

Bi-weekly Seismic Call Minutes

Date: 2016-01-27

NRC Attendance: Vaughn Thomas, BP Jain, Robert Roache, Jin-so Nie, Joseph Braverman, Carl Constantino, Richard Morante,

KHNP Attendance: Erin Wisler, Seokhwan Hur, Jongbo Lee

KEPCO E&C Attendance: Jinwoo Lee, Jaewan Park, Yoonho Nam, Youngsun Lee, Daejoong Kim, Joohyung Kang

Public Attendance: None

Summary:

RAI 266-8235, Question 03.07.02-5

- 1.) The NRC staff stated that a basis for only including the building story shear forces and overturning moments are considered in the calculation of seismic response forces and moments must be provided (explain why neglecting the RCS mass and the hydrodynamic mass is acceptable).
- 2.) The NRC staff further stated that a thorough description of how the RCS mass and the convective (sloshing) hydrodynamic masses of the IRWSR, AFW, and FHA tanks are included in the SSI analysis, and how the results of that analysis are used in the design of structures and tanks, must be provided. It was stated that numerical examples of the process would be helpful.
- 3.) The NRC staff stated the vertical accelerations and resulting forces need to be considered in the detailed evaluation of tanks to ensure the adequacy of tank design. It was stated that the applicant needs to describe the process by which tanks have been evaluated and cite applicable documentation.
- 4.) For each of the above items, KHNP confirmed understanding of the issues and agreed to supplement the response to address them.

RAI 129-8085, Question 03.08.01-4a

The NRC stated that limited time had been provided to review the applicant's position. It was agreed that RG 1.136, Revision 3 endorses ASME Section III, Division 2, Subsection CC, "Code for Concrete Containment," 2001 Edition with 2003 Addenda for the design of concrete containments. It was also agreed that RG 1.57, Revision 2 does not endorse an edition or addenda of the ASME code for the design

of metal components not backed by concrete, and that 10 CFR 50.55a lists ASME Section III, Division 1, Subsection NE, "Class MC Components" as generally acceptable for use. The NRC staff stated that no other applicant has used two different ASME editions and addenda in one structure, to recollection, and that discussion would need to take place internally to determine acceptability of the approach. It was stated that feedback would be provided during the next public call.

Scheduling

It was stated that the NRC would need to examine the provided seismic RAI response schedule in the context of KHNP's complete revised RAI response schedule in order to evaluate impacts on the overall Phase 2 schedule. It was highlighted that multiple items on the schedule had proposed due dates in October 2016 (beyond the current Phase 2 completion date) and would need to be examined in order to determine if the scope of the issues will allow them to be carried forward as SER open items.

Next Interaction

KHNP stated that the week of 2016-02-08 through 12 is a Korean holiday and informed the staff that a request would be made to move the next call from 2016-02-10 to 2016-02-04.

The NRC staff stated that the response to RAI 182-8160, Question 03.07.01-4 would be discussed during the next call. It was stated the issue was concerning the generic site profiles, and that an issue description would be provided to the applicant prior to the call.

KHNP stated that drafts responses to RAI 252-8299, Questions 03.07.02-11 and 14 would be provided ahead of the next call, and NRC staff feedback providing those responses would be appreciated.

The call was concluded after providing an opportunity for the public to comment.