Memorandum from the Office of the Inspector General

August 19, 2016

Dwain K. Lanier, MR 6D-C

REQUEST FOR FINAL ACTION – AUDIT 2016-15361 – LOCAL POWER COMPANY RATE REVIEW PROCESS

Attached is the subject final report for your review and final 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. In accordance with the Inspector General Act of 1978, as amended, the Office of the Inspector General is required to report to Congress semiannually regarding audits that remain unresolved after 6 months from the date of report issuance.

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 Jennifer R. Torregiano, Senior Auditor, at (865) 633-7372 or Rick C. Underwood, Director, Financial and Operational Audits, at (423) 785-4824. We appreciate the courtesy and cooperation received from your staff during the audit.

David P. Wheeler

David P. Wheeler
Assistant Inspector General
  (Audits and Evaluations)
ET 3C-K

JRT:BSC
Attachment
cc (Attachment):
  TVA Board of Directors
  Jennifer N. Brogdon, MR 6D-C
  Robertson D. Dickens, WT 4D-K
  William D. Johnson, WT 7B-K
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  John M. Thomas III, MR 6D-C
  OIG File No. 2016-15361

Office of the Inspector General

Audit Report

To the Vice President, Operational and Regulatory Assurance

LOCAL POWER COMPANY RATE REVIEW PROCESS

Audit Team
Jennifer R. Torregiano
Michael C. Cook
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Audit 2016-15361
August 19, 2016

ABBREVIATIONS

ARRC	Audit, Risk, and Regulation Committee
FY	Fiscal Year
LPC	Local Power Company
LRA	Local Rate Adjustment
O&RA	Operational and Regulatory Assurance
RLPC	Revenue Less Power Costs
RRRP	Revised Rate Review Process
TVA	Tennessee Valley Authority

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APPENDICES

Audit 2016-15361 – Local Power Company Rate Review Process

EXECUTIVE SUMMARY

Why the OIG Did This Audit

In 2011, as a part of its role as the regulatory authority over 155 local power companies (LPC), the Tennessee Valley Authority (TVA) Board of Directors directed TVA management to (1) perform a comprehensive review of all aspects of TVA's regulatory policy, (2) solicit input from the public as a part of that comprehensive review, and (3) make recommendations for TVA Board action. This review included the LPC rate review process.

In April 2013, as a result of the directed management review, TVA management provided recommended actions to the TVA Board, and the TVA Board voted to approve those recommendations. Through its resolution, the TVA Board increased oversight for LPC local rate adjustments (LRA) by approving the Revised Rate Review Process (RRRP) in the TVA regulatory policy. According to the TVA regulatory policy, the purpose of the revision was to add financial screening metrics to its Guideline Amount evaluation so that only those LPCs demonstrating a clear need would qualify for an expedited rate increase. TVA stated the Guideline Amount was initiated to provide LPCs with a targeted increase in total revenue necessary to address normal increases in business costs caused by growth in customers, operating expenses, and inflation.

We scheduled an audit of the LPC rate review process in our annual plan as part of continued work in the area of TVA's role as a regulator. We audited LRAs processed during fiscal year 2015 to determine if TVA's process for reviewing LPC rate change requests complies with the approved RRRP in the TVA regulatory policy.

What the OIG Found

We found TVA's process for reviewing LPC rate change requests did not comply with the approved RRRP in the TVA regulatory policy due to improper and unapproved calculations of the Guideline Amount in two areas. We also noted the method used to initially calculate an LPC's cash ratio excluded loans and investments of electric system funds to third parties.

What the OIG Recommends

We recommend TVA's Vice President, Operational and Regulatory Assurance (O&RA):

1. Calculate the Guideline Amount as stated in the RRRP or obtain approval for the current calculation method.

2. Include any loans or investments of electric system funds in the initial calculation to determine the LPC's cash ratio.

