

**KHNP****KOREA HYDRO & NUCLEAR POWER CO., LTD**

70-1312-gil, Yuseong-daero, Yuseong-gu, Daejeon, 34101, KOREA

Tel: +82-42-870-5400 / Fax: +82-42-870-5449

<http://www.khnp.co.kr>

July 25, 2018

Document Control Desk

U.S. Nuclear Regulatory Commission

Washington, DC 20555-0001

Attention: Mr. William Ward

Division of New Reactor Licensing

Docket No. 52-046

MKD/NW-18-0107L

Subject: Submittal of Revised Technical Reports for APR1400 Design Certification

References:

- 1. KHNP Letter MKD/NW-18-0039L, Submittal of Technical Reports for the APR1400 Design Certification, dated March 19, 2018**
- 2. KHNP Letter MKD/NW-18-0040L, Submittal of Revised Technical Reports for APR1400 Design Certification, dated March 27, 2018**
- 3. KHNP Letter MKD/NW-18-0091L, Submittal of Technical Reports for APR1400 Design Certification, dated June 18, 2018**
- 4. KHNP Letter MKD/NW-17-0369L, Revised Response to RAI 38-7878 for the Question 07.05-1 (Rev.4), dated November 27, 2017**
- 5. KHNP Letter MKD/NW-18-0020L, Supplemental Response to RAI 33-7880, dated January 29, 2018**
- 6. KHNP Letter MKD/NW-18-0057L, Revised Response to RAI 342-8291 for the Question 07.08-10 (Rev.2), dated April 30, 2018**
- 7. KHNP Letter MKD/NW-18-0066L, Revised Response to RAI 45-7883 for the Question 07.09-2 (Rev.6), dated May 4, 2018**
- 8. KHNP Letter MKD/NW-18-0045L, Submittal of Markup of the APR DCA – Safety Evaluation with No Open Items for Chapter 7, dated March 29, 2018**

The purpose of this letter is to transmit four (4) sets of revisions regarding the following titled technical reports:

1. Diversity and Defense-in-Depth (Rev. 3)
2. Software Program Manual (Rev.3)
3. Criticality Analysis of New and Spent Fuel Storage Racks (Rev.3)
4. Equipment Qualification Program (Rev. 4)

Prior versions of the reports had been submitted under References 1 to 3. ‘Diversity and Defense-in-Depth’ Revision 3 incorporates all the responses to the relevant RAIs (See References 4 to 7). ‘Software Program Manual’ Revision 3 reflects the mark-up provided under Reference 8 regarding software project organization. ‘Criticality Analysis of New and Spent Fuel Storage Racks’ Revision 3 changes the acceptable minimum burnup for enrichment due to a revision to the burnup loading curve and clears out improper markings for proprietary information. The fourth revision of ‘Equipment Qualification Program’ report was carried out in order to make it consistent with DCD Rev. 3, which is going to be officially transmitted soon.

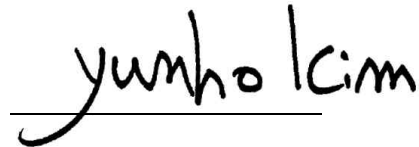


KHNP
KOREA HYDRO & NUCLEAR POWER CO., LTD

Enclosure 1 provides a copy of the associated affidavit. Enclosures 2 to 9 provide electronic copies of either proprietary or non-proprietary version of each set of the revised technical reports.

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

Sincerely,



Yun-ho Kim
Project Manager
Advanced Reactors Development Laboratory
Korea Hydro & Nuclear Power Co., Ltd.

Enclosures:

1. Affidavit KAW-18-0107
2. Diversity and Defense-in-Depth (Proprietary) (APR1400-Z-J-NR-14002-P, Rev.3)
3. Diversity and Defense-in-Depth (Non-Proprietary) (APR1400-Z-J-NR-14002-NP, Rev.3)
4. Software Program Manual (Proprietary) (APR1400-Z-J-NR-14003-P, Rev.3)
5. Software Program Manual (Non-Proprietary) (APR1400-Z-J-NR-14003-NP, Rev.3)
6. Criticality Analysis of New and Spent Fuel Storage Racks (Proprietary) (APR1400-Z-A-NR-14011-P, Rev.3)
7. Criticality Analysis of New and Spent Fuel Storage Racks (Non-Proprietary) (APR1400-Z-A-NR-14011-NP, Rev.3)
8. Equipment Qualification Program (Proprietary) (APR1400-E-X-NR-14001-P, Rev.4)
9. Equipment Qualification Program (Non-Proprietary) (APR1400-E-X-NR-14001-NP, Rev.4)

Enclosure 1

Affidavit KAW-18-0107

I, Jeong-kwan Suh, 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, APR1400- Z-J-NR-14002-P, APR1400-Z-J-NR-14003-P, APR1400-Z-A-NR-14011-P, and APR1400-E-X-NR-14001-P, 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 July 25, 2018

A handwritten signature in black ink, reading "Jeongkwan Suh", is written over a horizontal line.

Jeong-kwan Suh
General Manager
APR1400 Licensing Team
Korea Hydro and Nuclear Power Co., Ltd

Enclosure 2

APR1400-Z-J-NR-14002-P, Rev.3

Diversity and Defense-in-Depth

(Proprietary)

Enclosure 3

APR1400-Z-J-NR-14002-NP, Rev.3

Diversity and Defense-in-Depth

(Non-proprietary)

Enclosure 4

APR1400-Z-J-NR-14003-P, Rev.3

Software Program Manual

(Proprietary)

Enclosure 5

APR1400-Z-J-NR-14003-NP, Rev.3

Software Program Manual

(Non-proprietary)

Enclosure 6

APR1400-Z-A-NR-14011-P, Rev.3

Criticality Analysis of New and Spent Fuel Storage Racks

(Proprietary)

Enclosure 7

APR1400-Z-A-NR-14011-NP, Rev.3

Criticality Analysis of New and Spent Fuel Storage Racks

(Non-proprietary)

Enclosure 8

APR1400-E-X-NR-14001-P, Rev.4

Equipment Qualification Program

(Proprietary)

Enclosure 9

APR1400-E-X-NR-14001-NP, Rev.4

Equipment Qualification Program

(Non-proprietary)