

## **KHNPDCDRAIsPEm Resource**

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**From:** Ward, William  
**Sent:** Thursday, August 04, 2016 7:46 PM  
**To:** apr1400rai@khnp.co.kr; KHNPDCDRAIsPEm Resource; daegeun.ahn@gmail.com; Andy Jiyong Oh; Jungho Kim (jhokim082@gmail.com); Mannon, Steven (steven.mannon@aecom.com)  
**Cc:** Williams, Donna; Ciocco, Jeff; Roy, Tarun; Junge, Michael; Arora, Surinder  
**Subject:** APR1400 Design Certification Application RAI 512-8665 [14.3.9 - Human Factors Engineering - Inspections, Tests, Analyses, and Acceptance Criteria]  
**Attachments:** APR1400 DC RAI 512 HOIB 8665.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, 90 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,

**William R. Ward, P.E.**  
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**Subject:** APR1400 Design Certification Application RAI 512-8665 [14.3.9 - Human Factors Engineering - Inspections, Tests, Analyses, and Acceptance Criteria]  
**Sent Date:** 8/4/2016 7:45:41 PM  
**Received Date:** 8/4/2016 7:45:44 PM  
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APR1400 DC RAI 512 HOIB 8665.pdf		69272

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**Return Notification:** No  
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# REQUEST FOR ADDITIONAL INFORMATION 512-8665

Issue Date: 08/04/2016

Application Title: APR1400 Design Certification Review – 52-046

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

Docket No. 52-046

Review Section: 14.03.09 - Human Factors Engineering - Inspections, Tests, Analyses, and Acceptance Criteria

Application Section: Sections 2.9.2, 14.3.2.9, and 14.3.9.3

## QUESTIONS

### 14.03.09-2

#### Question 14.03.09-2:

The DCD, Section 14.3.2.9, states, "Design ITAAC will be closed in accordance with the guidance in RG 1.215 (Reference 31) and Section 8.3.1 of NEI 08-01 (Reference 32)". Reference 32 (DCD page 14.3-37) is identified as, "NEI 08-01, "Industry Guideline for the ITAAC Closure Process under 10 CFR Part 52," Rev. 4, Nuclear Energy Institute, 2010."

However, the NEI document, Reference 32, does not include a Section Number 8.3.1 that the applicant is using to close the design ITAAC. Therefore, the DCD applicant needs to clarify which section of Reference 32 is to be used to close the Design ITAAC. Additionally, the staff also notes that Rev. 4 of NEI 08-01 is not the current revision. The current revision of this document is Rev. 5 (Corrected) which was issued in June, 2014.

The staff also suggests that the DCD applicant should review and verify that its application does not use the non-existent Section 8.3.1 of Reference 32 for closure of any other ITAAC.

### 14.03.09-3

#### Question 14-03.09-3:

The DCD Section 14.3.6 describes COL information item COL 14.3(4) as follows:

COL 14.3(4)      The COL applicant is to provide a design ITAAC.

The above COL Information item description is not complete and also not consistent with the COL applicant action described in DCD Section 14.3.2.9. To make it complete and consistent with DCD Section 14.3.2.9, it needs to be modified to state, as a minimum, the following:

COL 14.3(4)      The COL applicant is to provide a design ITAAC closure schedule for implementing the V&V design ITAAC as addressed in Subsection 14.3.2.9.