



Memorandum from the Office of the Inspector General

March 16, 2007

Paul R. LaPointe, WT 3A-K

FINAL REPORT – INSPECTION 2007-504I – REVIEW OF INVENTORY HOUSED AT THE HARTSVILLE INVESTMENT RECOVERY CENTER (HARTSVILLE)

Attached is the subject final report for your review and action. As discussed with your staff on March 1, 2007, the subject report is being issued in presentation format. Your staff's informal comments to the draft report and management actions planned or taken have been incorporated in the final report. Please notify us when final action is complete.

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 E. Ashley Haga, Auditor, at (423) 751-3124 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

EAH:BKA

Attachment

cc (Attachment):

William H. Bonham, WT 3A-K
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OIG File No. 2007-504I



Review of Inventory Housed at the Hartsville Investment Recovery Center (Hartsville)

2007-504I

March 16, 2007



Synopsis

We conducted a review to determine whether Tennessee Valley Authority's (TVA) inventory management system, PassPort, accurately reflects the reported \$14.3 million in TVA inventory housed at the Hartsville facility. We compared:

- PassPort to inventory on hand and found materials corresponding to 89 of the 93 catalog identification numbers (CAT IDs) selected for review, or 95.7 percent, were (1) housed in the Hartsville location identified by PassPort and (2) in agreement with the quantity identified by PassPort.
- Inventory on hand to PassPort for 38 judgmentally selected CAT IDs and found (1) inventory and surplus materials were commingled and (2) many of the materials were not reflected accurately in PassPort. However, according to Procurement:
 - ◆ Procurement was waiting on plant direction for the disposition of several materials housed at Hartsville, including some of the materials chosen during our review for comparison purposes.
 - ◆ Some materials were directly purchased and never reflected in PassPort.



Objective and Scope

Objective:

- ◆ Determine whether TVA's inventory management system, PassPort, accurately reflects inventory housed at Hartsville.

Scope:

- ◆ TVA equipment, material, and supplies included in TVA inventory that have been redeployed/assigned/delivered to Hartsville.* As of December 20, 2006, the Hartsville inventory represented about \$14.3 million.

*TVA equipment, material, and supplies included in inventory will be referred to as materials throughout this report.



Background



- ◆ In the early 1970s, TVA proposed to construct nuclear plants to generate electricity to meet base load demand forecasts for the 1980s and beyond.
- ◆ According to the *Environmental Assessment and Finding of No Significant Impact* pertaining to TVA's potential transfer of the land for industrial use:
 - TVA planned construction of two nuclear plants with two units each at the Hartsville site in the Tennessee Counties of Smith and Trousdale.
 - When the actual power demand in the TVA power distribution area did not increase as rapidly as was forecast, TVA cancelled construction of the plants.
 - Plant A construction permit was cancelled August 29, 1984.
 - Plant B construction permit was cancelled March 22, 1983.
- ◆ In 1996, the Hartsville Nuclear Plant site was renamed the Hartsville Investment Recovery Center. The site remains in use as a center for TVA investment recovery operations and as an inventory warehouse facility.



Background (continued)



- ◆ All Procurement warehousing facilities use Hartsville for long- and short-term storage of auxiliary material. The TVA inventory stored at Hartsville is identified in PassPort as “warehouse 9” for the applicable facility.
- ◆ Inventory at Hartsville is governed by Procurement Standard Department Procedures, MMS-1.0, *Material Receipt/Inspection Material Storage and Handling Material Issue, Control, and Return*; and MMS-2.0, *TVA Inventory Management Policy*.

MMS-1.0

- Delineates receipt and inspection requirements.
- Defines the requirement and establishes controls for the storage, staging, and handling of materials and equipment.

MMS-2.0

- Requires the Site Procurement manager to conduct cycle counts at all stocking locations.
- Necessitates that cycle inventory results be compiled and reported on a monthly basis.



