Memorandum from the Office of the Inspector General

October 15, 2009

Kimberly S. Greene, WT 7B-K

REQUEST FOR FINAL ACTION – AUDIT 2008-12037 – DISTRIBUTOR REVIEW OF BOLIVAR ENERGY AUTHORITY

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

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

If you have any questions, or wish to discuss our findings, please contact Melissa M. Neusel, Project Manager, at (865) 633-7357 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

MMN:JP
Attachment
cc (Attachment):
- Steve Byone, WT 4B-K
- Peyton T. Hairston Jr., WT 7B-K
- Tom D. Kilgore, WT 7B-K
- John E. Long Jr., WT 7B-K
- Richard W. Moore, ET 4C-K
- Emily J. Reynolds, OCP 1L-NST
- John M. Thomas III, WT 4B-K
- John G. Trawick, WT 3D-K
- OIG File No. 2008-12037

Office of the Inspector General

Audit Report

To the Chief Financial Officer and Executive Vice President, Financial Services

DISTRIBUTOR REVIEW OF BOLIVAR ENERGY AUTHORITY

Audit Team
Melissa M. Neusel
Laura E. Huffine
Stephanie L. Simmons
Jennifer R. Torregiano

Audit 2008-12037
October 15, 2009

TABLE OF CONTENTS

APPENDICES

TVA Office of the Inspector General

Why the OIG Did This Review

The OIG performed a review of the Bolivar Energy Authority (Bolivar), which is a distributor for TVA power based in Bolivar, Tennessee. Annual revenues were approximately $22.7 million in fiscal year 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, and manufacturing. Within these classifications are various rate classes based on the customer type and usage.

The objective of the review was to determine compliance with key provisions of the power contract between TVA and Bolivar including (1) proper reporting of electric sales by customer class to facilitate proper revenue recognition and billing by TVA; (2) nondiscrimination in providing power to members of the same rate class; and (3) use of revenues, including any surplus, for approved purposes such as operating expenses, debt service, tax equivalent payments, and reasonable reserves for renewals, replacements, and contingencies.

What the OIG Recommends

We recommend the Chief Financial Officer (CFO) work with Bolivar to (1) remediate classification and metering issues and institute controls to prevent the issues from recurring, (2) comply with contract provisions related to proper allocation of joint costs and customer contracts, and (3) strengthen its internal controls. In addition, the CFO should establish a process to document approval of distributor customer's credit applications. We requested and received written comments on a draft of this report from Bolivar and TVA. Their comments are discussed later in this report and reproduced in their entirety in Appendices to the report.

In separate reports issued on other distributors in May and August 2009, TVA responded to issues also found at Bolivar related to (1) contracts for customers whose demand exceeds 50 kW, (2) guidance for distributors on cash reserves, (3) performing joint cost studies, and (4) providing guidance on when a demand meter is required. TVA does not plan to take action regarding co-mingling of electric and nonelectric funds, another issue we found at Bolivar and in previous audits; therefore, we suggest the power contract be modified.

For more information, contact Melissa M. Neusel, Project Manager, at (865) 633-7357 or Jill M. Matthews, Deputy Assistant Inspector General, Audits and Support, at (865) 633-7430.

October 2009

Audit 2008-12037
Bolivar Energy Authority

What the OIG Found

Our review of Bolivar found no material issues related to use of revenues for approved purposes; however, improvements were needed in the following areas:

- **Customer Classification and Metering** – We identified issues that could impact the proper reporting of electric sales and the ability to ensure nondiscrimination in providing power to members of the same rate class. Specifically, we noted customers (1) not being properly classified, (2) with energy usage in excess of 15,000 kWh but not measured for demand,[i] and (3) where estimates were used to determine their bill for 24 months or more. We were unable to estimate the monetary effect of all of the issues because, in some instances, information was not available; however, for those where information was available, the monetary effect on Bolivar and TVA was not material.
- **Contract Compliance** – We identified three areas where Bolivar was not meeting power contract requirements. Specifically, we found (1) co-mingling of electric department funds with other service department funds, (2) inaccurate allocation of costs between departments, and (3) customer contracts were not in place for all customers with demand above 50 kW.
- **Distributor Internal Controls** – We noted four areas where Bolivar could strengthen its internal controls. Specifically, we noted weaknesses regarding (1) the accuracy of data entered into the billing system for contract demand, (2) monitoring of manual changes, (3) monitoring of negative usage situations, and (4) monitoring repetitive instances of zero usage for individual accounts.

In addition, we found Bolivar had more than enough cash on hand to cover planned capital projects and provide a cash reserve. The cash reserve after planned capital projects was about 12 percent. While TVA has established guidelines to determine if a distributor has adequate cash reserves (cash ratio of 5 percent to 8 percent), TVA has not established guidelines to determine if a distributor's cash reserves are excessive. Based on prior distributor audit findings, TVA is in the process of defining criteria for determining when a distributor's cash reserves are excessive.

Finally, we identified certain opportunities to enhance TVA oversight of the distributors. Specifically, we noted TVA has not (1) performed a joint cost study in over 20 years and (2) adequately defined the process required to document approval of Small Manufacturing Credits. TVA is in the process of addressing a finding from a previous review that we also found at Bolivar related to when a demand meter is required.

---

[i] According to Bolivar personnel, a customer may not require a demand meter because their electrical configuration (service entrance and transformers) would not allow a demand greater than 50 kW to be realized. There was no evidence to determine which customers could be in this situation.

BACKGROUND

Bolivar Energy Authority (Bolivar) is a distributor for Tennessee Valley Authority (TVA) power based in Bolivar, Tennessee, with revenues from electric sales of approximately $22.7 million in fiscal year (FY) 2008. TVA relies on distributors to report customer usage and subsequently the amount owed to TVA (Schedule 1). Customers are generally classified as residential, commercial, and manufacturing. Within these classifications are various rate classes based on the customer type and usage. Table 1 shows the customer mix for Bolivar as of June 2008.

