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May 22, 2015

Document Control Desk

U.S. Nuclear Regulatory Commission

Washington, DC 20555-0001

Attention: Mr. Samuel Lee

Branch Chief, Licensing Branch 2 (LB2)

Docket No. 52-046

MKD/NW-15-0018L

Subject: APR1400-F-C-TR-12002, KCE-1 Critical Heat Flux Correlation for PLUS7 Thermal Design follow-up and meeting request

In response to the technical meeting held between Korea Hydro and Nuclear Power (KHNP) and the U.S. Nuclear Regulatory Commission (USNRC) on April 30, 2015 regarding the USNRC staff review of KEPCO/KHNP Topical Report – APR1400-F-C-TR-12002, KCE-1 Critical Heat Flux Correlation for PLUS7 Thermal Design; KHNP will be providing additional information to address the USNRC reviewer comments from the meeting and to enhance the clarity of the topical report.

During the meeting the USNRC reviewers indicated that additional information and clarifications were needed to support the proposed Minimum Departure from Nucleate Boiling Ratio (MDNBR); the need for additional information and clarification appeared to focus on three specific areas:

1. Provide the information to quantify the magnitude of the conservatism gained by the applicant's use of the Tong Factor and demonstrate that the conservatism balances the identified issues by the staff;
2. Address or explain the non-conservative sub-region around the lower system pressure limit of the CHF correlation;
3. More completely address the use of training data in lieu of validation data. Provide additional justification for concluding the validation data set conservatively represents the full range of the DNBR limit.

KHNP is planning to provide additional information and clarifications to the issues identified by



the staff review to the NRC by July 15, 2015 and a follow-up meeting with the Staff is tentatively planned for July 29, 2015 (to be determined based on staff availability) to discuss the additional information and address any remaining questions.

It is expected that the additional information provided will address the issues raised by the staff during their review of the KCE-1 topical report and support the requested MDNBR.

Please confirm that the proposed approach described in this letter is acceptable to the NRC staff.

KHNP appreciates the staff's review to date and looks forward to bringing this review to an appropriate conclusion for both KHNP and the Staff in a timely fashion.

If you have any questions or would like to discuss this letter in more detail, please contact Mr. Yun Ho Kim in our Washington DC Center.

Respectfully,

A handwritten signature in black ink that reads "M. K. Kim". The signature is written in a cursive style and is positioned above a thin horizontal line.

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