a process to ensure all customers with contracts have the appropriate contract demand entered into the billing system and the contract demand in the system agrees with the customer’s contract.

Scottsboro’s Response – Scottsboro agreed with the recommendation and stated it is striving to verify the contract demand in the billing system agrees with the contract demand on the customer contract. No target completion date for this action was provided. See Appendix B for Scottsboro’s complete response.

TVA Management’s Comments – TVA management agreed with the recommendation and will discuss with Scottsboro how to implement TVA recommendations in this area. No target completion date for this action was provided. See Appendix C for TVA’s complete response.

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

11. Ensure only retail rate increases/decreases approved by the Board are implemented.

Scottsboro’s Response – Scottsboro agreed with the recommendation and stated FCA and any other rate changes will be approved by the Board and documented in the minutes of the Board meetings. No target completion date for this action was provided. See Appendix B for Scottsboro’s complete response.

TVA Management’s Comments – TVA management did not address this recommendation and stated TVA could not implement recommendations related to Scottsboro’s resale rates since TVA agreed to give up the authority to regulate Scottsboro’s resale rates. See Appendix C for TVA’s complete response.

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

12. Require Board approval of all retail rate increases/decreases for all rate classifications.

Scottsboro’s Response – Scottsboro agreed with the recommendation and stated FCA and any other rate changes will be approved by the Board and documented in the minutes of the Board meetings. No target completion
date for this action was provided. See Appendix B for Scottsboro’s complete response.

**TVA Management’s Comments** – TVA management did not address this recommendation and stated TVA could not implement recommendations related to Scottsboro’s resale rates since TVA agreed to give up the authority to regulate Scottsboro’s resale rates. See Appendix C for TVA’s complete response.

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

13. Document retail rate schedules including which customer the rate classification is available to, the energy and demand thresholds, retail rates and charges, how demand is determined, minimum bill requirements, and any other special charges that may apply (facilities charge, reactive power, etc.), and obtain the Scottsboro Board approval.

**Scottsboro’s Response** – Scottsboro stated retail rate schedules are available to the public on the Web site. See Appendix B for Scottsboro’s complete response.

**TVA Management’s Comments** – TVA management did not address this recommendation and stated TVA could not implement recommendations related to Scottsboro’s resale rates since TVA agreed to give up the authority to regulate Scottsboro’s resale rates. See Appendix C for TVA’s complete response.

**Auditor’s Response** – As of July 14, 2010, retail rate schedules including the information described in the above recommendation were not included on the Scottsboro Web site. The only retail rate information included on the Web site as of July 14, 2010, were the retail rate classifications, thresholds for qualification for the classifications, and the retail rate charged to the customer. Additionally, the Web site does not include the specialized SC&G retail rate classification or the corresponding rate schedule. The OIG maintains that documenting retail rate schedules to include the information described in the above recommendation is good utility practice.

14. Bill reactive power charges for MSB customers separate from demand charges.

**Scottsboro’s Response** – Scottsboro disagreed with the recommendation and stated reactive power billing practices for an MSB customer were based on previous TVA reactive power billing practices prior to Scottsboro assuming the billing responsibility. See Appendix B for Scottsboro’s complete response.
**TVA Management’s Comments** – TVA management did not address this recommendation and stated TVA could not implement recommendations related to Scottsboro’s resale rates since TVA agreed to give up the authority to regulate Scottsboro’s resale rates. See Appendix C for TVA’s complete response.

**Auditor’s Response** – The current reactive power billing practice for MSB customers at Scottsboro does not follow previous or current standard TVA billing practice for billing reactive power to MSB customers. The OIG maintains that reactive power charges for MSB customers should be billed separate from demand charges.

15. Bill demand for customers with multiple meters separately when interval data is not available to determine the simultaneous peak demand.

**Scottsboro’s Response** – Scottsboro disagreed with the recommendation and asked for TVA to provide industry documentation that requires a distributor to bill a customer based on the simultaneous demand of multiple meters at the same location. See Appendix B for Scottsboro’s complete response.

**TVA Management’s Comments** – TVA management agreed with the recommendation and stated if the distributor has more than one meter and a single point of delivery, the simultaneous peak demand at the delivery point should be determined and used to bill the customer. TVA management will discuss this issue with Scottsboro. Target completion date for this action is May 2011. See Appendix C for TVA’s complete response.