Bolivar's Customer Mix as of June 2008

Customer Classification	Number of Customers	Revenue	Kilowatt Hours Sold
Residential	9,021	$12,820,665	147,421,312
General Power – 50 kW & Under (Commercial)	2,161	2,452,841	22,982,926
General Power – Over 50 kW (Commercial or Manufacturing)	112	6,728,869	84,295,903
Street and Athletic	14	130,327	1,036,371
Outdoor Lighting[1]	29	545,253	3,902,309
Total	**11,337**	**$22,677,955**	**259,638,821**

Table 1

The distributors are required to establish control processes over customer setup, rate application, and measurement of usage to ensure accurate and complete reporting to TVA. Bolivar, like many other distributors, outsources its billing and invoice processing to a third-party processor, Central Service Association (CSA). Bolivar 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 Bolivar with the management reporting (e.g., exception reports) designed to ensure the accuracy and completeness of the customer invoice and the purchased power invoice (Schedule 1) to TVA. All other accounting and finance responsibilities are done by Bolivar, which has a Board of Directors, and a President/CEO providing oversight and a manager and accountant managing the daily activities. Bolivar does not have any nonelectric business interests. However, Bolivar does provide billing and collection services for other Bolivar utility services.

[1] This customer count represents those customers who only have outdoor lighting accounts with Bolivar. Another 4,910 customers had outdoor lighting accounts as well as accounts for other services with Bolivar at June 30, 2008. The "Kilowatt Hours Sold" amounts include all kilowatt hours for all accounts, i.e., both Outdoor Lighting categories.

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 Bolivar including:

- Proper reporting of electricity sales by customer class to facilitate proper revenue recognition and billing by TVA.
- Nondiscrimination in providing electricity 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; and
  - Reasonable reserves for renewals, replacements, and contingencies.

To achieve our objective, we:

- Obtained Bolivar electronic billing information from CSA for the audit period. The information was not complete because CSA does not maintain historical 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 Bolivar 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 in April through July 2009. This 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 the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective. In performing this audit, nothing came to our attention that indicated noncompliance with applicable laws and regulations.

FINDINGS

Our review of Bolivar found no material issues related to use of revenues for approved purposes. However, we found improvements were needed in certain areas. Specifically, we found customer classification and metering issues that could result in (1) improper reporting of electric sales and (2) discrimination in providing power to members of the same rate class. In addition, we found Bolivar had more than enough cash on hand to cover planned capital projects and provide a cash reserve of about 12 percent. While TVA has established guidelines to determine if a distributor has adequate cash reserves (cash ratio of 5 percent to 8 percent), TVA has not established guidelines to determine if a distributor's cash reserves are excessive.

We also found improvements were needed to (1) comply with contract provisions regarding the co-mingling of funds; allocation of costs between departments; and customer contracts and (2) improve Bolivar's internal controls related to accuracy of contract demand data entered in the system; monitoring of manual data changes; monitoring of negative usage (kWh) amounts in billing data; and monitoring repetitive instances of zero usage. Finally, we have identified certain opportunities to enhance TVA oversight of the distributors.

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

As discussed below, we identified issues involving the classification of customers and metering which could impact the proper reporting of electric sales. In addition, these issues impact the ability to ensure nondiscrimination in providing power to members of the same rate class.[2] We were unable to estimate the monetary effect of all of the issues because, in some instances, information was not available; however, for those where information was available, the monetary effect on Bolivar and TVA was not material. Correcting classification and metering issues is nonetheless important to ensure all customers are placed in the correct rate classification and charged the same rate as other customers with similar circumstances.

Customer Classification Issues

We found seven customers that were not classified properly during a portion of our audit period. One commercial customer was misclassified within the power contract's General Power Rate – Schedule GSA. The GSA schedule is divided into three parts—Part 1, Part 2, and Part 3—based on the electric usage and

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

demand.[3] The remaining six customers were misclassified as residential customers. The monetary impact of the classification issues below was not material to Bolivar or TVA. Specifically, we noted:

- One customer was classified as GSA Part 1[4] instead of GSA Part 2. According to the General Power Rate – Schedule GSA, a customer should be classified as a GSA Part 2 if (1) usage is over 15,000 kWh, (2) metered demand exceeds 50 kW, or (3) contract demand is greater than 50 kW. When a customer is moved to GSA Part 2, they must remain at that classification for 12 months after the usage or demand meets the Part 2 criteria. This customer had metered demand of 50.2 kW in August 2006; 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 legacy CSA system used by Bolivar does not 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 by the GSA Part 2 rate schedule. Bolivar personnel were not aware the threshold for metered demand in the CSA system was 50.499 kW rather than 50.01 kW. In August 2007 the customer's demand was 53.3 kW, thereby meeting the GSA Part 2 demand requirement and was correctly classified as a GSA Part 2. The customer was classified correctly for the remainder of the audit period.
- Six customers were classified as Residential instead of GSA Part 1. According to the Residential Rate Schedule, this rate shall apply only to a single-family dwelling where the major use of electricity is for domestic purposes. We found:
  - Four customers were property management customers whose rental property accounts had reverted back to the property management name.

---

[3] 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."

[4] Under the General Power Rate – Schedule GSA between Bolivar and TVA, customers are classified as GSA Part 1 or GSA Part 2 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) if 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.

According to Bolivar personnel, rental property is considered temporary service and should be charged at a commercial (GSA) rate when vacant and in the property management name.

- Two customers were accounts for service other than Residential. According to Bolivar personnel, both of these customers were reclassified to the correct GSA rate based on our findings.

Metering Issues
In addition to the customer classification issues, our review of billing agency data noted the following issues related to metering of customers at Bolivar. We were unable to estimate the monetary effect because (1) demand meters were not in place or (2) usage readings were not available which would provide information to make the estimates. We found:

- Twenty customers were classified as GSA Part 2 with energy usage in excess of 15,000 kWh but were not measured for demand. Under Part 2 of the GSA Resale Rate Schedule and the Wholesale rate schedule, there would be no effect on the revenues for TVA or the distributor unless customer demand exceeded 50 kW. Without demand meters in place, we could not determine if any of these customers would have exceeded 50 kW. According to Bolivar personnel, the maximum load that can be realized is determined by the electrical configuration of the customer (service entrance and transformers). Consequently, it is possible that a load in excess of 50 kW could not be realized, and therefore a demand meter would not be needed. However, Bolivar does not have the maximum load information for each customer on file, nor is it in the CSA system. A physical inspection would have to be performed for each customer in order to determine the maximum load limit.
- Four customers were billed based on estimates instead of actual usage readings for 24 months or more. For two of these customers, once the meters were read, the practice of estimating the monthly bills resulted in the customers being charged for 2,500 kWh and 24,000 kWh, respectively, more than their actual usage. Actual readings on the other two customers had not been obtained since July 2006 and February 2007. According to Bolivar personnel, actual readings were obtained in May and July 2009 for these customers, and it was determined each had been overbilled. Bolivar does not have a formal policy defining the maximum time a meter reading can be estimated; however, we were informed the informal policy typically followed was to estimate usage for three to six months and then obtain an actual reading.