TVA Management's Comments

In response to our draft report, O&RA management stated the Guideline calculation being used was supported by the 1992 Guidelines, and O&RA believes its continued use under the RRRP was the intention of the regulatory staff and the TVA Board. O&RA acknowledged that the RRRP could have better clarified the annual Guideline Amount calculation. O&RA also stated it will modify the LRA process by documenting, for those LPCs that have any loans or investments of electric system funds, the calculation of the cash ratio with and without such loans. Additionally, O&RA plans to meet with the Audit, Risk, and Regulation Committee (ARRC) to review the report's findings, discuss the recommendations, and obtain advice on any further action. See Appendix C for TVA management's complete response.

Auditor's Response

As discussed in the accompanying report, we agree with O&RA's plans to (1) modify the LRA process by documenting, for those LPCs that have any loans or investments of electric system funds, the calculation of the cash ratio with and without such loans; and (2) review the report's findings and recommendations with the ARRC and obtain advice on any further action.

Although O&RA stated the Guideline calculation being used was supported by the 1992 Guidelines, and O&RA believed its continued use under the RRRP was the intention of the TVA Board, continuation of the 1992 practices is not supported by the presentation provided to the ARRC in April 2013 to obtain approval of the RRRP. That presentation stated "The proposed Revised Rate Review Process will replace the Resale Rate Guidelines approved in 1992 that are used in evaluating requests for increases in the distributor component of resale rates."

BACKGROUND

In 2011, as a part of its role as the regulatory authority for 155 local power companies (LPC),[1] the Tennessee Valley Authority (TVA) Board of Directors directed TVA management to (1) perform a comprehensive review of all aspects of TVA's regulatory policy, (2) solicit input from the public as part of that comprehensive review, and (3) make recommendations for TVA Board action. This review included the LPC rate review process.

In April 2013, as a result of the directed review, TVA management provided recommended actions to the TVA Board, and the TVA Board voted to approve those recommendations. Through its resolution, the TVA Board increased oversight for LPC rate change requests, known as local rate adjustments (LRA), by approving the Revised Rate Review Process (RRRP) in the TVA regulatory policy. The process applies in considering adjustments to the distribution component of resale rates for distributors of TVA power. According to the TVA regulatory policy, the purpose of the revision was to add financial screening metrics to the Guideline Amount evaluation so that only those LPCs demonstrating a clear need would qualify for an expedited rate increase (See Appendix B for the Guideline Amount formula). Those financial screening metrics are:

- Cash ratio,
- Debt service coverage or times interest earned ratio, and
- Net income ratio.

According to the TVA regulatory policy:

> The Guideline Amount is intended to reflect a distributor's normal cost of doing business on an annual basis, and such Guideline Amount generally averages approximately 0.5% of a distributor's annual sales revenue.

Where a need for a rate increase is not shown by analyzing these financial metrics, additional analysis is to be performed to determine whether a rate increase is appropriate. The RRRP states:

> It is recognized that a distributor's RLPC [Revenue Less Power Costs] needs are likely to increase over time because of such factors as growth, inflation, and need for plant replacements. It is expected that a distributor's needed increase in RLPC for any FY [fiscal year] would not exceed the amount (Guideline Amount) projected by the formula.

1 LPCs are also referred to as "distributors."

The RRRP states that each year this formula will be applied to the revenue and cost data of each LPC. Barring unusual circumstances and so long as the LPC requesting a rate increase less than (i.e., "Below") or equal to the Guideline passes the additional screening metrics set forth in the RRRP, TVA would expect to promptly agree to any such requested increase. Section C of the RRRP goes on to state that an in-depth financial analysis will be required where an LPC:

- "Fails the metrics" and consequently is not qualified for an expedited Guideline Amount rate increase, and the additional analysis provides insufficient justification for the rate adjustment;
- Requests an increase in RLPC that exceeds the Guideline Amount ("Above"); or
- Has Surplus Cash as defined in Section D (2).