**Auditor’s Response** – The OIG concurs with TVA’s planned action. The OIG maintains that Scottsboro should bill demand for customers with multiple meters separately when interval data is not available to determine the simultaneous peak demand.

16. Include all rates for all customer classifications in the billing system to create customer bills or develop and implement a review and approval process for customer bills manually calculated outside the billing system.

**Scottsboro’s Response** – Scottsboro disagreed with the recommendation and stated the billing system cannot perform the calculation for this customer, and the bill must be created manually outside the system. Scottsboro also stated the Statement on Auditing Standard 70 review did not find any issues with billing prepared manually outside the billing system. See Appendix B for Scottsboro’s complete response.
TVA Management’s Comments – TVA management did not address this recommendation and stated TVA could not implement recommendations related to Scottsboro’s resale rates since TVA agreed to give up the authority to regulate Scottsboro’s resale rates. See Appendix C for TVA’s complete response.

Auditor’s Response – The OIG maintains that a review and approval process should be implemented for customer bills manually calculated outside the billing system. Additionally, the most recent SAS 70 review at the time of the OIG audit dated August 25, 2006, did not include any evidence customer bills manually calculated outside of the billing system were included as part of the SAS 70 compliance testing.

17. Include additional information in customer contracts to easily identify contracts for customers with multiple meters or locations.

Scottsboro’s Response – Scottsboro agreed with the recommendation and stated work is being continued in the customer contracts area to ensure customer account or location is easily identifiable on customer contracts. No target completion date for this action was provided. See Appendix B for Scottsboro’s complete response.

TVA Management’s Comments – TVA management did not address this recommendation and stated TVA could not implement recommendations related to Scottsboro’s resale rates since TVA agreed to give up the authority to regulate Scottsboro’s resale rates. See Appendix C for TVA’s complete response.

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

18. Require certification from customers under a manufacturing service schedule that they meet the requirements of the schedule.

Scottsboro’s Response – Scottsboro’s response did not address this recommendation.

TVA Management’s Comments – TVA management agreed with the recommendation and stated the power contract requires the distributor to maintain the required certifications in order to sell power under the manufacturing classifications. TVA management will discuss this issue with Scottsboro. Target completion date for this action is May 2011. See Appendix C for TVA’s complete response.

Auditor’s Response – The OIG concurs with TVA’s planned actions.
19. Revise customer contracts with conflicting language to accurately reflect the applicable retail rate schedule.

Scottsboro’s Response – Scottsboro agreed with the recommendation and stated it is striving to clearly identify the applicable retail rate classification in customer contracts. No target completion date for this action was provided. See Appendix B for Scottsboro’s complete response.

TVA Management’s Comments – TVA management did not address this recommendation and stated TVA could not implement recommendations related to Scottsboro’s resale rates since TVA agreed to give up the authority to regulate Scottsboro’s resale rates. See Appendix C for TVA’s complete response.

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

The Group President, S&ER, should:

20. Develop and provide guidance on controls over designing, approving, and implementing retail rates for distributors who have authority to set their own retail rates.

TVA Management’s Comments – TVA management did not address this recommendation and stated TVA could not implement recommendations related to Scottsboro’s resale rates since TVA agreed to give up the authority to regulate Scottsboro’s resale rates. See Appendix C for TVA’s complete response.

Auditor’s Response – The OIG maintains that TVA, as a part of its responsibility to ensure nondiscrimination, should develop and provide guidance on controls over designing, approving, and implementing retail rates for distributors who have authority to set their own retail rates.

21. Review and recover any amounts due to TVA for the SC&G schedule customer without a demand meter.

TVA Management’s Comments – TVA management agreed with this recommendation and will evaluate recovery mechanisms for the amounts due for the SC&G customer’s demand charges. TVA will work with Scottsboro to recover the demand charges. The target completion date for this action is May 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 TVA and Scottsboro 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 Scottsboro electronic billing information from 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.
- Documented and tested the procedures and controls in place to ensure complete and accurate invoicing of payments to TVA.
- Determined through inquiry and review of documentation whether Scottsboro 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.

