

KHNPDCDRAIsPEm Resource

From: Ward, William
Sent: Friday, August 12, 2016 11:55 PM
To: 'apr1400rai@khnp.co.kr'; KHNPDCDRAIsPEm Resource; 'daegeun.ahn@gmail.com'; 'Andy Jiyong Oh'; 'Jungho Kim (jhokim082@gmail.com)'; Tyree, Christopher (christopher.tyree@aecom.com)
Cc: Williams, Donna; Ciocco, Jeff; Wunder, George; Mitchell, Matthew; Yeshnik, Andrew
Subject: APR1400 Design Certification Application RAI 514-8671 [10.3.6 - Steam and Feedwater System Materials]
Attachments: APR1400 DC RAI 514 MCB 8671.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,

William R. Ward, P.E.
Senior Project Manager
U.S. Nuclear Regulatory Commission
m/s T6-D38M
Washington, DC, 20555-0001
NRO/DNRL/Licensing Branch 2
ofc T6-D31
ofc (301) 415-7038

U.S. NRC PROTECTING PEOPLE AND THE ENVIRONMENT
Please consider the environment before printing this email.

Hearing Identifier: KHNP_APR1400_DCD_RAI_Public
Email Number: 572

Mail Envelope Properties (ade2a1fce0fc4a41b4f265e5026a7ce2)

Subject: APR1400 Design Certification Application RAI 514-8671 [10.3.6 - Steam and Feedwater System Materials]
Sent Date: 8/12/2016 11:55:17 PM
Received Date: 8/12/2016 11:55:21 PM
From: Ward, William

Created By: William.Ward@nrc.gov

Recipients:

"Williams, Donna" <Donna.Williams@nrc.gov>
Tracking Status: None
"Ciocco, Jeff" <Jeff.Ciocco@nrc.gov>
Tracking Status: None
"Wunder, George" <George.Wunder@nrc.gov>
Tracking Status: None
"Mitchell, Matthew" <Matthew.Mitchell@nrc.gov>
Tracking Status: None
"Yeshnik, Andrew" <Andrew.Yeshnik@nrc.gov>
Tracking Status: None
"apr1400rai@khnp.co.kr" <apr1400rai@khnp.co.kr>
Tracking Status: None
"KHNPDCDRAIsPEm Resource" <KHNPDCDRAIsPEm.Resource@nrc.gov>
Tracking Status: None
"daegeun.ahn@gmail.com" <daegeun.ahn@gmail.com>
Tracking Status: None
"Andy Jiyong Oh" <jiyong.oh5@gmail.com>
Tracking Status: None
"Jungho Kim (jhokim082@gmail.com)" <jhokim082@gmail.com>
Tracking Status: None
"Tyree, Christopher (christopher.tyree@aecom.com)" <christopher.tyree@aecom.com>
Tracking Status: None

Post Office: HQPWMSMRS05.nrc.gov

Files	Size	Date & Time
MESSAGE	661	8/12/2016 11:55:21 PM
APR1400 DC RAI 514 MCB 8671.pdf		77562

Options

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

REQUEST FOR ADDITIONAL INFORMATION 514-8671

Issue Date: 08/12/2016
Application Title: APR1400 Design Certification Review – 52-046
Operating Company: Korea Hydro & Nuclear Power Co. Ltd.
Docket No. 52-046
Review Section: 10.03.06 - Steam and Feedwater System Materials
Application Section: 10.3.6

QUESTIONS

10.03.06-28

Title 10 of the Code of Federal Regulations (10 CFR) Part 52.6 requires that information submitted as part of a standard design certification under 10 CFR Part 52 shall be complete and accurate in all material respects. The staff seeks additional information on the main steam and feedwater system to determine if FSAR Section 10.3.6 accurately reflects the configuration of the piping system in the applicant's design calculations and procurement drawings.

By letter dated January 11, 2016 (ADAMS Accession No. ML16011A239), in response to RAI 314-8378, Questions 10.03.06-3, 10.03.06-5, and 10.03.06-7, and 10.03.06-9, the applicant proposed to revise FSAR Tables 10.3.2-2, 10.3.2-3, and 10.3.2-4. The staff noted changes proposed by the applicant's responses to the aforementioned RAI questions went beyond the scope of the RAI question and inadequately explained the: (1) removal of fittings, valves, and flanges from Tables 10.3.2-2, 10.3.2-3, and 10.3.2-4 and (2) introduction of changes to pipe sizes in tables 10.3.2-3 and 10.3.2-4. As a result, the staff developed a follow-up RAI 452-8545.

In follow-up RAI 452-8545, Question 10.3.6-20, the staff noted the applicant's proposed changes to Tables 10.3.2-2, 10.3.2-3, and 10.3.2-4 which appeared to be potentially in error. The applicant provided their response to this RAI by letter dated April 28, 2016 (ADAMS Accession No. ML16119A107). However, the staff notes that the applicant's response did not address all of the staff's concerns. The staff therefore requests a response to the following items which were part of RAI 452-8545, Question 10.3.6-20 but which remain unresolved by the applicant's response of April 28, 2016:

1) If the removal of fittings, valves, and flanges from Tables 10.3.2-2, 10.3.2-3 and 10.3.2-4 is intended, provide a justification for the removal of these components from the tables and, as necessary, identify where the materials of construction for these components will be documented in the FSAR.

2) Provide an explanation for the proposed changes in pipe sizes documented in applicant's RAI 314-8378 response dated January 11, 2016. Specifically, the staff notes that the following items were changed:

- Changing the "Main steam piping to MSSV" from 8 inches to 6 inches (Table 10.3.2-3)
- Changing the "Feedwater pump discharge header to Feedwater heaters 5/6/7" from 30 inches to 32 inches (Table 10.3.2-4 [1 of 2])
- Removing the 26 inch and 30 inch piping from the "Feedwater heaters 7 outlet header - Fittings" (Table 10.3.2-4 [1 of 2])
- Removing the 26 inch and 30 inch piping from the "Feedwater heaters 7 outlet header to MFVCs" (Table 10.3.2-4 [1 of 2])
- Removing the 26 inch and 30 inch piping from the "Feedwater heaters 7 outlet header to MFVCs - Fittings" (Table 10.3.2-4 [1 of 2])

REQUEST FOR ADDITIONAL INFORMATION 514-8671

If the changes were intentional, identify other parts of the DCD, including P&IDs, transient analyses, and other impacted sections of the FSAR, which require corresponding changes and provide proposed corresponding changes. If the changes were not intentional, revise Tables 10.3.2-3 and 10.3.2-4 with the correct information (which may be to restore the information which was originally included in the tables).