



Memorandum from the Office of the Inspector General

May 9, 2024

Laura J. Campbell

REQUEST FOR FINAL ACTION – AUDIT 2022-17369 – TVA’S INVOICE REVIEW AND APPROVAL 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.

If you have any questions or wish to discuss our findings, please contact Chad B. Bube, Director, Contract Audits, at (865) 633-7334. We appreciate the courtesy and cooperation received from your staff during the audit.

A handwritten signature in black ink that reads "David P. Wheeler".

David P. Wheeler
Assistant Inspector General
(Audits and Evaluations)

CBB:KDS

Attachment

cc (Attachment):

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OIG File No. 2022-17369



Office of the Inspector General

Audit Report

To the Vice President,
Supply Chain

TVA'S INVOICE REVIEW AND APPROVAL PROCESS

Auditor
Jennifer H. Norris

Audit 2022-17369
May 9, 2024

ABBREVIATIONS

CO	Contracting Officer
CTS	Contract Technical Steward
EAM	Enterprise Asset Management
FIA	Field Invoice Approver
FY	Fiscal Year
PO	Purchase Order
SPP	Standard Programs and Processes
T&M	Time and Materials
TVA	Tennessee Valley Authority

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MEMORANDUM DATED MAY 3, 2024, FROM LAURA J. CAMPBELL TO
DAVID P. WHEELER



Audit 2022-17369 – TVA’s Invoice Review and Approval Process

EXECUTIVE SUMMARY

Why the OIG Did This Audit

The Tennessee Valley Authority’s (TVA) Standard Programs and Processes (SPP) 04.004, *Invoice Review and Approval*, provides guidelines for the ongoing effective review and approval of supplier invoices. The policy describes the activities involved in ensuring complete, accurate, and timely approval of invoices for signature, or nonreceiving,ⁱ contracts and purchase orders (PO) regulated by TVA-SPP-04.000, *Management of the TVA Supply Chain Process*. The review of invoices includes validating that materials received and services rendered are accurately billed in accordance with the pricing structure and terms and conditions specified in the contract or PO.

On June 23, 2015, the Office of the Inspector General Issued a report on the adequacy of TVA’s invoice review and approval process.ⁱⁱ In the previous audit, our review of 143 invoices found inadequate reviews were performed on 104 invoices (73 percent). This audit, which has similar audit objectives to the aforementioned report, was initiated as part of our annual audit plan. Our objectives were to (1) assess TVA’s policies and procedures related to the review and approval of invoices, (2) determine compliance with applicable policies and procedures, and (3) determine if TVA’s invoice approvers have adequate information, including clear contractual compensation provisions and sufficient invoice detail, to effectively perform their role. The scope of our audit included Supply Chain nonreceiving contracts and POs with fiscal year 2021 invoiced costs totaling \$3,554,951,594.

What the OIG Found

We determined policies and procedures were not being followed to ensure effective review and approval of supplier invoices. Our review of 127 invoices found inadequate reviews were performed on 55 invoices (43 percent). Based on our review of sampled invoices and relevant contractual documentation, as well as interviews with field invoice approvers, contracting officers (COs), and contract technical stewards, we identified several potential underlying causes for why effective invoice reviews were not performed.

ⁱ A nonreceiving contract is a contract or purchase order where the invoices are electronically scanned into TVA’s Enterprise Asset Management (EAM) system and routed to the field invoice approver (FIA) for review and approval. The FIA reviews the invoices for agreement to contract or PO terms and approves the invoice in the EAM system. The scope of our audit does not include invoices processed through the evaluated receipts process or the materials receipt processes covered by Supply Chain-SPP-04.022, *Material Receipt, Inspection, Storage and Handling, Issue, Control and Return*.

ⁱⁱ Audit 2014-15031, *Adequacy of the Invoice Approval Process*, June 23, 2015.



Audit 2022-17369 – TVA’s Invoice Review and Approval Process

EXECUTIVE SUMMARY

Specifically, we determined:

- FIAs did not always follow invoice review processes to ensure all required elements were reviewed.
- FIAs did not always utilize the invoice review checklist to help facilitate an adequate invoice review.
- Contracts contained unclear and/or conflicting compensation provisions.
- Clear and frequent communication did not always exist between FIAs and COs.
- FIAs are only required to take an online training course one time.