The scope of the review was for the period July 2006 through June 2008. Fieldwork was conducted November 2009 through March 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.
The Scottsboro Power Electric Board has received the audit report from the TVA Office of the Inspector General. We have reviewed these findings and would like to offer our response. Initially, we wish to recognize that we welcome the review of our business and strive to operate with a motive of continuous improvement. We also pursue to achieve excellent results when graded for compliance issues relevant to our business while balancing these issues with a cost-benefit philosophy.

   a. Customer Classification Issues – While we strive for zero errors, we do recognize that errors are made and we appreciate that the audit highlighted these errors. They have been corrected and actions have been taken to bring continuous improvement to the classification of customer accounts.

   b. Metering Issues – We strive to properly meter all electric customers based on guidelines issued by TVA. Due to the substantial difference between non-demand meters and demand meters, SEPB endeavors to avoid using demand meters when there is not a sufficient return on investment. Noting that the TVA commercial rates give electric customers the first 50 kw of demand free, SEPB has instructed CSA to flag accounts that should be considered for demand metering. SEPB staff reviews these accounts from time to time and will determine if there is a sufficient demand usually greater than 75 kw sustained for a 12 month period. SEPB does not install demand metering when the demand is very close to 50 kw since there will be a very small demand revenue and no reasonable return on the metering investment. Our Board instructs us to be good stewards of our revenues and installing demand on accounts that will not produce a material amount of demand revenue would violate our Board’s instructions.

   c. Other Potential Power Discrimination Issues - SEPB worked with (REDACTED) during March 2003 thru October 2004 to create a Stone, Clay and Glass rate similar to Alabama Power’s SCG rate. The customer met with us on numerous occasions stating that he was unwilling to continue to pay $0.15-0.20 per kwh. (REDACTED) indicated that a diesel generator could be installed to produce power cheaper than buying it from SEPB. During this same time frame, TVA and SEPB were jointly working on a time-of-use billing Pilot Program. See attached document SEPB TVA Power Contract # 49982A supplement # 59. This pilot and the created rate were in harmony with the anticipated direction of billing. Also, in 2004, SEPB received approval from TVA to have local rate-making authority. See attached document SEPB TVA Power Contract # 49982A supplement # 58. In an effort to support our community and save a large quantity of jobs, SEPB Board approved creation of a SCG rate based on a time-of-use billing methodology, which TVA is now requiring all distributors to transition to. SEPB created the SCG rate and requested the TVA Power Billing department to set up a parallel wholesale SCG rate that SEPB would pay the wholesale portion from the recover any customer using the SCG rate. The TVA Power Billing department refused to set up the wholesale SCG rate in the SEPB Schedule 1 wholesale power billing template. Further, time-of-use rates do not have any demand charges. TOU rates used by most utilities are a rate strategy to encourage customers to move their load to
off-peak times to take advantage of cheaper rates. This is exactly what was accomplished by the SEPB SCG rate that has been in use since January 2005. And, this is exactly what TVA wants to implement with the wholesale TOU rate change scheduled for October 1, 2010. Finally, the TVA OIG should investigate the unwillingness or inaction of the TVA Power Billing Department who failed to act on request by SEPB to create a wholesale SCG rate. If the TVA Power Billing Department would have created a wholesale SCG billing line item, then this issue would not be a problem. In conclusion, SEPB's creation of the SCG rate was an effort to keep supplying electricity to a customer who was considering installing an electric generator, to pilot time-of-use rates to determine their impact on our system demand with TVA, and use state-of-the-art metering technology in conjunction with our telecommunication system. If in the perspective of this audit the TVA OIG states that this was improper, then the new "smart grid" metering and time-of-use retail rates now being encouraged by TVA and being installed by the distributors are just as wrong. SEPB was clearly on the cutting edge of promoting TOU rates and metering technology when we installed this in December 2004. And it is patently unfair for the TVA OIG to somehow claim anything was done improperly.

2. Use of Revenues
   a. Cash Reserves – We do recognize that there is a prescribed target for cash reserves to enable us to re-invest into our facility with renewals and replacements as well as have provision for contingencies. The audit has highlighted this need and we have taken action to get this ratio within the guidelines. While we know that the easiest way to adjust this figure is to raise rates, we have taken the position to (i) reduce costs (ii) increase A/P turnover from 29 days to 35 days and (iii) reduce A/R turnover from 34 days to 29 days. We will monitor this ratio for the coming periods to see if we need to make any further changes.

b. Use of Funds for Telecomm Business - We will create an internal loan document to the Telecomm Dept with terms and conditions including recourse provisions as well as record interest income.

