

KHNPDCDRAIsPEm Resource

From: Ward, William
Sent: Friday, March 04, 2016 3:27 PM
To: apr1400rai@khnp.co.kr; KHNPDCDRAIsPEm Resource; daegeun.ahn@gmail.com; Andy Jiyong Oh; Tyree, Christopher (christopher.tyree@aecom.com)
Cc: Lee, Samuel; Ciocco, Jeff; Williams, Stephen; Vera, John; Burkhart, Lawrence
Subject: APR1400 Design Certification Application RAI 429-8491 [11.3 - Gaseous Waste Management System]
Attachments: APR1400 DC RAI 429 RPAC 8491.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

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Subject: APR1400 Design Certification Application RAI 429-8491 [11.3 - Gaseous Waste Management System]
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From: Ward, William

Created By: William.Ward@nrc.gov

Recipients:

"Lee, Samuel" <Samuel.Lee@nrc.gov>
Tracking Status: None
"Ciocco, Jeff" <Jeff.Ciocco@nrc.gov>
Tracking Status: None
"Williams, Stephen" <Stephen.Williams@nrc.gov>
Tracking Status: None
"Vera, John" <John.Vera@nrc.gov>
Tracking Status: None
"Burkhart, Lawrence" <Lawrence.Burkhart@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
"Tyree, Christopher (christopher.tyree@aecom.com)" <christopher.tyree@aecom.com>
Tracking Status: None

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REQUEST FOR ADDITIONAL INFORMATION 429-8491

Issue Date: 03/04/2016
Application Title: APR1400 Design Certification Review – 52-046
Operating Company: Korea Hydro & Nuclear Power Co. Ltd.
Docket No. 52-046
Review Section: 11.03 - Gaseous Waste Management System
Application Section: 11.3

QUESTION

11.03-10

REQUIREMENT: 10 CFR 50, Appendix I

GUIDANCE: RG 1.109

ISSUE: The applicant's response to RAI 145-7932, Question 11.03-1, does not indicate the method used to calculate Effluent Concentration Limit (ECL) values reported by KHNP in Table 11.2-10 and Table 11.3-6. The previously received response to RAI 145-7932, question 11.03-1, describes the equation used to calculate the ECLs (Eq. 1 in page 11.03-1-3/5 of Reference 1); however, the staff needs to see a more detailed calculation of all parameters in Table 11.2-10 and Table 11.3-6.

Results obtained by staff confirmatory calculations using the applicant's stated equations found in pages 11.03-1-3/5 and 11.03-1-3/6 of Reference 1 differ from the applicant's tabulated values as provided in the RAI response to question 11.03-1. A detailed calculation description for each of the radionuclides presented below is necessary for staff verification. All parameters in the equations presented by the applicant must be identified and explained.

1. Liquid: Te-129, I-131, Cs-134, Cs-136, Cs-137, and H-3. (Table 11.2-10) (Previously presented as requested information in Example #3 in RAI Question 11.03-1)
2. Gas: Xe-131m, Cs-134, Cs-136, and Cs-137. (Table 11.3-6)

Please address these items by providing the requested information and incorporating the response into the DCD as proposed DCD mark-up changes, including essential explanatory text.

Reference 1: Korea Hydro and Nuclear Power Co., Ltd., Enclosure to "Response to RAI 145-7932," ADAMS Accession Number ML15269A018, dated September 25, 2015.