

## **KHNPDCRAIsPEm Resource**

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**From:** Ciocco, Jeff  
**Sent:** Thursday, October 22, 2015 8:49 AM  
**To:** apr1400rai@khnp.co.kr; KHNPDCRAIsPEm Resource; Harry (Hyun Seung) Chang; Andy Jiyong Oh; Christopher Tyree  
**Cc:** Stubbs, Angelo; Segala, John; Wunder, George; Umana, Jessica; Lee, Samuel  
**Subject:** APR1400 Design Certification Application RAI 265-8327 (09.02.04 - Potable and Sanitary Water Systems)  
**Attachments:** APR1400 DC RAI 265 SPSB 8327.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 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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# REQUEST FOR ADDITIONAL INFORMATION 265-8327

Issue Date: 10/22/2015

Application Title: APR1400 Design Certification Review – 52-046

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

Docket No. 52-046

Review Section: 09.02.04 - Potable and Sanitary Water Systems

Application Section: 9.2.4

## QUESTIONS

09.02.04-1

The staff has reviewed DCD Tier 2, Section 9.2.4, and found most of the information contained in the section to be enclosed in double brackets, indicating it to be conceptual design information (CDI) for which the applicant is not seeking certification. Paragraph (a)(24) of 10 CFR 52.47 requires "a representative conceptual design for those portions of the plant for which the application does not seek certification, to aid the NRC in its review of the FSAR and to permit assessment of the adequacy of the interface requirements." Paragraph (a)(25) of 10 CFR 52.47 addresses interface requirements, and states that "the interface requirements to be met by those portions of the plant for which the applicant seeking certification" ... "must be sufficiently detailed to allow completion of the FSAR."

In its review of DCD Tier 2, Section 9.2.4, the staff was unsure as to whether the necessary interface requirements had been established and whether the CDI was clearly differentiated from the standard plant certified design information. For example, DCD Tier 2, Section 9.2.4.2.1, provides, as CDI, the statement: "No cross connection exist between the domestic water system and any potentially radioactive system that domestic water is supplied to potentially radiologically contaminated areas, backflow prevention devices are installed." But in DCD Tier 2, Figure 9.2.4-1, "Domestic Water and Sanitary Systems Flow Diagram," it is indicated in Note 1 that domestic water supply isolation valves and backflow preventers are not CDI. So, since the domestic water supply isolation valves are not CDI, the staff would like to know which portions of the system contained within the buildings shown on DCD Tier 2, Figure 9.2.4-1, (auxiliary building, turbine generator building, etc.) are within the scope of the certified design or CDI.

In order for the staff to complete its review of this system the applicant is requested to:

- a. Clearly identify what portions of the Domestic Water and Sanitary Systems are within the scope of the DCD, and which portions are conceptual design.
- b. Clearly identify the interface requirements for the conceptual design.



**U.S.NRC**

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