Section D (2) states:

> Surplus cash working capital for a distributor (Surplus Cash) will be defined as a Cash Ratio of greater than 33%. A Cash Ratio of 33% would provide cash levels equaling approximately 120 days of power costs and operations and maintenance expenses. TVA will review and take into consideration any loans of electric system funds that the distributor may have made when evaluating Surplus Cash. The in-depth financial analysis provided for in section [*sic*] C above will be performed for any distributor that has Surplus Cash and requests a rate increase.

TVA stated the Guideline Amount was initiated to provide LPCs with a targeted increase in total revenue necessary to address normal increases in business costs caused by growth in customers, operating expenses, and inflation. In August 2013, the TVA Board approved a revision to the RRRP that delegated approval of all LPC rate requests to TVA management other than those with the following criteria:

- Requested rate action is above the Guideline Amount.
- Financial screening metrics do not clearly demonstrate need.
- New, special, or novel considerations within the rate request.

In August 2015, TVA staff proposed to increase delegation of approval to include above-Guideline Amount requests to allow the Audit, Risk, and Regulation Committee (ARRC) members to concentrate on more strategic regulatory matters. The proposed changes were approved by the TVA Board and included the following:

- Authorization for TVA staff to approve above-Guideline Amount requests meeting established financial metrics based on a detailed 5-year financial analysis.

- The TVA Board was to maintain oversight of all rate actions and the ARRC was to receive monthly regulatory updates along with LRA quarterly reports. The quarterly reports were to include a description, justification, revenue amount, Guideline status ("Above"/"Below"), and current and projected financial metrics of all requests.

We scheduled an audit of the LPC rate review process in our annual audit plan as part of continued audit work in the area of TVA's role as a regulator. See Appendix A for information pertaining to our objective, scope, and methodology.

FINDINGS

We found TVA's process for reviewing LPC rate change requests did not comply with the approved RRRP in the TVA regulatory policy due to improper and unapproved calculations of the Guideline Amount in two areas. We also found the method used to initially calculate an LPC's cash ratio excluded loans and investments of electric system funds to third parties. The following provides a detailed discussion of our findings.

IMPROPER AND UNAPPROVED CALCULATION OF THE GUIDELINE AMOUNT

We statistically sampled 22 of 123 LRAs processed during FY2015. For each sampled LRA, we determined if the request was reviewed in accordance with the RRRP by verifying:

- The Guideline Amount was correct.
- The cash, debt service coverage or times interest earned, and net income ratios were accurately calculated and reviewed.
- If applicable, the in-depth financial analysis was accurately performed, calculated, and reviewed.
- The LRA was accurately recommended for approval or denial.
- If the LRA was approved, it was approved appropriately by TVA management or the TVA Board, and it was approved in a timely manner.

Additionally, we noted if there were any open regulatory issues for the LPC when the rate change was requested.

Use of a 3-Year Rolling Balance
We found rather than evaluating an LRA against the annually calculated Guideline Amount, TVA uses a rolling 3-year cumulative total (i.e., current year's calculation of the Guideline Amount plus the 2 previous year's calculations less any rate increases taken) as the Guideline for each LPC. If an LPC asks for a rate increase that exceeds its Guideline Amount, the RRRP requires an in-depth financial analysis be performed before approving the request. However, with

TVA using the 3-year rolling Guideline Amount rather than the annual calculation, an LPC can ask for a rate increase larger than the annual Guideline Amount, and TVA will not perform an in-depth financial analysis as required under Section C of the RRRP.

During our audit period, there were 64 LRAs processed with a Guideline status of "Below" or "Equal." That status was determined by TVA using the 3-year rolling Guideline Amount. We determined 41 of the 64 LRAs (i.e., 64 percent) would have been considered "Above" Guideline when using the single FY Guideline calculation rather than the 3-year rolling amount. We also determined 8 of those 41 LRAs had an in-depth analysis performed, even though they had a status of "Below" or "Equal." Therefore, 33 out of 64 (i.e., 52 percent) LRAs with the Guideline status of "Below" or "Equal" should have had an in-depth financial analysis and did not.

