Memorandum from the Office of the Inspector General

July 6, 2011

Kimberly S. Greene, WT 7B-K

REQUEST FOR FINAL ACTION – AUDIT 2010-13286 – DISTRIBUTOR AUDIT OF WARREN RURAL ELECTRIC COOPERATIVE CORPORATION

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

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

If you have any questions, or wish to discuss our findings, please contact me or Richard C. Underwood, Acting Director, Distributor Audits, at (423) 785-4824. We appreciate the courtesy and cooperation received from your staff during the audit.

Robert E. Martin

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

SLS:JP
Attachment
cc (Attachment):
Steve Byone, WT 4B-K
Michael B. Fussell, WT 9B-K
Peyton T. Hairston, Jr., WT 7B-K
Tom Kilgore, WT 7B-K
Richard W. Moore, ET 4C-K
Robert A. Morris, WT 7C-K
Emily J. Reynolds, OCP 1L-NST
Stephen B. Summers, WT 4B-K
John M. Thomas III, MR 6D-C
John G. Trawick, WT 3D-K
Robert B. Wells, WT 9B-K
OIG File No. 2010-13286

Office of the Inspector General

Audit Report

To the Group President, Strategy and External Relations

DISTRIBUTOR AUDIT OF WARREN RURAL ELECTRIC COOPERATIVE CORPORATION

Audit Team
Stephanie L. Simmons
Jessica L. Monroe

Audit 2010-13286
July 6, 2011

ACRONYMS AND ABBREVIATIONS

FY	Fiscal Year
kW	Kilowatt
kWh	Kilowatt Hours
OIG	Office of the Inspector General
RUS	Rural Utilities Services
SEDC	Southeastern Data Cooperative
TVA	Tennessee Valley Authority
WRECC	Warren Rural Electric Cooperative Corporation

TABLE OF CONTENTS

EXECUTIVE SUMMARY i

BACKGROUND 1

FINDINGS 2

DISTRIBUTOR USED ELECTRIC SYSTEM REVENUES FOR NONELECTRIC PURPOSES 2

SOME CUSTOMER ACCOUNTS WERE MISCLASSIFIED AND/OR OTHERS WERE NOT METERED FOR DEMAND AS REQUIRED 4

ADEQUATE CASH RESERVES 6

TVA OVERSIGHT OPPORTUNITIES 8

RECOMMENDATIONS 8

APPENDICES

A. OBJECTIVE, SCOPE, AND METHODOLOGY

B. LETTER DATED JUNE 30, 2011, FROM GARY K. DILLARD TO ROBERT E. MARTIN

C. MEMORANDUM DATED JUNE 30, 2011, FROM KIMBERLY S. GREENE TO ROBERT E. MARTIN

Audit 2010-13286 – Distributor Audit of Warren Rural Electric Cooperative Corporation

EXECUTIVE SUMMARY

Why the OIG Did This Audit

As part of our annual audit plan, the OIG (Office of the Inspector General) audited Warren Rural Electric Cooperative Corporation's (WRECC) compliance with the power contract between the Tennessee Valley Authority (TVA) and WRECC, a power distributor based in Bowling Green, Kentucky, for the audit period July 2008 through June 2010. Key contract provisions included (1) proper reporting of electric sales, (2) nondiscrimination in providing power, and (3) use of electric revenue for approved purposes. For fiscal year 2010, WRECC provided power to approximately 60,000 customers that resulted in electric sales revenue of approximately $157 million. WRECC also owns and/or operates nonelectric businesses including a security system and monitoring service division, a propane sales subsidiary, and a natural gas distribution subsidiary, and partially owns a nonelectric bill processing company. In addition, WRECC provides billing services for a water utility.

What the OIG Found

WRECC generally appears to be in compliance with the contract provisions for (1) proper reporting of electric sales and (2) nondiscrimination in providing power. However, we noted instances of noncompliance with other provisions of the power contract. The most important instances were related to use of electric revenues where WRECC:

- Purchased a nonelectric business with electric revenues.
- Paid nonelectric business expenses with electric revenues.
- Guaranteed lines of credit for nonelectric businesses with electric revenues without prior approval from TVA.

Other areas for improvement in contract compliance were noted regarding co-mingling of electric and nonelectric funds, customer classification, and metering. Specifically, we found:

- WRECC did not maintain a separate general ledger for one nonelectric service division.
- Misclassified customer accounts and a metering issue that could impact (1) the proper reporting of electric sales and/or (2) nondiscrimination power contract provisions. We were unable to estimate the monetary effect of all the classification and metering issues we identified because in some instances information was not available. However, where we were able to estimate the monetary effect on WRECC and TVA, it would not be significant. According to WRECC personnel, the misclassified customer accounts were reclassified during the audit.

We also identified one area where TVA's oversight of the distributors should be enhanced. This issue, regarding the lack of a current joint cost study, has been reported in previous OIG distributor audit reports. TVA has agreed to take corrective action on this issue.

