



OCT 14 2013

LR-N13-0198

10 CFR 71.95

ATTN: Document Control Desk
Director, Division of Spent Fuel Storage and Transportation
Office of Nuclear Material Safeguards,
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

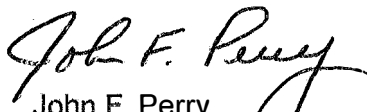
Salem and Hope Creek Generating Stations
Renewed Facility Operating License Nos. DPR-70, DPR-75, and
NPF-57
NRC Docket Nos. 50-272, 50-311, and 50-354

SUBJECT: 10 CFR 71.95 Report for Packaging and Transporting a Shipping
Cask (Model 8-120B) Without Meeting a Required Condition in
Certificate of Compliance 71-9168

In accordance with 10 CFR 71.95(a)(3), PSEG Nuclear LLC (PSEG) submits this report
for a potential instance where a Condition in the EnergySolutions Model 8-120B
transportation package Certificate of Compliance was not met during a shipment.

This letter contains no commitments. Should you have any questions or comments
regarding the submittal, please contact David Lafleur of Salem Regulatory Assurance at
856-339-1754.

Sincerely,


John F. Perry
Site Vice President – Salem


Paul J. Davison
Site Vice President – Hope Creek

Attachment 1: PSEG 10 CFR 71.95 Report (EnergySolutions Model 8-120B Cask)

cc: Mr. W. Dean, Administrator – Region 1, NRC
Mr. John Hughey, Licensing Project Manager – Salem and Hope Creek
USNRC Senior Resident Inspector, Salem
USNRC Senior Resident Inspector, Hope Creek
Mr. P. Mulligan, Manager IV, NJBNE
Mr. T. Cachaza, Salem Commitment Tracking Coordinator
Mr. P. Bonnett, Hope Creek Commitment Tracking Coordinator
Mr. L. Marabella, Corporate Commitment Tracking Coordinator
Mr. D. Lafleur, Salem Regulatory Assurance

bcc: President and Chief Nuclear Officer
Vice President Operations Support
Site Vice President – Salem
Site Vice President – Hope Creek
Director – Nuclear Oversight
Director – Regulatory Affairs
Plant Manager – Salem
Plant Manager – Hope Creek
Regulatory Assurance Manager – Salem
Regulatory Assurance Manager – Hope Creek
Manager – Engineering Programs
Licensing Manager

(Note: the bcc list will not be submitted as part of the letter to the NRC)

PSEG 10 CFR 71.95 Report (EnergySolutions Model 8-120B Cask)

1) Abstract

This report provides the information required by 10 CFR 71.95(a)(3) for an instance in which a condition in the Certificate of Compliance (CoC) for the Model 8-120B (Cask Certificate of Compliance #9168) was not observed in making a shipment. Specifically the CoC states that, "Prior to each shipment, the package must be leak tested in accordance with Section 8.2.2.2 of the application." The Safety Analysis Report (SAR), Section 8.2.2.2 further states: "in addition, prior to shipment, the vent and drain ports shall be tested by pressurizing the volume above the respective plug and stat-o-seal anytime they have been removed during the cask loading operation..." The SAR specifies a hold time of 60 minutes for the pre-shipment leak test of the cask vent port whereas, the PSEG operating procedure only requires a 20-minute hold time. The PSEG procedure was developed based on the EnergySolutions air pressure drop test procedure TR-TP-002.

On August 14, 2013, EnergySolutions submitted a report to the NRC, in accordance with 10 CFR 71.95, detailing a discrepancy in their procedures for pre-shipment leak testing of the cask vent port that existed from February 2001 to the present (Reference 1). PSEG has determined, based on a review of shipping records, there was one shipment where the pre-shipment leak testing did not meet the condition of the CoC.

There were no safety consequences as a result of this shipment. PSEG will update the procedure for performing the pre-shipment leak test on the Model 8-120B casks to conform to those prescribed in the current CoC and SAR prior to the next shipment.

