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February 13, 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-18-0027L

**Subject: Submittal of Updated Technical Reports**

**References:**

- 1. KHNP Letter MKD/NW-17-0260L, Revised Response to RAI 333-8397, dated August 30, 2017**
- 2. KHNP Letter MKD/NW-17-0366L, Revised Response to RAI 420-8482 for Question 19.03-34, dated November 17, 2017**
- 3. KHNP Letter MKD/NW-17-0189L, Revised Response to RAI 301-8280 for Question 07.01-45, dated August 2, 2017**

The purpose of this letter is to transmit five sets of updated proprietary or non-proprietary versions of technical reports for APR1400 Design Certification of which titles are as follows:

1. Evaluations and Design Enhancements to Incorporate Lessons Learned from Fukushima Dai-Ichi Nuclear Accident
2. CPC Setpoint Analysis Methodology for APR1400
3. KHNP APR1400 Flywheel Integrity Report
4. Common Q Platform Supplemental Information in Support of the APR1400 Design Certification
5. Validation of SCALE 6.1.2 with 238-Group ENDF/B-VII.0 Cross Section Library for APR1400 Design Certification

The revised technical reports on the first subject include the modified information provided in Reference 1 and maintain consistency with the revised response to the related RAI submitted through Reference 2.

The second title revisions incorporate the markups presented in Reference 3.

The third and the fourth ones reflect the results from the discussions using ERR. The fourth title technical report update provides only the proprietary version in the same manner as the original version.

The last title revisions added just a new KHNP Technical Report Number without any changes to the contents in order to be properly referenced as an IBR in the upcoming APR1400 DCD Rev. 2 Chapter 9.



Enclosure 1 contains the KHNP Affidavit and Enclosures 5 to 8 provide the first two subject electronic copies of proprietary or non-proprietary versions of the revised technical reports.

Enclosures 2 to 4 are three Westinghouse Applications for Withholding Proprietary Information from Public Disclosure, each accompanying Affidavit, Proprietary Information Notice, and Copyright Notice. Enclosures 9 to 13 provide the last three subject electronic copies of proprietary or non-proprietary versions of the corresponding revised technical reports.

Enclosures 9, 11 and 12 contain information proprietary to Westinghouse Electric Company LLC("Westinghouse"), it is supported by corresponding Affidavits signed by Westinghouse, the owner of the information. The Affidavits set forth the basis on which the information may be withheld from public disclosure by the Nuclear Regulatory Commission("Commission") and addresses with specificity the considerations listed in paragraph (b)(4) of Section 2.390 of the Commission's regulations.

Accordingly, it is respectfully requested that the information which is proprietary to Westinghouse be withheld from public disclosure in accordance with 10CFR Section 2.390 of the Commissions regulations.

Correspondence with respect to the copyright or proprietary aspects of the Enclosures 9, 11 and 12 or the supporting Westinghouse Affidavit should reference CAW-17-4585, CAW-18-4692 and CAW-18-4693 respectively and should be addressed to James A. Gresham, Manager, Regulatory Compliance, Westinghouse Electric Company, 1000 Westinghouse Drive, Building 3 Suite 310, Cranberry Township, Pennsylvania 16066.

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

Sincerely,

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Han-gon Kim  
Project Manager  
Advanced Reactors Development Laboratory  
Korea Hydro and Nuclear Power Co., Ltd

Enclosures:

1. Affidavit KAW-18-0027
2. Westinghouse Application for Withholding Proprietary Information from Public Disclosure(CAW-17-4585)
3. Westinghouse Application for Withholding Proprietary Information from Public