What the OIG Recommends

We recommend the Group President, Strategy and External Relations, work with WRECC to (1) comply with various contract provisions related to use of electric revenues and (2) remediate classification and metering issues. Detailed recommendations are listed on page 8 of this report.

Management's Comments

WRECC and TVA management generally agreed with our recommendations except for our recommendation to create an independent general ledger and corresponding accounts for the security system and monitoring service division and have taken or are taking actions to address the recommendations. The target completion date for all corrective actions is May 2012. See Appendix B for WRECC's complete response and Appendix C for TVA's complete response.

Auditor's Response

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

BACKGROUND

Warren Rural Electric Cooperative Corporation (WRECC) is a power distributor for Tennessee Valley Authority (TVA) based in Bowling Green, Kentucky, with revenues from electric sales of approximately $157 million in fiscal year (FY) 2010. Prior to April 1, 2011, TVA relied on distributors to self-report customer usage and subsequently the amount owed to TVA (Schedule 1). Customers are generally classified as residential, commercial, manufacturing, and lighting. Within these classes are various rate classifications based on the customer type and usage. Table 1 shows the customer mix for WRECC as of June 2010.

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

Customer Classification	Number of Customers	Revenue	Kilowatt Hours Sold
Residential	49,667	$75,647,186	818,543,438
General Power – 50 Kilowatt (kW) and Under (Commercial)	9,217	10,745,221	93,700,024
General Power – Over 50 kW (Commercial or Manufacturing)	669	58,606,084	773,168,098
Street and Athletic	213	1,092,096	6,106,275
Outdoor Lighting[1]	226	1,767,843	13,734,564
Unbilled Revenue		9,616,917	107,010,269
Total	**59,992**	**$157,475,347**	**1,705,252,399**

Table 1

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

[1] The "Number of Customers" represents those customers who only have Outdoor Lighting accounts with WRECC at June 30, 2010. In addition, another 12,605 customers had Outdoor Lighting accounts as well as accounts for other services. However, the totals for "Revenue" and "Kilowatt Hours Sold" include both categories of Outdoor Lighting customers.

In addition to the electric department, WRECC:

- Owns and operates a security system and monitoring service division.
- Owns a propane sales subsidiary.
- Owns a natural gas distribution subsidiary.
- Partially owns a bill processing company with another distributor.
- Provides billing services for a water utility.

FINDINGS

WRECC generally appears to be in compliance with the contract provisions for (1) proper reporting of electric sales and (2) nondiscrimination in providing power. However, we noted instances of noncompliance with other provisions of the power contract. The most important instances were related to use of electric revenues where WRECC (1) purchased a nonelectric business with electric revenues, (2) paid nonelectric business expenses with electric revenues, and (3) guaranteed lines of credit for nonelectric businesses with electric revenues without prior approval from TVA. Other areas for improvement in contract compliance were noted regarding co-mingling of electric and nonelectric funds, customer classification, and metering.

As of June 30, 2010, WRECC had enough cash on hand to provide a cash reserve equivalent to a cash ratio of about 11.7 percent, which is greater than TVA's established guidelines for an adequate cash ratio of 5 to 8 percent. We also identified one area where TVA's oversight of the distributors should be enhanced. This issue, regarding the lack of a current joint cost study, has been reported in previous Office of the Inspector General (OIG) distributor audit reports.

DISTRIBUTOR USED ELECTRIC SYSTEM REVENUES FOR NONELECTRIC PURPOSES

Section 6 of the TVA power contract, "Use of Revenues," states approved uses of revenues from electric system operations, including any surplus, are (1) operating expenses, (2) debt service, and (3) reasonable reserves for renewals, replacements, and contingencies. In addition, the Schedule of Terms and Conditions, Section 1(a), states:

> Cooperative shall administer, operate, and maintain its electric system as a separate department in all respects, shall establish and maintain a separate fund for the revenues from electric operations, and shall not directly or indirectly mingle electric system funds or accounts, or otherwise consolidate or combine the financing of the electric system, with those of any other of its operations. The restrictions of this subsection include, but are not limited to, prohibitions against furnishing, advancing, lending, pledging, or otherwise diverting electric system funds, revenues, credit, or property to other

operations of the Cooperative, the purchase or payment of, or providing security for, indebtedness or other obligations applicable to such other operations.

As discussed in detail below, WRECC used electric system revenues to (1) purchase a propane sales company, (2) pay the obligations of a security system and monitoring subsidiary, (3) guarantee multiple lines of credit for three nonelectric subsidiaries, and (4) co-mingle funds of the electric department and its security system and monitoring subsidiary.