We also determined TVA could clarify policies and procedures to better define roles and responsibilities related to (1) FIA approval of invoices related to POs with compensation terms different from the blanket contract and (2) required communications when there are changes in FIA assignments.

In addition, we noted several opportunities to improve contract administration. Specifically, we identified opportunities related to (1) documentation inconsistencies between contracts and information in TVA’s EAM system, (2) the issuance of amendments for contract modifications, (3) work performed after the contract’s termination date, and (4) contract clauses containing inconsistent guidance.

What the OIG Recommends

We recommend TVA management take actions related to (1) increasing the effectiveness of invoice reviews, (2) clarifying policies and procedures to better define roles and responsibilities, and (3) improving contract administration.

TVA Management’s Comments

In response to our draft report, TVA management concurred with the findings and stated they plan to take actions to achieve the recommendations. See the Appendix for TVA management’s complete response.

Auditor’s Response

We agree with TVA management’s planned actions.

BACKGROUND

The Tennessee Valley Authority's (TVA) Standard Programs and Processes (SPP) 04.004, *Invoice Review and Approval*, was issued effective September 15, 2011,¹ to provide guidelines for the ongoing effective review and approval of supplier invoices. The policy describes the activities involved in ensuring complete, accurate, and timely approval of invoices for signature, or nonreceiving,² contracts and purchase orders (POs) regulated by TVA-SPP-04.000, *Management of the TVA Supply Chain Process*. The review of invoices includes validating materials received and services rendered are accurately billed in accordance with the pricing structure and terms and conditions specified in the contract or PO.

TVA-SPP-04.004 defines the roles and responsibilities of the contracting officer (CO), contract technical steward (CTS), and field invoice approver (FIA) as shown in Table 1.

Roles and Responsibilities in the Invoice Review and Approval Process	
Role	Responsibilities
CO*	Responsible for (1) defining commercial terms, including developing clear pricing structures and ensuring invoice requirements are incorporated into their contracts/POs and conform to the requirements of TVA's Enterprise Asset Management (EAM) system, (2) conducting contract pricing and invoice reviews, and (3) managing all commercial contractual matters.
CTS	Responsible for (1) establishing TVA's requirements and the oversight of the technical performance of the contractor; (2) coordinating, as needed, with the FIA on the review and approval of invoices; (3) validating, as needed, the receipt of products or services; and (4) working closely with the CO throughout the life of the contract.
FIA	Responsible for (1) successfully completing TVA's FIA training and participating in refresher training, as required; (2) receiving invoices for approval through TVA's EAM system; (3) coordinating with the CO to understand the pricing structure of the contract; (4) verifying the amounts are within the PO limits by reviewing contract documentation and reviewing the record in the EAM; (5) reviewing all commercial details of the invoice for compliance with the contract terms; (6) verifying accuracy of any calculations in the invoice; (7) coordinating with the CTS and other personnel, as appropriate, to confirm validation of deliverables; and (8) approving or disapproving the invoice after review and validation has been completed.
* CO refers to TVA's Supply Chain personnel responsible for establishing and maintaining contracts with suppliers, including contract managers, procurement agents, and supply chain associates.	

Table 1

¹ At the time of our audit, the most recent revision of the policy was effective December 19, 2018.

² A nonreceiving contract is a contract or PO where the invoices are electronically scanned into TVA's EAM system and routed to the FIA for review and approval. The FIA reviews the invoices for agreement to contract or PO terms and approves the invoice in the EAM system. The scope of our audit does not include invoices processed through the evaluated receipts process or the materials receipt processes covered by SC-SPP-04.022, *Material Receipt, Inspection, Storage and Handling, Issue, Control and Return*.

The invoice review and approval process includes the receipt, entry, review, and approval of invoices in TVA's EAM system. Suppliers may either (1) send invoices to TVA's Accounts Payable, which enters the invoices into EAM and attaches a copy of the invoice to the TVA Invoice Review application or (2) submit invoices through the supplier portal, which allows the FIA to review the invoice in EAM before approving. Upon invoice receipt and entry into EAM, an electronic notification is routed to the FIA identified on the PO for review and approval. The FIA may return the invoice to Accounts Payable; however, if correction is needed, a detailed explanation must be included.

During fiscal year (FY) 2021, TVA made payments for invoiced costs totaling \$3,554,951,594 for nonreceiving contracts and POs managed by TVA's Supply Chain. The \$3.55 billion included payments of \$3.34 billion on 1,715 contracts and \$210 million on 8,296 POs.

