



Sequoyah Nuclear Plant Tools Control Analysis

2006-502I

March 31, 2006



Objective, Scope, and Methodology

- ◆ **Objective:** To assess the processes and key control activities used to track and account for tools at Sequoyah Nuclear Plant (SQN).
- ◆ **Scope:** Our scope included tools controlled by the SQN toolroom.



Objective, Scope, and Methodology (cont'd)

- ◆ **Methodology: To assess tool management processes and key control activities, we:**
 - Reviewed TVAN Business Practice 226 (BP-226) and other information to identify the Tool Management and Equipment Accountability Program* required processes and key control activities.
 - Conducted walkthroughs with SQN tools management personnel to identify actual practices.
 - Identified potential control deficiencies by comparing BP-226 requirements with actual practices.
 - Reviewed documentation, observed processes and operations, and conducted interviews necessary to verify process owner observations and identify/assess other potential control gaps.
 - Assessed the completeness and accuracy of the tool management process currently in use by comparing the actual tool status for selected tools with the status shown in the Tool Management System (TMS).

This inspection was conducted in accordance with the “Quality Standards for Inspections.”

*BP-226 uses the terms “tools” and “equipment” interchangeably. However, we were told “equipment” is now used in reference to “heavy equipment.”



Background

- ◆ **This inspection was initiated as a result of our review of procedures and key control activities used to track and account for tools at Browns Ferry Nuclear Plant (Inspection No. 2005-526I).**

- ◆ **BP-226, Tool and Equipment Accountability, dated August 27, 2000:**
 - Established and implemented a plant accountability system for tools and equipment.
 - Strengthened and standardized existing tool and equipment accountability practices.
 - Provided for periodic reporting to control and minimize equipment losses.



Background (cont'd)

- ◆ **BP-226 prescribed the following exception for SQN hot toolroom:**
 - “At SQN Plant the hot tool room is a self-service station and only tools and equipment controlled by procedures will be issued and returned via our computer program. Examples are stainless steel brushes, tube benders, slings and hoists.”

- ◆ **SQN tools are issued and tracked using an automated system – TMS.**
 - As of January 2006, TMS showed about \$10.5 million in tagged tools, hand tools*, and other miscellaneous items in inventory at SQN.
 - Because TMS was originally inundated with various tools and miscellaneous shop machinery from the old tagged equipment program, it contains numerous obsolete and discontinued items that do not meet the tracking/accountability requirements of BP-226.

* Hand tools refers to items such as hammers, screwdrivers, pliers, socket wrenches, pipe wrenches, etc.



Summary of Observations

- ◆ **Noncompliance with BP-226 prescribed processes and key control activities and other process/control weaknesses have resulted in a lack of tool accountability/tracking.**
 - However, two control mechanisms were implemented to enhance toolroom security.
 - ◆ Access to the toolroom is restricted to personnel with valid business reasons using hand geometry.
 - ◆ Closed circuit cameras have been installed in the toolroom which facilitates control when the tool room is not manned.



Observation: BP-226 (Oversight)

◆ BP-226 states:

- The Site Vice President will be accountable for tagged equipment assigned to each site and will appoint a Chief Accountability Officer (CAO).
 - ◆ CAO responsibilities include ensuring proper tagging , issuing and reconciling inventory lists, and tracking and trending of inventories.
- Each site organization will appoint a Organization Accountability Representative (OAR).
 - ◆ OAR responsibilities include (1) inventory of tools assigned to their work group, (2) marking untagged tools, and (3) “performing physical inventories periodically to ensure that all inventory assigned to their organization is accounted for.”

◆ We found:

- CAO or OAR positions have been established. However, some of their duties are not being performed, as addressed later in this report.



Observation: BP-226 (Accountability)

- ◆ **BP-226 mandates that:**
 - Certain types of equipment are tagged for the purpose of facilitating property accountability and control.
 - All issues and returns of tools and equipment will be made on the site toolroom computer program via bar code wand.
 - Tool users are subject to predetermined check-out limits.
 - ◆ Over limit reports are to be generated and sent to appropriate supervisors.
 - ◆ Exceptions may be granted by completing and obtaining supervisory approval– Request For Release From Tool Issue Limit form.
 - Individuals will be held accountable for the return of tools, including damaged tools.
 - ◆ An overdue tool letter is generated and sent to the section supervisor for resolution.
 - ◆ Failure to return tools will result in disciplinary action and may include termination or reimbursement.
 - Proper care must be taken to prevent theft or damage to tools and equipment assigned to their organization.



Observation: BP-226 (Accountability)

(cont'd)

- ◆ **We found that SQN is complying with some of the specific accountability provisions of BP-226, including:**
 - Tagging tools with an identifying number.
 - Entering the tools into TMS.
 - Issuing the tools via bar code wand.

- ◆ **We also found the following accountability related noncompliance issues:**
 - Tool issue limits are not used.
 - Overdue tool report is not issued regularly.
 - Tool users are not held accountable for the return of the tools.

- ◆ **SQN has implemented controls to ensure toolroom security, as required by BP-226:**
 - Access to the toolroom is restricted to personnel with valid business reasons using hand geometry.
 - Closed circuit cameras have been installed in the toolroom which facilitates control when the toolroom is not manned.



Observation: BP-226 (Tracking)

- ◆ **BP-226 requires tracking of tools and update of tools inventory via the following processes:**
 - Lost, theft, or vandalism of tagged tools will be reported to the CAO within 24 hours. The CAO will report to the toolroom on TVA Form 405B for inventory update.
 - Worn, broken, or otherwise unserviceable tools will be returned to the toolroom for proper disposition update.
 - Contaminated tools will be bagged and tagged and returned to Radiological Controlled Area toolroom and the toolroom attendant will give credit to the user.
 - Contaminated tools requiring disposal will be reported to toolroom on appropriate forms, TVA Form 405C or 405B, for proper inventory disposition.
 - Tools transferred to another person will be reported on TVA Form 405B, which is prepared to transfer responsibility to the individual assuming custody.
 - Tool losses are to be reported per TVA Form 4012, Retirement Notice, which is to be prepared by the CAO.



Observation: BP-226 (Tracking) (cont'd)

- ◆ **We found TMS does not accurately reflect the status of tools at SQN.**
 - Thirty-five tools shown in TMS as “available for issue” were selected for verification—30 (85 percent) could not be located in the specified toolroom.
 - Twenty-seven tools stored in specific locations in the toolroom were traced to TMS—TMS showed the correct status for 18 (67 percent).
 - Eight tools observed as being “in-service” were traced to TMS (should be shown as “issued”)—only one was correctly shown as “in-service.” (i.e., two were shown as “lost,” four were shown as “available for issue,” and one was not listed in TMS)
 - Seven tool numbers listed on TVA Form 405B “lost tool” forms were compared with their status in TMS—Three were correctly listed as “lost” while four were incorrectly listed.



Observation: BP-226 (Reporting)

- ◆ **BP-226 mandates that:**

- Records on both tagged and untagged tool losses will be kept and categorized in an annual loss report.
- Complete physical inventories of tagged/untagged equipment will be performed every two years or at periodic intervals.

- ◆ **We found:**

- The Periodic Lost Property Report is not being prepared.
- Physical inventories of tagged equipment are not being performed.



Recommendations

- ◆ **The SQN Site Vice President should:**
 - Take actions to ensure compliance with BP-226, including:
 - ◆ Performing required physical inventories and updates to the computer tracking system.
 - ◆ Requiring procedural compliance to ensure accurate tracking.
 - ◆ Requiring TVA/contractor accountability.