WRECC Used Electric Revenues to Purchase a Propane Sales Subsidiary
In 1998, WRECC purchased a 50 percent interest in a propane sales subsidiary by securing a loan for $1,645,286. In 2004, WRECC purchased the remaining 50 percent interest by securing a loan for $1,250,000. The power contract prohibits the purchase or payment of indebtedness or other obligations applicable to other operations of the Cooperative. The power contract also states the Cooperative shall not consolidate or combine the financing of the electric system with any of its other operations.

Since the initial purchase in 1998, WRECC has paid all principal and interest payments for the loans used to purchase the subsidiary from the electric department general fund cash account. These payments totaled $344,096 in FY 2009 and $342,058 in FY 2010. Net margin provided by the propane subsidiary during these years was $221,889 in FY 2009 and $363,244 in FY 2010.

TVA currently allows distributors to invest reserves in nonelectric business ventures with prior approval from TVA. If approved, TVA and the distributor execute appropriate legal protections, such as a joint use agreement and loan agreement. However, WRECC did not obtain approval from TVA to use electric revenues for the nonelectric purposes noted above, and the electric department has not been reimbursed for these expenditures.

WRECC Diverted Electric System Funds to Pay Obligations of a Security System and Monitoring Service Division
In 2004, WRECC absorbed a subsidiary that provided a security system and monitoring service. Since 2004, WRECC has paid all security system and monitoring service division expenses from the electric department general fund cash account. These expenses have been recorded in a separate account in the electric system general ledger and totaled $225,940 in FY 2009 and $288,542 in FY 2010.

WRECC Co-Mingled Electric System and Security System Division Funds
WRECC maintains separate general ledgers for all subsidiaries except the security system and monitoring service division, as noted above. The revenue, expense, receivable and loan accounts for the security system, and monitoring service division were included on the electric department's general ledger. The expenses mentioned above were paid out of the electric department general fund

cash account and were offset by revenues collected. WRECC personnel stated the profit and/or loss from the security system and monitoring service division was included in the electric department general fund cash account. Therefore, the electric department general fund cash account included a profit of $25,040 in FY 2009 and a loss of $14,764 in FY 2010 from the security system and monitoring service division.

According to TVA personnel, TVA has allowed distributors to use the same bank account(s) for both electric and nonelectric business. However, TVA personnel stated electric and nonelectric business activity should be recorded in separate general ledgers.

WRECC Guaranteed Nonelectric Lines of Credit With Electric System Revenues

WRECC guaranteed nonelectric lines of credit with electric revenues without prior approval from TVA. Specifically, WRECC guaranteed multiple lines of credit for the (1) propane sales subsidiary ranging from $250,000 to $500,000, (2) natural gas distribution subsidiary for $150,000, and (3) partially owned bill processing company for $250,000. According to WRECC personnel, the lines of credit have not been utilized. However, because the lines of credit can be drawn upon at any time, a monetary risk to the electric department exists.

SOME CUSTOMER ACCOUNTS WERE MISCLASSIFIED AND/OR OTHERS WERE NOT METERED FOR DEMAND AS REQUIRED

As discussed on the following page, we identified customer classification and metering issues that could impact the (1) proper reporting of electric sales and/or (2) ability to ensure nondiscrimination in providing power to members of the same rate class.[2] We were unable to estimate the monetary effect of the metering issues because customer demand information was not available. For the customer classification issues, the monetary effect on WRECC and TVA was not significant. However, correcting customer classification and metering issues is important to ensure all customers are placed in the correct rate classification and charged the same rate as other customers with similar circumstances.

Customer Classification Issues

We found a total of 37 customer accounts were misclassified under the Residential Rate – Schedule RS[3] that should have been classified under the

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

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

General Power Rate – Schedule GSA.[4] The GSA schedule is divided into three parts—Part 1, Part 2, and Part 3—based on electric usage and demand.[5] We noted 3,164 customer accounts that appeared to be improperly classified based on customer name and/or the existence of multiple accounts at the same address. At our request, WRECC reviewed a sample of 459 of these accounts that we judgmentally selected. WRECC determined 25 customer accounts (5.4 percent) were incorrectly classified. In addition, during our review of accounts with low usage, another 12 customer accounts were found to be misclassified as residential by WRECC personnel. The monetary impact of the classification issues detailed below would not be significant to WRECC or TVA. Specifically, we noted:

- Thirty-four customer accounts were separately metered structures, such as a barn, garage, workshop, shed, etc., that should be classified as GSA Part 1.
- Two customer accounts were businesses that should have been classified as GSA Part 1.
- One customer account was a group home. According to TVA personnel, a group home is not considered a single-family dwelling; therefore, the RS schedule does not apply. Group homes should be classified within the appropriate part of the GSA schedule based on usage and demand takings.

According to WRECC personnel, the 37 customer accounts have been reclassified from residential to the appropriate part of the GSA schedule.