TVA management informed us this was the way they had always performed the Guideline Amount calculation. When we asked for additional support for this departure, TVA management identified a sentence from a 1992 proposed rate change as the basis for the use of the cumulative total. We also noted the TVA regulatory policy specifies, "The proposed Revised Rate Review Process will replace the Resale Rate Guidelines approved in 1992 that are used in evaluating requests for increases in the distributor component of resale rates." We did not note any language in the Board-approved RRRP that allows the application of a rolling 3-year cumulative total in the calculation of the Guideline Amount.

Improper Calculation of the Guideline Amount
While testing the 22 sampled LRAs, we recalculated the Guideline Amount as presented in the RRRP. The RRRP contains specific definitions for each element of the Guideline Amount calculation (see Appendix B). Two elements of the Guideline Amount calculation are:

- B = Average Number of Customers served each month by Distributor during the Latest Period.
- b = Average Number of Customers served each month by Distributor during the Previous Period.

We noted cases where the average number of customers for the LPC had decreased from the previous period to the latest period. As a result, a negative amount resulted when performing the function "B-b." However, TVA personnel used "0" as the result of the calculation rather than the negative result. The RRRP does not contain any language allowing this modification of the calculation. TVA personnel were unsure as to why this was the practice.

For the 22 sampled LRAs, this improper modification of the calculation occurred three times and resulted in a total overstatement of the Guideline in two instances and an understatement in one instance for a combined overstatement of the Guideline Amount of $2,789 (as shown in Table 1 on the following page).

We did not project the sample results to the population because this calculation method is applied to all LPC Guideline calculations whenever the LPC's average number of customers has declined.

LPC	OIG Guideline Calculation	TVA Guideline Calculation	Difference	Percentage Difference
LPC 1	$ 78,442	$ 80,396	$(1,954)	2.5%
LPC 2	37,071	36,903	168	(0.5%)
LPC 3	331,073	332,076	(1,003)	0.3%
Total			**$(2,789)**	

Table 1

CALCULATION TO DETERMINE SURPLUS CASH EXCLUDES LOANS AND INVESTMENTS OF ELECTRIC SYSTEM FUNDS TO THIRD PARTIES

Section C of the RRRP states an in-depth financial analysis will be required where an LPC has surplus cash. Surplus cash is defined as a cash ratio greater than 33 percent (i.e., 120 days of power costs and operations and maintenance expenses). In addition, the RRRP states when evaluating surplus cash, TVA will review and take into consideration any loans of electric system funds the LPC may have made. According to TVA personnel, loans and investments of electric system funds to third parties are not included in the cash ratio calculation and are not considered until after cash levels have been determined to be surplus. If it is determined that an LPC has surplus cash, TVA performs an in-depth financial analysis. Part of that analysis includes consideration of any loans of electric system funds, specifically, in the review of deferred debits on the balance sheet.

Excluding loans and investments of electric system funds to third parties in the initial calculation of the cash ratio will cause the cash ratio to be lower and therefore potentially not representative of the LPC's true financial position. For example, an LPC could loan funds to another line of business or municipal entity to keep its cash ratio low and continue to request rate increases that are more than needed to address its RLPC. Accordingly, loans of electric system funds should be included in the cash ratio calculation.

RECOMMENDATIONS

We recommend TVA's Vice President, Operational and Regulatory Assurance (O&RA):

1. Calculate the Guideline Amount as stated in the RRRP or obtain approval for the current calculation method.

2. Include any loans or investments of electric system funds in the initial calculation to determine the LPC's cash ratio.

