

KHNPDCDRAIsPEm Resource

From: Ciocco, Jeff
Sent: Thursday, August 13, 2015 10:51 AM
To: KHNPDCDRAIsPEm Resource
Subject: FW: APR1400 Design Certification Application RAI 123-7920 (11.1 Source Terms)
Attachments: image001.jpg; APR1400 DC RAI 123 RPAC 7920.pdf

From: Ward, William
Sent: Tuesday, August 04, 2015 11:17 AM
To: 'apr1400rai@khnp.co.kr' <apr1400rai@khnp.co.kr>; KHNPDCDRAIsPEm Resource <KHNPDCDRAIsPEm.Resource@nrc.gov>; 'Chang, Harry' <hyunseung.chang@gmail.com>; 'Yunho Kim (yshh8226@gmail.com)' <yshh8226@gmail.com>; jiyong.oh5@gmail.com; daegeun.ahn@gmail.com; Tyree, Christopher (christopher.tyree@aecom.com) <christopher.tyree@aecom.com>
Cc: Ciocco, Jeff <Jeff.Ciocco@nrc.gov>; Lee, Samuel <Samuel.Lee@nrc.gov>; McCoppin, Michael <Michael.McCoppin@nrc.gov>; Williams, Stephen <Stephen.Williams@nrc.gov>; Gran, Zachary <Zachary.Gran@nrc.gov>; Olson, Bruce <Bruce.Olson@nrc.gov>
Subject: APR1400 Design Certification Application RAI 123-7920 (11.1 Source Terms)

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 the RAI question. We may adjust the schedule accordingly.

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
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 Please consider the environment before printing this email.

Hearing Identifier: KHNP_APR1400_DCD_RAI_Public
Email Number: 178

Mail Envelope Properties (4d37a63c440e4d7ba5cbba23b51b10e3)

Subject: FW: APR1400 Design Certification Application RAI 123-7920 (11.1 Source Terms)
Sent Date: 8/13/2015 10:51:08 AM
Received Date: 8/13/2015 10:51:09 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

| Files | Size | Date & Time |
|----------------------------------|------|-----------------------|
| MESSAGE | 1518 | 8/13/2015 10:51:09 AM |
| image001.jpg | 4205 | |
| APR1400 DC RAI 123 RPAC 7920.pdf | | 79231 |

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



REQUEST FOR ADDITIONAL INFORMATION 123-7920

Issue Date: 08/04/2015
Application Title: APR1400 Design Certification Review – 52-046
Operating Company: Korea Hydro & Nuclear Power Co. Ltd.
Docket No. 52-046
Review Section: 11.01 - Source Terms
Application Section: SRP 11.1

QUESTIONS

11.01-3

REQUIREMENT

RG 1.109; SRP 11.1; 10 CFR 50, APPENDIX I

ISSUE

The staff has performed a review of the LADTAP and GASPAP files provided by the applicant. Based on the review of the calculation input and output files and DCD tables the staff is unable to determine the default design parameters that were used in place of site specific data.

The applicant LADTAP input files indicate that Consumption Factors referenced in the application from RG 1.109 in Tables E-4 and E-5 are questionable when compared to the actual values in the Regulatory guide. Also upon review of the applicants LADTAP input and output files, the NRC staff notes that the applicant output files display individual consumption rates as 5.2 kg for Adults, 6.3 kg for Teen, and 5.2 kg for Child. These consumption rates are 100 times less than the values reported in the LADTAP input files provided and 100 times less than the values reported in RG 1.109 Table E-5.

INFORMATION NEEDED

The staff is requesting a calculation package that describes all input parameters and their source used within the LADTAP and GASPAP effluent dose codes. Provide the basis for all design parameters and values used in the LADTAP II and GASPAP II code calculations. Staff requests that these calculation packages include value derivations and references to sources of the data to support the review and evaluation of compliance with 10 CFR 50 Appendix I design dose requirements for liquid and gaseous effluents.

The staff is also requesting the applicant to confirm the values being reported in the LADTAP input and output files and results being reported in DCD Table 11.2-5.

Please address these items and provide a mark up for the proposed DCD changes. It may be necessary to provide this information in an audit.