



Memorandum from the Office of the Inspector General

October 25, 2006

Karl W. Singer, LP 6A-C

FINAL REPORT – INSPECTION 2006-530I – BROWNS FERRY NUCLEAR PLANT  
MATERIALS INVENTORY ACCOUNTING PRACTICES

Attached is the subject final report for your review and action. Your staff's informal comments to the draft report have been incorporated. Please advise us of your planned actions in response to our findings within 60 days of the date of this report.

Information contained in this report may be subject to public disclosure. Please advise us of any sensitive information in this report which you recommend be withheld.

If you have any questions, please contact Rick C. Underwood, Senior Auditor, Inspections, at (423) 751-3108 or Gregory C. Jaynes, Deputy Assistant Inspector General, Inspections, at (423) 751-7821. We appreciate the courtesy and cooperation received from your staff during this review.

Ben R. Wagner  
Assistant Inspector General  
(Audits and Inspections)  
ET 3C-K

GCJ:BKA

Attachment

cc (Attachment):

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Deborah A. Kearnaghan, MR 6D-C  
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OIG File No. 2006-530I



Tennessee Valley Authority  
Office of the Inspector General

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# *Inspection Report*

## **BROWNS FERRY NUCLEAR PLANT MATERIALS INVENTORY ACCOUNTING PRACTICES**

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Inspection Team  
Rick C. Underwood  
Jennifer L. Hamby  
Heather R. Kulisek  
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2006-5301  
October 25, 2006

## **SYNOPSIS**

At the request of the Tennessee Valley Authority's (TVA) Chief Nuclear Officer (CNO) and Executive Vice President, we conducted a review of inventory accounting practices at Browns Ferry Nuclear Plant (BFN). Specifically, we were requested to determine (1) whether proper accounting practices and TVA policies were followed when returning material and components (i.e., spare parts) to inventory after being removed from installed locations, and (2) whether existing procedures provide adequate guidance on returning spare parts to inventory.

In summary, we found:

- Noncompliance with Generally Accepted Accounting Principles (GAAP) and TVA policies and procedures.
- TVA policies and procedures do not adequately address (a) how to account for the return of material/components to inventory from installed locations (i.e., spare parts) and (b) the inventory tracking of spare parts.
- Facts noted during our review may have created an appearance of manipulation of entries to achieve an outage incentive payout.

## **BACKGROUND**

The CNO specifically requested that we “examine whether proper accounting practices are being followed when returning material and components removed from installed locations to inventory.” In addition, he asked that we “evaluate the accuracy of cost reporting and whether it is sufficient to determine the magnitude of material credits on operation and maintenance (O&M) expenditures.” In January 2006, BFN personnel identified spare parts which were housed at various locations throughout the plant. The spare parts were accounted for by recording them in PassPort as inventory at an estimated value of about \$3.011 million and by crediting base O&M expense. In March 2006, BFN personnel identified additional spare parts and accounted for these items by placing them in inventory at an estimated value of about \$5.219 million and crediting the Unit 3 Cycle 12 outage (U3C12) expense. While the spare parts recorded in PassPort resided at different plant locations and were not under the control of BFN warehouse personnel, the transactions were treated as a return to stock.<sup>1</sup> In addition, not all identified spare parts were recorded in PassPort as inventory.

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<sup>1</sup> Some of the spare parts recorded as inventory cannot be controlled by the warehouse due to radiation exposure.

Personnel from the TVA Controller's organization performed a review of these transactions and concluded that credit should be allowed for only \$1.784 million of the \$8.23 million in spare parts. Prior to the March 2006 financial closing, the Controller reversed \$1.592 million of the credit applied to base O&M expense and \$4.854 million of the credit applied against the U3C12 outage expense. The \$4.854 million accounting reversal resulted in the outage incentive goal related to cost not being achieved. The corresponding incentive payout would have totaled about \$39,000.

According to plant personnel, the returns were initiated because BFN management personnel with nuclear industry experience from outside TVA were used to "shop spares" being tracked as far as location, quantity on hand, state of repair, etc., and felt this was something that should be done at BFN. In order to track the availability of spare parts, BFN maintenance personnel were sent to identify items that were located throughout the plant that were still of use and not tracked in PassPort.