---

[4] Under the General Power Rate – Schedule GSA, customers are classified based on the following requirements:

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

[5] Demand is a measure of the rate at which energy is consumed. The demand an electric company must supply varies with the time of day, day of the week, and the time of year. Peak demand seldom occurs for more than a few hours or fractions of hours each month or year, but electric companies must maintain sufficient generating and transmission capacity to supply the peak demand. Demand charges represent the high costs electric companies pay for generating and transmission capacity that sits idle most of the time. Demand charges are based on the amount of energy consumed in a specified period of time known as a demand interval. Demand intervals are usually 15 or 30 minutes. (Engineering Tech Tips, December 2000, Dave Dieziger, Project Leader, United States Department of Agriculture Forest Service, Technology & Development Program, http://www.fs.fed.us/eng/pubs/htmlpubs/htm00712373/index.htm.)

For TVA distributors, the commercial and manufacturer Schedules of Rates and Charges direct that metered demand be calculated as "the highest average during any 30-consecutive-minute period of the month of the load metered in kW."

Metering Issues

In addition to the customer classification issues, our review of billing agency data noted one issue related to metering of customer accounts at WRECC. We were unable to estimate the monetary effect because in some instances demand meters were not in place that would provide information to calculate the estimates. Specifically, we found 5 customer accounts classified as GSA Part 2 had energy usage in excess of 25,000 kilowatt hours (kWh) but were not measured for demand.[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 these customer accounts would have exceeded 50 kW. In addition, we identified another 13 accounts with energy usage in excess of 25,000 kWh during the audit period. However, WRECC has installed or scheduled installation of a demand meter at the location for 9 of these accounts. Service to 3 of these accounts was either temporary or has been disconnected, and 1 account's usage reading greater than 25,000 kWh was due to a multiple month billing so no further corrective action is necessary.

ADEQUATE CASH RESERVES

As of June 30, 2010, WRECC reported about $16.5 million in its cash and cash equivalent accounts.[7] WRECC management provided the planned FY 2011 capital expenditures, as shown in Table 2 below. WRECC funds its capital expenditures through use of the United States Department of Agriculture, Rural Utilities Services (RUS)[8] Electric Program, and other loans.

WRECC's FY 2011 Planned Capital Expenditures

Capital Expenditure Plans	Project Cost
Electric Plant	$16,781,047
General Plant	1,954,175
Contingencies	273,000
Deferred Items	85,000
Total Planned Capital Expenditures	**$19,093,222**

Table 2

6 On February 10, 2010, in response to a finding in a previous OIG distributor audit report, TVA issued guidance to distributors in Kentucky on how to evaluate whether a demand meter is needed when a customer's usage reaches 25,000 kWh.

7 The amounts related to the security service and monitoring division that were co-mingled with electric funds were excluded from cash reserves calculations.

8 The United States Department of Agriculture, Rural Utilities Services Electric Program, provides leadership and capital to upgrade, expand, maintain, and replace America's rural electric infrastructure. Under the authority of the Rural Electrification Act of 1936, the Electric Programs make direct loans and loan guarantees to electric utilities to serve customers in rural areas.

WRECC plans to obtain approximately $9.4 million in RUS loans and will obtain other loans to fund remaining capital expenditures. Because of the methods WRECC has selected for funding its capital improvements, these items have limited impact on WRECC's ongoing cash position. Table 3 shows WRECC's cash ratio was about 11.7 percent, which is greater than TVA's established guidelines for an adequate cash ratio of 5 to 8 percent.[9]

WRECC's Cash Accounts and Cash Ratio

	Cash and Cash Equivalents
FY 2010	$16,483,342
Cash Ratio	11.70%

Table 3

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

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

Cash on Hand Equivalent to an 8% Cash Ratio	Cash and Cash Equivalents[10] as Reported and Cash Ratio	Rate Increase[11]		
		Additional Revenue	Percent	Effective Date
$11,842,931	$8,187,061 (CR = 5.53%)	$714,000	0.54%	10/1/2009
$9,606,010	$8,399,140 (CR = 6.99%)	$2,000,000	1.51%	4/1/2008
$7,627,378	$5,982,430 (CR = 6.27%)	$405,851	0.38%	4/1/2006

Table 4

Discussions with WRECC management indicated its operating philosophy is to maintain and expand operations by using RUS loans, other loans, and cash from the electric department general fund cash account as necessary.

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

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

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

11 These are the rate increases requested by and approved for the distributor. These increases do not include any rate increases or decreases made by TVA, including Fuel Cost Adjustments, which were passed through by the distributor to the customer.

TVA OVERSIGHT OPPORTUNITIES

We found one opportunity to enhance TVA's oversight of this distributor. However, the issue noted for this distributor has been reported in previous OIG distributor audit reports. Specifically, we noted TVA has not performed a joint cost study of WRECC in over 20 years even though the TVA Accountants' Reference Manual calls for one to be performed every three to four years or when major changes occur that affect joint operations.