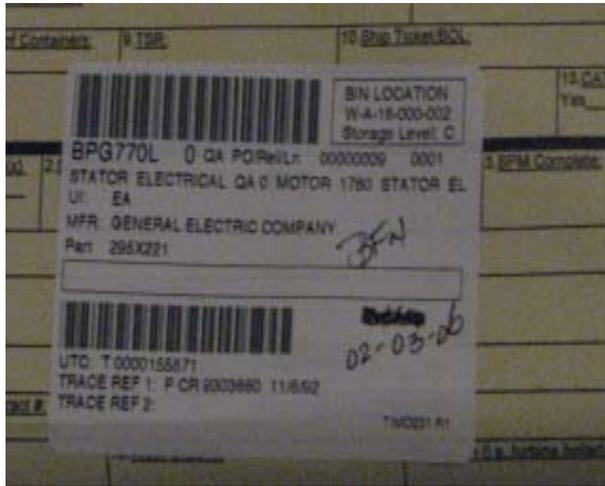
Methodology

- ◆ To achieve our objective, we:
 - Reviewed Procurement Standard Department Procedures MMS-1.0 and MMS-2.0 to identify policies and procedures and key control activities applicable to inventory housed at Hartsville.
 - Interviewed Hartsville and other procurement personnel to gain an understanding of the warehousing program at Hartsville.
 - Randomly selected 93 of the 838 inventory CAT IDs listed in PassPort as stored at Hartsville. A walkdown was performed at Hartsville to verify the existence, PassPort location, and PassPort quantity for the materials corresponding to the 93 CAT IDs.
 - ◆ Attribute statistical sampling methodology was used to select the sample size. The sample size was based on a 3 percent maximum tolerable error rate and 5 percent risk of incorrect acceptance.
 - ◆ The inventory value of the 93 CAT IDs was about \$2.7 million.
 - Judgmentally selected 38 CAT IDs corresponding to materials observed at Hartsville and determined if the materials were accurately reflected in PassPort. The judgmental selection was made during our physical and location walkdown verification testing applicable to materials listed in PassPort.

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



Findings Summary



In summary we found that:

- Materials corresponding to 89 of the 93 CAT IDs selected for review, or 95.7 percent, were (1) housed in the Hartsville location identified by PassPort and (2) in agreement with the quantity identified by PassPort.
- Of the 38 CAT IDs corresponding to materials observed at Hartsville for comparison to PassPort: (1) inventory and surplus materials were commingled and (2) many of the materials were not reflected accurately in PassPort. However, Procurement was waiting on plant direction for the disposition of several materials, some of which were directly purchased and never reflected in PassPort.



Finding 1 – Physical Verification of Hartsville Inventory Listed in PassPort

In comparison of PassPort to inventory on hand at Hartsville, we found the materials applicable to 89 of the 93 CAT IDs selected for verification were (1) housed in the location identified by PassPort and (2) in agreement with the quantity identified by PassPort. Information pertaining to the four exceptions is as follows:

◆ Physical Verification Exceptions

- CAT ID--*BHW367M* showed a quantity of one on hand in PassPort. However, we found zero on hand.
 - ◆ According to Hartsville personnel, the material had been sent to Kingston Fossil Plant (KIF) in May 2006 and was still listed in PassPort as being in “Distribution Status.” Supporting documentation for the transfer was provided.
 - ◆ According to Hartsville personnel, an e-mail was subsequently sent to KIF requesting that they show the material as “Received Distribution” in PassPort. We verified KIF made the requested correction.



Finding 1 – Physical Verification of Hartsville Inventory Listed in Passport (continued)

- CAT ID--*CLN112W* had a quantity listed in 16 different Hartsville locations in PassPort. For 1 of the locations included in our sample, PassPort listed 90 as the quantity on hand, and we found none.
 - ◆ According to Hartsville personnel, these materials were sent to Paradise Fossil Plant (PAF) in December 2006 and were still listed in PassPort as being in “Distribution Status.” Supporting documentation for the transfer was provided.
 - ◆ Hartsville personnel advised that an e-mail was subsequently sent to PAF requesting that they show the materials as “Received Distribution” in PassPort. We verified PAF made the requested correction.

◆ PassPort Location Exceptions

- For CAT ID--*BMD543G*, PassPort showed a quantity of one located at D-B-02-000-001.¹ Our walkdown determined the actual material location was D-A-05-202-000.¹
 - ◆ According to Hartsville personnel, this material was relocated to the D-A-05-202-000¹ location in November 2006 during an inventory consolidation by the Watts Bar Nuclear Plant.
 - ◆ We verified that the location was corrected in PassPort.