On June 23, 2015, the Office of the Inspector General issued a report on the adequacy of TVA's invoice review and approval process.³ In the previous audit, our review of 143 invoices found inadequate reviews were performed on 104 invoices (i.e., 73 percent). This audit, which has similar audit objectives to the aforementioned report, was initiated as part of our annual audit plan.

OBJECTIVES, SCOPE, AND METHODOLOGY

Our objectives were to (1) assess TVA's policies and procedures related to the review and approval of invoices, (2) determine compliance with applicable policies and procedures, and (3) determine if TVA's invoice approvers have adequate information, including clear contractual compensation provisions and sufficient invoice detail, to effectively perform their role. The scope of our audit included Supply Chain nonreceiving contracts and POs with FY 2021 invoiced costs totaling \$3,554,951,594. To achieve our objectives, we:

- Obtained and reviewed TVA policies and procedures related to the review and approval of invoices to identify requirements and significant controls. Specifically, we reviewed (1) TVA-SPP-04.000, *Management of the TVA Supply Chain Process*; (2) TVA-SPP-04.004, *Invoice Review and Approval*; (3) TVA-SPP-04.002, *Procurement of Products and Services*; and (4) TVA-SPP-13.009, *Accounts Payable Process*.
- Obtained and reviewed the "Processing Accounts Payable and Cash Disbursement" and "Contract Management" Sarbanes-Oxley process narratives to identify significant controls.
- Obtained an understanding of internal controls associated with invoice review and approval activities to identify significant controls. We identified six controls significant to the audit objectives. Our primary methods for testing the operating effectiveness of significant controls were through (1) inquiry of FIAs, COs, and CTSs and (2) analysis of sampled invoices to assess the adequacy

³ Audit 2014-15031, *Adequacy of the Invoice Approval Process*, June 23, 2015.

of the FIA's review. Internal controls significant to the audit objectives were related to the following requirements or activities:

- Mandatory online training prior to performing the FIA function.
 - Receipt of invoices into TVA's EAM system and subsequent notification routed to the FIA for invoice review.
 - CO's responsibility to develop clear and specific pricing structures for contracts and POs.
 - CTS's responsibility to validate receipt of products and services in support of the invoice review process.
 - CO's responsibility to assist FIA's with invoice review for long-term contracts and perform contract compliance reviews to identify invoicing issues.
 - FIA's responsibility to review all commercial details and verify the accuracy of invoice calculation prior to invoice approval.
- Obtained and reviewed the training materials for the online FIA training to determine training content.
 - Reviewed the final report and corrective actions taken for Audit 2014-15031, *Adequacy of the Invoice Approval Process*, to obtain an understanding of the issues identified and the corrective actions taken.
 - Obtained a list of 10,011 Supply Chain nonreceiving contracts and POs with FY 2021 invoiced costs totaling \$3,554,951,594 for analysis and review.
 - Selected samples of contracts and POs, as shown in Table 2, to perform detailed testing of invoices. Our samples consisted of (1) seven contracts and five POs that were judgmentally selected based on auditor knowledge, spend amounts, and issues identified in Audit 2014-15031, *Adequacy of the Invoice Approval Process* and (2) 29 contracts and 20 POs that were randomly selected using a random number generator. Since we did not use statistical sampling, the results of the samples cannot be projected to the population.

Sampled Supply Chain Nonreceiving Contracts and POs					
Description	Population*		Sample		
	Items	FY 2021 Invoiced Costs	Type	Items	FY 2021 Invoiced Costs
Contracts	1,253	\$3,343,835,997	Judgmental	7	\$128,932,978
			Random	29	54,950,237
Purchase Orders	2,850	192,651,566	Judgmental	5	4,744,017
			Random	20	837,805
Total	4,103	\$3,536,487,563		61	\$189,465,037

* To eliminate lower risk contracts and POs from our population subject to sampling, we removed 5,908 contracts and POs, totaling \$18,464,031, that had no invoiced costs, negative invoiced costs, or invoiced costs less than \$10,000.