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

RECOMMENDATIONS

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

1. Request approval from TVA to use electric system revenues for (1) principal and interest payments on the purchase of the propane sales subsidiary and (2) support of the security systems and monitoring services division.

   WRECC's Response – WRECC agrees with the recommendation. WRECC will request that the board of Propane Energy Services, Inc., approve the payment of dividends to WRECC in the amount equal to the debt service annually on a fiscal year basis through FY 2015. WRECC has requested TVA perform a joint cost study for the security and monitoring services division in which WRECC's dispatch center performs services for the monitoring services. The joint cost study is currently in process, and a draft of the report should be available July 2011. See Appendix B for WRECC's complete response.

   TVA Management's Comments – TVA management agrees that distributors may not use electric system revenues for nonelectric system purposes. Distributor has agreed to implement measures under which the propane sales subsidiary will make principal and interest payments on the loan with the loan being paid over approximately five years. Following discussion with TVA, distributor understands that going forward; electric system revenues shall not be used for nonelectric system purposes. With regard to the security systems and monitoring services division monitoring services division, distributor has informed TVA that it does not use electric system revenues to support the security systems and monitoring services division. TVA will work with distributor to ensure the appropriate arrangements are put in place for such joint use. The target completion date for this is May 2012. See Appendix C for TVA's complete response.

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

2. Request approval from TVA for the guaranteeing of nonelectric lines of credit with electric revenues for the propane sales subsidiary, natural gas distribution subsidiary, and partially owned bill processing company.

   WRECC's Response – WRECC agrees with the recommendation. WRECC will remove its name as guarantor for the lines associated with the propane sales subsidiary and the natural gas subsidiary. The board for PenWar, the partially owned bill processing company, approved to cancel the line of credit in May 2011. See Appendix B for WRECC's complete response.

   TVA Management's Comments – TVA does not agree with this recommendation since it would be a use of electric revenues for nonelectric purposes. Distributor is taking action to remove distributor as guarantor of the line of credits for the propane subsidiary and natural gas distribution subsidiary. Distributor is no longer a guarantor of the line of credit for the bill processing company, as such line of credit has been cancelled. The target completion date for this is May 2012. See Appendix C for TVA's complete response.

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

3. Obtain approval from TVA prior to (1) any future investments of electric system revenues in nonelectric lines of business and (2) guaranteeing debts of nonelectric lines of business with electric system revenues.

   WRECC's Response – WRECC agrees with the recommendation. WRECC does not currently have any plans for entering other nonelectric lines of businesses. However, if it is considered in the future, management will discuss with TVA and have proper approvals in place before moving forward with the investment. See Appendix B for WRECC's complete response.

   TVA Management's Comments – If distributor proposes to use electric system funds for the purposes set forth in the power contract, TVA would be happy to work with distributor to approve and put in place agreements to help prevent misuse of electric system funds or assets in violation of the power contract provisions and ensure compliance with the use of revenues provisions in Section 6 of the power contract. TVA has discussed with distributor using electric system funds only for the purposes set forth in the power contract, and distributor agrees. See Appendix C for TVA's complete response.

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

4. Create an independent general ledger and corresponding accounts for the security system and monitoring service division.

WRECC's Response – WRECC does not agree with the recommendation to set up an independent general ledger for the security system and monitoring service division. WRECC has requested a joint cost study to be performed by TVA to verify that the monthly amount charged is sufficient to cover the costs. A draft of the joint cost study report should be available July 2011. WRECC feels that the activity for the security system and monitoring division is adequately segregated within the current accounting system and does not plan at this time to set up a separate general ledger. See Appendix B for WRECC's complete response.

TVA Management's Comments – TVA management agrees with the recommendation to the extent necessary for the distributor to carry out the requirements of Section 1 of the Terms and Conditions of the power contract, which require it to maintain the electric system separate from its other operations. TVA discussed this recommendation with distributor, and distributor informed TVA that it does account separately for the expenses and revenues of the security system and monitoring services division. See Appendix C for TVA's complete response.

Auditor's Response – WRECC's response does not disagree with the OIG finding that WRECC comingled the electric system and security system and monitoring service division funds but indicates that due to the very limited activity related to the security system and monitoring division, it is not cost effective to set up a separate general ledger to manage the activity. The OIG suggests TVA and distributor management monitor the security system and monitoring service division's level of activity and properly segregate these funds from those of the electric system as required under Section 6 of the wholesale power contract if the level of activity increases.

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

WRECC's Response – WRECC agrees with the recommendation. During the audit, 37 customer accounts were identified as misclassified as residential. All accounts were reclassified to the appropriate GSA schedule during December 2010. WRECC has procedures in place to review new accounts to determine the proper classification is set up initially in the system. See Appendix B for WRECC's complete response.

TVA Management's Comments – TVA management agrees that the power contract requires consistent classification of customers in accordance with the applicable rate schedule. Distributor has agreed to carry out this recommendation. The target completion date for this action is May 2012. See Appendix C for TVA's complete response.

