



Memorandum from the Office of the Inspector General

February 28, 2019

Matthew M. Rasmussen, OPS 4A-SQN

**REQUEST FOR MANAGEMENT DECISION – AUDIT 2018-15574 – TOOL CONTROLS
AT SEQUOYAH NUCLEAR PLANT**

As part of our annual audit plan, we audited the tool controls at Sequoyah Nuclear Plant (SQN). Our audit objective was to determine if SQN is in compliance with the Tennessee Valley Authority's (TVA) Nuclear Power Group Business Practice 226 (BP-226), *Tool and Equipment Accountability*. The scope of the audit included small tools covered under BP-226 onsite at SQN.

In summary, we determined SQN is not in compliance with BP-226. Specifically, we found (1) issues and returns of tools and equipment are not made in TVA's Tool Management System (TMS), and periodic random inventories are not performed; (2) tool room access is not adequately controlled; and (3) a new tool tracking system TVA is planning to use cannot accommodate rigging requirements.

We recommend the Vice President, SQN:

1. Coordinate with the TVA Nuclear sponsor to revise BP-226 to include the new tool tracking system for issues and returns of small tools and equipment.
2. Conduct a complete physical inventory when the new tool tracking system is fully implemented and enforce the requirements of BP-226.
3. Consider installing badge readers for access into the main tool room.
4. Continue to work with the new tool tracking system vendor to include fields for tracking qualification information to comply with rigging safety requirements.

TVA management agreed with the audit findings and recommendations in this report. See the Appendix for TVA management's complete response.

BACKGROUND

In 2006, the Office of the Inspector General issued an inspection report entitled *Review of the TVA Sequoyah Nuclear Plant Tool Control Program*.¹ The 2006 inspection report contained recommendations that the Vice President, SQN, should take actions to ensure compliance with BP-226 including (1) performing required physical inventories and updates to the computer tracking system, (2) requiring procedural compliance to ensure

¹ Inspection 2006-5021, *Review of the TVA Sequoyah Nuclear Plant Tool Control Program*, March 31, 2006.

accurate tracking, and (3) requiring TVA/contractor accountability. According to TVA Problem Evaluation Report Number 98400, which was developed in response to the inspection report recommendations, TVA revised BP-226 to incorporate the results of the inspection but determined no efficiencies could be gained by having the software vendor perform a data cleanup in the tool tracking program. TVA determined the data cleanup would occur naturally, over time, by reviewing reports and manually deleting recorded tool issues that no longer exist.

BP-226,² which provides instructions in detail that are necessary to implement the plant tool and tool room program, states all issues and returns of tools and equipment will be made on the site TMS. If tool rooms are not staffed around the clock, the first-line supervisor will be responsible for the issuance of tools. The TVA Tool Room Issue Form will be used in the event TMS is unavailable or not accessible. Periodic random inventories should be performed to evaluate the effectiveness and accuracy of the TMS. Pneumatic tools and items requiring an annual inspection such as electric tools and rigging will be assigned a unique identification number and tracked in the TMS program. BP-226 also outlines the use of the TMS to resolve discrepancies resulting from loss, theft, or vandalism and records disposition of worn, broken, or otherwise unserviceable tools and equipment. According to TVA personnel, all TVA Nuclear facilities will be migrating to a new system for tool and equipment tracking supported by Wesco Distribution, Inc. (Wesco).³

As shown in Table 1, SQN's annual small tool purchases ranged from \$175,287 to \$424,273 in fiscal years (FY) 2013 to 2017.⁴

SQN's Small Tool Purchases FYs 2013-2017	
FY	Amount
2013	\$345,776
2014	196,011
2015	195,565
2016	175,287
2017	<u>424,273</u>
Total	\$1,336,912

Table 1

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- ² BP-226, Revision No. 0008, had an effective date of March 3, 2015, and excludes tools and equipment contained in site measuring and testing equipment programs.
- ³ In 2011, TVA entered into an Integrated Supply Chain program with Wesco under TVA Contract No. 4634. Wesco Integrated Supply is a subsidiary of Wesco and includes e-Crib which is a Web-based procurement and inventory software tool that is accessible in the SQN tool room.
- ⁴ Subsequent to the draft report, TVA management informed us that the general ledger account labeled "Small Tools" used to identify small tool purchases during our audit period included only rentals of items they classified as small tools. TVA management stated actual purchases of small tools were charged to individual projects and would be difficult to quantify.

OBJECTIVE, SCOPE, AND METHODOLOGY

The objective of the audit was to determine if SQN is in compliance with BP-226. The scope included small tools covered under BP-226 onsite at SQN. To achieve our audit objective, we:

- Obtained and reviewed BP-226 to identify procedures related to tool and equipment accountability and reporting.
- Conducted walkthroughs with SQN's tools management personnel to identify actual practices and determine compliance with BP-226.
- Obtained a listing of tools assigned to SQN from the TMS as of September 4, 2018.
- Identified available TMS reporting and performed data analysis to determine any anomalies/unusual entries that require follow up.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

FINDINGS

In summary, we determined SQN is not in compliance with BP-226. Specifically, we found (1) issues and returns of tools and equipment are not made in the TMS and periodic random inventories are not performed, (2) tool room access is not adequately controlled, and (3) the Wesco tracking system cannot accommodate rigging requirements.