Table 2

- Selected 127 invoices totaling \$27,147,111 for testing and review from each of the sampled contracts and POs as shown in Table 3. For each contract or PO

in our sample, we either (1) tested all invoiced costs during FY 2021 or (2) judgmentally selected one to four invoices based on the highest dollar amount or the complexity of the compensation methodology.⁴ Since we did not use statistical sampling, the results of the samples cannot be projected to the population.

Summary of Sampled Invoices				
Description	Sample of Contracts/POs		Sample of Invoices	
	FY 2021 Invoiced Cost	No. of Contracts/POs	No. of Items	Amount
Contracts	\$183,883,215	36	85	\$ 23,845,753
Purchase Orders	5,581,822	25	42	3,301,358
Total	\$ 189,465,037	61	127	\$27,147,111

Table 3

- Reviewed the selected invoices and related contract documentation to determine if the (1) invoices complied with contract/PO terms, (2) compensation provisions were clear and concise, and (3) invoices included sufficient detail and were mathematically accurate.
- Identified 72 FIAs associated with the 61 contracts and POs and interviewed 47 of the FIAs to (1) assess compliance with policies and procedures, (2) determine if FIAs had an adequate understanding of their responsibilities for invoice review and approval, and (3) determine if FIAs had sufficient information to effectively perform their role.
 - We interviewed (1) at least one FIA associated with each sampled contract and (2) FIAs associated with POs when there was an invoicing deficiency identified during our review of the respective invoice.
 - Of the 25 FIAs not interviewed, 13 were associated with POs that had no invoice deficiencies, 8 were associated with a sampled contract for which we selected a different FIA to interview, 3 were no longer employed at TVA, and 1 was unresponsive to our interview request.
- Identified 34 COs associated with the 61 contracts and POs and interviewed 33 of the COs to (1) assess compliance with policies and procedures and (2) obtain an understanding of the CO's involvement with FIAs and the invoice review and approval process. The CO not interviewed was no longer employed at TVA.
- Identified 67 CTSs associated with the 61 contracts and POs and judgmentally selected 10 CTSs for interviews to (1) assess compliance with policies and procedures and (2) obtain an understanding of the CTSs' involvement with

⁴ Invoices for contracts and purchase orders that have cost-reimbursable or time and materials (T&M) compensation terms are typically more complex, thus having a higher inherent risk for errors.

FIAAs and the invoice review and approval process. Of the 10 CTSs interviewed, 5 also functioned as the FIA for the respective contract or PO.⁵

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 objectives. We believe the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

FINDINGS AND RECOMMENDATIONS

In summary, we determined:

- Policies and procedures were not being followed to ensure adequate review and approval of supplier invoices. Specifically, our review of 127 invoices found inadequate reviews were performed on 55 invoices (i.e., 43 percent). In addition, we identified several potential underlying causes for why effective invoice reviews were not being performed.
- Policies and procedures could be clarified to better define roles and responsibilities related to (1) FIA approval of invoices related to POs with compensation terms different from the blanket contract and (2) required communications when there are changes in FIA assignments.
- Contract administration could be improved by TVA.

The following provides a detailed discussion of our findings.

NONCOMPLIANCE WITH POLICIES AND PROCEDURES RESULTED IN INADEQUATE INVOICE REVIEWS

TVA-SPP-04.004, *Invoice Review and Approval*, requires FIAs to review all commercial details and verify accuracy of any calculations used in invoices. Specifically, the policy states that FIAs are responsible for reviewing the PO amount, pricing structure, rates, shipping charges, per diem rates, and appropriate vehicle use. We selected 127 invoices from 36 contracts and 25 POs to determine compliance with applicable policies and procedures. As shown in Table 4 on the following page, 43 percent of the invoices were not adequately reviewed.

⁵ TVA-SPP-04.004, *Invoice Review and Approval*, states that the FIA and CTS roles may be performed by the same individual.