TVA Management's Comments – In response to our draft report, O&RA management stated:

1. The 3-year rolling balance used in the Guideline calculation was supported by the 1992 Guidelines, and O&RA believes its continued use under the RRRP was the intention of the regulatory staff and the TVA Board. O&RA acknowledged that the RRRP could have better clarified the annual Guideline Amount calculation with respect to the rolling 3-year balance.

   O&RA also stated an evaluation was completed by O&RA to compute Guideline Amounts for two scenarios: (1) an LPC that took the Guideline Amount each year for a set time period and (2) an LPC that took the Guideline Amount every third year for the same time period. The analysis indicates that a 3-year accumulation of the Guideline Amount is slightly greater than a yearly calculation, but the variance is less than 1 percent. O&RA's interpretation is that the 3-year rolling average method is not financially disproportional and is also consistent with the practices that have been in place since 1992 when the last TVA Board memorandum was approved that uses a 3-year rolling basis. However, O&RA stated as a result of the finding, it will review with the ARRC the application of the 3-year average approach to the Guideline Amount and will seek advice on any further action. The expected completion date is April 2017.

2. The RRRP TVA Board memorandum does not specifically reference the practice of using a zero value to reflect the change in customers. O&RA's historical interpretation and current practice is to reflect a decline in customers as a zero value rather than a negative value to recover fixed costs on an annual basis. O&RA stated it will review with the ARRC the use of a zero value (in lieu of a negative value) in the calculation of average number of customer variance and will seek advice on any further action. The expected completion date is April 2017.

3. The RRRP does not expressly require that any loans or investments of electric system funds be considered in the initial calculation of an LPC's cash ratio. The RRRP does, however, state specifically that "TVA will review and take into consideration any loans of electric system funds when evaluating surplus cash." As a result of the finding, O&RA stated it will review with the ARRC, O&RA's interpretation and current application of the cash ratio calculation and will seek advice on any further action. The expected completion date is April 2017. O&RA will also modify its LRA process by documenting, for those LPCs that have any loans or investments of electric system funds, the calculation of the cash ratio with and without such loans (which is used to determine if further review is warranted).

   See Appendix C for TVA management's complete response.

Auditor's Response – We agree with O&RA's planned actions regarding:

- Use of a zero value in the calculation to reflect changes in customers when calculating the Guideline Amount.
- Modifying the LRA process by documenting, for those LPCs that have any loans or investments of electric system funds, the calculation of the cash ratio with and without such loans.
- Reviewing the audit report's findings and recommendations with the ARRC and obtaining advice on further action.

O&RA stated the 3-year rolling balance being used in the Guideline calculation was supported by the 1992 Guidelines, and O&RA believed its continued use under the RRRP was the intention of the TVA Board. However, continuation of the 1992 practices is not supported by the presentation provided to the ARRC in April 2013 to obtain approval of the RRRP. That presentation stated "The proposed Revised Rate Review Process will replace the Resale Rate Guidelines approved in 1992 that are used in evaluating requests for increases in the distributor component of resale rates." The presentation to the ARRC gave no indication of the intent to continue using a 3-year rolling balance.

When the ARRC considers O&RA's use of a 3-year cumulative total to evaluate a LRA, we would note the analysis performed and mentioned by O&RA in its response did not appear to take anything into account other than the requested increase in rates. Rate increases do not occur in a vacuum, and there are other items that could result in a rate increase being below Guideline Amounts, including loans and investments to other lines of business. Accordingly, when an LPC request for a rate increase exceeds the annual Guideline Amount calculation, in our opinion, it is in the best interest of the rate payers that the more comprehensive analysis of the LPC's financial information provided for in the RRRP be performed.

If the ARRC agrees with the way in which O&RA recommends the calculations discussed in our report be performed, the RRRP should be modified to reflect the current manner in which the process works.