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. While TVA has established guidelines to determine if a distributor has adequate cash reserves (cash ratio[5] of 5 percent to 8 percent), TVA has not established guidelines to determine if a distributor's cash reserves are excessive.

We found Bolivar had more than enough cash on hand to cover planned capital projects and provide a cash reserve. As of June 30, 2008, Bolivar reported about $2.8 million in its cash and cash equivalent accounts, and the cash reserve after planned capital projects was about 12 percent.

Table 2 shows information about plans for major capital expenditures obtained from Bolivar's office manager and our review of Bolivar's Board of Directors' meeting minutes.

Bolivar's Planned Capital Expenditures

Capital Expenditure Plans	Project Cost
SCADA Completion	$120,000
Mapping Completion	$100,000
Total Planned Expenditures Funded From Cash Reserves	**$220,000**

Table 2

When compared to Bolivar's capital expenditure plans for the foreseeable future, the balance in Bolivar's cash accounts was enough to pay for these items and leave about $2.5 million as a reserve as shown in Table 3. Table 3 also shows Bolivar's cash ratio percentage was about 13 percent before accounting for planned capital expenditures and about 12 percent after accounting for them.

Bolivar's Cash Accounts Compared to Planned Capital Expenditures

	Cash and Cash Equivalents	Planned Capital Expenditures	Reserve After Planned Capital Expenditures
FY 2008	$2,755,412	$220,000	$2,535,412
Cash Ratio Percentage	12.6%		11.6%

Table 3

Discussions with Bolivar's management indicated the operating philosophy of management was to use a conservative, generally debt-averse approach.

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

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

According to TVA records, over the past five years Bolivar was approved for rate increases in 2003 and 2005. Table 4 shows the rate increases received by Bolivar and the cash position and cash ratio at June 30 prior to the effective date of the rate increase.

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

Cash on Hand Equivalent to an 8% Cash Ratio	Cash and Cash Equivalents[6] and Cash Ratio	Rate Increase[7]		
		Additional Revenue	Percent	Effective Date
$1,247,067	$1,487,995 (CR = 9.6%)	$38,000	0.22%	10/1/2003
$1,307,314	$2,322,242 (CR = 14.2%)	$488,559	2.75%	10/1/2005

Table 4

Coupled with this debt-averse philosophy, distributors consider 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. Examples of weather events[8] TVA distributors have incurred include damage from (1) the recent January 27, 2009, ice storm in Kentucky and Tennessee where about 130,000 of TVA distributor consumers lost their electricity and (2) tornados and the impact of tropical storms, such as the 2005 damage to Mississippi systems resulting from hurricane Katrina.

CONTRACT COMPLIANCE ISSUES

Our review noted three areas where Bolivar was not meeting the requirements of the power contract with TVA. Specifically, we found: (1) co-mingling of electric department funds with those of other service departments, (2) inaccurate allocation of costs between service departments, and (3) customers with demand above 50 kW without a contract. Discussion on each of these items follows.

Co-Mingling of Funds

Section 1, Purpose of Contract, of the power contract between Bolivar and TVA states, "electric system funds and accounts shall not be mingled with other funds or accounts of Municipality." Our review noted that cash collections for other services are co-mingled with cash collections for electric services in the same

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

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

[8] After a severe weather event, utilities launch massive and costly round-the-clock restoration efforts. In addition to costs for miles of new wire, new poles, new transformers, and their own crews, utilities often have to pick up the bill for other utility crews providing assistance in the restoration effort.

bank account. Similarly, billings for electric and all other service departments are recorded in the same receivable account. According to TVA personnel, TVA has allowed the practice of the distributor using the same bank account(s) for all of their business activities. Also, TVA has allowed a distributor, like Bolivar, to perform billings for other departments' utility services and use one (electric) general ledger to record the activities as long as the items are separately accounted for each month. According to Bolivar personnel, customer payments collected in one month are paid to the other service departments after the next month's closing, which could be between 1 month to 1.5 months depending on the customer's billing cycle.

The Bolivar financial statements at June 30, 2007, and June 30, 2008, included cash for collections of other departments' services in the cash balances reported as Electric Department Assets. In addition, June 30, 2007, and 2008 balances shown on the financial statements in the receivables account "Customers' Accounts" are $2,623,625 and $2,882,383, respectively, and include customer receivables for services provided by other service departments.

In a separate report on another distributor issued in August 2009, we recommended TVA work with the distributor and modify the collections process to separate electric department funds from those of other service departments. TVA management was satisfied the distributor's process accounted for the collections separately in the general ledger and also accepted that payments to the other service departments consistently lagged two months behind the actual collections because of the billing process. As a result, TVA management plans no action on this issue. Therefore, we suggested TVA consider modifying Section 1 of the power contract during the formal implementation of a rate change to no longer prohibit such actions.

Allocation of Joint Costs

We noted one instance in which Bolivar's accounting practices did not conform to the power contract with TVA. 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." Our review of allocations made during the audit period found in certain instances the allocation percentages were not applied in accordance with the last TVA joint cost allocation study, which occurred in 1986, or applied consistently. As a result, we noted an error in the June 2008 allocations which resulted in a total overbilling to the City of $2,789 and an overbilling to the County of $1,242.

Customer Contracts When Demand Exceeds 50kW

Under Bolivar's contract with TVA, all customers that exceed 50 kW monthly are required to sign a formal contract. We randomly selected 33 accounts classified as GSA Part 2 or higher in the billing agency data and found only 13 had a contract with Bolivar. The contract includes a contract demand amount which is used in placing the customer in the correct classification, and the amount is also entered into the CSA system for computing the customer's minimum bill.[9]

In a separate report on another distributor issued in May 2009, we recommended the distributor review management reports listing customers that are above 50 kW hours without a contract and work with these customers to obtain signed contracts. TVA agreed the Schedule of Rates and Charges requires distributors to obtain contracts with all customers whose actual or contract demand exceeds 50 kW. However, TVA did not agree with our recommendation to review management reports listing customers that are above 50 kW hours without a contract and work with these customers to obtain signed contracts. Rather, TVA management prefers to adjust the contract threshold requirement of 50 kW (established in 1963) since requiring contracts with small commercial customers is a time-consuming and difficult task which may provide little benefit for distributors or the TVA system. According to TVA management, a recommendation that a new and higher threshold be established as part of the rate change process with the distributors will be presented to the Board. When the rate change is put into effect, all retail customers above the new threshold will be expected to have executed contracts. Target completion date will coincide with the rate change efforts that are currently under way with the distributors and is expected to be in place by October 2010.