Summary of Invoice Reviews			
Invoice Review	Count	Percentage	Amount
Adequate	72	57%	\$ 6,906,762
Inadequate	55	43%	20,240,349
Total	127	100%	\$27,147,111

Table 4

We determined the inadequate invoice reviews performed on 55 of the 127 invoices were related to one or more of the following key issues.⁶

- Costs not in compliance with the contract or PO terms – 25 of the 55 invoices included items or rates that were not provided for in the contract or PO, but were approved for payment by TVA. For example, multiple invoices included labor categories that were not provided for in the contract’s rate schedule.
- Unclear compensation provisions in contracts and POs – 20 of the 55 invoices were associated with contracts or POs that did not include clear and specific compensation provisions. For example, we identified three invoices associated with a contract that included T&M compensation provisions; however, the contract did not include a labor rate schedule detailing labor categories and billing rates. We also identified three invoices associated with a PO that was structured with fixed price compensation terms. However, the invoices included labor rates and the CO stated that the PO was intended to have T&M compensation terms.
- Insufficient invoice detail to allow for an adequate review – 15 of the 55 invoices did not include sufficient invoice detail to allow for an adequate invoice review. Specifically, some invoices and invoice supporting documentation (1) did not include an adequate description for progress billings on fixed price projects (e.g., the invoice did not specify the milestones achieved) or (2) were not descriptive enough to determine if invoiced costs were in compliance with the contract’s pricing schedule (e.g., the invoice line included costs billed for “equipment” or “crew”, but did not define type of equipment or crew utilized).

Potential Causes of Inadequate Invoice Reviews

We identified several potential underlying causes for inadequate invoice reviews, including:

- FIAs did not always follow required invoice review processes to ensure all required elements were reviewed.
- FIAs did not always utilize an available invoice review checklist to help facilitate an adequate invoice review.
- Contracts contained unclear and/or conflicting compensation provisions.

⁶ Multiple issues were associated with some invoices.

- Clear and frequent communication did not always exist between the FIAs and COs.
- FIAs are only required to take the online training course one time.

Each of the potential underlying causes is discussed in detail below.

FIAs Did Not Always Follow Required Invoice Review Processes

We determined 66 percent of FIAs interviewed had a sufficient process in place for reviewing invoices; however, the remaining 34 percent of FIAs did not take sufficient steps to properly validate the invoice prior to approval for payment. TVA-SPP-04.004, *Invoice Review and Approval*, states the FIA is responsible for (1) reviewing all commercial details, such as PO amount, pricing structure, rates, shipping charges, per-diem rates, appropriate vehicle use, etc. and (2) verifying accuracy of any calculations employed in the invoice. For FIAs who did not take sufficient steps to validate invoices, we asked how they ensured invoices were in compliance with the terms and conditions of the contract or PO. Examples of the FIA's responses included individuals stating they (1) verified that materials or services were received, (2) compared the invoice to the contractor's initial quote, and (3) reviewed the invoice to ensure the invoice will not cause the approved PO amount to be exceeded.

FIAs Did Not Always Utilize the Invoice Review Checklist

TVA-SPP-04.004 includes an Invoice Review Checklist for use by CTSs and FIAs. The Invoice Review Checklist is presented in the online FIA training course required of all individuals performing the FIA function. FIAs are not required to complete the checklist form for each invoice approved; however, the checklist is designed to facilitate the verification that (1) the invoice includes sufficient detail necessary to adequately review the invoice and (2) invoiced amounts meet contractual requirements.

We found that 81 percent of FIAs interviewed did not utilize the Invoice Review Checklist in performing invoice reviews. Of the 81 percent, 39 percent stated they were not aware the checklist existed. As previously stated, the Invoice Review Checklist is presented in the online FIA training course; however, the training course is only a one-time requirement. Referencing the checklist during the invoice review process could increase the FIA's awareness when considering if an invoice meets the invoice requirements and pricing provisions of a contract or PO.

Contracts Contained Unclear or Conflicting Compensation Provisions

TVA-SPP-04.002 and TVA-SPP-04.004, require Supply Chain and the CO to develop clear, complete contract language, including clearly defined and specific pricing structures. According to TVA-SPP-04.004, COs should also apply provisions that reduce the risk of overbillings and should define specific line-item materials and services to be provided. In addition, the aforementioned policies and procedures state that, when possible, the CO should use conformed contracts, which is a contract in which all the provisions of the contract are included in the contract document itself. Without clear, concise, complete, and

specific compensation terms, the FIA could lack the commercial details needed to properly validate invoiced costs.