¹ Zone-Row-Section-Tier-Bin



Finding 1 – Physical Verification of Hartsville Inventory Listed in PassPort (continued)

- ◆ Quantity Exception*
 - CAT ID--*BVG259Q* showed a quantity of 170 on hand in PassPort. The test count located a quantity of 172 in the warehouse.
 - ◆ According to Hartsville personnel, an inventory count was conducted on these materials in September 2006. The box containing these materials was sealed; therefore, Hartsville personnel did not open it. Instead they identified the quantity available by notations on the box and distribution documentation. The seal on the box was broken during our walkdown.
 - ◆ We verified that the material quantity was changed to a quantity of 172 in PassPort.

*We also identified that CAT ID--*ADT037C* showed a quantity of three on hand in PassPort. The test count located a quantity of six in the warehouse. However, according to Hartsville personnel, three are available as inventory and three are listed as surplus.



Finding 2 – Physical Observations Compared to PassPort Information

We selected 38 CAT IDs corresponding to materials observed at Hartsville and compared our physical observations (i.e., documented location and quantity) with information listed in PassPort. In comparison of inventory on hand to PassPort, we found:

- For 8 of the 38 selected CAT IDs, the location and quantity information in PassPort agreed with our observation, and the items were classified in PassPort as inventory.
- For 9 of the 38 selected CAT IDs, the location and quantity information in PassPort agreed with our observation. However, the items were classified as surplus material.
- For 2 of the 38 selected CAT IDs, the location and quantity information in PassPort did not reflect the location and quantity identified at the Hartsville facility. However, the material was identified as surplus.
- For 3 of the 38 selected CAT IDs, no location or quantity information was found under the CAT ID in PassPort.
- One CAT ID with a physical count of 5 could not be located in PassPort. Therefore, this material could be inventory or surplus.



Finding 2 – Physical Observations Compared to PassPort Information (continued)

- Four CAT IDs had location information in PassPort that did not reflect the location identified at the Hartsville facility. Materials pertaining to 3 of the CAT IDs were identified as inventory.
 - ◆ Hartsville personnel planned to correct location information in PassPort.
- Eleven CAT IDs had quantities listed in PassPort that did not agree with the physical count we performed.
 - ◆ Of the 11 CAT IDs, 4 pertained to inventory items.
 - ◆ Hartsville personnel planned to make appropriate PassPort corrections.

Additional Information

Procurement personnel informed us that in the fall of 2005 all materials housed at Hartsville were accounted for. Hartsville personnel are now required to perform inventory cycle counts and report results on a monthly basis. Materials warehoused with no CAT ID information or that have not been designated as surplus or inventory, have been assigned a sequentially numbered Inventory Ticket which identifies key information about the materials. A revision to MMS-1.0 requires that items shipped to Hartsville include all necessary information to build a CAT ID. Otherwise, the item will be returned.



Finding 2 – Physical Observations Compared to PassPort Information (continued)

- Hartsville personnel are tracking the Inventory Tickets and have requested TVA sites to determine whether the materials need to be placed in inventory or surplus and advise Procurement accordingly. Some materials were directly purchased and never reflected in PassPort.
- For materials that need to be placed in inventory and have no CAT ID, sites have been requested to provide necessary information so that CAT IDs can be generated.

During our walkdown, we judgmentally selected six Inventory Tickets corresponding to materials we observed and found all six tickets identified the materials as belonging to Browns Ferry Nuclear Plant (BFN). According to Hartsville personnel, BFN is to identify the materials as inventory or surplus and provide information to build CAT IDs, as needed.



Recommendations

- ◆ We recommend the Senior Vice President, Procurement:
 - Make corrections in PassPort, as necessary, for the discrepancies noted during our comparison of inventory on hand to PassPort. Also, ensure that PassPort is updated timely to accurately reflect site determinations for the (1) remaining Inventory Ticket materials and (2) CAT IDs that have not been designated as inventory or surplus material.