DISTRIBUTOR INTERNAL CONTROL ISSUES

We identified four issues where Bolivar's internal controls could be strengthened to improve completeness, accuracy, and validity of the billing data. Specifically, we found improvements could be made in the (1) accuracy of contract demand data entered in the system, (2) monitoring of manual data changes, (3) monitoring of negative usage (kWh) amounts in billing data, and (4) monitoring repetitive instances of zero usage amounts for individual accounts.

Contract Demand in Billing Agency System

We noted two issues related to entering contract demand in the billing system. Specifically, while performing our review of customers with demand in excess of 50 kW (see "Customer Contracts When Demand Exceeds 50 kW" on the previous page), we noted (1) one customer's contract demand was not entered into the system correctly, and (2) one customer that did not have a contract had a contract demand amount entered in the CSA system. According to Bolivar personnel, both of these issues would be corrected.

Monitoring Manual Data Changes

Before October 2007, Bolivar personnel received and reviewed reports showing manual changes made to customer information (e.g., classification number, rate

[9] For example, a customer becomes a GSA Part 2 when either (1) the customer's currently effective contract demand or its highest billing demand during the latest 12-month period is more than 50 kW but less than 1,000 kW or (2) the customer's billing demand is less than 50 kW and its energy takings for any month during such period exceed 15,000 kWh.

amounts, contract demand amounts, etc.) to ensure changes were appropriate and accurate. After the new CSA system went into production in October 2007, Bolivar personnel were unable to generate the report and, consequently, no reviews of changes to customer information have been performed on a routine basis. We contacted CSA and determined a similar report was available in the new system and informed Bolivar personnel how to generate the report.

Monitoring Negative Usage Amounts
Two instances of negative usage (kWh) amounts were found during our review of the billing data (70,000) and (3,334), and both were for GSA Part 1 customers. The first instance was the result of entering the total adjustment amount needed without considering the meter constant (multiplier) that is automatically applied in the system. The second instance was the result of entering the adjustment amount through two different screens (processes) which doubled the usage adjustment amount. According to CSA personnel, the new system does not currently have the capability of generating an exception report listing negative usage amounts, nor does the system have edit checks to prevent negative usage amounts from occurring. According to Bolivar personnel, only the kWh were incorrect in the adjustments, and the dollar amounts were correct in both cases; however, we did not verify the amounts since they would be immaterial to Schedule 1.

Monitoring Zero Usage Amounts
One GSA Part 1 customer had "0" usage readings for 12 of the 24 months in the audit period. Bolivar personnel determined the meter was broken and replaced the meter during the 12^{th} month with a 0 usage amount. A total of 4,335 kWh were reported for the 12 months with readings (4 months before the meter was replaced and 8 months after the replacement), or an average usage of 361.25 kWh per month. Bolivar personnel agreed the 0 usage should have been noticed on a timelier basis. Bolivar did not make an adjustment to the customer's bill to recover missed kWh.

TVA OVERSIGHT OPPORTUNITIES

We found opportunities to enhance TVA's oversight of the distributors. Specifically, we noted TVA has not (1) performed a joint cost study in over 20 years even though the TVA Accountant's Reference Manual calls for one to be performed every three to four years or when major changes occur that affect joint operations; (2) adequately defined the process for granting the Small Manufacturing Credit to ensure proper documentation, including evidence of approval, is submitted and maintained; (3) provided adequate guidance on when a demand meter is required; and (4) defined criteria for evaluating when a distributor's cash is excessive.

Joint Cost Allocation Studies
The current allocation of expenses between Bolivar and other City departments is based on a joint cost allocation study prepared in 1986 and has not been formally reviewed in the last 23 years. The joint cost allocation study needs to be updated for Bolivar to ensure the proper allocations of expenses occur between service departments. The TVA Accountant's Reference Manual states:

> (t)he electric system is regarded as a separate department even though, for efficiency and economy, some activities may be combined with other municipal or cooperative non-electric operations. Any shared costs would be allocated among departments on an equitable basis. Interdepartmental services are settled by monthly cash transfers. Allocations may be made based on space occupied; direction of effort, customers served or any other means that reasonably distribute costs among user departments. These cost allocations should be formally reviewed every three to four years by the distributor and TVA, or when major changes occur that affect joint operations.

In a separate report on another distributor issued in August 2009, we recommended TVA implement procedures to perform joint cost studies with each distributor that shares costs with other entities at least every three to four years as required by the TVA Accountant's Reference Manual. TVA management agreed the studies help allocate costs correctly, but stated they were very labor intensive. TVA stated they will work toward implementing the studies as additional resources are hired. Target date to begin the studies is January 2010.

Small Manufacturing Credit Certification Documentation
We noted one Bolivar customer was receiving the Small Manufacturing Credit (SMC). This customer originally received credit under a previous TVA program, the Large Manufacturer Bill Credit (LMBC) agreement, which was grandfathered into the SMC program. The LMBC required each customer receiving the credit to have completed an application form prior to receiving the credit and the application be approved by TVA. This was required to verify the (1) customer's contract demand would fall between 1,000 kW and 5,000 kW and (2) company had a Standard Industrial Classification code which fell between 20 and 39, inclusive, to qualify for the program. The LMBC was supplemented and amended in October 2003 to provide for revised and extended manufacturing credits for small manufacturing loads. This amendment became known as the SMC.

We obtained a copy of the application from the Distributor, signed by the customer on October 21, 2003, requesting the SMC credit be granted. The LMBC agreement states, "It is understood and agreed that credits shall not be allowed by Distributor for any account until a completed application is received and approved by TVA." The "Manufacturing Bill Credit Program" application form does not have an approval/signature line for a TVA representative. We were unable to locate any evidence that TVA approved this application.