## **OBJECTIVES, SCOPE, AND METHODOLOGY**

Our objectives were to determine (1) whether proper accounting practices and TVA policies were followed when returning material and components removed from installed locations to inventory (i.e., spare parts), and (2) whether existing procedures provide adequate guidance on returning spare parts to inventory. To achieve our objectives, we:

- Reviewed TVA Nuclear (TVAN) and Chief Financial Officer (CFO) policies and procedures related to TVA inventory return practices (i.e., TVAN SPP-4.4, Material Issue, Control, and Return, and CFO-SPP-13.8, Accounting for Materials and Supplies Inventories).
- Interviewed TVAN, CFO, and Procurement personnel.
- Reviewed the Federal Energy Regulatory Commission's (FERC) Uniform System of Accounts and interviewed FERC and PriceWaterhouseCoopers personnel regarding accounting for the return of spare parts to inventory.
- Reviewed schedules, memorandums, and other supporting documentation related to the initial inventory return transactions and subsequent adjustments/reversals.

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

## **FINDINGS**

We found proper accounting practices and TVA policies were not followed when the January and March 2006 spare parts returns were made. Therefore, the Controller's \$6.446 million accounting reversal appears appropriate. Furthermore, the TVAN and CFO policies and procedures were not designed to address the accounting and inventory control of spare parts. We also noted that the facts noted during our review may have created an appearance of manipulation of entries to achieve an outage incentive payout.

### **NONCOMPLIANCE WITH GAAP AND TVA POLICIES AND PROCEDURES**

The accounting treatment and valuation of the spare part returns resulted in accounting inaccuracies and subsequent transaction reversals. We also found noncompliance with certain provisions of CFO-SPP-13.8 when the spare parts were recorded in PassPort as inventory. While we conclude that the return of the spare parts was not accounted for correctly, we believe spare parts, where all necessary information exists, should be tracked and accounted for. Identification and tracking of spare parts will facilitate timely use and the avoidance of unnecessary purchases.

#### **NonCompliance with GAAP**

Based on our review of documentation and discussions with BFN, Procurement, and CFO personnel, it appears that the Controller's \$6.446 million accounting reversal was appropriate. We were told that the majority of the items placed in inventory could not be tracked to PassPort issuance and were most likely originally issued and expensed in previous financial statement periods or perhaps as part of the original BFN plant construction. For these items, normal accounting practices would require any residual value associated with such items be reflected through prior period adjustments and not credits to current expense accounts. In our opinion, while the items placed in inventory have an inherent value to TVA, documentation reviewed and descriptions of the items provided by BFN, Procurement, and Controller personnel support that the spare parts had limited or no book value. Therefore, the initial booking of the spare parts in PassPort resulted in an understatement of accumulated depreciation and an overstatement of inventory. Discussions with PriceWaterhouseCoopers, FERC, and the TVA Controller supported our conclusion.

**NonCompliance with TVAN SPP-4.4, Material Issue, Control, and Return**

We noted the following requirements for returning material under TVAN SPP-4.4 that were not complied with when placing items in inventory in January and March 2006:

- Section 3.3.3.A requires that plant personnel perform the necessary activities to establish that the item being returned meets the original requirements. However, we were told that several of the items placed in inventory still require refurbishment prior to availability for reissue. The reason given for this was the shelf-life of several items once they are repaired or refurbished is limited, and the work will have to be redone.
- Section 3.3.3.D requires that plant personnel provide the following additional information for returned items that have been removed from plant-related systems and not identified to a TVA contract number.
  1. Physical location from which the item was removed
  2. The system number
  3. Component identifier
  4. Unique manufacturer serial number or other identification

The required information could not be obtained for many of the items returned to inventory.

Section 3.3.4 requires the Nuclear Materials manager or designee verify that material is identifiable and QA Level I, II, and III items are traceable to the original procurement document or previously installed plant location for items removed from service. This information was not available for many of the items returned to inventory.

