

KHNPDCDRAIsPEm Resource

From: Ciocco, Jeff
Sent: Wednesday, July 15, 2015 3:11 PM
To: apr1400rai@khnp.co.kr; KHNPDCDRAIsPEm Resource; Harry (Hyun Seung) Chang; Yunho Kim; Steven Mannon
Cc: Hansing, Nicholas; Clark, Theresa; Betancourt, Luis; Lee, Samuel
Subject: APR1400 Design Certification Application RAI 78-8021 (14.03.03 - Piping Systems and Components - Inspections, Tests, Analyses, and Acceptance Criteria)
Attachments: APR1400 DC RAI 78 MEB 8021.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.

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

Thank you,

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REQUEST FOR ADDITIONAL INFORMATION 78-8021

Issue Date: 07/15/2015

Application Title: APR1400 Design Certification Review – 52-046

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

Docket No. 52-046

Review Section: 14.03.03 - Piping Systems and Components - Inspections, Tests, Analyses, and Acceptance Criteria

Application Section:

QUESTIONS

14.03.03-1

Section 1.3 of [DCD Tier 1](#) states that “The figure legend and acronym and abbreviation list are provided for information only and are not part of the Tier 1 DCD.” A similar statement appears in multiple tables, such as Table 2.4.1-3 (page 2.4-9) where it states “The column ‘Item No.’ is information only (not part of certified design).” This language could create confusion about the process for changing Tier 1 information described in 10 CFR 52.63. In particular, the idea of “information only” material appears to differ from the definitions of Tier 1 information that have appeared in previous design certification rule Appendices to 10 CFR Part 52. Therefore, it should be revised for consistency with these processes and in a manner that retains a unique (though possibly generically phrased) identifier that enables traceability of component information throughout the DCD. A related example can be found in the [AP1000 DCD Tier 1](#) on page 1.2-2, where the “Interpretation of Figures” section provides some discussion on as-built attributes and their relationship to safety functions that has been accepted by the NRC staff; however, this does not extend to item numbers.

14.03.03-2

DCD Tier 1, Table 2.3-3 is inconsistent with the remainder of Tier 1. Several systems, as named in the table, do not appear in later sections with the appropriate ITAAC. The system naming and ITAAC references should be made consistent across Tier 1. Examples include:

1. Safety Depressurization and Vent System – not found
2. Containment Air Monitoring/Sampling System – not found
3. Auxiliary Feedwater Pump Turbine System – not found
4. Station Heating System – not found
5. Breathing Air System – not found
6. Instrument Air System – not found
7. Service Air System – not found
8. Auxiliary Steam System - This section is stated as “no entry” (Tier 1, Section 2.7.1.9).
9. Safety Injection/Shutdown Cooling System - These two systems should be separate entries.
10. Essential/Normal Chilled Water System - These two systems should be separate entries.

