

October 7, 2013

Dr. Myung-Ki Kim
Project Manager
APR1400 Design Certification
Korea Hydro and Nuclear Power Co., Ltd.
1312 Beon-gil 70, Yuseong-daero
Yuseong-Gu, Daejeon
305-343 Korea (Republic of)

SUBJECT: ADVANCED POWER REACTOR 1400 FINAL TOPICAL REPORT SAFETY EVALUATION FOR THE KOREA HYDRO AND NUCLEAR POWER CO., TOPICAL REPORT APR1400-K-Q-TR-11005-NP, REVISION Z, "KHNP QUALITY ASSURANCE PROGRAM DESCRIPTION FOR THE APR1400 DESIGN CERTIFICATION".

Dear Dr. Kim:

By letter dated January 6, 2012, Korea Hydro & Nuclear Power Co., LTD (KHNP), submitted Topical Report APR1400-K-Q-TR-11005-N, Revision 0, "KHNP Quality Assurance Program Description for the APR1400 Design Certification," for U.S. Nuclear Regulatory Commission (NRC) staff review in accordance with the guidance of NUREG-0800, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants," Section 17.5, "Quality Assurance Program Description - Design Certification, Early Site Permit and New License Applicants." On May 9, 2012, KHNP submitted the Quality Assurance Program Description (QAPD) Topical Report APR1400-K-Q-TR-11005-NP, Revision 1, "KHNP Quality Assurance Program Description for the APR1400 Design Certification," incorporating updates to the "Organization" section of the document in order to reflect the recent corporate restructuring of KHNP. By letter dated November 26, 2012, KHNP responded to the NRC staff's request for additional information (RAI) No. 6834. By letter dated February 26, 2013, KHNP responded to the NRC staff's RAI No. 7004. On August 26, 2013, KHNP submitted Revision 2 of QAPD Topical Report, APR1400K-Q-TR-11005-NP. Revision 2 primarily incorporated the changes committed to by KHNP in the RAI responses. In addition, editing errors in Revision 1 were corrected and organizational changes since Revision 1 were updated.

The KHNP QAPD topical report covers the activities associated with the Design Certification (DC) of the APR1400 power reactor. The QAPD is based on the applicable portions of both Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants," to Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50, "Domestic Licensing of Production and Utilization Facilities," and the American Society of Mechanical Engineers (ASME) NQA 1-2008, "Quality Assurance Program Requirements for Nuclear Facilities," with 1a-2009 Addenda, as endorsed by NRC Regulatory Guide (RG) 1.28, Revision 4, "Quality Assurance Program Criteria (Design and Construction)," relevant to the KHNP APR1400 design certification project.

M-K. Kim

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The NRC staff has reviewed and has found that Topical Report APR1400-K-Q-TR-11005-NP, Revision 2, is acceptable for use by KHNP for the APR1400 DC activities to the extent specified and under the limitations delineated in the topical report and in the enclosed safety evaluation. The enclosed Final Topical Report Safety Evaluation (TRSE) defines the basis for acceptance of the topical report. Our acceptance applies only to material provided in the subject topical report. We do not intend to repeat our review of the acceptable material described in the topical report for the review of the DC.

In accordance with the guidance provided on the NRC website, <http://www.nrc.gov/about-nrc/regulatory/licensing/topical-reports.html>, we request that KHNP publish an accepted version of this topical report within 90 days. The accepted version of this topical report shall incorporate this letter and the enclosed safety evaluation after the title page. Also, the accepted version must include the NRC staff's RAIs and your responses to these questions. The accepted version shall include an "-A" (designating accepted) following the topical report identification symbol PQD-HD-19005.

If future changes to the NRC's regulatory requirements affect the acceptability of this topical report, KHNP will be expected to revise the topical report appropriately, or justify its continued use.

If you have any questions or comments concerning this matter, I can be reached at (301) 415-6391 or via e-mail at Jeff.Ciocco@nrc.gov.

Sincerely,

/RA/

Jeff Ciocco, Senior Project Manager
Environmental Projects Branch 2
Division of New Reactor Licensing
Office of New Reactors

Project No. 0782

Enclosure:
As stated

cc: See next page

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****see previous concurrence *via email**

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DATE	9/24/2013	09/25/13	9/30/13	9/30/13	10/03/13	10/07/13

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