No Guidance as to When a Demand Meter is Required

TVA could provide additional guidance on when installation of a demand meter is required. The GSA rate schedule indicates customers should be moved from GSA Part 1 to GSA Part 2 when their usage exceeds 15,000 kWh during any month. While GSA Part 1 customers are only billed for energy usage, GSA Part 2 customers are to be billed for any demand that exceeds 50 kW. However, TVA has not provided guidance to the distributors to indicate (1) at what point a GSA Part 2 customer should be required to have a meter that measures demand, (2) how often line monitors should be used to test whether a customer is nearing or exceeding the 50 kW demand threshold, or (3) what documentation should exist for GSA Part 2 customers to provide justification for why a demand meter does not need to be installed.

TVA currently performs an annual "true up" to account for distribution losses (i.e., the difference between kWhs used (as reported by the distributor on Schedule 1) and the kWhs delivered to the distributor by TVA). The distribution loss factor is calculated on the difference of kWhs but is applied to both kWh and kW demand because a similar calculation cannot be performed for kW demand. By issuing guidance as to when demand meters should be installed at distributor customers, TVA could increase the accuracy of the reporting of end-user demand and receive payment for demand not currently being reported.

In a separate report on another distributor issued in August 2009, we recommended TVA develop guidance to indicate when a distributor should install demand meters for GSA Part 2 customers. TVA management stated guidance would be provided to all distributors to evaluate the installation of a demand meter once a customer's monthly usage exceeds 25,000 kWh since it is probable that such a customer would meet the 50 kW thresholds for demand charges for GSA Part 2 customers. TVA management also indicated a distributor should consider factors such as the nature of the customer's business, operating patterns, and electrical equipment and building specifications when considering the installation of a demand meter.

No Criteria for Evaluating When a Distributor's Cash is Excessive

While TVA has established guidelines to determine if a distributor has adequate cash reserves (cash ratio of 5 percent to 8 percent), TVA has not established guidelines to determine if a distributor's cash reserves are excessive. TVA uses the cash ratio as one of the factors in determining if a rate increase is warranted for a distributor. However, the lack of defined criteria identifying when a distributor may have more than adequate cash on hand could negatively impact TVA's analysis regarding whether (1) a distributor's rates should be lower or (2) an additional rate review may be warranted.

In separate reports issued on other distributors in May 2009, we recommended TVA develop criteria to be used in determining whether a distributor's cash reserves are excessive and incorporate the criteria into the rate setting process. TVA management agreed and will make recommendations to the TVA Board that additional financial metrics be employed for purposes of administering the resale rate provisions in Section 5 of the wholesale power contracts. The need to consider cash reserves will be included in TVA management's recommendations to the Board. A change in the current guidelines to include these additional financial metrics requires Board action. Target completion date is December 2010.

RECOMMENDATIONS

We recommend the Chief Financial Officer (CFO) work with Bolivar to improve compliance with the contract. Specifically, Bolivar should:

1. Develop controls to reduce the likelihood of a customer's rate classification being changed in a manner that does not comply with the rate schedules.

   Bolivar's Response – Bolivar stated electrical meters are required by law to be accurate within 2 percent, plus or minus, and to change classification and drastically increase costs for an amount which is not within the required accuracy range would be excessive and indefensible. Therefore, the billing agency software rounds readings 50.499 kW and below to 50 kW and readings of 50.5 kW to 51 kW. Bolivar also stated TVA is aware of the process, and no action is warranted. See Appendix A for Bolivar's complete response.

   TVA Management's Comments – The CFO agreed with the recommendation and noted Bolivar is working with the billing agency to resolve classification and billing issues. See Appendix B for TVA's complete response.

   Auditor's Response – The Office of the Inspector General (OIG) agrees there is a 2 percent accuracy range for meters; however, the finding listed under "Customer Classification Issues" pertains to customers' classification as determined by the billing agency's software, not the accuracy of the customers' meters. Our finding shows the billing agency's software does not correctly classify customers based on the criteria established in the approved power rate schedules. Therefore, the OIG maintains Bolivar should work with the billing agency to correct the logic in the software so all customers will be accurately classified in accordance with the criteria in the power rate schedules at all times.

2. Monitor customer accounts for rental addresses to more consistently treat all customers of the same class in the same manner.

   Bolivar's Response – Bolivar agreed the customers classified as residential instead of GSA Part 1 should be classified as GSA Part 1 and stated these customers had been changed. Bolivar also stated six of the customers were misclassified due to human error, and the staff had been made aware of the issues. See Appendix A for Bolivar's complete response.

TVA Management's Comments – The CFO agreed the power contract requires consistent treatment of customers and noted Bolivar worked with the billing agency and resolved the classification issues. See Appendix B for TVA's complete response.

Auditor's Response – The OIG concurs with the actions taken but believes monitoring customer accounts for residential addresses will reduce the risk of similar instances recurring in the future.

3. Implement a procedure to either routinely monitor demand or place demand meters at customer service addresses where usage has exceeded 15,000 kWh.

   Bolivar's Response – Bolivar stated Engineering meets with every new customer to determine service entrance size and connected load. If the service entrance is not large enough to carry a load in excess of 50 kW or the transformer serving this customer is incapable of carrying a 50 kW load, no demand meter is installed. Should load be added to any customer which could result in a demand over 50 kW, an entrance change and electrical inspection by the Electrical Inspector of the State of Tennessee is required. Permits for this inspection can only be obtained at the office of Bolivar Energy Authority, and when such permits are issued, the Bolivar Energy Authority Engineering staff visits the site and meets with the electrician to determine if a 50 kW demand can be achieved. See Appendix A for Bolivar's complete response.

   TVA Management's Comments – The CFO agreed distributors should monitor demand to ensure compliance with the GSA rate schedule requirements and noted Bolivar had a process in place to determine delivery points that are capable of pulling loads in excess of 50 kW. Therefore, TVA management feels no further action is needed. See Appendix B for TVA's complete response.

   Auditor's Response – The OIG agrees a customer could use more than 15,000 kWh in a month without exceeding 50 kW or, conversely, exceed 50 kW without using more than 15,000 kWh in a month. The OIG also concurs with Bolivar's actions to meet with every new customer to determine service entrance size and connected load requirements. However, we also believe the service entrance size and connected load requirements for all customers (new and old) should be documented in a manner that is readily available and can be accessed, monitored, and modified (i.e., recorded in the billing agency system). This will allow Bolivar personnel to more easily identify and monitor customers near the usage and demand thresholds and determine when a customer needs to have a demand meter installed.

