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May 23, 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-16-0540L

Subject: Revised Response to RAI 179-8190 for the Questions 09.01.01-21, 09.01.01-22 and Questions 09.01.01-23, 09.01.01-25 (Rev. 2)

- References:**
- 1) NRC Request for Additional Information 179-8190, dated September 1, 2015
 - 2) KHNP Letter MKD/NW-15-0182L, Response to RAI 179-8190 for Question on a 30-Day Response Cycle, dated October 19, 2015
 - 3) KHNP Letter MKD/NW-15-0349L, Response to RAI 179-8190 for Question on a 60-Day Response Cycle, dated December 10, 2015
 - 4) KHNP Letter MKD/NW-16-0041L, Response to RAI 179-8190 for Question 09.01.01-18, dated January 15, 2016
 - 5) KHNP Letter MKD/NW-16-0113L, Response to RAI 179-8190 for the Question 09.01.01-15, dated February 3, 2016
 - 6) KHNP Letter MKD/NW-16-0402L, Revised Response to RAI 167-8191, dated April 22, 2016
 - 7) KHNP Letter MKD/NW-16-0418L, Revised Response to RAI 179-8190, dated April 22, 2016

KHNP is hereby submitting the revised response to RAI 179-8190, dated September 1, 2015. The RAI revised responses addresses the Questions 09.01.01-21, 09.01.01-22 (Rev. 1) and Questions 09.01.01-23, 09.01.01-25 (Rev. 2). It provided sensitivity analysis results for the new fuel rack criticality uncertainty evaluations on various design conditions. It clarified a fresh fuel assembly drop condition and position between fuel racks in the new fuel racks in the new fuel rack storage pit in order to consider an accident condition.

Enclosure 1 contains a copy of the associated affidavit. Enclosure 2 provides the revised responses to RAI 179-8190 for the Questions 09.01.01-21 and 09.01.01-22 (Rev. 1) (Proprietary). Enclosure 3 provides the revised responses to RAI 179-8190 for the Questions 09.01.01-21 and 09.01.01-22 (Rev. 1) (Non-Proprietary). Enclosure 4 provides the revised responses to RAI 179-8190 for the Questions 09.01.01-23 and 09.01.01-25 (Rev. 2) (Proprietary). Enclosure 5 provides the revised responses to RAI 179-8190 for the Questions 09.01.01-23 and 09.01.01-25 (Rev. 2) (Non-Proprietary).

If additional information or clarification is required, please contact Daegeun Ahn, Director of KHNP Washington DC Center at ahn.daegeun@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-16-0540
2. Revised Response to RAI 179-8190 for the Questions 09.01.01-21 and 22 (Proprietary)
3. Revised Response to RAI 179-8190 for the Questions 09.01.01-21 and 22 (Non-Proprietary)
4. Revised Response to RAI 179-8190 for the Questions 09.01.01-23 and 25 (Rev. 2) (Proprietary)
5. Revised Response to RAI 179-8190 for the Questions 09.01.01-23 and 25 (Rev. 2) (Non-Proprietary)

Enclosure 1

Affidavit KAW-16-0540

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, Revised Response to RAI 179-8190 for the Questions 09.01.01-21 and 22 (Proprietary) and Revised Response to RAI 179-8190 for the Questions 09.01.01-23 and 25 (Rev. 2) (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 May 23, 2016.

A handwritten signature in black ink, appearing to be 'Yun-ho Kim', is written above a horizontal line.

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

Enclosure 2

Revised Response to RAI 179-8190 for the Questions 09.01.01-21 and 22

(Proprietary)

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Enclosure 3

Revised Response to RAI 179-8190 for the Questions 09.01.01-21 and 22

(Non-Proprietary)

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Enclosure 4

Revised Response to RAI 179-8190 for the Questions 09.01.01-23 and 25
(Rev. 2)

(Proprietary)

May 23, 2016

Enclosure 5

Revised Response to RAI 179-8190 for the Questions 09.01.01-23 and 25
(Rev. 2)

(Non-Proprietary)

May 23, 2016