

KHNPDCDRAIsPEm Resource

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Sent: Monday, June 15, 2015 10:09 AM
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Cc: Hansing, Nicholas; Clark, Theresa; Betancourt, Luis; Lee, Samuel
Subject: APR1400 Design Certification Application RAI 30-7927 (03.02.02 - System Quality Group Classification)
Attachments: APR1400 DC RAI 30 MEB 7927.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 90 days to respond to the RAI. 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 30-7927

Issue Date: 06/15/2015

Application Title: APR1400 Design Certification Review – 52-046

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

Docket No. 52-046

Review Section: 03.02.02 - System Quality Group Classification

Application Section:

QUESTIONS

03.02.02-1

Several entries in DCD Tier 2, Table 3.2-1 have multiple seismic Category and Quality Group classifications assigned to them. It is not clear how these classifications are distinguished or how they are justified. Please clarify this methodology and revise the DCD table as needed to update the classifications. Examples are mentioned below, but the applicant should evaluate the entire table for similar issues.

1. The line item "Letdown piping and valves from CV-520 outlet to CV-415 inlet" is classified as both seismic Category II/ Category III. Please justify this designation and why there does not appear to be a class break on the associated P&ID.
2. The line item "Boric acid recovery system (holdup tank to boric acid storage tank and reactor makeup water tank) is classified as both seismic Category II/ Category III. Please justify this designation and why no class break appears to be shown on the associated P&ID.
3. The line items "Piping and valve containing radioactive materials" (in 109. WV- Liquid Radwaste), "RO package", and "Piping and components containing radioactive material" (in 110. WX- Solid Radwaste) are designated seismic Category II/III.
4. The line items "Non-safety related" (in 70. PN- NSSS process instrumentation), and "Non-safety UPS" (in 49. IP- Instrument and Control Power (Including Inverters) is seismic Category II/III.
5. Auxiliary feedwater pumps are listed as C/G, but only ASME Section III is listed as the Code. (page 3.2-70).
6. POSRV piping (page 3.2-70) is listed as Quality Group C/D and seismic Category I/II.

03.02.02-2

On DCD Tier 2, Section 3.2.3, page 3.2-13, the applicant states: "Piping supports and component supports are in the same safety class and have the same QA requirements as the piping and components to which they apply." Please clarify in DCD Tier 2, Section 3.2.2 and/or 3.2.3 how supports are classified with respect to quality group classification. If they are classified in the same Quality Group as the piping or components that they support, this may have unintended consequences. For example that supports for Class 1 RCPB components are designed to ASME BPV Code Section III Subsection NB criteria rather than Subsection NF as described in DCD Tier 2, Section 3.9.3 (page 3.9-55).

