

## KHNPDCDRAIsPEm Resource

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**From:** Ciocco, Jeff  
**Sent:** Friday, August 21, 2015 7:05 AM  
**To:** KHNPDCDRAIsPEm Resource  
**Subject:** FW: APR1400 Design Certification Application RAI 96-8073 (16 - Technical Specifications)  
**Attachments:** APR1400 DC RAI 96 SPSB 8073.pdf; image001.jpg

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**From:** Ciocco, Jeff  
**Sent:** Wednesday, July 22, 2015 1:14 PM  
**To:** apr1400rai@khnp.co.kr; KHNPDCDRAIsPEm Resource <KHNPDCDRAIsPEm.Resource@nrc.gov>; Harry (Hyun Seung) Chang <hyunseung.chang@gmail.com>; Yunho Kim <yshh8226@gmail.com>; Steven Mannon <steven.mannon@aecom.com>  
**Cc:** Tjader, Theodore <Theodore.Tjader@nrc.gov>; Dias, Antonio <Antonio.Dias@nrc.gov>; Umana, Jessica <Jessica.Umana@nrc.gov>; Lee, Samuel <Samuel.Lee@nrc.gov>  
**Subject:** APR1400 Design Certification Application RAI 96-8073 (16 - Technical Specifications)

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 this RAI. We may adjust the schedule accordingly.

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

Thank you,

Jeff Ciocco  
New Nuclear Reactor Licensing  
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**Hearing Identifier:** KHNP\_APR1400\_DCD\_RAI\_Public  
**Email Number:** 204

**Mail Envelope Properties** (4b0362768b4745cdb4b4d05ba307efef)

**Subject:** FW: APR1400 Design Certification Application RAI 96-8073 (16 - Technical Specifications)  
**Sent Date:** 8/21/2015 7:05:16 AM  
**Received Date:** 8/21/2015 7:05:19 AM  
**From:** Ciocco, Jeff

**Created By:** Jeff.Ciocco@nrc.gov

**Recipients:**  
"KHNPDCDRAIsPEm Resource" <KHNPDCDRAIsPEm.Resource@nrc.gov>  
Tracking Status: None

**Post Office:** HQPWMSMRS08.nrc.gov

<b>Files</b>	<b>Size</b>	<b>Date &amp; Time</b>
MESSAGE	1180	8/21/2015 7:05:19 AM
APR1400 DC RAI 96 SPSB 8073.pdf		94751
image001.jpg	5056	

**Options**  
**Priority:** Standard  
**Return Notification:** No  
**Reply Requested:** No  
**Sensitivity:** Normal  
**Expiration Date:**  
**Recipients Received:**

# REQUEST FOR ADDITIONAL INFORMATION 96-8073

Issue Date: 07/22/2015  
Application Title: APR1400 Design Certification Review – 52-046  
Operating Company: Korea Hydro & Nuclear Power Co. Ltd.  
Docket No. 52-046  
Review Section: 16 - Technical Specifications  
Application Section:

## QUESTIONS

### 16-2

Paragraph (a)(11) of 10 CFR 52.47 and paragraph (a)(30) of 10 CFR 52.79 states that a design certification (DC) applicant and a combined license (COL) applicant, respectively, are to propose TS prepared in accordance with 10 CFR 50.36 and 50.36a. 10 CFR 50.36 sets forth requirements for technical specifications to be included as part of the operating license for a nuclear power facility. Subsection 52.47(a)(11) requires that technical specifications be provided in the application for design certification of a new reactor design.

NUREG-1432, "Standard Technical Specifications-Combustion Engineering Plants," Rev. 4, provides NRC guidance on format and content of technical specifications as one acceptable means to meet 10 CFR 50.36 requirements.

SRP Section 16.0, Part III.2.A states, in part, "when reviewing a difference between the proposed TS provision and the reference TS provision, verify that the applicant's written technical or administrative reasoning in support of the difference is logical, complete, and clearly written."

The Deviation Report has TS 3.8.1 Condition F as being deleted/unnecessary, yet it is included. Justify the need for TS 3.8.1 Condition F.

### 16-3

The SR 3.8.1.3 acceptance criteria is listed as a "percent of rating," vs the actual KW rating as listed in the STS. Justify using "percent of rating," vs the actual KW rating.

### 16-4

The SR 3.8.1.7 Notes 2, 3, and 4 are not in the STS and Note 4 is illogical. The Deviation Report, "APR1400-K-O-NR-14001-NP," does not address the addition of these notes. Justify the Notes or delete them.

### 16-5

The STS 3.8.2 ACTIONS Note stating that "LCO 3.0.3 is not applicable," is missing in the generic TS 3.8.2. Justify this deviation from the STS.

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16-6

The LCO section of the Bases for generic TS 3.8.2 is missing the second paragraph that is in the STS. The missing paragraph discusses capabilities of a qualified offsite circuit. Justify this difference or include the missing STS 3.8.2 Bases paragraph.

16-7

The ACTIONS section of the Bases for TS 3.8.3 refer to and inoperable EDG subsystem. The Bases for TS 3.8.1 refer to EDG Trains. Explain the difference between EDG subsystem and EDG Train.

16-8

The TS 3.8.4 Logical Connector between Required Actions D.1 to "Be in MODE 3," and D.2 to "Be in MODE 4," is "AND" in the STS but is "OR" in the APR1400 TS 3.8.4. The Deviation Report, "APR1400-K-O-NR-14001-NP," does not address this difference. Justify this change or replace the Logical Connector "OR" between Required Actions D.1 and D.2 with "AND."

16-9

SR 3.8.4.3 is missing its "SR 3.8.4.3" identifier; add.

16-10

TS 3.8.5 Condition A is not properly indented; correct.

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16-11

The TS 3.8.5 Condition B brackets around "for reasons other than Condition A" are not needed. Justify the brackets in TS 3.8.5 Condition B around "for reasons other than Condition A," or remove.

16-12

The Logical Connectors between TS 3.8.5 Required Actions B.2.1 "AND" B.2.2 "AND" B.2.3 are not properly indented; properly indent.

16-13

TS 3.8.6 Condition C and required Action C NOTES are "was" in the STS and not "is below the top of plates," as stated in the APR1400 TS 3.8.6. The Deviation Report, "APR1400-K-O-NR-14001-NP," does not address this difference. Justify this deviation or make it consistent with the STS.

16-14

The generic TS SR 3.8.6.6 NOTE addresses MODES 1, 2, 3, and 4, while the Bases for SR 3.8.6.6 only discuss MODES 1 and 2. The Bases for SR 3.8.6.6 should discuss MODES 3 and 4, in addition to MODES 1 and 2.

16-15

STS LCO 3.8.7 NOTE is not included in either the generic TS or Bases and is not discussed in the Deviation Report. Justify not including STS LCO 3.8.7 NOTE in the generic TS and Bases, or include it.

