



KHNP
KOREA HYDRO & NUCLEAR POWER CO., LTD

KHNP Central Research Institute

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MKD/NW-13-0002L

Jan. 7, 2013

ATTN: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Reply Required Yes No

Attention: Mr. David Matthews, Director,
Division of New Reactor Licensing

Subject: Transmittal of Topical Report APR1400-F-C-TR-12002-P/-NP, Revision 0,
"KCE-1 Critical Heat Flux Correlation for PLUS7 Thermal Design" for Safety
Evaluation, dated November 2012

Korea Hydro & Nuclear Power Co., LTD (KHNP) hereby submits Topical Report APR1400-F-C-TR-12002-P, Revision 0, "KCE-1 Critical Heat Flux Correlation for PLUS7 Thermal Design," dated November 2012 for staff review and approval (i.e., safety evaluation) in accordance with the topical report review process outlined in NRC guidance document LIC-500. The non-proprietary version of this report is also transmitted herewith. The topical report transmitted with this letter summarizes the test data analysis for the development of the KCE-1 Critical Heat Flux Correlation, the correlation results, the Critical Heat Flux test facility and the test procedure for PLUS7 fuel and will be referenced in future licensing actions such as the APR1400 Design Certification (DC) Program.

It is our understanding that a formal review schedule will be established soon after you inspect the enclosed report and discuss it with our project representatives in a conference call. In the meantime, it is expected that this report will be reviewed and a Safety Evaluation Report produced within approximately 18 months from receipt of this letter.

The subject report contains commercial strategic information proprietary to KHNP that is customarily held in confidence. Consistent with Paragraph (b)(1) of Section 2.390 of the Commission's regulations, KHNP hereby submits this application for withholding and respectfully requests that the information which is proprietary to KHNP be withheld from public disclosure in accordance with 10 CFR Section 2.390.

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Pursuant to the requirements of 10 CFR 2.390(b)(1)(ii) and 10 CFR 50.30(b), we are enclosing one copy of the associated affidavit (non-proprietary, Enclosure 1). The affidavit sets forth the basis on which the information identified as proprietary may be withheld from public disclosure by the Commission. Correspondence with respect to the affidavit should be addressed to Moon-Ghu Park, Korea Hydro & Nuclear Power Co., LTD at the letter-head address above, via telephone +82-42-870-5020, or by e-mail to parkmoon@khnp.co.kr.

Enclosure 2 provides APR1400-F-C-TR-12002-P, Revision 0, "KCE-1 Critical Heat Flux Correlation for PLUS7 Thermal Design" (proprietary) and Enclosure 3 provides APR1400-F-C-TR-12002-NP, Revision 0, "KCE-1 Critical Heat Flux Correlation for PLUS7 Thermal Design" (non-proprietary). In addition, KHNP is submitting both the proprietary and non-proprietary versions of this report electronically.

Questions or Requests for Additional Information related to the content and preparation of this report should be directed to me or Mr. Yun-Ho Kim of my staff at yunhokim@khnp.co.kr.

Sincerely,



Moon-Ghu Park
Director
APR 1400 Design Certification
Korea Hydro & Nuclear Power Co., LTD
parkmoon@khnp.co.kr

Enclosure 1: Affidavit KAW-12-0002

Enclosure 2: APR1400-F-C-TR-12002-P, Revision 0, "KCE-1 Critical Heat Flux Correlation for PLUS7 Thermal Design" (proprietary)

Enclosure 3: APR1400-F-C-TR-12002-NP, Revision 0, "KCE-1 Critical Heat Flux Correlation for PLUS7 Thermal Design" (non-proprietary)

Cc: Hossein Hamzehee NRC
William Ward NRC
Chang-Hwan Ban KNF
Stanley Ritterbusch WEC

ENCLOSURE 1

Affidavit KAW-13-0002

I, Myung-Ki Kim, state the following:

1. I am the Director, General Design Management, 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 criterion 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, report APR1400-F-C-TR-12002-P, Revision 0, "KCE-1 Critical Heat Flux Correlation for PLUS7 Thermal Design," 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.

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

Executed on 7th day of Jan. 2013.

M. K. Kim

Myung-Ki Kim
Director, General Design Management,
Korea Hydro & Nuclear Power Co., LTD

ENCLOSURE 2

APR1400-F-C-TR-12002-P, Revision 0, "KCE-1 Critical Heat Flux Correlation
for PLUS7 Thermal Design"

(proprietary)

ENCLOSURE 3

APR1400-F-C-TR-12002-NP, Revision 0, "KCE-1 Critical Heat Flux
Correlation for PLUS7 Thermal Design"

(non-proprietary)