



Watts Bar Nuclear Plant Tools Control Analysis

2006-503I

February 8, 2006



Objective, Scope, and Methodology

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



Objective, Scope, and Methodology (cont'd)

- ◆ Methodology: To assess tool management processes and key control activities, we:
 - Reviewed BP-226 and other information to identify the Tool Management and Equipment Accountability Program* required processes and key control activities.
 - Conducted a walkthrough with WBN 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 judgmentally selected tools with the status shown in the tool inventory Excel spreadsheets being maintained at WBN.

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. 2005-5261).
- ◆ In 1997, WBN implemented a tools management process with the goal of making the toolrooms as self service as possible. According to WBN personnel:
 - The self-service practice resulted in five toolroom positions being eliminated.
 - Excel spreadsheets are used to track and identify tool status.
 - Tools are only checked in and out of the toolroom during outages, using the Excel spreadsheets.
 - WBN continues to utilize this process for tool management.
- ◆ TVAN Business Practice 226 (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 WBN hot toolroom:
 - “At WBN the computerized tool tracking system is not available in the hot toolroom and some of the other temporary toolrooms (established for special projects). These toolrooms are stocked with tools and the inventory is encoded in the main toolroom’s computer system. These toolrooms are self service and the inventory monitored by toolroom personnel. However, individual tool issues and returns are not tracked.”

- ◆ According to WBN personnel:
 - “Tool expenditures for the WBN toolroom were \$158,619 for FY 2005, approximately \$60,000 of which was spent on a few specific items.
 - WBN maintains records for these purchases.
 - While individual records are maintained for tool purchases, the total value of the current WBN inventory cannot be determined.
 - WBN does not have an inventory management system (software/staff) to support tracking all tools and their value.”



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.



Observation: Noncompliance with 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 not been established and many of their duties are not being performed.**



Observation: Noncompliance with BP-226 (Accountability)

BP-226 mandates that:

- 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 pre-determined 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.

We found:

- **A computerized tracking/accountability system has not been implemented, therefore:**
 - ◆ Tools are not checked out via wand.
 - ◆ Tool issue limits are not used.
 - ◆ Overdue tool report is not used.
 - ◆ Tool users are not held accountable for the return of the tools.



Observation: Noncompliance with 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. CAO will report to the toolroom on form TVA 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 405C or 405B, for proper inventory disposition.
- Tools transferred to another person will be reported on Form TVA 405B, which is prepared to transfer responsibility to the individual assuming custody.
- Tool losses are to be reported per TVA 4012, Retirement Notice, which is to be prepared by the CAO.



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

We found:

- In addition to WBN not being in compliance with BP-226, the toolroom Excel inventory tracking spreadsheets do not accurately reflect tool status.
 - ◆ Thirty-three tools we observed as being “in-service” in the plant were traced to the Excel spreadsheets. Twenty-nine tools (88 percent) were either not recorded or incorrectly recorded on the spreadsheets. Specifically:
 - Twenty-five tools were not recorded on the spreadsheets, therefore their existence was not documented.
 - Two tools were incorrectly assigned to employees no longer employed at WBN.
 - Two tools were not in the location shown on the spreadsheets.
 - ◆ Fifteen tools which were “available for use” in the clean toolroom were traced to the spreadsheets. Six tools (40 percent) were not recorded on the spreadsheet.



Observation: Noncompliance with 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 WBN Site Vice President should:

- ◆ **Take action to ensure compliance with BP-226 including:**
 - Implementing a computerized tracking system, such as TMS.
 - Performing required physical inventories and updates to the computer tracking system.
 - Requiring procedural compliance to ensure accurate tracking.
 - Requiring TVA/contractor accountability.