ISSUES AND RETURNS OF TOOLS AND EQUIPMENT ARE NOT MADE IN THE TMS AND PERIODIC RANDOM INVENTORIES ARE NOT PERFORMED

As noted above, BP-226 states all issues and returns of tools and equipment will be made on the site TMS. We originally planned to test the accuracy of the TMS system by comparing item counts and statuses to the actual counts and statuses on hand. However, according to SQN's tool room personnel, the TMS has not been used for issues and returns of tools and equipment in about 10 years. Accordingly, we determined a system that had not been used for 10 years would not show actual inventory amounts currently on hand.

In addition, BP-226 states periodic random inventories should be performed to evaluate the effectiveness and accuracy of the TMS. Our review of the TMS data identified inaccuracies in the inventory listing. For example, the listing included tools and equipment (1) in issued status that have been issued to terminated employees and (2) that were last issued and returned over 10 years ago. As a result, we determined the inventory shown in the TMS was not accurate and could not be verified as SQN only uses TMS for tracking rigging requirements. SQN's personnel informed us that representatives from Wesco have set up an inventory of items in the Wesco system, but the Wesco system is currently

not covered under BP-226 and does not share unique identifiers with the TMS that would allow for item count comparisons between the two systems.

As a result of not using the TMS in compliance with BP-226, TVA's determination that data cleanup would occur naturally, over time, by reviewing reports and manually deleting recorded tool issues that no longer exist proved to be inaccurate. The purpose of BP-226 is to strengthen and standardize existing tool and equipment accountability practices. If BP-226 is not updated and complied with, SQN will be unable to (1) generate accurate periodic reporting and (2) control and minimize equipment losses.

TOOL ROOM ACCESS IS NOT ADEQUATELY CONTROLLED

If tool rooms are not staffed around the clock, BP-226 makes the first-line supervisor responsible for the issuance of tools. The SQN tool room is not staffed around the clock. We noted during our observation that (1) the tool room door is secured with a padlock, (2) a camera system is located at the front entrance but does not have recording capability, and (3) the tool room does not have a badge reader to restrict access.

According to tool room personnel, supervisors access the tool room using their key, but there have been instances in which the tool room door and cabinets have been left open. Leaving the tool room and cabinets unlocked does not provide adequate accountability for who has taken or returned tools or deter theft.

THE WESCO TRACKING SYSTEM CANNOT ACCOMMODATE RIGGING REQUIREMENTS

According to BP-226, rigging equipment requires annual inspection and is assigned a unique identification number and tracked in the TMS. TVA's definition of rigging includes wire rope slings, alloy steel chains, synthetic round or web slings, shackles, eyebolts, and special devices that are used either singularly or in a combination to attach a load to a lifting device for the purpose of stabilizing, lifting, pulling, or moving a suspended load. According to TVA personnel, SQN tracks inspection testing dates for rigging equipment in the TMS; however, all TVA nuclear plants are moving away from the TMS system and will be using the Wesco system for tool issuance/returns tracking. Additionally, SQN's management stated the Wesco system cannot currently accommodate tracking qualifications, but they are working with Wesco to develop fields to comply with these requirements.

RECOMMENDATIONS

We recommend the Vice President, SQN:

1. Coordinate with the TVA Nuclear sponsor to revise BP-226 to include the Wesco inventory management system for issues and returns of small tools and equipment in the main tool room.

2. Conduct a complete physical inventory when the Wesco tool tracking system is fully implemented and enforce the requirements of BP-226 for (a) periodic inventories of tools and equipment and (b) other tool accountability procedures.
3. Consider installing badge readers for access into the main tool room.
4. Continue to work with Wesco to include fields for tracking qualification information to comply with rigging safety requirements.

TVA Management's Comments – TVA management agreed with the audit findings and recommendations in this report. See the Appendix for TVA management's complete response.

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This report is for your review and management decision. Please advise us of your management decision within 60 days from the date of this report. If you have any questions, please contact Michael A. Driver, Audit Manager, at (423) 785-4813 or Rick Underwood, Director, Financial and Operational Audits, at (423) 785-4824. We appreciate the courtesy and cooperation received from your staff during the audit.



(for) David P. Wheeler
Assistant Inspector General
(Audits and Evaluations)
WT 2C-K

MAD:FAJ

cc: TVA Board of Directors
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OIG File No. 2018-15574



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TO: David Wheeler, Asst. IG, Audits & Evaluations
WT-2C-K

FROM: Matthew Rasmussen, Sequoyah Vice President
OPS-4A-SQN

DATE: February 22, 2019

SUBJECT: Draft Audit 2018-15574 – Tool Controls at Sequoyah Nuclear Plant
Ref. BP-226

Please accept this memo as a formal response indicating my concurrence on the findings and recommendations in the draft audit report of the tool controls at Sequoyah Nuclear Plant.

Additionally, actions have already been taken or are underway to address the majority of the issues that include, but are not limited to, the education of our tool room staff on the requirements and revisions to BP-226 and installation of a card reader for access.

Let me know if you need further information from me. Thank you,

A handwritten signature in black ink, appearing to be 'M. Rasmussen'.

cc: Rick Underwood, Director, OIG Financial & Operational Audits, SP-1A-C
Michael Driver, Audit Manager, SP-1A-C
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