OBJECTIVE, SCOPE, AND METHODOLOGY

Our audit objective was to determine if the Tennessee Valley Authority's (TVA) process for reviewing local power companies (LPC) rate change requests complied with the approved Revised Rate Review Process (RRRP) in the TVA regulatory policy. Our audit scope included all LRAs processed during fiscal year (FY) 2015 (October 1, 2014, through September 30, 2015). To achieve our objective, we:

- Obtained the TVA Board of Directors' approved RRRP (as a part of the Audit, Risk, and Regulation Committee minutes) to serve as criteria for our testing.
- Obtained a listing of all local rate adjustments (LRA) processed by TVA during FY2015 that had been reported to the TVA Board. To ensure we had a complete and accurate population of LRAs, we compared the listing to supporting documentation maintained by TVA personnel in the Regulatory Assurance organization.
- Selected a statistical sample of 22 LRAs from the population of 123 LRAs processed in FY2015 using a 5-percent precision, 95-percent confidence level, and a 1-percent assumed error rate to determine if rate change requests were reviewed in compliance with the RRRP. Because we used statistical sampling, the results of the sample can be projected to the population.
- Tested the following attributes for the sampled LRAs in order to determine compliance with the RRRP:

    1. Obtained the Guideline Amount used in the LRA and recalculated it using the formula in the RRRP.
    2. Recalculated the cash ratio, debt service coverage/times interest earned ratio, and net income ratio used in the LRA.
    3. Determined if an LPC's ratios exceeded the screen levels in all of the three metrics.[1]
    4. Traced inputs of the in-depth financial analysis to Distributor Annual Report System reports and required LPC questionnaires.
    5. Verified whether or not the statements in the in-depth financial analysis used as support for the determination made by TVA were valid by tracing those statements to supporting documentation. We then used auditor judgment to determine if the determination made by TVA seemed reasonable.

[1] If an LPC exceeded the screen levels in all of the three metrics (i.e., the LPC is deemed to have "failed the metrics") or had a cash ratio of greater than 33 percent, the LPC would be required to undergo additional analysis to determine whether there is sufficient justification for the requested rate increase.

6. Determined if the level of approval for LRAs was appropriate.

7. Determined the date the LRA was requested by the LPC by obtaining the initial LRA letter.

8. Noted the date the LRA was (a) requested and (b) either approved or denied by obtaining supporting documentation. We determined if the elapsed time (in number of days) between the two dates was appropriate per the RRRP.

9. Obtained documentation to show TVA verified there were no open regulatory issues for the LPC requesting the rate adjustment by either (a) asking personnel responsible within the Regulatory Assurance group or (b) reviewing the list of open regulatory items provided to them by responsible personnel.

- Determined if the Guideline status of the population of 123 LRAs would have changed if the rolling 3-year cumulative balance was not in use by comparing the requested amount to the single year Guideline Amount calculation.

The objective of this audit was to determine compliance with the TVA regulatory policy and not to identify or assess TVA's system of internal controls; therefore, internal controls were not tested as part of this audit. We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require 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 objective. We believe the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective.

TOTAL REVENUES (RLPC)

SUBSEQUENT CHANGES

FORMULA[1]

Projected Increase = [M x (B-b)/b] + [M x H] + [T x P) + [0.041 x D) +

[1.67 x D x (B-b)/b] - [R/B x (B-b)] - S - [I-i], where

M = Distributor's Operating and Maintenance Expenses during the Latest Period.

B = Average Number of Customers served each month by Distributor during the Latest Period.

b = Average Number of Customers served each month by Distributor during the Previous Period.

H = Percentage Change from the end of the Latest Period over the end of the Previous Period in the Handy-Whitman Index for Total Distribution Plant.

T = Amount of any Taxes and/or Tax Equivalents (less any passthrough revenue taxes) applicable to Distributer's operations during the Latest Period.

P = Percentage change from the Latest Period over the Previous Period in Distributor's Electric Plant less Depreciation.

[1] This section A merely restates the formula used in the 1992 guidelines entitled, "Guidelines for Administration of Wholesale Power Contract Resale Provisions."

