



**Nebraska Public Power District**

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NLS2015128  
October 29, 2015

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

Subject: 10 CFR 71.95 Report Involving *EnergySolutions* Certificate of Compliance  
No. 9168  
Cooper Nuclear Station, Docket No. 50-298, DPR-46

- References:
1. Letter from Mark S. Lewis, *EnergySolutions*, LLC, "10 CFR 71.95 Notification Associated with the Failure to Observe Certificate of Compliance Condition of the 8-120B Secondary Lid Test Port Configuration," dated September 21, 2015
  2. Letter from Steven E. Sisley, *EnergySolutions*, LLC, "Request to Amend Certificate of Compliance No. 9168, Revision 21 for the *EnergySolutions* 8-120B Type B Shipping Package," to the Nuclear Regulatory Commission, dated September 16, 2015

Dear Sir or Madam:

Nebraska Public Power District submits this report pursuant to 10 CFR 71.95(c) after being informed by *EnergySolutions* that the conditions of approval in Certificate of Compliance No. 9168 for the 8-120B cask may not have been observed for certain shipments (Reference 1). The 8-120B cask was used by Cooper Nuclear Station to make a shipment in April 2015.

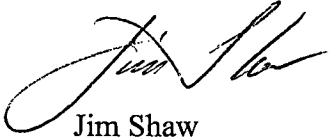
Attached is a report containing the content required by 10 CFR 71.95(c), as appropriate for this issue. *EnergySolutions* has reported this issue to the U.S. Nuclear Regulatory Commission per Reference 2.

This report contains no commitments.

If you have any questions regarding this information, please contact me at (402) 825-2788.

NLS2015128

Sincerely,



Jim Shaw  
Licensing Manager

/jo

Attachment: 10 CFR 71.95 Report, Failure to Observe Certificate of Compliance Conditions  
for the 8-120B Secondary Lid Test Port Configuration

cc: Dan Shrum w/attachment  
Senior Vice President, Regulatory Affairs  
EnergySolutions, LLC

Regional Administrator w/attachment  
USNRC - Region IV

Cooper Project Manager w/attachment  
USNRC - NRR Project Directorate IV-1

Senior Resident Inspector w/attachment  
USNRC - CNS

NPG Distribution w/o attachment

CNS Records w/attachment

**10 CFR 71.95 Report**

**Failure to Observe Certificate of Compliance Conditions for the  
8-120B Secondary Lid Test Port Configuration**

10 CFR 71.95 Report  
Failure to Observe Certificate of Compliance Conditions for the  
8-120B Secondary Lid Test Port Configuration

Abstract

On September 21, 2015, Nebraska Public Power District (NPPD) received a notification from EnergySolutions, LLC, (EnergySolutions) informing Cooper Nuclear Station (CNS) of the discovery of instances in which the conditions of approval in Certificate of Compliance (CoC) No. 9168 for the 8-120B cask may not have been observed for certain shipments.

EnergySolutions reported that secondary lids on four casks were fabricated with a cladding tube inside the test port hold, but the tube is not shown on the drawing referenced by the CoC. The purpose of the secondary lid test port tube is to isolate the pre-shipment test volume from the interspace between the two plates that make up the secondary lid. The isolation of the test volume provided by the tube assures that the test volume does not exceed the limit on which the hold time for the pre-shipment leak rate test is based. The tubes were inadvertently omitted when the lids were redesigned for operational enhancements in Revision 19 of the CoC.

Therefore, the conditions for approval in the CoC were not observed for any Type B shipments of radioactive material made in 8-120B casks utilizing the subject secondary lids that were entered into service between October – December, 2014. The condition was determined not to have a safety consequence because the as-built test volumes with tubes installed in the subject secondary lids met the basis for the pre-shipment leak rate test hold time. EnergySolutions submitted a CoC amendment request to the Nuclear Regulatory Commission (NRC) requesting authorized usage of the subject secondary lids.

Narrative Description of Event

In accordance with 10 CFR 71.95(c), the following information is provided.

- a) Status of component or systems that were inoperable at the start of the event and that contributed to the event:

No components or systems were determined to be inoperable.

EnergySolutions stated that all of the 8-120B casks operating with the secondary lids that have the tube installed in the test port, specifically secondary lid numbers 8-120B-5, -6, -7, and -8, have been removed from service until the CoC is amended to include the tube.

- b) Dates and approximate times of occurrences:

Based on a review of CNS shipping records, it was determined that CNS used the 8-120B cask that is the subject of this notification one time between October 2014 and September 11, 2015. It was used for Shipment 15-10 on April 28, 2015.

- c) The cause of each component or system failure or personnel error, if known:

*EnergySolutions* stated that they cleared the hold and released the subject secondary lids for use, believing that prior NRC authorization was not required because the tubes had been part of the previously NRC-approved 8-120B cask design and were inadvertently omitted from the new secondary lid design.

- d) The failure mode, mechanism, and effect of each failed component, if known:

Not applicable.

- e) A list of systems or secondary functions that were also affected for failures of components with multiple functions:

Not applicable.

- f) The method of discovery of each component or system failure or procedural error:

*EnergySolutions* stated the error was identified by the NRC inspection team during an audit at the *EnergySolutions'* facility in Columbia, SC.

- g) For each human performance-related root cause, a discussion of the cause(s) and circumstances:

*EnergySolutions* provided no information on a human performance-related root cause.

- h) The manufacturer and model number (or other identification) of each component that failed during the event:

No components failed.

- i) For events occurring during use of a packaging, the quantities and chemical and physical form(s) of the package contents:

There was no actual event while using the 8-120B cask. Shipment 15-10 departed CNS on April 28, 2015, and arrived at *EnergySolutions* in Oak Ridge, Tennessee on April 30, 2015. Shipment arrived with no discrepancies.

#### Assessment of Safety Consequences

*EnergySolutions* stated that the presence of tubes in the subject secondary lid test ports has no safety consequence because the as-built test volume meets the basis for the pre-shipment leak rate test hold time. The secondary lid test port configuration of the subject lids is similar to the design previously authorized for use prior to CoC Revision 19.

Planned Corrective Actions

*EnergySolutions* took corrective action to remove the affected lids from service until authorized to resume their use.

*EnergySolutions* has prepared and submitted an application to the NRC to amend CoC No. 9168 to include the test port tube in the affected lids as an authorized configuration.

*EnergySolutions* will perform an apparent cause analysis and identify additional corrective actions to prevent recurrence.

Previous Similar Events Involving the Same Packaging

On June 25, 2015, NPPD received a notification from *EnergySolutions* regarding instances in which the conditions of approval in CoC No. 9168 for the 8-120B cask may not have been observed in making certain shipments. During the vent port seal pre-shipment leak rate test, a neoprene gasket that was added under the test manifold may have reduced the test sensitivity below the required value. *EnergySolutions* replaced all of the subject gaskets with a modified version that does not have the potential to reduce test sensitivity.

Extent of Exposure of Individuals to Radiation or Radioactive Materials

None.

Licensee Contact for Additional Information

Joe Bednar  
Radiological Technical Supervisor  
Cooper Nuclear Station  
(402) 825-5314