**NonCompliance with CFO-SPP-13.8, Accounting for Materials and Supplies**

Section 5.2.2, Inventory Valuation, of CFO-SPP-13.8, states that material purchased for capital projects must be returned to inventory stock prior to closing the project and that items purchased as O&M expense should be returned within 30 days of work order closure or prior to the end of the fiscal year, if possible. If these requirements had been followed, the items that did conform to TVAN SPP-4.4 Section 3.3.3.A and did meet original requirements would have already been in inventory prior to January and March 2006. Both Procurement and BFN personnel indicated that the origin of the items placed in inventory cannot be determined, but most likely the items originated from several different places: BFN Unit 1; BFN Unit 2; BFN Unit 3; Hartsville; or Bellefonte Nuclear Plant. Both Procurement and BFN personnel noted that some of the items placed in inventory in January and March 2006 had never been recorded as inventory items and therefore had no Catalog Identifier

(CAT ID) or established Average Unit Price (AUP). AUPs were estimated based on similar equipment/materials. For the items that were initially recorded in inventory, CFO-SPP-13.8 compliance would have resulted in timely returns to inventory and corresponding accounting adjustments in the proper financial statement period.

## **TVA POLICIES AND PROCEDURES INADEQUATE**

As stated previously, we found that the returns were initiated because BFN management personnel with nuclear industry experience from outside TVA were used to “shop spares” being tracked as far as location, quantity on hand, state of repair, etc., and felt this was something that should be done at BFN. We agree and believe spare parts, where all necessary information exists, should be accounted for and tracked. Identification and tracking of spare parts will facilitate timely use and the avoidance of unnecessary purchases.

However, we found and management concurred that TVAN and CFO policies and procedures, related to control, issuance, and return of inventory, were not really designed to address spare parts.

### **TVAN SPP-4.4, Material Issue, Control, and Return**

We found that the guidance provided by this document did not address many of the issues that were problematic for the BFN and Procurement personnel regarding the January and March 2006 spare part returns. The policy does not address the addition of items that are not currently in the inventory system or how they should be valued. In addition, it does not address any accounting issues arising from placing items in inventory that may have been depreciated or otherwise expensed in a prior financial statement period.

### **CFO-SPP-13.8, Accounting for Materials and Supplies**

We found CFO-SPP-13.8 does not specifically address how parts removed from previously installed locations and depreciated or expensed in a prior financial statement period should be accounted for or valued. CFO-SPP-13.8 does state that, “The Controller organization is responsible for ensuring that materials and supplies expenses are properly valued and matched to the correct accounting period and that TVA’s assets are accurately reflected on the balance sheet in accordance with GAAP and applicable laws and regulations.” The TVA Controller is currently drafting policies and procedures to address the accounting for spare parts. In addition, the Controller plans to use a consultant to review current inventory valuation and expensing practices. In our discussion with the Controller, we agreed that CFO-SPP-13.8 was not designed to address the accounting and valuation of spare parts (i.e., previously installed items).

## **APPEARANCE OF POTENTIAL MANIPULATION**

Prior to the Controller's \$4.854 million reversal which applied to the U3C12 outage expense, the expected incentive payout applicable to the U3C12 outage goals was about \$555,000. Our analysis determined that about \$39,000 of the scheduled payout was related to outage budget performance. By crediting items placed in inventory to the U3C12 outage expense, the cost performance goal was achieved.

We found no documentation or other information which indicated the intent of the credit was to achieve outage performance goals. The circumstances surrounding these entries, however, could create the appearance of an attempt to manipulate entries to achieve an incentive award. These circumstances include the policy and accounting practice violations, the CFO accounting reversal, and the fact that many of the key management personnel who directed the gathering and placement of spare parts into inventory were eligible recipients of the incentive payout.

## **RECOMMENDATIONS**

We recommend that the Controller, CNO, and Senior Vice President, Procurement, collaborate to:

- Ensure that accounting practices and TVA policies and procedures are complied with when placing spare parts in inventory.
- Modify policies and procedures to (a) address the proper accounting, valuation, and methods to return previously installed items to inventory and (b) provide for tracking spare parts.

We recommend that the CNO ensure that recording and reporting of financial data related to outage incentive payouts is, whenever feasible, either entered or reviewed and approved by someone not eligible for any payout related to that data.