D = Sum of the amounts of Distributor's Depreciation and Total Debt Expenses for the Latest Period.

R = Amount by which Distributor's Total Sales Revenues (exclusive of any passthrough revenue taxes) for the Latest Period exceeds its Total Power Cost for the Latest Period.

S = Amount by which Distributor's Total Operating Revenue less Electric Sales Revenue for the Latest Period exceeds the same for the Previous Period.

I = Three-year average of Distributor's Other Income for the three years ending with the Latest Period.

i = Three-year average of Distributor's Other Income for the three years ending with the Previous Period.

August 8, 2016

David P. Wheeler, ET 3C-K

COMMENTS - DRAFT AUDIT 2016-15361 - LOCAL POWER COMPANY RATE REVIEW PROCESS

Thank you for providing us with the OIG's Draft Audit Report 2016-15361- Local Power Company Rate Review Process. We appreciate your efforts to help strengthen TVA's regulatory processes and model. Below is a summary of our comments.

Summary: Based on the review of the local rate adjustment (LRA) process, the OIG stated that TVA's process did not comply with the Revised Rate Review Process (RRRP) approved by the TVA Board in three areas. Improper and unapproved calculations of the guideline amount were cited regarding the rolling three-year guideline balance and the "customer served" computation. Additionally, the OIG stated that the method used to initially calculate an LPC's cash ratio should include any loans or investments of electric system funds. O&RA believes that employing 1) the rolling three-year guideline balance, 2) staff's existing application of the "customer served" computation, and 3) the calculation of cash ratio exclusive of loans or investments of electric system funds all comply with the RRRP as approved by the TVA Board. O&RA has consulted with TVA's Office of General Counsel (OGC) to confirm that O&RA's interpretations are reasonable and consistent with the RRRP. As a result of this OIG report, O&RA plans to meet with the TVA Audit, Risk, and Regulation (ARR) Committee to review the report's findings, discuss the recommendations, and obtain advice on any further action. Specifically, O&RA's current handling of the three-year guideline balance, the "customer served" computation, and the cash ratio determination will be discussed. Regarding the calculation of cash ratio, O&RA will modify its LRA process by documenting, for those LPCs that have any loans or investments of electric system funds, the calculation of the cash ratio with and without such loans (which is used to determine if further review is warranted).

Findings:
1A. Guideline - Use of a three-year rolling balance:
The OIG noted that the current Board memo does not address the three-year rolling average balance used in the calculation of the guideline amount for LRAs. O&RA acknowledges that the RRRP could have better clarified the annual guideline amount calculation with respect to the rolling three-year balance. The RRRP does state that the guideline calculation is the same formula used in the 1992 guidelines. This practice was supported by the 1992 guidelines, and continued following the RRRP, which we believe was the intention of the regulatory staff and Board.

An evaluation was completed by O&RA to compute guideline amounts for two scenarios: (1) an LPC that took the guideline amount each year for a set time period and (2) an LPC that took the guideline amount every third year for the same time period. The analysis indicates that a three year accumulation of the guideline amount is slightly greater than a yearly calculation, but the variance is less than 1%. The attached worksheet reflects the less than 1% difference that would occur if a guideline amount was taken annually, and the methodology reflects that an increase in retail revenue results in a reduction in the following year's guideline amount.

To test the sensitivity of a larger versus mid-size LPC, both Nashville Electric Service and Athens Utilities were evaluated using FY 2014 guideline data. For both LPCs tested, the resulting guideline amount for the following year decreased less than 1%.

O&RA's interpretation is that the three-year rolling average method is not financially disproportional and is also consistent with the practices that have been in place since 1992 when the last Board memo was approved that uses a three-year rolling basis. The use of the three-year method helps manage yearly cost variations and fluctuations, allows LPCs to plan the timing of rate changes, provides adequate protections for electric system ratepayers, and helps keep rates as low as feasible.

