

November 12, 2015

MEMORANDUM TO: Samuel S. Lee, Chief  
Licensing Branch 2  
Division of New Reactor Licensing  
Office of New Reactors

FROM: Luis Betancourt, Project Manager **/RAI/**  
Licensing Branch 2  
Division of New Reactor Licensing  
Office of New Reactors

SUBJECT: SUMMARY OF THE SEPTEMBER 24, 2015, PUBLIC MEETING WITH  
KOREA HYDRO AND NUCLEAR POWER CO. LTD. TO DISCUSS  
TOPICS RELATED TO ADVANCED POWER REACTOR 1400 DESIGN

On September 24, 2015, a Category 1 public meeting was held between the U.S. Nuclear Regulatory Commission (NRC) staff and Korea Hydro and Nuclear Power Co. Ltd. (KHNP) at the NRC offices in Rockville, Maryland. The purpose of the meeting was to discuss various topics related to: (1) the responses to request for additional information (RAI) 7994 and RAI 8000; and (2) the responses to the issue lists for Sections 3.7, "Seismic Design," and 3.8, "Seismic Category I Structures."

The meeting notice was issued on September 2, 2015, and was documented in the Agencywide Documents Access and Management System (ADAMS) under Accession Number ML15265A527. The meeting agenda and meeting attendees list are included in the enclosure. The meeting handouts from the meeting are available in ADAMS under Accession Number ML15266A063.

A summary of the topics discussed is shown below:

***Supplemental Responses to Request for Additional Information 7994 and 8000***

*Discussion of RAI 7994:*

The applicant provided its response to RAI 7994 on September 10, 2015 (ML15253A869). In its response, the applicant provided a planned change to Section 3.9.6.5 that refers to "relief requests. The staff asked the applicant to revise the planned design control document (DCD) to clarify the provisions regarding relief requests, alternative requests, and Operation and Maintenance (OM) Code Cases, as applicable. The applicant agreed to provide a supplemental RAI response.

*Discussion of RAI 8000:*

In RAI 8000, Question 03.10-6 (ML15197A265), the NRC staff requested the applicant to define “inactive” components in the DCD. The applicant provided its response to RAI 8000 on October 27, 2015 (ML15239B396). In its response, the applicant defined only “inactive pumps.” The staff asked the applicant to revise the definition to “inactive components” so that the definition applies other components as well as pumps. The applicant agreed to provide the supplemental RAI response and a letter with a DCD mark-up.

**Responses to Issue Lists for Sections 3.7 and 3.8***Discussion of 3.7.1, Issue Lists #1 through #6:*

The staff found the draft responses to Issue Lists #5 and #6 acceptable. The applicant stated it will provide a letter with the final DCD mark-ups. However, Issues Lists #1 through #4 weren't resolved. The staff decided to make Issues Lists #1 through #4 into a RAI.

*Discussion of 3.7.2 Issue Lists (including the associated Technical Reports (TR))*

Issues #1, #2, #3, #5, #7, and #11 were deferred to the October 5 - 6, 2015, public meeting. The staff found the responses to Issues #6, and #8 through #10 to be acceptable. The applicant agreed to include the response to Issue #9 in TR APR1400-E-S-NR-14002-P. The applicant agreed to provide a letter with DCD mark-ups for the responses to Issues #6 through #10.

The staff found the response to Issue #4 not fully acceptable. The staff will issue this as a RAI. The applicant agreed to provide a draft response to Issue #4 at the October 5 - 6, 2015, public meeting. In addition, the applicant agreed to provide the DCD mark-ups.

*Discussion of 3.8 Issue Lists:*

- Clarification Question 1 (AI 3-75.1)
  - (1) Item (a): The response was not clear to the staff. The staff asked the applicant for additional clarification in its response. The applicant agreed to revise the draft response and will discuss this item at the October 5 - 6, 2015, public meeting.
  - (2) Item (b): The staff found the response acceptable. The applicant agreed to provide a letter with the DCD mark-up.
  - (3) Item (c): The response was not clear to the staff. The applicant agreed to revise the draft response and will discuss this item at the October 5 - 6, 2015, public meeting.

- Clarification Question 2 (AI 3-75.2)
  - (1) Item (a): The staff found the response acceptable. The applicant agreed to provide a letter with the DCD mark-up.
  - (2) Item (b): How to test for leakage of the weld is an outstanding issue and may require a design change. Another issue is the staff think the supports for the reactor vessel a may require a design change. The applicant agreed to revise the draft response and will discuss this item at the October 5 - 6, 2015, public meeting.
- Clarification Question 3 (AI 3-75.3)
  - (1) Item (a): The response was not clear to the staff. The applicant agreed to revise the draft response and will discuss this item at the October 5 - 6, 2015, public meeting.
  - (2) Item (b): The staff found the response acceptable.
  - (3) Item (c): The response only addresses one of two issues. The staff requested the applicant to provide the calculation for the short edge distance. The applicant agreed to revise the draft response and will discuss this item at the October 5 - 6, 2015, public meeting.
- Clarification Question 1 (AI 3-75.4)

The staff found the response acceptable. The applicant agreed to provide a letter with the DCD mark-up.
- Clarification Question 2 (AI 3-75.5)

KHNP understands the staff's concerns that a collection tank may be needed for the leak chase channels. Current design has no way to check for leaks. The applicant agreed to revise the draft response and will discuss this item at the October 5 - 6, 2015, public meeting.

### **Public Comments**

A member of the public (Mr. Marvin Lewis) asked the staff about the status of the Aircraft Impact Assessment (AIA) review for the APR 1400 DC application. The staff stated that the applicant is currently performing an AIA and will submit it to the NRC by the end of the year. The staff mentioned that members of the public can find the public DCD on the NRC's website at <http://www.nrc.gov/reactors/new-reactors/design-cert/apr1400/dcd.html#dcd>.

***Conclusion of the Meeting***

At the conclusion of the meeting, KHNP committed to consider all of the feedback from the meeting and propose the most effective approach for providing updated information to the NRC (e.g., a letter with DCD markups or a response to an NRC request for additional information). KHNP will engage with the NRC project managers to finalize the path forward on these issues.

Please direct any inquiries to Luis Betancourt at (301) 415-6146, or via e-mail at [Luis.Betancourt@nrc.gov](mailto:Luis.Betancourt@nrc.gov).

Project No.: 052-046

Enclosure:  
List of Attendees

cc w/enclosure: See next page

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Package: ML15300A478  
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**NRO-002**

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