



Entergy Nuclear Northeast
Entergy Nuclear Operations, Inc.
James A. Fitzpatrick NPP
P.O. Box 110
Lycoming, NY 13093
Tel 315-342-3840

JAFP-08-0103
October 2, 2008

ATTN: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

**Subject: Entergy Nuclear Operations, Inc.
James A. FitzPatrick Nuclear Power Plant
License No. DPR-59
Docket No. 50-333
Certificate of Compliance Not Met During Receipt of Low-Level
Radioactive Waste Shipment at Barnwell, SC Disposal Facility**

Reference: South Carolina, Department of Health and Environmental Services letter to Mr. John Solowski, Radiation Protection Manager, Entergy Nuclear Northeast/JAFNPP regarding South Carolina Radioactive Waste Transportation Permit 0031-31-08, dated April 10, 2008

Dear Sir or Madam:

In accordance with 10 CFR 71.95(c), Entergy Nuclear Northeast Operations, Inc., James A. FitzPatrick Nuclear Power Plant (JAF) is providing this report of a discrepancy discovered during receipt of a low level radioactive waste shipment at the disposal facility located in Barnwell, South Carolina. Following the off-loading of Duratek Transport Cask CNS cask 3-55-1 that originated from JAF, Barnwell personnel determined that the cask base plate lead-in bolt located at the 2 o'clock position was not torqued to 75 ft-lbs., as required by the cask handling procedure referenced in the Certificate of Compliance.

In accordance with 10 CFR 71.95(c), a written report is required within 60 days upon discovery of an event identified in 10 CFR 71.95, paragraphs (a) or (b). JAF's original review of the event determined that the discrepancy was not reportable. Subsequent review with the NRC concluded that the discrepancy meets reporting criterion 10 CFR 71.95(a)(3) and a late report should be submitted.

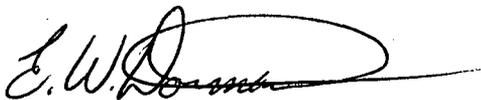
Attachment 1 contains the event report.

There are no new commitments made in this letter.

Should you have any questions or require additional information, please contact Mr. John Solowski, Radiation Protection Manager at (315) 349-6783.

4001
1145501
RMSS

Sincerely,



Gene Dorman
Acting Licensing Manager

ED:jm

Attachment: Event Report

cc:

Mr. Samuel J. Collins, Regional Administrator
U.S. Nuclear Regulatory Commission,
Region I
475 Allendale Road
King of Prussia, PA 19406-1415

Mr. Charles Donaldson, Esquire
Assistant Attorney General
New York Department of Law
120 Broadway
New York, New York 10271

Mr. Bhalchandra Vaidya, Project Manager
Plant Licensing Branch
U.S. Nuclear Regulatory Commission
Mail Stop O8 C2A
Washington, DC 20555

Mr. Paul Eddy
New York State Department of Public
Services
3 Empire State Plaza
Albany, New York 12223-1350

Mr. E. William Brach, Director
Spent Fuel Project Office
Office of Nuclear Material Safety and
Safeguards,
U.S. Nuclear Regulatory Commission
Mail Stop E3 D2M
Washington, DC 20555-0001

Mr. Paul Tonko, President
New York State Energy Research and
Development Authority
17 Columbia Circle
Albany, New York 12203-6399

Office of NRC Resident Inspector
James A. FitzPatrick NPP
P.O. Box 136
Lycoming, New York 13093

Mr. Patrick L. Paquin, General Mgr.
Energy Solutions
140 Stoneridge Drive
Columbia, South Carolina 29210

ATTACHMENT 1 to JAFP-08-0103

James A. FitzPatrick Nuclear Power Plant
Docket No. 50-333

Event Report

ATTACHMENT 1 to JAFP-08-0103

1. ABSTRACT:

On February 15, 2008, the Barnwell Disposal Facility notified JAF of the discovery of a loose base plate lead-in bolt located at the 2 o'clock position on low-level radioactive waste cask CNS 3-55-1 that was shipped from JAF. The shipment (No. 0208-13587) was classified as Radioactive Material, Type B (U) Package and was transported from JAF on February 12, 2008 as "Exclusive Use". The shipment was transported in accordance with Radioactive Material Quantities of Concern (RAMQC) program requirements. The shipment contents were irradiated hardware from the JAF spent fuel pool cleanup campaign. Verbal notification from Barnwell indicated that the loose bolt did not result in a violation of seal integrity, and radiation and contamination surveys had indicated no leakage.

On April 10, 2008, JAF received written notification of an infraction from the State of South Carolina (SC), Department of Health and Environmental Control (DHEC), Bureau of Land and Waste Management. The letter identified the loose bolt discrepancy discovered by Barnwell and noted that the condition was contrary to the requirements of "Handling Procedure For The Duratek Transport Cask CNS 3-55, Certificate of Compliance 5805" and SC Radioactive Material License 097. The letter directed JAF to investigate and institute corrective measures which ensure that all handling procedures involving radioactive material transportation at JAF would be properly implemented and to provide the DHEC documentation of the corrective measures not later than May 12, 2008.

2. NARRATIVE:

On February 11, 2008, CNS cask 3-55-1 was prepared by Energy Solutions, Inc. (ES) personnel at the JAF site for shipment of irradiated hardware to the Barnwell Waste Management Facility. Model CNS 3-55 casks are comprised of a steel-encased, lead-shielded cylindrical body sealed to a base plate by two silicone o-rings and secured by twelve base plate bolts. The base plate bolts were torqued to 75 ft-lbs, as required by the ES cask handling procedure. Both ES and JAF personnel completed the verification and sign off checklist for the base plate bolt torque values as required by the ES cask handling procedure. Impact limiters (top and bottom) were also installed and secured to the cask body, each using six impact limiter bolts which were wrench tightened. ES procedures did not specify a torque value requirement nor independent verification for the installation of the impact limiter bolts.