Recommendation: O&RA will review with the ARR Committee the application of the three-year average approach to the guideline amount and will seek advice on any further action. Expected completion date is April 2017.

1B. Guideline – Improper calculation of the guideline amount:
The OIG noted that an LPC's decline in customers was reflected as a zero value rather than a negative number. The RRRP Board memo does not specifically reference the practice of using a zero value to reflect the change in customers.

O&RA's historical interpretation and current practice is to reflect a decline in customers as a zero value rather than a negative value to recover fixed costs on an annual basis.

Since 1992, a zero value (in lieu of a negative value) has been used in the formula, and the RRRP guideline calculation employs the same formula used in the 1992 guidelines. Furthermore, nothing in the RRRP prohibits such approach. Given prior practice, we believe that O&RA's interpretation is reasonable and consistent with the RRRP.

Recommendation: O&RA will review with the ARR Committee the use of a zero value (in lieu of a negative value) in the calculation of average number of customer variance and will seek advice on any further action. Expected completion date is April 2017.

2. Calculation to determine surplus cash excludes loans and investment of electric system funds to third parties:
The OIG noted the RRRP refers to including any loans of electric system funds in the cash ratio calculation. The OIG is recommending that O&RA include any loans or investments of electric system funds in the initial calculation to determine the LPC's cash ratio. Going forward, O&RA will modify its LRA process by documenting, for those LPCs that have any loans or investments of electric system funds, the calculation of the cash ratio with and without such loans (which is used to determine if further review is warranted).

The RRRP does not expressly require that any loans or investments of electric system funds be considered in the initial calculation of an LPC's cash ratio. The RRRP does, however, state specifically that "TVA will review and take into consideration any loans of electric system funds when evaluating surplus cash."

David P. Wheeler
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O&RA wholly agrees with the OIG's finding that electric system ratepayers should not be funding loans or investments to third parties to the detriment of the electric ratepayers. In fact, O&RA stresses that the use of electric system funds, including loans or investment of such funds, is governed by the power contract between TVA and each LPC. Through O&RA's compliance efforts, TVA has identified and documented LPCs with non-electric loans and executed loan agreements to ensure that electric ratepayers are protected. As part of ongoing assurance efforts, TVA will continue to do such checks.

O&RA has interpreted the RRRP to direct that any loans or investments of electric systems funds be an additional consideration after an LPC has been determined to have surplus cash. As such, the loans are not considered in determining surplus cash, but rather evaluated for purposes of determining whether a rate increase request is appropriate, e.g. staff looks at whether the LPC has unapproved loans or investments that warrant resolution and/or whether the LPC is complying with the agreements providing for the terms of approved loans or investments along with how such loans impact the financial health of the LPC. O&RA feels that considering loans in the cash ratio could misrepresent the LPC's true liquidity and financial condition as those funds are not actually available for use.

O&RA appreciates the OIG's interpretation of when loans or investments should be considered in the RRRP. O&RA believes its interpretation and current application sufficiently addresses the loans and investments of electric system funds. Even so, O&RA will more clearly show how such concerns are addressed by documenting, for those LPCs that have any loans or investments of electric system funds, the calculation of the cash ratio with and without such loans (which is used to determine if further review is warranted). O&RA plans to review all of this with the ARR Committee.

Recommendation: O&RA will review with the ARR Committee O&RA's interpretation and current application of the cash ratio calculation and will seek advice on any further action. Expected completion date is April 2017. O&RA will also modify its LRA process by documenting, for those LPCs that have any loans or investments of electric system funds, the calculation of the cash ratio with and without such loans (which is used to determine if further review is warranted).

Thank you for allowing us the opportunity to review the draft report and provide feedback. Please let me or Jennifer Brogdon know if you have any questions.

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MR 6D-C

cc: Jennifer N. Brogdon, MR 6D-C
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