4. Work with the billing agency and implement a mechanism in the system (e.g., new field, standardized code in a comment field, etc.) to document the maximum load an account can pull in order to: (1) allow more efficient monitoring of the system's load requirements and (2) identify accounts that may need to have a demand meter installed.

   Bolivar's Response – Bolivar stated Engineering meets with every new customer to determine service entrance size and connected load. If the service entrance is not large enough to carry a load in excess of 50 kW or the transformer serving this customer is incapable of carrying a 50 kW load, no demand meter is installed. Should load be added to any customer which could result in a demand over 50 kW, an entrance change and electrical inspection by the Electrical Inspector of the State of Tennessee is required. Permits for this inspection can only be obtained at the office of Bolivar Energy Authority, and when such permits are issued, the Bolivar Energy Authority Engineering staff visits the site and meets with the electrician to determine if a 50 kW demand can be achieved. See Appendix A for Bolivar's complete response.

   TVA Management's Comments – The CFO stated that while implementing such a mechanism may result in an improvement to the Distributor's system, the power contract does not require such updates to the billing system. See Appendix B for TVA's complete response.

   Auditor's Response – The OIG agrees a customer could use more than 15,000 kWh in a month without exceeding 50 kW or, conversely, exceed 50 kW without using more than 15,000 kWh in a month. The OIG also concurs with Bolivar's actions to meet with every new customer to determine service entrance size and connected load. We also believe the service entrance size and connected load restrictions for all customers (new and old) should be documented in a manner that is readily available to be accessed, monitored, and modified. Therefore, we maintain Bolivar should work with the billing agency and implement a mechanism in the system (e.g., new filed, standardized code in a comment filed, etc.) to document the maximum load an account can pull in order to: (1) allow more efficient monitoring of the system's load requirements and (2) identify accounts that may need to have a demand meter installed.

5. Implement a procedure to limit the number of months usage may be estimated, and require meters be read at least once every FY.

   Bolivar's Response – Bolivar stated BEA was denied access to the property which resulted in estimated billing for the four customers listed in the report. Bolivar also stated a practical method which ultimately results in access being granted is to give the customer a high estimated bill. Bolivar has since received keys to access the meters and stated no further action was warranted. See Appendix A for Bolivar's complete response.

TVA Management's Comments – The CFO agreed with the recommendation and noted Bolivar had corrected the accounts based on estimates. See Appendix B for TVA's complete response.

Auditor's Response – The OIG concurs with the actions taken. However, we maintain Bolivar should implement a procedure to limit the number of months usage may be estimated and to require meters be read at least once every FY.

6. Implement a procedure to ensure only customers with contracts have contract demand entered in the system and the correct amount is entered.

   Bolivar's Response – Bolivar did not address this recommendation in their response.

   TVA Management's Comments – The CFO agreed the Distributor should appropriately input data into the system and also noted Bolivar had corrected the two incorrect demand amounts. See Appendix B for TVA's complete response.

   Auditor's Response – The OIG maintains Bolivar should implement a procedure to ensure only customers with a contract have contract demand entered in the system and the correct amount is entered.

7. Generate and review reports showing manual changes made to customer information to ensure updates were entered correctly in the system.

   Bolivar's Response – Bolivar stated that since October 2007 screens have been password-protected, and only key personnel with management clearance can make changes to data. Bolivar also stated they were working with the billing agency to get the report needed to check data changes. See Appendix A for Bolivar's complete response.

   TVA Management's Comments – The CFO agreed that while generating such a report may result in an improvement to the Distributor's system, the power contract does not require such a report. The CFO also noted the OIG was able to show Bolivar personnel how to get a report. See Appendix B for TVA's complete response.

   Auditor's Response – The OIG concurs with the actions taken, and no further action is necessary.

8. Work with the billing agency to develop and implement a process (e.g., generate an exception report, review specific screens, or add edit checks in the system, etc.) to notify the distributor of customers with negative usage or prevent negative usage from occurring.

Bolivar's Response – Bolivar stated that during the time of conversion from Legacy to CMB, the software picked up kWh billed differently if a meter constant was involved, and the new software addresses this issue. See Appendix A for Bolivar's complete response.

TVA Management's Comments – The CFO agreed that while developing and implementing such a process may result in an improvement to the Distributor's system, the power contract does not require such a process. See Appendix B for TVA's complete response.

Auditor's Response – The OIG recognizes there were issues in the conversion; however, we maintain Bolivar's internal controls would be strengthened by working with the billing agency to develop and implement a process to alert Bolivar when the data indicates negative usage. The OIG also recognizes the power contract does not require these specific processes. However, as a prudent business practice, distributors must maintain effective internal controls in order to (1) accurately bill their customers and (2) provide accurate information to TVA for calculation of the distributor's monthly power bill (Schedule 1).

9. Work with the billing agency to develop (or improve) an exception report listing accounts with repetitive zero usage.

Bolivar's Response – Bolivar stated the problem had been corrected and recognized the account should have been back billed. Bolivar also stated there were numerous accounts that have zero usage each month; therefore, a report showing zero usage would be useless because the person in the office would have no way of determining what is actually connected at the service. BEA meter readers are instructed to monitor possible metering errors while at the location, and the meter readers had been reminded of their responsibilities since human errors occur. See Appendix A for Bolivar's complete response.

TVA Management's Comments – The CFO agreed that while generating such a report may result in an improvement to the Distributor's system, the power contract does not require such a process. See Appendix B for TVA's complete response.

Auditor's Response – The OIG concurs with the actions taken; however, we also maintain an exception report listing accounts with repetitive zero usage would be beneficial, if not for the personnel in the office, then, for the meter readers. The meter reader could refer to the report while obtaining the reading and could determine whether the location appeared to be a seasonal account based on physical observation of the site. The OIG also recognizes the power contract does not require these specific processes. However, as a prudent business practice, distributors must maintain effective internal controls in order to (1) accurately bill their customers and (2) provide accurate information to TVA for calculation of the distributor's monthly power bill (Schedule 1).

The CFO should:

10. Review process for granting credits and implement procedures to ensure proper documentation for each application is submitted, evidence of review and approval by the appropriate TVA personnel is included on the form, and the documentation is maintained at TVA in accordance with appropriate record retention policies.