3. Contract Compliance
   a. Co-Mingling of funds – We have created the Telecomm services in order to provide solutions to our community as well as create an economics of scale for our business. Rather than increase electric rates to our customers to pay for daily operating expenses, we have generated an additional revenue stream to help cover the fixed costs of infrastructure such as customer service, building costs, and administrative costs. We feel that in order to complete a separate general ledger, we would have to perform 2 separate billings, 2 separate payrolls, and 2 separate payables systems. This would negate the economics of scale and increase our operating costs which in turn would increase power costs to our customers. We are currently ranked 9 out of 18 municipalities in our area in power costs. We feel the added cost to administrate 2 systems is not added value to our customers as well as our customers can currently make one convenient payment for their utility services.

   We ask for tolerance in this area of administration. We can identify the revenue and costs of power versus telecomm as well as an inter-departmental loan balance between the 2 departments.

b. Metering Issues - We do recognize TVA's recommendation that demand meters be put on accounts that have over 25,000 kWh. Of the three accounts that had energy usage in excess of 25,000 kWh, only one account had this usage at least half of the time. The other two accounts occasionally had over 25,000 kWh with one of the accounts only reaching that threshold once in a twelve month period. The customer that had usage over 25,000 kWh at least half of the time is a time of use retail rate with no demand. We have talked to
our Engineering Department about TVA’s recommendation and they have reviewed these
two accounts. The conclusion was that because of the sporadic rate that the new 25,000
kWh threshold is reached, it is not cost effective to install a demand meter at these sites.
We will continue to monitor our accounts concerning this benchmark recommendation in
the future.

It is extremely difficult to operate our utility without a known set of guidelines that we can
reference. We are operating under the 10/20/1978 Power Contract No. TV49982A that has been
supplemented more than sixty (60) times. This combined contract and accompanying supplements has a
total of more than 200 pages which would make it impossible to refer to on a day-by-day basis. TVA has
not been able to present to us a concise manual of all the metering, billing, and customer account
regulations that we should be following. When we have asked for such a concise manual, the TVA staff
never responds.

4. Distributor Internal Controls
   a. Approval of Rate Increases – Our rates are published on our web site and are changed for
      public view anytime they change. We will include the FCA rate changes as well as any other rate changes
      in the minutes of future board meetings. We will also be very sure that any classification rates are
      approved by our Board.
   b. Documentation and Approval of Retail Rate Schedules – Retail rate schedules are
      published on our web site for the public. We will document these rate changes in our
      Board minutes and also keep a file of these rate changes as they occur after Board
      approval. These include all standard retail rates and time of use rates.
   c. Billing Practices – There were two customers cited in this part of the audit. The one that
      refers to the reactive demand billing was billed based on the TVA practice prior to SEPB’s
      assuming the billing responsibility. Both meters are read monthly for this customer and
      the kWh and demand charges are billed in the billing system according to the MSB rate
      schedule.

      The second customer cited is a time of use rate customer. TVA had no time of use rates
      that would have applied to this customer. Therefore there is no calculation that can be
      done inside the billing system to reflect this time of use rate. The meter was a special
      meter that could be read on site and remotely. The meter was read each month and the
      calculations including kWh were entered into the billing system for TVA reporting. We do
      recognize that does increase the possibility for error but human intervention is required in
      several stages of the metering and billing process. We had been through a SAS 70 audit
      and no stipulation was made concerning this account.

      Also, TVA has approved and allowed distributors to bill customers individually for meters
      or points of service at the same physical location since the inception of TVA and
      subsequent creation of distributor electric systems. Due to advances in billing system
      technology, it is now possible to add multiple meters to one customer account and to send
      a cumulative bill to said customer. To SEPB’s knowledge, TVA has never issue any de
      facto prohibition to this practice in the past. If in fact this is not allowed, SEPB
      respectfully requests that TVA send the appropriate documentation FERC or industry
      approved standard for billing or metering that requires an electric supplier to bill a
      customer based on the simultaneous demand of multiple meters at the same physical
      location.

d. Customer Contract Issues - We agree that work needs to be done to clear up any confusion
   concerning contracts. We are continuing to work on that to ensure that the applicable
   customer account or location is easily identifiable. Applicable documents are sent to TVA
   for certification. We are also striving to clearly identify the applicable retail customer
   classification and verify the same contract demand is entered into the billing system.
Again, the TVA office has offered very little guidance regarding customer power contracts. SEPB has requested the TVA give us advice or recommendation regarding contract terms, notice of cancellation, penalties, failure to pay, deposits, and special charges. TVA offers no manual or standards on contract creation, implementation, and maintenance that we know of.