2) Narrative

PSEG received a letter from EnergySolutions which was written to the users of the Model 8-120B cask by Email on August 21, 2013. This letter provided a copy of the August 14, 2013 EnergySolutions 10 CFR 71.95 report on the Model 8-120B cask (Reference 1). The EnergySolutions 10 CFR 71.95 report details a discrepancy in their leak testing procedures, provides February 2001 to the present as the dates of occurrence for the event and a safety analysis of the event.

Salem and Hope Creek used the same pre-shipment leak testing procedure as EnergySolutions. Therefore Salem and Hope Creek reviewed the cask shipment records for the time period specified.

Records for Salem shipments 06-43, 06-44, and 06-56 show a pre-shipment leak test was performed on the vent port with a 20-minute hold time prior to all shipments; however, no documentation in cask loading, testing, process procedures or check-off sheets shows that the vent port, plug or stat-o-seal had been removed during cask loading. Therefore, a pre-shipment leak test was not required for these shipments per the CoC condition and these shipments are not reportable.

Records for Hope Creek shipments HC05-062 and HC11-085 show a pre-shipment leak test was performed on the vent port with a 20-minute hold time prior to both shipments. No documentation in the cask loading, testing, process procedures or check-off sheets

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shows that the vent port, plug or stat-o-seals had been removed during cask loading for HC05-062. Therefore, a pre-shipment leak test was not required for this shipment per the CoC condition and this shipment is not reportable.

The shipping record for HC11-085, shipped on October 3, 2011, shows that the cask vent port may have been removed prior to testing. This required a 60-minute hold time for the pre-shipment leak test, in accordance with the CoC condition. Contrary to this, the leak test was performed with a 20-minute hold time; therefore, this is reportable under 10 CFR 71.95.

a) Status of Components

All Model 8-120B components operated normally for the HC11-085 shipment.

b) Date of Occurrence

October 3, 2011

c) Method of Discovery

This event was discovered as part of the review of all PSEG shipments made with the Model 8-120B cask from February 2001 to the last identified shipment on October 3, 2011, as a result of the EnergySolutions 10 CFR 71.95 report.

d) Cause

PSEG incorporated a vendor procedure without reviewing it against the requirements of the CoC; and therefore, did not identify that the procedure contained the incorrect hold time requirement for the cask vent port pre-shipment leak testing.

e) Package Contents

Hope Creek 8-120B cask shipment HC11-085 contained 120.3 cubic feet of dewatered filters and irradiated hardware with a total activity of 198 Curies.

(3) Assessment of Safety Consequences

Based on evaluation from EnergySolutions (Reference 1), there were no safety consequences associated with this shipment. The required hold time for leak testing varies in proportion to the test volume if the test pressure and acceptance criterion remain unchanged. Larger test volumes require longer hold times. The test volume includes the free volume of the space to be tested and the volume of the test manifold. For the Model 8-120B lids, the calculation for the large primary lid seal results in a 60-minute hold time. Since the other containment seals have smaller test volumes, applying a 60-minute hold time for all seals, including the vent port, is conservative.

The SAR test volume for the primary containment seal is listed as 103.2 cubic centimeters. The test volume for a 20-minute hold time is calculated as

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$(20/60) \times 103.2 = 34.4$ cubic centimeters. The vent port test volume is equal to the combined volume of the test manifold (10 cubic centimeters) plus a very small residual volume inside the vent port. Therefore, a pre-shipment leak test of the vent port, performed using a 20-minute hold time, is adequate to demonstrate compliance with maximum leak rate acceptance criteria, and there is no safety consequence from this Hope Creek shipment.

The recipient of the cask (Barnwell Operations) acknowledged the arrival of the shipment on October 5, 2011, without incident, and that the waste was disposed on October 6, 2011. There was no additional exposure to radiation as a result of the shipment.

4) Corrective Actions

Salem and Hope Creek will update their procedure for leak testing the Model 8-120B casks to conform to those prescribed in the current CoC and SAR by January 31, 2014 and prior to the next Model 8-120B cask shipment.

5) Contact for Additional Information

David Lafleur, Salem Regulatory Assurance, (856) 339-1754

6) Extent of Exposure of Individuals to Radiation or Radioactive Materials

None

References:

1. EnergySolutions letter, "10CFR71.95 Report on the 8-120B Cask," dated August 14, 2013