Based on our review, we found that 12 of the 61 sampled contracts and POs had unclear and/or conflicting compensation provisions. For example:

- Two contracts referenced pricing schedules that did not exist. One contract included a compensation clause stating the contractor would be paid firm fixed prices as defined in the pricing schedule. The other contract provided for T&M compensation terms, which stated the contractor would be paid the rates shown on the pricing schedule for time spent performing work and for the provision of materials. However, neither contract included a relevant pricing schedule or labor rate attachment.
- Two contracts provided for T&M and fixed price compensation terms, but both of the contracts' pricing schedules included a labor rate category and labor rate ranges. Additionally, one of the contract's pricing schedules included a markup. Pricing schedules with labor rate ranges and/or markups align more similarly with cost-reimbursable compensation terms.
- One contract provided for fixed price compensation terms and stated the contractor would be paid firm fixed prices as defined in the pricing schedule. However, the pricing schedule primarily included fixed labor rates, a structure more closely aligned with T&M compensation terms.
- Two POs did not include the applicable labor rates or fixed unit rates in the PO documentation.

Clear and Frequent Communication Did Not Always Exist

TVA's invoice review and approval policy states the (1) FIA is responsible for coordinating with the CO to understand the pricing structure of the contract, (2) CTS is responsible for coordinating with the FIA on the review and approval of invoices and validating the receipt of products or services in support of the invoice review process, as needed, and (3) CO and CTS are responsible for conducting post award meetings with contract stakeholders, whenever possible, and including a discussion of the expectations and responsibilities of the invoicing process. However, TVA-SPP-04.004, *Invoice Review and Approval*, does not include a definition of which roles are considered to be contract stakeholders. In addition, the policy requires the CO to confirm the FIAs understand their responsibility in approving invoices for payment for long-term contracts during the first six months.

Through interviews of 47 FIAs, 33 COs, and 10 CTSs performed during the course of our audit, we determined clear and frequent communication did not always exist to ensure FIAs clearly understand pricing structures and invoice review responsibilities.

Specifically, we found:

- Nine of the COs interviewed (41 percent) who managed contracts⁷ included in our sample stated they did not confirm the FIAs understood their invoice review and approval responsibilities during the initial six months of a long-term contract.
- Nine of the COs interviewed (27 percent) stated that FIAs are not involved in post award contract meetings.
- Nine of the COs interviewed (27 percent) responded that communication with the FIA was not frequent.
- Three of the CTSs interviewed⁸ (30 percent) did not affirm the verification of the receipt of products and services invoiced.
- Eight of the FIAs interviewed (17 percent) stated they were not notified of contract modifications.

Interviews with COs also revealed there is no reporting mechanism within TVA's EAM system that notifies a CO when a PO is issued under a blanket contract or when changes in FIA assignments have been made to existing POs. Therefore, according to the COs, to identify FIAs assigned to new POs issued under a blanket contract, or changes in FIA assignments to existing POs, the CO must continually perform a manual review within TVA's EAM system. COs also informed us that due to the volume of POs issued on some contracts, COs communicate contract changes to the CTSs rather than the FIAs.

FIAs Are Only Required to Take the Online Training Course Once

TVA-SPP-04.004 requires any individual performing the FIA function to complete the designated TVA training and participate in refresher training, as required. Although TVA-SPP-04.004 states that FIAs are responsible for participating in refresher training, as required, Supply Chain personnel informed us that the training is only required one time. All 47 of the FIAs interviewed had completed the online training course; however, 14 of the FIAs interviewed⁹ (30 percent) did not affirm the adequacy of the training. In our interviews, we asked each FIA for suggestions on how the online training course could be improved and 10 FIAs (21 percent) believed the policy should be changed from a one-time training requirement to requiring refresher training at a defined cadence. Also, 7 FIAs (15 percent) stated that incorporating additional content on how to utilize TVA's EAM to access the invoice and contractual documentation would be beneficial. In addition, some FIAs suggested incorporating examples of properly supported invoices as well as invoice review scenarios in the online training course.

⁷ Of the 33 COs interviewed, 11 COs were only associated with POs and were not included in this analysis.

⁸ One of the CTSs interviewed did not verify the receipt of products and services and two CTSs interviewed did not respond in a manner in which we could determine if verification occurred.

⁹ Of the 14 FIAs who did not affirm the adequacy of the training, eight did not recall the training content four did not believe the training was adequate, and two did not respond in a manner that allows us to determine their opinion of the training.

We reviewed the FIA training presentation, which included (1) FIA roles and responsibilities, (2) contract pricing structures, (3) an overview of the contracting process, (4) an overview of the invoice review process, (5) invoice review and approval exercises, and (6) details on how to access the invoice, PO, or contract information in TVA's EAM system. Requiring FIAs to complete refresher training on a more frequent basis could result in a more effective and efficient invoice review and approval process.