    TVA Management's Comments – The CFO agreed with the recommendation and stated TVA will work with the Distributor to ensure future credit certifications have the TVA required signatures and are appropriately kept on file.

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

Additional Comments Provided

In their response to the draft report, Bolivar provided information for one of the customer classification findings stating the customer had billed demand in excess of 50 kW during the period in question. We verified and agree with Bolivar's explanation and removed the finding and recommendation from the report.

Bolivar also provided statements about the findings in the following sections of the report:

- Use of Electric System Revenues
- Co-Mingling of Funds
- Allocation of Joint Costs
- Customer Contracts When Demand Exceeds 50 kW

See Appendix A for Bolivar's complete response.

BOLIVAR ENERGY AUTHORITY

815 Tennessee Street
P.O. Box 188
Bolivar, Tennessee 38008

Toll Free: 1-800-332-0457
Phone: 731-658-5257
Fax: 731-658-7703

September 23, 2009

Ms. Melissa Neusel

Project Manager

Office of the Inspector General

400 West Summit Hill Drive

Knoxville, TN 37902-1401

Dear Ms. Neusel;

We have reviewed the draft audit report of BEA and have enclosed comments relevant to your list of suggested improvements. I have enclosed our response with reference to subject title and page. If, upon review of these comments you have any questions, please give me a call.

Respectfully,

John Fortune

President/CEO

Page 4 & 5 – Customer Classification

1. Electrical meters are required by law to be accurate within 2% plus or minus. To change classification and drastically increase costs for an amount which is not within this required accuracy range would be excessive and indefensible. Because of this Central Service Billing Software rounds anything 50.499 and below to 50kW; kW readings of 50.5 will be rounded to 51 kW. TVA is aware of this process. No action warranted.
2. Central Service's Billing Software works on a 12 month threshold. Once a customer hits the demand threshold, the billing software changes their classification. It stays that way for 12 months. Central Service Billing Software changes back after 12 months if they have not hit the threshold again. No action warranted. The account had a billed demand of 53kw in November 2006.
3. The Customers who were classified as residential instead of GSA Part 1 have been changed. Bolivar Energy agrees that they should be classified GSA Part 1. Six of these resulted due to human error, staff has been made aware of these issues. BEA policy is meters for wells which are used for to serve single family residences are placed on residential rates. TVA is aware of this policy.

Page 5 – Metering Issues

Bolivar Energy Authority has customers which use more than 15,000kwh in a month but are physically unable to exceed 50kw demand. We also have customers with demands in excess of 50kw that do not use anywhere near 15,000kwh. The proper way to determine is a customer is capable of exceeding 50kw demand is through an engineering analysis not an arbitrary, inaccurate determination by an customer service representative with no knowledge of the customers capabilities.

Bolivar Energy Authority uses the following, more accurate method. The size and type of meter needed is determined by the Engineering Department. Engineering meets with every new customer to determine service entrance size and connected load. If the service entrance is not large enough to carry a load in excess of 50 kW or the transformer serving this customer is incapable of carrying a 50 kW load no demand meter is installed.

Example 1: A 120/240 volt, 200 amp entrance cannot carry a load in excess of 50 kW. Should a load greater than 50 kW be connected to this service it would literally burn up.

Example 2: A service which is served by a 15 kva transformer cannot possibly have a load in excess of 50 kW. The transformer will shut off long before 50 kW is reached.

Should load be added to any of these customers which could result in a demand over 50 kW an entrance change and electrical inspection by the Electrical Inspector of the State of Tennessee is required. Permits for this inspection can only be obtained at the office of Bolivar Energy Authority and when such permits are issued Bolivar Energy Authority Engineering staff visits site and meets with electrician to determine if a 50 kW demand can be achieved.

All service entrances large enough to have a load in excess of 50 kW and have a transformer capable of providing 50 kW of load have a demand meter installed. This method of determining load is much more accurate than any arbitrary kwh usage based on estimated load factor.

The GSA 2 is used to recover costs from customers that have demands in excess of 50kw. To place customers on GSA 2 and thereby drastically increasing their monthly bill when their connected equipment is incapable of use 50kw demand would be inexcusable.

Bolivar Energy Authority policy is that every meter is to be read every month if possible. However due to weather or lack of access to property estimation is sometimes required.

On the four customers that were billed on estimates. Bolivar Energy Authority was denied access to the property which resulted in estimated billing. Bolivar Energy Authority cannot force a customer to grant access to a meter short of court action which we have no intention of doing unless as a last resort. A more practical method which ultimately results in access being granted is to give the customer a HIGH estimated bill. Though this method may take a few months to work it NEVER fails. We must remember that Bolivar Energy Authority does not own this property, it is owned by the customer . We have since received keys to access these meters.

No further action warranted.

Page 7 – Use of Electric System Revenues

As you have stated TVA has not established set guidelines to determine what appropriate reserves are mainly because each Distributor is different and one set number will not work.

In reference to current cash reserves there are several items I feel were either not adequately explained or covered in your analysis.

1. Estimated cost for digital mapping has increased approximately $150,000.
2. TVA is in the process of finalizing specifications for AMR/AMI systems TVA will require distributors to install. Estimated cost for this system will be $1.5 - $2 million.
3. The cash reserves you indicate include moneys being drawn from bonds issues which have since been spent to cover material.
4. The cash reserves you indicate include a money market account which is set aside to make bond interest and principal payments twice a year, therefore cannot be counted as reserves.
5. The second money market account is used for cash flow issues. Since almost 80% of our monthly expenditures are paid at the first of each month and our revenue comes in periodically during the month we find ourselves in a negative cash flow situation the first of each month. Every month we must empty this account the first of each month to cover the TVA power bill. Additionally there have been five (5) times since the beginning of 2009 we have had to use a temporary line of credit to obtain additional funds, as much as $425,000 to pay the TVA bill.

Because of these issues our auditing firm of Young and Garret has informed our Board of Directors that, in their opinion, our reserves are too low and need to be increased by approximately $1,000,000.

Reserve levels are monitored and approved by the Bolivar Energy Authority Board of Directors. No change warranted.

Page 8 – Co-Mingling of Funds

Separation of funds upon receipt is impractical and in some instances impossible. The method that Bolivar Energy Authority uses is common practice among multiple service utilities and is approved by TVA.