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

6. In accordance with the TVA Guidance to Distributors on Demand Meters issued in February 2010, review all customers' usage greater than 25,000 kWh and either install demand meters, or document the reason a demand meter is not needed.

   WRECC's Response – WRECC agrees with the recommendation. The customer accounts have been reviewed, and reasons have been documented as to why a demand meter was not needed; however, the method used was not the same as the TVA guidance. WRECC is currently in the process of gathering information issued in the guidance from TVA. WRECC plans to have the review completed by June 2012. See Appendix B for WRECC's complete response.

   TVA Management's Comments – TVA management agrees. Distributor has agreed to carry out this recommendation. The target completion date for this action is May 2012. See Appendix C for TVA's complete response.

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

The Group President, Strategy and External Relations, should:

7. Review the distributor's use of electric system revenues for (1) supporting the security systems and monitoring services division, (2) purchasing the propane sales subsidiary, and (3) guaranteeing lines of credit for subsidiaries. Ensure that proper approvals and appropriate legal documents are executed to protect the electric ratepayer in accordance with the power contract.

   TVA Management's Comments – TVA no longer approves of the use of electric system funds for nonelectric purposes and, as such, does not agree with the recommendation. However, distributor is working to comply with the power contract with respect to the security systems and monitoring services division, propane sales subsidiary, and the lines of credit for subsidiaries. In the meantime, TVA is working with distributor to determine what arrangements and agreements could be put in place to best protect the electric system with respect to the use of electric system revenues that have already been used by distributor in these ventures.

   Also going forward, if distributor proposes to use electric system funds for the purposes set forth in the power contract, TVA would be happy to work with distributor to put in place agreements to help prevent misuse of electric system funds or assets in violation of the power contract provisions and to ensure compliance with the standard use of revenue provisions in Section 6 of the power contract. Going forward, if distributor proposes to use electric system funds for the purposes set forth in the power contract, TVA will work with distributor to approve and put in place agreements to help prevent misuse of electric system funds or assets in violation of the power contract provisions and to ensure compliance with the use of revenue provisions in

Section 6 of the power contract. The target completion date for this action is May 2012. See Appendix C for TVA's complete response.

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

OBJECTIVE, SCOPE, AND METHODOLOGY

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

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

To achieve our objective, we:

- Obtained electronic billing data for the audit period. To validate the reliability of the billing data, we compared the data to the information reported to TVA on the Schedule 1. No significant differences were noted, therefore the data was deemed reliable.
- Performed queries on data to identify classification, metering, and contract compliance issues. Reviewed results of the queries and, using nonstatistical sampling, selected accounts for further analysis and follow-up to determine whether misclassification, metering issues, or noncompliance with contract requirements occurred. Since nonstatistical sampling was used, projection of the results was not appropriate.
- Limited our work on internal controls to those control deficiencies identified as contributing to noted instances of noncompliance with the power contract and/or the TVA Act.
- Determined through inquiry and review of documentation whether WRECC had any nonelectric, system-related business interests supported by electric system funds.
- Obtained disbursements listings for the audit period. Reviewed and analyzed disbursements to identify instances where electric system funds may have been used for purposes not allowed under the TVA power contract. Used nonstatistical sampling to select questionable disbursements for further analysis and follow-up. Since nonstatistical sampling was used, projection of the results was not appropriate.
- Reviewed cash and cash equivalents in relation to planned capital expenditures and other business uses of cash.

OBJECTIVE, SCOPE, AND METHODOLOGY (cont.)

When evaluating results of our audit work, we used both qualitative and quantitative factors when considering the significance of an item. For the purposes of this audit, the quantitative factor considered in determining an item's significance is whether the item exceeds 3 percent of the average annual purchased power from TVA for the audit period. For this audit, this amount equaled $3,722,492. Also, for the purposes of this audit, we considered any errors identified as systemic or intentional as significant.

The scope of the audit was for the period July 2008 through June 2010. Fieldwork was conducted November 2010 through February 2011 and included visiting WRECC's offices in Bowling Green, Kentucky. 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.

WarrenRECC
A Touchstone Energy® Cooperative

June 30, 2011

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

RESPONSE TO DRAFT AUDIT 2010-13286 – DISTRIBUTOR AUDIT OF WARREN RURAL ELECTRIC COOPERATIVE CORPORATION

Dear Mr. Martin:

The following is management's response to the specific findings in the Distributor Review of Warren Rural Electric Cooperative Corporation dated May 31, 2011. The recommendations are stated first, along with agreement or disagreement and the actions taken or planned including dates of completion or planned completion.