Recommendations

We recommend TVA management:

- Implement procedures to (1) assess the clarity, conciseness, and completeness of compensation terms and (2) ensure contract terms establish an invoice format that includes sufficient detail.
- Revise policies to clarify the CO's and CTS's responsibility to (1) monitor the invoice approval process and (2) engage in clear and frequent communication with the FIA.
- Establish an automatic reporting mechanism to communicate (1) contract modifications to the FIA and (2) changes in FIA assignments for existing POs to COs.
- Require and establish a frequency for online refresher training.
- Assess the adequacy of the online FIA training related to the FIA's responsibilities for reviewing all commercial terms, communicating with the CO to understand the contract's pricing structure, and utilizing the Invoice Review Checklist as a reference during the invoice review process.

TVA Management's Comments – In response to our draft audit report, TVA management stated Supply Chain would (1) review procedures to assess employee understanding of and adherence to contract terms and conditions related to invoice approvals, (2) explore options to enhance communications of contract changes between COs and FIAs, and (3) review FIA training materials, contents, and frequency. See the Appendix for TVA management's complete response.

Auditor's Response – We agree with TVA management's planned actions.

POLICIES COULD BE CLARIFIED TO BETTER DEFINE ROLES AND RESPONSIBILITIES

Our review of TVA SPPs related to procurement activities and invoice review and approval processes identified opportunities for TVA to clarify policies and procedures. Specifically, policies could better define roles and responsibilities regarding (1) FIA approval of invoices related to POs with compensation terms different from the blanket contract and (2) required communications when there are changes in FIA assignments.

FIA's Role When POs Differ from Blanket Contracts

According to TVA-SPP-04.004, *Invoice Review and Approval*, FIAs are assigned at the PO level and their roles and responsibilities include (1) coordinating with the CO to understand the pricing structure of the contract and (2) reviewing invoices to confirm full compliance with the compensation provisions of the contract. For POs issued under blanket contracts, the PO terms are negotiated and issued by the CO. As part of their responsibilities in negotiating the terms of the PO, TVA-SPP-04.002, *Procurement of Products and Services*, requires the CO to ensure the PO conforms to the blanket contract. However, we found several instances where the PO's compensation terms were different from the blanket contract's compensation terms (e.g., the blanket contract had fixed price compensation terms, but the PO issued under the respective contract had T&M compensation terms).

Although TVA-SPP-04.004 states FIAs are to review invoices to verify compliance with the compensation provisions of the contract, neither TVA-SPP-04.002 nor TVA-SPP-04.004 provided clear guidance on what actions the FIA should take when the PO's compensation terms were not provided for in the blanket contract.

Communicating Changes to FIA Assignments

As previously stated, we found that clear and frequent communication between the FIA and CO did not always occur, which could be attributed to the lack of an automated reporting mechanism to notify a CO when (1) a PO is issued under a blanket contract or (2) there are changes in FIA assignments to existing POs. TVA-SPP-04.002 includes requirements for communicating changes in FIA assignments. Specifically, the policy states that when a change in the FIA is identified, the business unit will immediately identify a replacement FIA and notify the CO, and the CO is responsible for updating TVA's EAM system with the name of the current FIA. However, TVA-SPP-04.004, which is specific to FIA's responsibilities, is unclear regarding processes for communicating changes in FIA assignments for different types of contracts. For example, TVA's invoice review and approval policy only provides specific guidance regarding how to coordinate transitions to a new CO and/or FIA for materials only contracts, short-term contracts, or contracts recently reviewed by the Office of the Inspector General.

Recommendations

We recommend TVA management:

- Revise policies to emphasize the importance of CO's responsibility to ensure a PO's compensation terms are provided for in the blanket contract.
- Revise policies to provide guidance on the FIA's responsibilities for approving invoices when the PO's compensation terms are not provided for in the associated blanket contract.
- Revise TVA-SPP-04.004 to include requirements for communicating changes in FIA assignments that is consistent with the language in TVA-SPP-04.002.

TVA Management's Comments – In response to our draft audit report, TVA management stated Supply Chain would review policies and procedures related to the roles of both COs and FIAs and revise TVA SPP-04.004, as necessary. See the Appendix for TVA management's complete response.

