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February 1, 2016
Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Attention: Mr. Jeff Ciocco
Division of New Reactor Licensing

Docket No. 52-046
MKD/NW-16-0100L

Subject: Supplemental Response to RAI 151-8078 for Questions 03.09.02-9 and 03.09.02-10

- References:**
- 1) **NRC Request for Additional Information 151-8078, dated August 10, 2015**
 - 2) **KHNP Letter MKD/NW-15-0208L, Response to RAI 151-8078, for Questions 03.09.02-9 through 15, dated October 23, 2015**
 - 3) **Public Meeting held on December 2, 2015 between the NRC and KHNP**
 - 4) **KHNP Letter MKD/NW-15-0275L, Response to RAI 151-8078 for Questions 03.09.02-1, 03.09.02-5, 03.09.02-8, and 03.09.02-16, dated December 1, 2015**
 - 5) **KHNP Letter MKD/NW-16-0018L, Response to RAI 151-8078 for Questions 03.09.02-2, 03.09.02-3, 03.09.02-4, 03.09.02-6, and 03.09.02-7, dated January 8, 2016**

KHNP is hereby submitting a supplemental response to RAI 151-8078, dated August 10, 2015. The supplemental RAI responses to Questions 03.09.02-9 and 03.09.02-10 provides a more detailed description of the analytical methodology and the hydrodynamic model used to obtain the relationship between RCP pulsations in the inlet ducts and the deterministic pressure fluctuations on the core support barrel (Question 03.09.02-9) and provides revised wording for a more accurate description of the random hydraulic forcing function applied to the reactor vessel internals (Question 03.09.02-10).

Enclosure 1 contains a copy of the associated affidavit. Enclosure 2 provides the response to RAI 151-8078 for Questions 03.09.02-9 and 03.09.02-10 (Proprietary). Enclosure 3 provides the response to RAI 151-8078 for Questions 03.09.02-9 and 03.09.02-10 (Non-Proprietary).

If additional information or clarification is required, please contact Daeyeun Ahn, Director of KHNP Washington DC Center at ahn.daeyeun@khnp.co.kr or 703-388-0592.

Sincerely,

Jae-yong Lee
Project Manager
Advanced Reactors Development Laboratory
Korea Hydro and Nuclear Power Co., Ltd

Enclosures:

1. Affidavit KAW-16-0100
2. Supplemental Response to RAI 151-8078 for Questions 03.09.02-9 and 03.09.02-10 (Proprietary)
3. Supplemental Response to RAI 151-8078 for Questions 03.09.02-9 and 03.09.02-10 (Non-Proprietary)

Enclosure 1

Affidavit KAW-16-0100

I, Yun-ho Kim, state the following:

1. I am the General Manager of Korea Hydro & Nuclear Power Co., Ltd. (KHNP), and as such I am authorized to request withholding the information transmitted with this letter from public disclosure and to execute this affidavit.
2. I am familiar with the criteria applied by KHNP to determine whether certain information is proprietary, and with the policies established by KHNP to ensure the proper application of these criteria.
3. The information, Supplemental Response to RAI 151-8078 for Questions 03.09.02-9 and 03.09.02-10 (Proprietary), transmitted with this letter has been classified by KHNP as proprietary in accordance with the policies for the control and protection of proprietary and confidential information. The information regarded as proprietary is identified and marked consistent with the requirements of 10 CFR 2.390, § (b)(1)(i). Accordingly, the proprietary information is enclosed within brackets and the right-hand bracket carries a notation of “TS” to indicate that the trade secret nature of the information claimed to be proprietary is the basis for proposing that the information so identified be withheld from public disclosure.
4. Pursuant to the considerations set forth in 10 CFR Section 2.390(a), KHNP considers the information classified as proprietary to be “trade secret” information since it is design, analysis, or test information that would be difficult for a competitor to reproduce and hence provides an economic and competitive advantage to KHNP.
5. The need for designating the information as proprietary has been raised within KHNP. The information is being treated proprietary and confidential and has not been disclosed by KHNP to the public.
6. Nondisclosure of the proprietary information transmitted with this letter is vital to the competitiveness held by KHNP and, hence, disclosure of the proprietary information transmitted in with this letter would have negative commercial impacts on the competitive position of KHNP in the U.S. nuclear market.
7. In accordance with KHNP policy, proprietary information contained in this document

may be, or may have been, made available on a limited basis to regulatory bodies, customers, potential customers, and their agents, suppliers, and licensees, and others under suitable agreements providing for nondisclosure and limited use of the information.

I declare that the foregoing statements are true and correct to the best of my knowledge, information and belief.

Executed on February 1, 2016.



Yun-ho Kim
General Manager
APR1400 Licensing Team
Central Research Institute
Korea Hydro and Nuclear Power Co., Ltd

Enclosure 2

Supplemental Response to RAI 151-8078 for Questions 03.09.02-9 and
03.09.02-10

(Proprietary)

February 1, 2016

Enclosure 3

Supplemental Response to RAI 151-8078 for Questions 03.09.02-9 and
03.09.02-10

(Non-Proprietary)

February 1, 2016