

KHNPDCDRAIsPEm Resource

From: Ciocco, Jeff
Sent: Thursday, August 13, 2015 10:38 AM
To: KHNPDCDRAIsPEm Resource
Subject: FW: APR1400 Design Certification Application RAI 98-8051 (09.01.02 - New and Spent Fuel Storage)
Attachments: APR1400 DC RAI 98 SPSB 8051.pdf; image001.jpg

From: Ciocco, Jeff
Sent: Wednesday, July 22, 2015 1:39 PM
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Subject: APR1400 Design Certification Application RAI 98-8051 (09.01.02 - New and Spent Fuel Storage)

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, 60 days to respond to the RAI question. 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: 164

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Subject: FW: APR1400 Design Certification Application RAI 98-8051 (09.01.02 - New and Spent Fuel Storage)
Sent Date: 8/13/2015 10:37:41 AM
Received Date: 8/13/2015 10:37:45 AM
From: Ciocco, Jeff

Created By: Jeff.Ciocco@nrc.gov

Recipients:
"KHNPDCDRAIsPEm Resource" <KHNPDCDRAIsPEm.Resource@nrc.gov>
Tracking Status: None

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MESSAGE	1248	8/13/2015 10:37:45 AM
APR1400 DC RAI 98 SPSB 8051.pdf		87410
image001.jpg	5040	

Options
Priority: Standard
Return Notification: No
Reply Requested: No
Sensitivity: Normal
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REQUEST FOR ADDITIONAL INFORMATION 98-8051

Issue Date: 07/22/2015

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: Section 9.1.2

QUESTIONS

09.01.02-8

RAI 9.1.2-8

GDC 61 requires that the fuel storage system be designed for adequate safety under anticipated operating and accident conditions. The fuel storage system must be designed with (1) the capability for appropriate periodic inspection and testing of components important to safety, (2) suitable shielding for radiation protection, (3) appropriate containment, confinement, and filtering capability, (4) residual heat removal that reflects the safety importance of decay heat and other residual heat removal, and (5) the capability to prevent a significant reduction in fuel storage coolant inventory under accident conditions.

SRP Section 9.1.2.III.2.H.i states that the spent fuel pool (SFP) design should include weirs and gates separating the spent fuel storage areas from handling areas to prevent the accidental draining of the coolant to levels inadequate for fuel cooling or radiation shielding. The bottoms of any gates should be above the top of the fuel assemblies, and the volume of the adjacent fuel-handling areas should be limited so that leakage into these areas while drained would not reduce the coolant inventory to less than 3 meters (10 feet) above the top of the fuel assemblies. The staff determined that the applicant's description of the SFP does not address all the design criteria identified in SRP Section 9.1.2.III.2.H.i.

The staff requests the applicant to discuss in the DCD the (sizing) volume of the adjacent fuel-handling areas, such that the leakage into these areas while drained would not reduce the coolant inventory to less than 3 meters (10 feet) above the top of the fuel assemblies.