1. **Request approval from TVA to use electric system revenues for (1) principal and interest payments on the purchase of the propane sales subsidiary and (2) support of the security systems and monitoring services division.**

   Response: WRECC agrees with the recommendation. WRECC will request that the board of Propane Energy Services, Inc. approve the payment of dividends to WRECC in the amount equal to the debt service annually on a fiscal year basis through FY2015. The security and monitoring services division activity is recorded separately on the TVA annual report on lines 415 and 416. Historically, the security division has generated enough revenues to cover the expenses related to services provided to members. During FY10, the security division reviewed its inventory and wrote off approximately $30,000, which resulted in a net loss for the year. Revenues collected from security customers are deposited in WRECC's general fund, but WRECC is able to determine security revenue from electric revenue through use of the SEDC consumer and general accounting systems. WRECC has requested TVA perform a joint cost study for the security and monitoring services division, in which WRECC's dispatch center performs services for the monitoring services. The joint cost study is currently in process and a draft of the report should be available July 2011.

951 Fairview Avenue, Post Office Box 1118, Bowling Green KY 42102-1118 • Phone: 270.842.6541 • Fax: 270.781.3299 • www.wrecc.com

2. **Request approval from TVA for the guaranteeing of nonelectric lines of credit with electric revenues for the propane sales subsidiary, natural gas distribution subsidiary, and partially owned bill processing company.**

   Response: WRECC agrees with the recommendation. WRECC will remove its name as guarantor for the lines associated with the propane sales subsidiary and the natural gas subsidiary. The board for PenWar, the partially owned bill processing company, approved to cancel the line of credit in May 2011.

3. **Obtain approval from TVA prior to (1) any future investments of electric system revenues in nonelectric lines of business and (2) guaranteeing debts of nonelectric lines of business with electric system revenues.**

   Response: WRECC agrees with the recommendation. WRECC does not currently have any plans for entering other nonelectric lines of businesses. However, if it is considered in the future, management will discuss with TVA and have proper approvals in place before moving forward with the investment.

4. **Create an independent general ledger and corresponding accounts for the security system and monitoring service division.**

   Response: WRECC does not agree with the recommendation to set up an independent general ledger for the security system and monitoring service division. WRECC currently has three accounts set up within the general ledger system as follows: 154.90 – Total Security Inventory, 415.90 – Total Security System Revenues and 416.90 – Total Security System Expense. Due to the fact that there is very limited activity related to the security system and monitoring division, it is not cost effective to set up a separate general ledger to manage the activity. The consumer accounting system provides detail for the revenue generated by the security system and it is brought over into the general accounting system monthly. Employees key their time directly to the expense account and any invoices paid are keyed to the related inventory or expense account with a budget item ID. The security system and monitoring division is charged for the dispatch services provided by WRECC's control center on a monthly basis. WRECC has requested a joint cost study to be performed by TVA to verify that the monthly amount charged is sufficient to cover the costs. A draft of the joint cost study report should be available July 2011. The activity is reported annually in the TVA annual report on lines 415 and 416. In addition, Form 990T is filed annually with the business activity related to the security system and monitoring service division. WRECC feels that the activity for the security system and monitoring division is adequately segregated within the current accounting system and does not plan at this time to set up a separate general ledger.

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

   Response: WRECC agrees with the recommendation. During the audit, 37 customer accounts were identified as misclassified as residential. All accounts were reclassified to the appropriate GSA schedule during December 2010. WRECC has procedures in place to review new accounts to determine the proper classification is set up initially in the system.

6. **In accordance with the TVA Guidance to Distributors on Demand Meters issued in February 2010, review all customers' usage greater than 25,000 kWh and either install demand meters, or document the reason a demand meter is not needed.**

   Response: WRECC agrees with the recommendation. The customer accounts have been reviewed and reasons have been documented as to why a demand meter was not needed; however, the method used was not the same as the TVA guidance. WRECC is currently in the process of gathering information issued in the guidance from TVA. WRECC plans to have the review completed by June 2012.

Sincerely,

Gary K. Dillard
President/CEO
WARREN RURAL ELECTRIC COOPERATIVE CORPORATION

cc: Kimberly S. Greene
Group President, Strategy and External Relations
TVA
400 West Summit Hill Drive, WT 7B
Knoxville, Tennessee 37902-1401

June 30, 2011

Robert E. Martin, ET 3C-K

RESPONSE TO DRAFT AUDIT REPORT 2010-13286 – DISTRIBUTOR AUDIT OF WARREN RURAL ELECTRIC COOPERATIVE CORPORATION

This is in response to your memorandum dated May 31, 2011.

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

RECOMMENDATIONS

1. Request approval from TVA to use electric system revenues for (1) principal and interest payments on the purchase of the propane sales subsidiary and (2) support of the security systems and monitoring services division.

