



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

October 16, 2024

LICENSEE: Entergy Operations, Inc.

FACILITY: Grand Gulf Nuclear Station, Unit 1

SUBJECT: SUMMARY OF SEPTEMBER 26, 2024, PARTIALLY CLOSED MEETING WITH ENTERGY OPERATIONS, INC. TO DISCUSS A PLANNED LICENSE AMENDMENT REQUEST RELATED TO THE SPENT FUEL POOL RACKS FOR GRAND GULF NUCLEAR STATION, UNIT 1 (EPID L-2024-LRM-0102)

On September 26, 2024, the U.S. Nuclear Regulatory Commission (NRC) staff held a partially closed meeting with representatives of Entergy Operations, Inc. (Entergy or the licensee) to discuss a planned license amendment request (LAR) related to the spent fuel pool (SFP) racks for the Grand Gulf Nuclear Station, Unit 1 (Grand Gulf). The meeting notice and agenda for this meeting, dated September 3, 2024, are available in the Agencywide Documents Access and Management System (ADAMS) at Accession No. ML24270A132. A list of attendees is enclosed.

The licensee presented on the following (slides can be found in ADAMS at ML24254A360):

- Objective of the planned LAR
  - Grand Gulf SFP criticality credits Boraflex neutron absorber material.
  - Licensee contracted Global Nuclear Fuel – Americas (GNF) to prepare a new criticality safety analysis (CSA).
  - License renewal application commitment related to Boraflex monitoring will be revised.
- Overview of SNAP-In Inserts
  - Representative from Curtiss-Wright Nuclear Division presented on details of the NETCO-SNAP-IN ® inserts (referenced further as “inserts”) to be used at Grand Gulf as part of the planned LAR.
    - Similar inserts are currently installed at other boiling water reactors, such as LaSalle County Station, Units 1 and 2; Peach Bottom Atomic Power Station, Units 2 and 3; Quad Cities Nuclear Power Station, Units 1 and 2; Fermi-2; and River Bend Station, Unit 1.

- Neutron Absorbing Material Monitoring Program
  - ♦ Complies with Nuclear Energy Institute (NEI) 16-03-A, Revision 0, “Guidance for Monitoring of Fixed Neutron Absorbers in Spent Fuel Pools,” (ML17263A133).
- Overview of the CSA
  - Representative from GNF described:
    - how the planned CSA is consistent with:
      - ♦ NRC Regulatory Guide 1.240, “Fresh and Spent Fuel Pool Criticality Analyses,” Revision 0 (ML20356A127).
      - ♦ NEI 12-16, Revision 4, “Guidance for Criticality Analyses of Fuel Storage at Light-Water Reactor Power Plants” (ML19269E069).
    - that no credit for Boraflex neutron absorber material, will only credit inserts.
    - details of the CSA
      - ♦ The CSA assessed both current fuel types and legacy fuel.
      - ♦ Assumed uniform pool loading.
      - ♦ The CSA evaluated:
        - Misload of fuel outside the SFP rack.
        - Missing insert, to address removal during fuel movement and during periodic removal inspections.
- Proposed Changes
  - Licensee provided details on the following technical specification (TS) changes:
    - TS 4.3.1.1 within TS 4.3.1 “Criticality” of Fuel Storage TS 4.3:
      - ♦ Addition of statement to address that the inserts are installed.
      - ♦ Revise maximum k-infinity value in the normal reactor core configuration at cold conditions.
      - ♦ Deletion of TS 4.3.1.1.e, and all of its sub-steps, which prescribed how Region II racks are controlled.
      - ♦ Deletion of figure 4.3.1, “Region II 4x4 Storage Configuration.”
    - TS 5.5 “Program and Manuals” of Administrative Control TS 5.0:
      - ♦ Addition of new section to describe the new Spent Fuel Pool Storage Rack Neutron Absorber Monitoring Program.

A portion of the meeting was closed to public participation because proprietary information needed to be discussed with the NRC staff. On September 17, 2024, the NRC issued a

letter to the licensee with the determination that the submitted information should be withheld from public disclosure (ML24257A017). During the closed session of the meeting, the licensee discussed and provided further technical details on the proposed changes.

No regulatory decisions were made at this meeting. No members of the public identified themselves during the open portion of the meeting. Public Meeting Feedback forms were not received.

Please direct any inquiries to me at 301-415-3867 or by email at [Michael.Mahoney@nrc.gov](mailto:Michael.Mahoney@nrc.gov).

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Michael Mahoney, Project Manager  
Plant Licensing Branch II-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-416

Enclosure:  
List of Attendees

cc: Listserv

LIST OF ATTENDEES

SEPTEMBER 26, 2024, PUBLIC PORTION OF PARTIALLY CLOSED MEETING WITH

ENTERGY OPERATIONS, INC.

REGARDING A PLANNED LICENSE AMENDMENT REQUEST RELATED TO THE SPENT

FUEL POOL RACKS FOR THE GRAND GULF NUCLEAR STATION, UNIT 1

<b>Name</b>	<b>Organization</b>
Mike Mahoney	U.S. Nuclear Regulatory Commission (NRC)
Kent Wood	NRC
Patrick Koch	NRC
Jack Vande Polder	NRC
Christopher Rojas	NRC
Joshua Wilson	NRC
Kamishan Martin	NRC
Jeff Hardy	Entergy Operations, Inc, (Entergy)
Cecil Mahan	Entergy
Rich Meister	Entergy
Greg Norris	Entergy
Alexander Roaldsand	Entergy
Brezelle White	Entergy
Zach Duncan	Entergy
David Addington	Entergy
Jedidiah Romo	Entergy
Erik Silko	Entergy
Brian Copper	Entergy
Brian Rickard	Curtiss-Wright
Erik Wengart	Curtiss-Wright
Constantin Ilioiu	Curtiss-Wright
Mathew Harris	Curtiss-Wright
Christopher Kmiec	Global Nuclear Fuel – Americas (GNF)
Lisa Schichlein	GNF
Mike Hartos	GNF
Kim O'Connor	GNF

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AMENDMENT REQUEST RELATED TO THE SPENT FUEL POOL RACKS  
FOR GRAND GULF NUCLEAR STATION, UNIT 1 (EPID L-2024-LRM-0102)  
DATED OCTOBER 16, 2024

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**ADAMS Accession No.: ML24234A007**

**\*concurrence by email**

OFFICE	NRR/DORL/LPL4/PM	NRR/DORL/LPL4/LA*	NRR/DORL/LPL4/BC*	NRR/DORL/LPL4PM*
NAME	MMahoney	PBlechman	JRankin	MMahoney
DATE	10/10/2024	10/10/2024	10/15/2024	10/16/2024

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