CONCLUSION
While we have responded to this list of findings, we ask that TVA and the TVA OIG keep in mind that other areas such as safety, customer satisfaction, and reliability are equally as important as rates and billing. We understand that contractual compliance is an integral part of managing our business, however, we have a corporate conviction that the customer satisfaction, safety of the public and our employees, reliability, financial success are equally important in managing the day-to-day affairs of our utility. Since 2008, SEPB has lowered its residential retail electric rate ranking from 17th to 9th among North Alabama distributors. In 2010, SEPB received the prestigious RP3 Designation from the American Public Power Association becoming the first electric utility in Alabama to receive that designation. Our accident rate is at an all-time low and our reliability continues to improve.

It is extremely difficult to operate our utility without a known set of guidelines that we can reference. We are operating under the 10/30/1978 Power Contract No. TV49828A that has been supplemented more than fifty (50) times. This combined contract and accompanying supplements has a total of more than 200 pages which would make it impossible to refer to on a day-by-day basis. TVA has not been able to present to us a concise manual of all the metering, billing, and customer account regulations that we should be following. When we have asked for such a concise manual, the TVA staff never responds.

In closing, we acknowledge the right and duty that TVA has to perform this audit. We feel that audits are a helpful way to identify errors and promote continuous improvement. We have been made aware of improvements that can be made and we will pursue those improvements.

Respectfully

James Sandlin, General Manager
June 15, 2010

John Powell, HR/Finance Manager
June 15, 2010

Note: Scottsboro attached copies of the wholesale power agreement with TVA. We did not include these agreements in this report.
SENSITIVE INFORMATION

July 8, 2010

Robert E. Martin, ET 3C-K

RESPONSE TO DRAFT AUDIT REPORT 2009-12510 – DISTRIBUTOR REVIEW OF ELECTRIC POWER BOARD OF THE CITY OF SCOTTSBORO

This is in response to your memorandum dated May 21, 2010.

To date, the TVA Board has chosen to carry out TVA's regulatory role through TVA's wholesale power contracts. With a few exceptions, the wholesale power contracts with municipal and cooperative distributors of TVA power include provisions that provide for TVA's regulation of the resale rates at which electric power is sold and distributed. TVA's wholesale power contract with the City of Scottsboro, Alabama is, one of those exceptions.

In 2002 (a time when electric utility deregulation was a more important consideration for both TVA and distributor customers), as part of TVA's goal to provide more flexible wholesale power contracts, the TVA Board approved an option under which distributors could elect deregulation of their resale rates except for the nondiscrimination contract provision required by section 12 of the TVA Act. The City of Scottsboro accepted this option to amend their wholesale power contract. Consequently, the only regulatory authority over Scottsboro's resale rates that TVA kept is in the contract provision that prohibits discrimination in the sale and distribution of electric power.

In view of the above, TVA management is unable to implement many of the recommendations made in Draft Audit Report 2009-12510 relating to Scottsboro's resale rates, specifically those made in recommendations numbers 2, 4, 5, 11, 12, 13, 14, 16, 17, 19 and 20 because TVA does not regulate Scottsboro's resale rates. In other words, since TVA agreed to give up the wholesale power contract provisions that provided TVA the means by which to regulate Scottsboro's resale rates, TVA currently has no mechanism by which to mandate requirements related to Scottsboro's resale rates except with respect to taking appropriate action to enforce the contract provision that prohibits discrimination in the sale and distribution of power. In the event that TVA is alerted to a complaint of discrimination, TVA will investigate and pursue appropriate correction and resolution if warranted.

Current TVA management recognizes that there are advantages for both TVA and Scottsboro if TVA were to otherwise regulate the resale rates of Scottsboro. Nevertheless, for these advantages to be realized, Scottsboro would need to be persuaded to reinstate those wholesale power contract provisions providing for such resale rate regulation. In conjunction with discussing this audit as well the implications of the proposed rate change with the City of Scottsboro, TVA management requested that Scottsboro reconsider the reinstatement of those wholesale power contract provisions. Scottsboro has agreed to evaluate reinstatement of the wholesale power contract provisions with their senior management and Board and provide a response on this.
Robert E. Martin  
Page 2  
July 8, 2010  

TVA management's responses to the recommendations in numbers 1, 3, 6, 7, 8, 9, 10, 15, 18 and 21 which do not involve Scottsboro's resale rates, are below:

1. In accordance with the TVA Guidance on Installing Demand Meters issued in February 2010, review the customers' usage greater than 25,000 kWh and install demand meters, if needed.
   - TVA management agrees that the distributor should review customer usage greater than 25,000 kWh and install demand meters, if needed. While TVA does not regulate the retail rates for Scottsboro, the wholesale rate currently requires that Scottsboro track and pay TVA for demand charges incurred for customers that are greater than 50 kW. We will discuss with the distributor how to implement TVA recommendations in this area.