    - TVA management agrees that distributors may not use electric system revenues for non-electric system purposes. As the OIG is aware, previously, TVA has entered into agreements with distributors approving the use of electric system funds for non-electric system purposes where there was a sufficient indirect benefit to the electric system to justify such use. However, TVA management no longer approves of this type of arrangements and as such, TVA does not agree with the recommended action to allow this use of electric system revenues.
    - Actions planned or taken and completion dates: Distributor has agreed to implement measures under which the propane sales subsidiary will make principal and interest payments on the loan with the loan being paid off in approximately five years. Following discussion with TVA, distributor understands that going forward, electric system revenues shall not be used for non-electric system purposes. With regard to the security systems and monitoring services division monitoring services division, distributor has informed TVA that it does not use electric system revenues to support the security systems and monitoring services division. Distributor only allows the security systems and monitoring services division to jointly use the electric system's monitoring equipment, and the electric system is reimbursed for this joint use. TVA will work with distributor to ensure that appropriate arrangements are put in place for such joint use. Target completion date is May 2012.

2. Request approval from TVA for the guaranteeing of nonelectric lines of credit with electric revenues for the propane sales subsidiary, natural gas distribution subsidiary, and partially owned bill processing company.

   - TVA management does not agree with this recommendation since it would be a use of electric revenues for nonelectric purposes.
   - Actions planned or taken and completion dates: distributor has informed TVA that is taking action to remove distributor as a guarantor of the line of credits for the propane subsidiary and natural gas distribution subsidiary. Distributor is no longer a guarantor of the line of credit for the bill processing company as such line of credit has been cancelled. Target completion date is May 2012.

3. Obtain approval from TVA prior to (1) any future investments of electric system revenues in nonelectric lines of business and (2) guaranteeing debts of nonelectric lines of business with electric system revenues.

   - If distributor proposes to use electric system funds for the purposes set forth in the Power Contract, TVA would be happy to work with distributor to approve and put in place agreements to help prevent misuse of electric system funds or assets in violation of the Power Contract provisions and to ensure compliance with the use of revenues provisions in section 6 of the Power Contract.
   - Actions planned or taken and completion dates: TVA has discussed with distributor using electric system funds only for the purposes set forth in the Power Contract, and distributor agrees.

4. Create an independent general ledger and corresponding accounts for the security system and monitoring service division.

   - TVA management agrees with the recommendation to the extent necessary for distributor to carry out the requirements of section 1 of the Terms and Conditions of the Power Contract which require it to maintain the electric system separate from its other operations.
   - Actions planned or taken and completion dates: TVA discussed this recommendation with distributor, and distributor informed TVA that it does account separately for the expenses and revenues of the security system and monitoring services division.

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

    - TVA management agrees that the Power Contract requires consistent classification of customers in accordance with the applicable rate schedule.
    - Actions planned or taken and completion dates: Distributor has agreed to carry out this recommendation. Target completion date is May 2012.

6. In accordance with the TVA Guidance to Distributors on Demand Meters issued February 2010, review all customers' usage greater than 25,000 kWh and either install demand meters, or document the reason a demand meter is not needed.

    - TVA management agrees with the recommendation.
    - Actions planned or taken, and completion dates: Distributor has agreed to carry out this recommendation. Target completion date is May 2012.

The Group President, Strategy and External Relations, should:

7. Review the distributor's use of electric system revenues for (1) supporting the security systems and monitoring services division, (2) purchasing the propane sales subsidiary, and (3) guaranteeing lines of credit for subsidiaries. Ensure that proper approvals and appropriate legal documents are executed to protect the electric ratepayer in accordance with the power contract.

    - As discussed above, TVA no longer approves of the use of electric system funds for non-electric purposes, and as such, does not agree with the recommendation. However, distributor is working to comply with the Power Contract with respect to the security systems and monitoring services division, propane sales subsidiary, and the lines of credit for subsidiaries. In the meantime, TVA is working with distributor to determine what arrangements and agreements could be in put in place to best protect the electric system with respect to the use of electric system revenues that have already been used by distributor in these ventures. Also going forward, if distributor proposes to use electric system funds for the purposes set forth in the Power Contract, TVA would be happy to work with distributor to put in place agreements to help prevent misuse of electric system funds or assets in violation of the Power Contract provisions and to ensure compliance with the standard use of revenues provisions in section 6 of the Power Contract.
    - Actions taken or planned and completion dates: TVA has discussed this recommendation with distributor. Going forward, if distributor proposes to use electric system funds for the purposes set forth in the Power

Contract, TVA will work with distributor to approve and put in place agreements to help prevent misuse of electric system funds or assets in violation of the Power Contract provisions and to ensure compliance with the use of revenues provisions in section 6 of the Power Contract. Target completion date is May 2012.

Kim S. Greene

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

YYA:TP
cc: Steve Byone, WT 4B-K
Michael B. Fussell, WT 9B-K
Peyton T. Hairston, Jr., WT 7B-K
Michael R. Hynes, WT 3D-K
Robert A. Morris, WT 7C-K
John M. Thomas III, MR 6D-C
John G. Trawick, WT 3D-K
Diane Wear, WT 4B-K
Robert B. Wells, WT 9B-K
EDMS