Auditor's Response – We agree with TVA management's planned actions.

CONTRACT ADMINISTRATION COULD BE IMPROVED

During our review of invoices and related contractual documentation associated with the 61 contracts and POs, we noted several opportunities to improve contract administration. Specifically, we:

- Identified inconsistencies between contract information documented within the fields in TVA's EAM system and the contract. For example, we identified seven contracts where the contract's effective start or end date in TVA's EAM system was not in agreement with the contract. In addition, we also found three contracts where the contract monetary limitation in TVA's EAM system was not consistent with the contract or the amendments issued to modify the contract monetary limitation.
- Identified instances where contract modifications were made in TVA's EAM system and no formal contract amendment was executed. Specifically, we found ten contracts where the contract term or monetary limit was modified through a revision in TVA's EAM system rather than through a formal written amendment, as required by the respective contracts.
- Determined costs were billed for work performed after the respective termination dates for two contracts. During our interview with one CO, we were informed that a PO issued under a contract can remain active subsequent to the contract's termination date. Work performed subsequent to the contract's termination date could expose TVA to uncontrolled risks such as damages or unintended liabilities.
- Identified contracts that included an Order of Precedence clause¹⁰ that allowed TVA and the contractors to reach an agreement by which the terms and conditions of a PO could take priority and precedence over the contract, exhibits, and attachments. We determined contract language allowing a PO to take precedence over the contract and its exhibits and attachments, resulted in terms and conditions that conflicted with the blanket contract.

Recommendations

We recommend TVA management:

- Implement procedures to (1) confirm information in TVA's EAM system are consistent with contract documentation and (2) ensure contract modifications

¹⁰ An Order of Precedence clause provides the order in which the contract and contract related documentation should be considered in the event of a conflict or inconsistency.

- to change the contract term or monetary limit are made through a formal, written amendment, when required by the contract.
- Establish policies to prevent instances of work being performed under a PO subsequent to the contract's termination date.
 - Revise Order of Precedence clauses that allow a PO to have compensation terms that are different from the compensation terms of the blanket contract.

TVA Management's Comments – In response to our draft audit report, TVA management stated Supply Chain would review contract administration policies and procedures related to information in EAM, contract changes and amendments, POs, and Order of Precedence clauses. See the Appendix for TVA management's complete response.

Auditor's Response – We agree with TVA management's planned actions.

May 3, 2024

David P. Wheeler, WT 2C-K

RESPONSE TO REQUEST FOR COMMENTS – DRAFT AUDIT 2022-17369 – TVA'S
INVOICE REVIEW AND APPROVAL PROCESS

Reference: Request for Comments – Draft Audit 2022-17369 – TVA's Invoice Review and
Approval Process dated March 31, 2024

Supply Chain has reviewed the report and provides the following comments and management
decision:

**NONCOMPLIANCE WITH POLICIES AND PROCEDURES RESULTED IN INADEQUATE
INVOICE REVIEWS**

Supply Chain will review procedures to assess employee understanding of and adherence to
contract terms and conditions regarding invoice approvals. Supply Chain will also explore
options to enhance communication of contract changes between Contracting Officers and Field
Invoice Approvers. Supply Chain will review Field Invoice Approver training materials, contents,
and frequency.

POLICIES COULD BE CLARIFIED TO BETTER DEFINE ROLES AND RESPONSIBILITIES

Supply Chain will review policies and procedures related to the roles of both Contracting
Officers and Field Invoice Approvers. Additionally, Supply Chain will review and revise TVA-
SPP-04.004, as necessary.

CONTRACT ADMINISTRATION COULD BE IMPROVED

Supply Chain will review contract administration policies and procedures related to information
in TVA's Enterprise Asset Management system, contract changes and amendments, Purchase
Orders, and Order of Precedent clauses.

CONCLUSION

TVA concurs with the OIG's findings and will take action to achieve the OIG's recommendations.

We would like to thank Jennifer H. Norris, Chad B. Bube and the OIG staff for their
professionalism in conducting this audit. If you have further questions please contact Howell
Conway, Senior Manager Supply Chain Strategy & Performance at 423-751-6658.



Laura J. Campbell
Vice President
Supply Chain

RHC:MDW
Attachment
cc: See page 2

David P. Wheeler
Page 2
May 3, 2024

cc (Attachment): Concurrence Sheet
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