

KHNPDCDRAIsPEm Resource

From: Ciocco, Jeff
Sent: Wednesday, May 11, 2016 10:07 AM
To: apr1400rai@khnp.co.kr; KHNPDCDRAIsPEm Resource; Jung-ho Kim (jhokim082@gmail.com); Andy Jiyong Oh; Christopher Tyree
Cc: Hernandez, Raul; Dias, Antonio; Wunder, George; Williams, Donna
Subject: APR1400 Design Certification Application RAI 480-8608 (09.01.02 - New and Spent Fuel Storage)
Attachments: APR1400 DC RAI 480 SPSB 8608.pdf

KHNP,

The attachment contains the subject request for additional information (RAI). This RAI was sent to you in draft form. Your licensing review schedule assumes technically correct and complete responses within 30 days of receipt of RAIs. However, KHNP requests, and we grant, 45 days to respond to this RAI. We may adjust the schedule accordingly.

Please submit your RAI response to the NRC Document Control Desk.

Thank you,

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Hearing Identifier: KHNP_APR1400_DCD_RAI_Public
Email Number: 533

Mail Envelope Properties (3e286128db9f475ea40418df1cb0a04f)

Subject: APR1400 Design Certification Application RAI 480-8608 (09.01.02 - New and Spent Fuel Storage)
Sent Date: 5/11/2016 10:06:49 AM
Received Date: 5/11/2016 10:06:50 AM
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Files	Size	Date & Time
MESSAGE	608	5/11/2016 10:06:50 AM
image001.jpg	5040	
APR1400 DC RAI 480 SPSB 8608.pdf		85958

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Priority: Standard
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REQUEST FOR ADDITIONAL INFORMATION 480-8608

Issue Date: 05/11/2016

Application Title: APR1400 Design Certification Review – 52-046

Operating Company: Korea Hydro & Nuclear Power Co. Ltd.

Docket No. 52-046

Review Section: 09.01.02 - New and Spent Fuel Storage

Application Section: 9.1.2

QUESTIONS

09.01.02-55

In RAI 79-7990, Question 9.1.2-1, the staff requested the applicant to discuss how the APR1400 design prevents the failure of non-seismic Category I SSCs from increasing the Keff in the new fuel storage pool (NFSP) or the spent fuel pool (SFP).

In its response the applicant stated that the spent fuel handling machine (SFHM) is designed to, in the event of a safe shutdown earthquake (SSE), not derail due to the strength of the rail mounting design, although the rails of the SFHM are designed as seismic Category III.

The staff evaluated the applicant's response and determined that additional information is required. The DCD classifies the SFHM as a seismic Category II system, but the rails of the machine are designed as seismic Category III. By the definition, as seismic Category III, these rails cannot be credited to remain functional following an SSE; therefore, these rails cannot be credited to prevent the derailment of the SFHM.

The staff requests the applicant to provide additional information clearly identifying how the SFHM design prevents it from falling into the SFP following an SSE (assuming failure of the seismic Category III rails), and to update the DCD accordingly.