On February 12, 2008, CNS cask 3-55-1 was shipped from JAF to the Barnwell facility. On February 14, 2008, the cask was receipt inspected, surveyed, off loaded from the transport trailer and reloaded to a yard trailer in preparation for the cask to be taken to the slit trench for disposal. On February 15, 2008, following removal of the impact limiter, a Barnwell technician noted that a base plate lead-in bolt at the 2 o'clock position was loose (less than hand tight). On that same day, JAF was notified of the discovery by the ES Licensing Manager at the Barnwell facility. During the notification, the ES Licensing Manager reported that there was no violation of cask seal integrity, and radiation and contamination surveys indicated no leakage.

ATTACHMENT 1 to JAFP-08-0103

2. NARRATIVE (con't):

i. Status of Components:

Based upon surveys of the shipping cask during the receiving process, the structural integrity of the cask was not affected by the discrepancy. There was no indication of leakage or shifting of contents. The discrepancy involved a single closure bolt on the shipping cask. As described in Section 2 of the CNS 3-55 cask safety analysis report, a single loose bolt is within the analyzed design basis of the cask.

ii. Dates and approximate times of occurrences:

The discrepancy was discovered on February 15, 2008 at the Barnwell, SC facility. JAF personnel were notified on that same day by the ES Licensing Manager at the Barnwell facility.

iii. Cause of component or system failure:

JAF has notified ES, the owner of the cask, of the identified deficiency. Since JAF does not own the cask or its design basis, we can not definitively determine the cause of the event. Our apparent cause evaluation identified inadequate procedural guidance for installing the impact limiter as a potential cause for the event. Model CNS 3-55 casks are comprised of a cask base plate which is secured to the cask body by twelve base plate bolts and sealed with two silicone o-rings. As part of the installation process, an impact limiter is attached to the cask body after securing the base plate to the cask. The twelve base plate bolts are secured, by procedure, to 75 ft-lbs of torque. The six impact limiter bolts are then wrench tightened to an unspecified torque value. Since the lower impact limiter is secured to the same flange as the cask base plate, compression of the base plate bolting may have occurred upon wrench tightening of the impact limiter bolts, thereby, causing relief of the base plate bolt during transport.

iv. Failure mechanism:

As noted above, JAF can not definitively determine the failure mechanism. A potential failure mechanism is wrench tightening of the impact limiter bolts into the same flange as the base plate bolts without specific torque value criteria. The wrench tightening of the impact limiter bolts might have resulted in compression on the base plate bolting, thereby causing relief of the torque value on a base plate bolt during transport to the Barnwell facility.

v. Secondary functions affected:

The discrepancy involved a single closure bolt on the shipping cask, and did not affect any secondary functions or components.

vi. Method of discovery:

The discrepancy was discovered during off loading of the liner into the slit trench at the Barnwell, SC facility.

ATTACHMENT 1 to JAFP-08-0103

2. NARRATIVE (con't):

vii. Human performance root cause:

The event was not primarily the result of human performance deficiencies. The discrepancy may have been caused by the design of the cask and inadequate ES procedures relating to the installation of the cask impact limiter. ES personnel's failure to incorporate lessons learned from a similar event and JAF's limited initial screening of operating experience within the plant operating experience program were contributing causes.

viii. Manufacture/Model number:

Shipping Cask No. 3-55-1 and ES Certificate of Compliance No. 5805.

ix. Quantities/Content:

Radioactive waste shipment No. 0208-13587 was classified as a Radioactive Material, Type B (U) Package. The shipment contents were irradiated hardware from the JAF spent fuel pool cleanup campaign.

3. SAFETY CONSEQUENCES:

There were no direct or likely challenges to nuclear or industrial safety as a result of this event. The discrepancy involved a single closure bolt. Section 2 of the cask safety analysis report shows that failure of 1 to 3 closure bolts will not result in loss of the cask base plate. Radiological surveys of the shipping cask were conducted at the Barnwell, SC facility upon discovery of the deviation, and no contamination or leakage was detected.

4. CORRECTIVE ACTIONS:

After performing an apparent cause evaluation, JAF performed the following corrective actions:

- Notified ES that the CNS 3-55 casks will not be used at JAF until ES determines the cause of the event and implements effective corrective actions to prevent recurrence.
- Revised JAF's cask handling procedure checklist (RP-OPS-05-07) to include a QA hold point for verification that a second torque check is performed with the cask in the horizontal position.
- Counseled JAF Radiation Protection staff to lower the threshold for entering deviations relating to radioactive waste transport activities into the corrective action program (CAP).

ATTACHMENT 1 to JAFP-08-0103

5. SIMILAR EVENTS:

A similar industry event occurred in February, 2007 when Constellation Energy's Nine Mile Point Nuclear Generating Station made a shipment using the same cask.

6. CONTACT INFORMATION:

For additional information regarding this event, please contact Mr. John Solowski, Radiation Protection Manager, at 315-349-6783.

7. EXPOSURE INFORMATION:

Radiological surveys of the shipping cask were conducted at the Barnwell, SC facility upon discovery of the deviation. No contamination or leakage were detected, therefore no unexpected radiological exposure to individuals occurred.