

KHNPDCDRAIsPEm Resource

From: Ciocco, Jeff
Sent: Friday, August 21, 2015 9:11 AM
To: KHNPDCDRAIsPEm Resource
Subject: FW: APR1400 Design Certification Application RAI 162-8055 (16 - Technical Specifications)
Attachments: APR1400 DC RAI 162 SPSB 8055.pdf; image001.jpg

From: Ciocco, Jeff
Sent: Thursday, August 20, 2015 9:59 AM
To: apr1400rai@khnp.co.kr; Harry (Hyun Seung) Chang <hyunseung.chang@gmail.com>; KHNPDCDRAIsPEm Resource <KHNPDCDRAIsPEm.Resource@nrc.gov>; Andy Jiyong Oh <jiyong.oh5@gmail.com>; Steven Mannon <steven.mannon@aecom.com>
Cc: Scully, Derek <Derek.Scully@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 162-8055 (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 this RAI. We may adjust the schedule accordingly.

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

Thank you,

Jeff Ciocco
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Hearing Identifier: KHNP_APR1400_DCD_RAI_Public
Email Number: 216

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Subject: FW: APR1400 Design Certification Application RAI 162-8055 (16 - Technical Specifications)
Sent Date: 8/21/2015 9:10:51 AM
Received Date: 8/21/2015 9:10:52 AM
From: Ciocco, Jeff

Created By: Jeff.Ciocco@nrc.gov

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

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Files	Size	Date & Time
MESSAGE	1176	8/21/2015 9:10:52 AM
APR1400 DC RAI 162 SPSB 8055.pdf		91614
image001.jpg	5056	

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

REQUEST FOR ADDITIONAL INFORMATION 162-8055

Issue Date: 08/20/2015
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

16-49

Rev. 0 of DCD Tier 2 Subsection 16.1.2 states: "The units specified in the APR1400 Technical Specifications are the International system of units (SI units) and the English units. The SI units have been used as the primary unit and the English units have been used in parentheses." Sections 3.3.4.a and 4.2.1.d (first sentence) of the Writer's Guide for Plant-Specific Improved Technical Specifications both contain the following guidance statement: "Units used in specifications should correlate with the units the operator reads from the instrumentation." Since a COL applicant would have to use either SI or English units, KHNP is requested to add the following: "The choice of units is a COL information item to be resolved by a COL applicant; however the TS and Bases do not enclose the parameter value pairs in square brackets. This is an exception to the use of brackets to denote COL information in the TS and Bases, as discussed below."

16-50

The applicant is requested to address the formatting of NOTES throughout the Technical Specifications (TS). These formatting issues in the TS are not in accordance with the Writer's Guide for Plant-Specific Improved Technical Specifications. Section 2.1.4.b of the Writer's Guide states the following: "If more than one issue is addressed in the Note, separate the items as ordered list (refer to Writer's Guide Section 2.1.3) and use the plural title "NOTES." Section 2.1.3.d states the following: "Include one blank line between each list component."

There are multiple occurrences of a NOTE containing multiple items and the title of the NOTE is "NOTE" versus "NOTES". Examples of these errors can be found on pages 3.1.3-2 (SR 3.1.3.1 NOTE), 3.3.1-1 (APPLICABILITY NOTE), and 3.6.2-1 (2 occurrences; the ACTIONS NOTE and the NOTE prior to REQUIRED ACTION A.1).

The applicant is requested to perform a global check of the NOTES contained in the TS to ensure that all formatting follows the guidance of the Writer's Guide, thus ensuring the text aligns with the STS. This global check should include the verifying that the proper NOTE title is being used (NOTE versus NOTES) and that a line break occurs between each listed component in the NOTE.

REQUEST FOR ADDITIONAL INFORMATION 162-8055

16-51

The applicant is requested to address the formatting of Logical Connectors in the Technical Specifications (TS). The requirements for the formatting of Logical Connectors are located in TS Section 1.2. There is also guidance in Section 2.1.5 of the Writer's Guide for Plant Specific Improved Technical Specifications. Some examples of the improper formatting of Logical Connectors include:

Logical Connectors in Required Action column should be indented according to TS Section 1.2. The Logical Connectors should align with the period after first number for second nesting level.

This proper indentation does not occur for Logical Connectors between Required Actions B.2.1 and B.2.2, and B.2.2 and B.2.3 for TS 3.8.5.

Logical Connector usage in Condition column should be on separate line between Condition statements and should be underlined. The Logical Connector "OR" is used inline between two Condition statements, and is not underlined in TS 3.5.2 Condition A.

In the REQUIRED ACTIONS column of ACTIONS A, B, and D of TS 3.1.7, should align flush left for the first nesting level.

The applicant is requested to perform a global check of the Logical Connectors to ensure that the requirements of TS Section 1.2 are met, which will align the TS with the STS.

16-52

Justify the deviation from the STS and the Writer's Guide for Plant Specific Improved Technical Specifications regarding the formatting of APPLICABILITY statements.

Section 2.5.4.b.1 of the Writer's Guide states "When a single Applicability statement continues to a second line, the wrapped line is indented five spaces to indicate this. In ISTS Revision 2, the wrapped line is not always indented five spaces. This should be corrected in the development of the plant specific ITS."

Two examples of the wrapped second line of text not being indented five spaces occur in the APPLICABILITY statements of Technical Specification 3.3.4 and 3.3.7.

The applicant is request to perform a global check of the TS to ensure that all APPLICABILITY statements are formatted correctly. This would align the text with the STS and the guidance contained in the Writer's Guide.