3. Consider developing retail rates schedules for other specialized industries in the Scottsboro area or documenting why retail rate schedules for other specialized industries are not developed.
   - As the Audit suggests, specialized rates can raise issues of potential discrimination. Therefore, TVA does not generally encourage distributors to develop and offer specialized rates except to the extent that such rates are a part of a program that has been developed by TVA. In the development of such programs, TVA endeavors to ensure that the rates offered are made available to all qualifying customers in a non-discriminatory manner.
   - Furthermore, as discussed in the third paragraph of the response, TVA currently has no mechanism by which to mandate requirements related to Scottsboro’s resale rates except with respect to any actions by Scottsboro that violate the non-discrimination provisions of the power contract. In this regard, TVA will further investigate the particular matters that OIG has referenced in the audit report.

6. Execute loan documents between the electric department and telecommunications department for loaned amounts that include interest rates to be paid by the telecommunications department, terms for payback, recourse available to the electric department if telecommunications is unable to make payment on a timely basis, and any other protections available to the electric rate payer.
   - TVA management is investigating whether the loaned amounts were an appropriate investment of electric system reserve funds. If so, TVA will seek to enter into the appropriate agreements. If the loaned amounts were not an appropriate investment of electric system reserve funds, TVA will pursue correction. Target completion for this action will be dependent on whether loan amounts are considered appropriate investments by TVA.
7. Create an independent general ledger and independent general ledger accounts for the telecommunications department.
   
   - TVA management agrees with the recommendation only to the extent necessary for the electric system to carry out the requirements of Section 1 of the Terms and Conditions of the Power Contract which require the distributor to maintain the electric system separate from the other municipal departments. TVA will discuss this with Scottsboro for a further understanding on how the books are currently maintained and if any changes are required. Target completion date for this action and remedies is May 2011.

8. Allocate all operation and maintenance costs between the electric department and telecommunications department according to the percentages documented in the joint cost study.
   
   - TVA management agrees with the recommendation and plans to pursue the execution of an appropriate joint use agreement. Target completion date for this action is May 2011.

9. Allocate all large expenses between the electric department and telecommunications department according to percentage of use by each department.
   
   - TVA management agrees with the recommendation and plans to pursue the execution of an appropriate joint use agreement. Target completion for this action is May 2011.

10. Implement a process to ensure all customers with contracts have the appropriate contract demand entered into the billing system and the contract demand in the system agree with the customer’s contract demand.
    
    - TVA management agrees that the customer contracts should have the appropriate contract demand entered into the billing system. While TVA does not regulate the retail rates for Scottsboro, the wholesale rate currently requires that Scottsboro track and pay TVA for demand charges incurred for customers that are greater than 50 kW. We will discuss with the distributor how to implement TVA recommendations in this area.

15. Bill demand for customers with multiple meters separately when interval data is not available to determine the simultaneous peak demand.
    
    - TVA management agrees with the recommendation. If the distributor has more than one meter at a single delivery point, the distributor should determine the simultaneous peak demand at the delivery point. If there is more than one point of delivery, then each point of delivery should be its own customer account as provided in the wholesale rate schedule. TVA will discuss this recommendation with the distributor. Target completion date for this action is May 2011.
18. Require certification from customers under a manufacturing service schedule that they meet the requirements of the schedule.
   - TVA management agrees with this recommendation. The Wholesale Schedule to the Power Contract requires Distributor maintain the required certifications in order to sell power under the manufacturing classifications. TVA will discuss this recommendation with Distributor. Target completion date for this action is May 2011.

The Group President, S&ER, should:

21. Review and recover any amounts due to TVA for the SC&G schedule customer without a demand meter.
   - TVA management agrees with this recommendation. The Power Contract requires demand meters for customers that are GSA2. TVA will evaluate recovery mechanisms for demand charges. TVA will work with the distributor to recover demand charges for this SC&G customer. Targeted completion date for this action is May 2011.

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

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