

KHNPDCDRAIsPEm Resource

From: Ciocco, Jeff
Sent: Thursday, October 08, 2015 12:13 PM
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Cc: Chien, Nan; Segala, John; Wunder, George; Umana, Jessica; Lee, Samuel
Subject: APR1400 Design Certification Application RAI 236-8293 (09.04.01 - Control Room Area Ventilation System)
Attachments: APR1400 DC RAI 236 SCVB 8293.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.

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

Thank you,

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REQUEST FOR ADDITIONAL INFORMATION 236-8293

Issue Date: 10/08/2015

Application Title: APR1400 Design Certification Review – 52-046

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

Docket No. 52-046

Review Section: 09.04.01 - Control Room Area Ventilation System

Application Section:

QUESTIONS

09.04.01-1

10 CFR 52.47(b)(1) requires that a design certification (DC) application contains the proposed inspections, tests, analyses, and acceptance criteria (ITAAC) that are necessary and sufficient to provide reasonable assurance that, if the inspections, tests, and analyses are performed and the acceptance criteria met, a plant that incorporates the DC is built and will operate in accordance with the DC, the provisions of the Atomic Energy Act, and the NRC's regulations. SRP Section 14.3, "Inspections, Tests, Analyses, and Acceptance Criteria," is used by the staff to evaluate whether the proposed ITAAC comply with 10 CFR 52.47(b)(1). The staff has reviewed DCD Tier 1, Section 2.7.3 and has the following ITAAC-related questions regarding the Control Room HVAC System (CRHS):

1. DCD Tier 1, Tables 2.7.3.1-3, "Acceptance Criteria" 7, requires the CRHS to be "capable of providing the conditioned air to maintain the room temperature within design limits for the CRE [control room envelope] during plant normal, abnormal and accidents conditions." The applicant is requested to revise the ITAAC to specify the parameters to define "design limits".

2. DCD Tier 1, Tables 2.7.3.1-3, "Acceptance Criteria" 8.b, requires the CRHS to "maintain positive pressure in the CRE during the emergency mode." The applicant is requested to revise the ITAAC to be more specific on the definition of positive pressure.

3. DCD Tier 1, Tables 2.7.3.1-3, "Inspection, Tests, Analyses" 11, the unfiltered inleakage test method is not specified. According to DCD Tier 2, Section 9.4.1.4, the applicant states that the unfiltered leakage test is performed in accordance with Regulatory Guide (RG) 1.197 and American Society for Testing and Materials (ASTM) E741-2000, "Standard Test Method for Determining Air Change in a Single Zone by Means of a Tracer Gas Dilution." The applicant is requested revise the ITAAC to specify ASTM E741 as the required test method.



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