

KHNPDCDRAIsPEm Resource

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Sent: Monday, July 06, 2015 1:09 PM
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Cc: Hart, Michelle; McCoppin, Michael; Umana, Jessica; Betancourt, Luis; Lee, Samuel
Subject: APR1400 Design Certification Application RAI 60-7972 (06.05.03 - Fission Product Control Systems and Structures)
Attachments: APR1400 DC RAI 60 RPAC 7972.pdf; image001.jpg

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 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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Subject: APR1400 Design Certification Application RAI 60-7972 (06.05.03 - Fission Product Control Systems and Structures)
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REQUEST FOR ADDITIONAL INFORMATION 60-7972

Issue Date: 07/06/2015

Application Title: APR1400 Design Certification Review – 52-046

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

Docket No. 52-046

Review Section: 06.05.03 - Fission Product Control Systems and Structures

Application Section: 6.5.2.3.3 Particulate (Aerosol) Removal by Natural Deposition

QUESTIONS

06.05.03-1

In DCD Chapter 15, loss of coolant accident (LOCA) and control element assembly accident design basis accident dose analyses (DBAs) were performed to show compliance with the design and siting criteria in 10 CFR 52.47(a)(2)(iv) and control room habitability dose criteria in GDC 19. For these DBAs which include releases to the containment, DCD Section 6.5.2.3.3 states that aerosol iodine removal in containment by natural deposition was modeled by using the 10th percentile values of the Powers natural deposition correlation in NUREG/CR-6189. Considering that the Powers natural deposition correlation was developed using operating PWR and BWR information on containment geometry and power, demonstrate why the Powers natural deposition correlation is applicable to the APR-1400 containment.

