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10 CFR 71.95

November 16, 2020

Serial: RA-20-0347

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

Subject: Brunswick Steam Electric Plant, Unit Nos. 1 and 2
Renewed Facility Operating License Nos. DPR-71 and DPR-62
Docket Nos. 50-325 and 50-324
10 CFR 71.95 Report on the 3-60B Cask

Duke Energy Progress, LLC (Duke Energy), hereby submits this report pursuant to 10 CFR 71.95(a)(3) regarding instances in which conditions of approval in the Certificate of Compliance (CoC) for the 3-60B cask (i.e., Docket 71-9321) have not been observed in making shipments. The enclosed notification from the certificate holder (i.e., Energy Solutions) provides the information related to the condition as required by 10 CFR 71.95(a)(3). The enclosure was developed by the certificate holder but is applicable to use of the 3-60B casks by Brunswick Steam Electric Plant (BSEP).

The specific CoC conditions which were not observed when making shipments with the 3-60B casks are related to packaging markings (i.e., lid alignment markings), fasteners/threaded holes, exposed packaging interior and exterior surfaces which were not inspected as part of the periodic maintenance program implemented by Energy Solutions. Failure to perform these periodic maintenance inspection activities had no safety consequence because such inspections were performed by Energy Solutions prior to each use of 3-60B cask. Additional details can be found in the enclosure to this letter.

BSEP used the 3-60B casks for shipments eleven times from 2016 to 2020 during which time this condition existed. The 3-60B casks have been removed from service until the required periodic inspections are completed.

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This document contains no regulatory commitments.

Please refer any questions regarding this submittal to Ms. Sabrina Salazar, Manager – Nuclear Support Services, at (910) 832-3207.

Sincerely,

A handwritten signature in black ink, appearing to read "John A. Krakuszeski". The signature is fluid and cursive, with the first name "John" and last name "Krakuszeski" clearly distinguishable.

John A. Krakuszeski

SBY/sby

Enclosure:

10 CFR 71.95 Report on the 3-60B cask (Docket 71-9321)

cc (with enclosure):

Ms. Laura Dudes, NRC Regional Administrator, Region II
Mr. Andrew Hon, NRC Project Manager
Mr. Gale Smith, NRC Senior Resident Inspector
Chair - North Carolina Utilities Commission
Mr. Aleksandr Gelfond, Cask Division Engineering/Licensing Manager, Energy Solutions

10 CFR 71.95 Report on the 3-60B cask (Docket 71-9321)



October 20, 2020
ES/NRC 20-004

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: 10CFR 71.95 Report on the 3-60B cask (Docket 71-9321)

EnergySolutions hereby submits the attached report (Attachment 1) providing the information required by 10CFR71.95(a)(3) for instances in which conditions of approval in the Certificate of Compliance for the 3-60B cask have not been observed in making shipments.

The circumstances described in this report is applicable to EnergySolutions (as a license holder and periodic maintenance inspection provider) and may be applicable to all licensed users (licensees) of 3-60B cask.

Should you have any questions regarding this notice, please contact me at (803)591-9074.

This letter is submitted electronically via the NRC Electronic Information Exchange (EIE) system.

Sincerely,

A handwritten signature in black ink, appearing to read 'Aleksandr Gelfond'.

Aleksandr Gelfond
Cask Division Engineering/Licensing Manager

Attachment 1: Failure to Observe Certificate of Compliance Condition for the 3-60B cask periodic maintenance inspection, October 20, 2020

cc) Pierre Saverot, NRC
Gerard van Noordennen, EnergySolutions



Failure to Observe Certificate of Compliance Condition for the 3-60B cask periodic maintenance inspection

October 20, 2020

1) Abstract

During a recent NRC inspection of EnergySolutions' Barnwell Logistics Facility (BLF), the inspection team identified that periodic maintenance performed for 3-60B casks (units #1 and #2) did not comply with Chapter 8 of the 3-60B cask Safety Analysis Report (SAR) requirements invoked by the latest revision of the Certificate of Compliance 71-9321 (CoC). Specifically, packaging markings (lid alignment markings), fasteners/threaded holes, exposed packaging interior and exterior surfaces were not inspected periodically as required by Table 8-1 of Chapter 8 of the 3-60B cask SAR.

Failure to perform periodic maintenance inspection of these items has no safety consequence because such inspections were performed prior to each use of 3-60B cask. Although, such inspections were performed prior to each use, EnergySolutions failed to inspect these items periodically as required in condition of approval in the CoC 71-9321. As such, condition of approval in the Certificate of Compliance was not observed in making a shipment which is addressed by 10CFR71.95 (a)(3).

2) Narrative Description of the Event

a) Status of Components

3-60B cask units #1 and # 2 have been removed from service until required periodic inspections (in accordance with Chapter 8 of the SAR) are completed.

b) Dates of Occurrences

The dates of occurrences for affected packaging's are as follows:

3-60B cask	Dates of Occurrences (shipments)	Number of Shipments
#1	March 2016 to June 2020	27
#2	July- September 2019	3

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

EnergySolutions Cask Book Procedure (TR-OP-052) provides a subset of operational, inspection, test and maintenance procedures for 3-60B cask operations. Among these procedures are:

- EnergySolutions Procedure No. CS-FP-PR-016, *3-60B Shipping Cask: Periodic Inspection and Maintenance of Fastener and Threaded Holes*
- EnergySolutions Procedure No. CS-FP-PR-017, *3-60B Shipping Cask: Periodic Maintenance of Exposed Surfaces.*

These procedures were inadvertently omitted from the use by the cask maintenance personnel during periodic maintenance inspections.



- d) Failure Mode, Mechanism, and Effect of each failed component, if known

Not applicable; no 3-60B packaging components failed.

- e) Systems or Secondary Functions Affected

Not applicable.

- f) Method of Discovery of the Error

The error/condition was identified by the NRC inspection team during an audit of EnergySolutions's Barnwell Logistics Facility (Barnwell, SC).

3) Assessment of Safety Consequences

Failure to perform periodic inspection of packaging markings (lid alignment markings), fasteners/threaded holes, exposed packaging interior and exterior surfaces has no safety consequence because such inspections were performed prior to each use of 3-60B cask.

4) Planned Corrective Actions

The following corrective actions are planned by EnergySolutions:

- EnergySolutions has removed 3-60B cask units #1 and #2 from service until appropriate annual inspections are performed.
- EnergySolutions has evaluated the condition for reportability under 10CFR 71.95 and has concluded that it is reportable.
- EnergySolutions (as the 3-60B cask license holder and periodic maintenance provider) will submit this report to NRC.
- EnergySolutions will contact licensees (cask users) that have made shipments using the affected 3-60B cask units with request to evaluate reportability under 10CFR71.95 process.
- EnergySolutions will perform an apparent cause analysis and identify additional corrective actions to prevent reoccurrence.
- All required inspections will be performed on the affected casks prior to placing them back into service.

5) Previous Similar Events Involving the 3-60B casks

No previous similar events have been identified.

6) Contact for Additional Information

Aleksandr Gelfond
EnergySolutions
Cask Division Engineering/Licensing Manager
(803)591-9074
axgelfond@energysolutions.com

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

None