

KHNPDCDRAIsPEm Resource

From: Ciocco, Jeff
Sent: Monday, September 28, 2015 6:44 AM
To: apr1400rai@khnp.co.kr; KHNPDCDRAIsPEm Resource; Harry (Hyun Seung) Chang; Andy Jiyong Oh; Christopher Tyree
Cc: Williams, Stephen; McCoppin, Michael; Olson, Bruce; Lee, Samuel
Subject: APR1400 Design Certification Application RAI 228-8193 (11.02 - Liquid Waste Management System)
Attachments: APR1400 DC RAI 228 RPAC 8193.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,

Jeff Ciocco
New Nuclear Reactor Licensing
301.415.6391
jeff.ciocco@nrc.gov



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From: Ciocco, Jeff
Created By: Jeff.Ciocco@nrc.gov

Recipients:

"Williams, Stephen" <Stephen.Williams@nrc.gov>
Tracking Status: None
"McCoppin, Michael" <Michael.McCoppin@nrc.gov>
Tracking Status: None
"Olson, Bruce" <Bruce.Olson@nrc.gov>
Tracking Status: None
"Lee, Samuel" <Samuel.Lee@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
"Harry (Hyun Seung) Chang" <hyunseung.chang@gmail.com>
Tracking Status: None
"Andy Jiyong Oh" <jiyong.oh5@gmail.com>
Tracking Status: None
"Christopher Tyree" <Christopher.tyree@aecom.com>
Tracking Status: None

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REQUEST FOR ADDITIONAL INFORMATION 228-8193

Issue Date: 09/28/2015

Application Title: APR1400 Design Certification Review – 52-046

Operating Company: Korea Hydro & Nuclear Power Co. Ltd.

Docket No. 52-046

Review Section: 11.02 - Liquid Waste Management System

Application Section: 11.2

QUESTIONS

11.02-5

10 CFR 50 Appendix A GDC 1 and 2 as they relate to Quality Assurance standards and identification of structures systems and components important to safety be designed to withstand the effects of natural phenomena. 10 CFR 50 Appendix A GDC 60 and Regulatory Guide 1.143 as it relates to the control of release of radioactive materials and the radwaste system safety classifications.

Staff review of DCD section 11.2.2 indicates that insufficient details are provided to describe the boundaries of the systems and their corresponding safety classifications. Staff is seeking sufficient details describing the radwaste systems including their respective isolation components. Currently the Staff is unable to determine if each system's isolation components are also included in the safety classification for the systems. DCD section 11.2.2.3 that states:

“The safety classification for the LWMS components applies to components up to and including the nearest valves, fittings, and/or welded/flanged nozzle connections.” This does not provide a description of isolation components in the description of LWMS systems.

DCD Section 11.3.1.3 clarifies this stating: “The safety classification for the GRS components applies to components, up to and including the nearest isolation valves, fittings, and/or welded/flanged nozzle connections.”

Each radwaste SSC classifications need to address the following information:

1. All components connected to a component classified as a RW-IIa (ex. Piping, pumps, etc) are also classified as RW-IIa, up to and including the nearest isolation component (ex. Isolation valves), on each connection, to the RW-IIa component.
2. All components connected to a component classified as a RW-IIb (ex. Piping, pumps, etc) are also classified as RW-IIb, up to and including the nearest isolation component (ex. Isolation valves), on each connection, to the RW-IIb component.
3. All components connected to a component classified as a RW-IIc (ex. Piping, pumps, etc) are also classified as RW-IIc, up to and including the nearest isolation component (ex. Isolation valves), on each connection, to the RW-IIc component.

Please address the items above and provide a mark-up on the proposed DCD changes.



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