Page 8 & 9 – Allocation of Joint Costs

There was apparently an error in communication on this issue. Bolivar Energy Authority has performed several cost allocation studies since 1986 and each time the TVA field accountant has had access to the study. Due to complaints from the Bolivar City Council, Bolivar Energy Authority had an outside consultant, Tennergy Corporation of Jackson, Tennessee; perform an independent study in 2003 which was also presented to the TVA field accountant.

In reference to the billing error which occurred in June 2008: this was a computer error and the bill was corrected the next month.

Page 9 – Customer Contracts When Demand Exceeds 50 kW

Bolivar Energy Authority is working on getting contracts signed with customers who exceed 50kW in conjunction with the SAS70 Audit. This is an ongoing process on a monthly basis. We understand that TVA is working on changing the threshold for contracts. We are putting all new GSA2 customers on contracts.

Page 10 – Monitoring Manual Data Changes

Since October 2007, screens are password protected. Only key personnel with Management clearance can make changes to data. We are working with Central Service to get needed report to check data changes.

Page 10 – Monitoring Negative Usage Amounts

The monetary amount customers were billed on these accounts was correct. During the time of conversion form Legacy to CMB the software picked up kwh billed differently if a meter constant was involved. The new software addresses this issue.

Page 10 – Monitoring Zero Usage Amounts

This was a seasonal service which runs zero usage much of the year. The problem was corrected and we recognize this should have been back billed. Bolivar Energy Authority has numerous accounts which have zero usage each month: primarily cabins, hunting lodges, camper poles and sheds. Therefore a report showing zero usage would be useless because the person in office would have no way of determining what is actually connected at the service. BEA meter readers are instructed to monitor possible metering errors while they are at the location. Human errors do occur and the meter readers have been reminded of their responsibilities.

RESPONSE TO TVA AUDIT REPORT

September 29, 2009

Robert E. Martin, ET 3C-K

RESPONSE TO DRAFT INSPECTION REPORT 2008-12037 – DISTRIBUTOR REVIEW OF BOLIVAR ENERGY AUTHORITY

This is in response to your memorandum dated September 1, 2009.

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

1. Develop controls to reduce the likelihood of a customer's rate classification being changed in a manner that does not comply with the rate schedules.
   - TVA management agrees that customer rate classification should comply with rate schedules.
   - **Actions taken or planned, and completion dates**: Distributor is working with Central Service Association (CSA) to resolve these classification and billing issues.

2. Work with the billing agency to ensure the software system has appropriate internal edits to properly classify customers based on actual usage/demand and the customer remains in the proper rate class for the appropriate period of time.
   - There is no indication that the billing agency's method of classifying customers based on actual usage/demand (fractional demand) results in inconsistent or discriminatory treatment.
   - **Actions taken or planned, and completion dates**: TVA does not plan to take any action on this.

3. Monitor customer accounts for multi-unit dwelling addresses to more consistently treat all customers of the same class in the same manner.
   - TVA management agrees that the Power Contract requires consistent treatment of customers.
   - **Actions taken or planned, and completion dates**: Distributor worked with CSA and resolved these classification issues.

4. Implement a procedure to either routinely monitor demand or place demand meters at customer service addresses where usage has exceeded 15,000 kWh.
   - TVA agrees that distributors should monitor demand to ensure compliance with the GSA rate schedule requirements. The rate schedule states, "Distributor shall meter the demands in kW of all customers having loads in excess of 50 kW."
   - **Actions taken or planned, and completion dates**: The Distributor has a process in place to determine delivery points that are capable of pulling loads in excess of 50 kW and TVA management feels that no further action is needed. Also, as TVA stated in the response on item 11 in the City of Oxford Electric Department Audit, TVA will provide guidance to all distributors to evaluate the installation of demand meters.

5. Work with the billing agency and implement a mechanism in the system (e.g., new field, standardized code in a comment field, etc.) to document the maximum load an account can pull in order to: (1) allow more efficient monitoring of the system's load requirements and (2) identify accounts that may need to have a demand meter installed.
   - While TVA management feels that implementing such a mechanism may result in an improvement to the Distributor's system, the Power Contract does not require such updates to the billing system.

6. Implement a procedure to limit the number of months usage may be estimated, and require meters be read at least once every FY.
   - TVA management agrees with the recommendation.
   - **Action taken or planned, and completion dates:** Distributor has corrected the accounts that were based on estimates.

7. Implement a procedure to ensure only customers with contracts have contract demand entered in the system and the correct amount is entered.
   - TVA management agrees that Distributor should appropriately input data into the system.
   - **Actions taken or planned, and completion dates**: Distributor has corrected the two incorrect demand amounts.

8. Generate and review reports showing manual changes made to customer information to ensure updates were entered correctly in the system.

- While TVA management feels that generating such a report may result in an improvement to the Distributor's system, the Power Contract does not require such a report.
- **Actions planned or taken, and completion dates:** OIG was able to show Bolivar personnel how to get this report.

9. Work with the billing agency to develop and implement a process (e.g., generate an exception report, review specific screens, or add edit checks in the system, etc.) to notify the distributor of customers with negative usage or prevent negative usage from occurring.
    - While TVA management feels that developing and implementing such a process may result in an improvement to the Distributor's system, the Power Contract does not require such a process.

10. Work with the billing agency to develop (or improve) an exception report listing accounts with repetitive zero usage.
    - While TVA management feels that generating such a report may result in an improvement to the Distributor's system, the Power Contract does not require such a report.

11. Review process for granting credits and implement procedures to ensure proper documentation for each application is submitted, evidence of review and approval by the appropriate TVA personnel is included on the form, and the documentation is maintained at TVA in accordance with appropriate record retention policies.
    - TVA management agrees with this recommendation. Going forward TVA will work with the Distributor to obtain proper documentation from any customer wishing to qualify for any of TVA's credit programs.
    - **Actions planned or taken, and completion dates**: TVA will work with the Distributor to ensure that future credit certifications have the TVA required signatures and are appropriately kept on file.

Kim S. Greene

Kimberly S. Greene
Chief Financial Officer and
Executive Vice President, Financial Services
WT 7B-K

VB: JSE
cc: See list on page 4

Peyton T. Hairston Jr., WT 7B-K
John P. Kernodle, WT 6A-K
John E. Long, Jr., WT 7B-K
Jill M. Matthews, ET 3C-K
Richard W. Moore, ET 4C-K
John M. Thomas III, WT 4B-K
John G. Trawick, WT 3D-K
Benny R. Wagner, ET 4C-K