

April 4, 2017

Dr. Han-Gon Kim, Project Manager  
APR1400 Design Certification  
Advanced Reactors Development Laboratory  
Korea Hydro and Nuclear Power Co., Ltd.  
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SUBJECT: ADVANCED POWER REACTOR 1400 FINAL SAFETY EVALUATION  
FOR TOPICAL REPORT APR1400-Z-M-TR-12003-P, REVISION 0,  
“FLUIDIC DEVICE DESIGN FOR THE APR1400”

Dear Dr. Kim:

The U.S. Nuclear Regulatory Commission (NRC) staff has prepared a final Topical Report Safety Evaluation (TRSE) for Topical Report APR1400-Z-M-TR12003-P, Revision 0, “Fluidic Device Design for the APR1400.” This TRSE is also valid for the non-proprietary version of the topical report. This action is supported by the letter dated February 23, 2017 (ADAMS Accession No. ML17088A115), whereby the Advisory Committee on Reactor Safeguards agrees with the NRC staff’s conclusions, within the limits and conditions that are specified in the TRSE. This evaluation is in support of the review of the APR1400 design certification application submitted by Korea Hydro and Nuclear Power (KHNP) and Korea Electric Power Corporation on December 23, 2014.

The staff requests that KHNP publish the accepted proprietary and non-proprietary versions of this topical report within one month of receipt of this letter. The accepted versions shall incorporate this letter and the enclosed final TRSE after the title page. Also, they must contain historical review information, including NRC requests for additional information and your responses. The accepted versions of the topical report shall include an “-A” (designated accepted) following the report identification number.

If the NRC’s criteria or regulations change such that its conclusion that the accepted topical report is invalidated, KHNP and/or the applicant referencing the topical report will be expected either to revise and resubmit its respective documentation or to submit justification for continued applicability of the topical report without revision of the respective documentation.

Dr. Kim

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If you have any questions or comments concerning this matter, please contact me at (301) 415-6391, or via e-mail at [Jeff.Ciocco@nrc.gov](mailto:Jeff.Ciocco@nrc.gov), or Jessica Umana at (301) 415-5207, or via e-mail at [Jessica.Umana@nrc.gov](mailto:Jessica.Umana@nrc.gov).

Sincerely,

**/RA/**

Jeffrey A. Ciocco, Senior Project Manager  
Licensing Branch 2  
Division of New Reactor Licensing  
Office of New Reactors

Docket No. 52-046

Enclosure:  
As stated

cc w/ encl.: See next page

Dr. Kim

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TOPICAL REPORT APR1400-Z-M-TR-12003-P, REVISION 0, "FLUIDIC  
DEVICE DESIGN FOR THE APR1400" DATE: April 4, 2017

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**ADAMS Accession Nos.**  
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**\*via e-mail**

**NRO-002**

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