- Disclosure(CAW-18-4692)
4. Westinghouse Application for Withholding Proprietary Information from Public Disclosure(CAW-18-4693)
  5. Evaluations and Design Enhancements to Incorporate Lessons Learned from Fukushima Dai-Ichi Nuclear Accident (Proprietary) (APR1400-E-P-NR-14005-P, Rev.2)
  6. Evaluations and Design Enhancements to Incorporate Lessons Learned from Fukushima Dai-Ichi Nuclear Accident (Non-Proprietary) (APR1400- E-P-NR-14005-NP, Rev.2)
  7. CPC Setpoint Analysis Methodology for APR1400 (Proprietary) (APR1400-F-C-NR-14001-P, Rev.2)
  8. CPC Setpoint Analysis Methodology for APR1400 (Non-Proprietary) (APR1400-F-C-NR-14001-NP, Rev.2)
  9. KHNP APR1400 Flywheel Integrity Report (Proprietary) (APR1400-A-M-NR-14001-P (WCAP-17942-P), Rev.3)
  10. KHNP APR1400 Flywheel Integrity Report (Non-Proprietary) (APR1400-A-M-NR-14001-NP (WCAP-17942-NP), Rev.3)
  11. Common Q Platform Supplemental Information in Support of the APR1400 Design Certification (Proprietary) (APR1400-A-J-NR-14004-P (WCAP-17922-P), Rev.2)
  12. Validation of SCALE 6.1.2 with 238-Group ENDF/B-VII.0 Cross Section Library for APR1400 Design Certification (Proprietary) (APR1400-A-N-NR17001-P (WCAP-17889-P), Rev.0)
  13. Validation of SCALE 6.1.2 with 238-Group ENDF/B-VII.0 Cross Section Library for APR1400 Design Certification (Non-Proprietary) (APR1400-A-N-NR17001-P (WCAP-17889-NP), Rev.0)

## **Enclosure 1**

### **Affidavit KAW-18-0027**

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, APR1400-E-P-NR-14005-P and APR1400-F-C-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.



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

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

Executed on February 13, 2018

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

## **Enclosure 2**

Westinghouse Application for Withholding Proprietary Information from  
Public Disclosure (CAW-17-4585)

### **Enclosure 3**

Westinghouse Application for Withholding Proprietary Information from  
Public Disclosure (CAW-18-4692)

## **Enclosure 4**

Westinghouse Application for Withholding Proprietary Information from  
Public Disclosure (CAW-18-4693)

**Enclosure 5**

APR1400-E-P-NR-14005-P, Rev.2

Evaluations and Design Enhancements to Incorporate Lessons Learned  
from Fukushima Dai-Ichi Nuclear Accident

(Proprietary)

**Enclosure 6**

APR1400-E-P-NR-14005-NP, Rev.2

Evaluations and Design Enhancements to Incorporate Lessons Learned  
from Fukushima Dai-Ichi Nuclear Accident

(Non-proprietary)

**Enclosure 7**

APR1400-F-C-NR-14001-P, Rev.2

CPC Setpoint Analysis Methodology for APR1400

(Proprietary)

## **Enclosure 8**

APR1400-F-C-NR-14001-NP, Rev.2

CPC Setpoint Analysis Methodology for APR1400

(Non-proprietary)

## **Enclosure 9**

APR1400-A-M-NR-14001-P, Rev.3  
(WCAP-17942-P)

KHNP APR1400 Flywheel Integrity Report  
(Proprietary)

**Enclosure 10**

APR1400-A-M-NR-14001-NP, Rev.3  
(WCAP-17942-NP)

KHNP APR1400 Flywheel Integrity Report  
(Non-proprietary)

## **Enclosure 11**

APR1400-A-J-NR-14004-P (WCAP-17922-P), Rev.2

Common Q Platform Supplemental Information in Support of the  
APR1400 Design Certification

(Proprietary)

## **Enclosure 12**

APR1400-A-N-NR-17001-P (WCAP-17889-P), Rev.0 Validation

of SCALE 6.1.2 with 238-Group ENDF/B-VII.0 Cross  
Section Library for APR1400 Design Certification

(Proprietary)

## **Enclosure 13**

APR1400-A-N-NR-17001-NP (WCAP-17889-NP), Rev.0

Validation of SCALE 6.1.2 with 238-Group ENDF/B-VII.0 Cross  
Section Library for APR1400 Design Certification

(Non-proprietary)