

## **KHNPDCDRAIsPEm Resource**

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**From:** Ciocco, Jeff  
**Sent:** Monday, February 01, 2016 10:39 AM  
**To:** apr1400rai@khnp.co.kr; KHNPDCDRAIsPEm Resource; Harry (Hyun Seung) Chang; Andy Jiyong Oh; Christopher Tyree  
**Cc:** Gran, Zachary; McCoppin, Michael; Burkhardt, Lawrence; Vera, John; Lee, Samuel  
**Subject:** APR1400 Design Certification Application RAI 389-8430 (11.03 - Gaseous Waste Management System)  
**Attachments:** APR1400 DC RAI 389 RPAC 8430.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. 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,

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**Hearing Identifier:** KHNP\_APR1400\_DCD\_RAI\_Public  
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**Subject:** APR1400 Design Certification Application RAI 389-8430 (11.03 - Gaseous Waste Management System)  
**Sent Date:** 2/1/2016 10:38:50 AM  
**Received Date:** 2/1/2016 10:38:53 AM  
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MESSAGE	608	2/1/2016 10:38:53 AM
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## REQUEST FOR ADDITIONAL INFORMATION 389-8430

Issue Date: 02/01/2016  
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:

### QUESTIONS

11.03-9

REQUIREMENT: 10 CFR 50 Appendix I Design Criteria

GUIDANCE: RG 1.109, SRP 11.3

ISSUE: DCD Table 11.3-7 does not currently demonstrate compliance with the annual maximum organ doses criteria.

10 CFR 50 Appendix I, Section II.C states that:

“The calculated annual total quantity of all radioactive iodine and radioactive material in particulate form above background to be released from each light-water-cooled nuclear power reactor in effluents to the atmosphere will not result in an estimated annual dose or dose commitment from such radioactive iodine and radioactive material in particulate form for any individual in an unrestricted area from all pathways of exposure in excess of 15 millirems to any organ.”

To demonstrate compliance, the staff requests that the applicant add a row to DCD Table 11.3-7 (1 of 3) to demonstrate compliance with the maximum organ doses. The staff acknowledges the discussion in DCD section 11.3.3.1 and requests an update to DCD Table 11.3-7 for consistency. Additionally, please add a column indicating the annual dose limits for each category.

Please address these items and provide a mark-up for the proposed DCD changes.



**U.S.NRC**

United States Nuclear Regulatory Commission

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