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August 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-18-0119L

**Subject: APR1400 Standard Design Certification Application Design Control Document,
Revision 3, Tier 1 and Tier 2**

References: 1) KHNP Letter MKD/NW-14-0036L, Korea Electric Power Corporation and Korea Hydro & Nuclear Power Co., Ltd Application for Design Certification of the APR1400 Standard Design, dated December 23, 2014
2) KHNP Letter MKD/NW-17-0070L, APR1400 Standard Design Certification Application Design Control Document, Revision 1, Tier 1 and Tier 2, dated March 10, 2017
3) KHNP Letter MKD/NW-18-0035L, APR1400 Standard Design Certification Application Design Control Document, Revision 2, Tier 1 and Tier 2, dated March 8, 2018
4) Advisory Committee on Reactor Safeguards letter, Report on the Safety Aspects of the APR1400 Pressurized-Water Reactor, dated July 26, 2018
5) US Nuclear Regulatory Commission letter, Report on the Safety Aspects of the Advanced Power Reactor 1400 Pressurized-Water Reactor, dated July 30, 2018

In Reference 1), Korea Electric Power Corporation and Korea Hydro & Nuclear Power Co., Ltd (KEPCO/KHNP) applied for design certification of the APR1400 standard design and requested approval of an accompanying amendment to the APR1400 Design Control Document (DCD) Revision 0, Tier 1 and Tier 2. In References 2) and 3), KEPCO/KHNP provided Revisions 1 and 2 to the APR1400 DCD Tier 1 and Tier 2, respectively.

This letter transmits the APR1400 DCD Revision 3, Tier 1 and Tier 2, for use in KEPCO/KHNP's APR1400 Design Certification Application. Revision 3 of the APR1400 DCD incorporates information associated with document changes as a result of KEPCO/KHNP's responses to Requests for Additional Information (RAIs) submitted from January 1, 2018. This letter provides supporting information in four enclosures, as follows:

Enclosure 1 contains a table that identifies the impact on DCD, Probabilistic Risk Assessment, Technical Specifications and technical/topical reports resulting from responses to issued RAIs and audit items, as well as editorial corrections and minor changes resulting from self-assessment activities.

Enclosure 2 contains a list of the changes made by chapter in APR1400 DCD Revision 3.

Enclosure 3 contains the APR1400 DCD Revision 3. The DCD is being submitted electronically through compact discs (CDs) in two versions:

- The first version (in CD 1) includes Security-Related Information (SRI) protected from public disclosure under the provisions in 10 CFR 2.390. KEPCO/KHNP requests that the NRC withhold from public disclosure this information in accordance with the provisions of 10 CFR 2.390.
- The second version (in CD 2) omits the SRI, and it is suitable for public disclosure.

Enclosure 4 contains a matrix table that identifies changes for References, COL items, Tables, and Figures that have been renumbered in Revision 3 from those in Revision 2 of the APR1400 DCD.

As noted in Reference 3), the APR1400 Design Certification Application was submitted in accordance with 10 CFR § 52.46 and 52.47 under Subpart B – Standard Design Certifications and that information essentially includes all the same technical information as prescribed in 10 CFR § 52.137, Contents of Applications; Technical Information, for standard design approvals under Subpart E - Standard Design Approvals (SDA). KEPCO/KHNP furthermore requested the NRC accept and apply the technical information provided under the APR1400 design certification application to support issuance of a design approval pursuant to Subpart E.¹

KEPCO/KHNP believes the scope, standards and depth of review conducted by the NRC Staff for design certification under Subpart B adequately encompass the scope and standards of review for a SDA under Subpart E, including referral requirements to the Advisory Committee on Reactor Safeguards (ACRS). To that end, KEPCO/KHNP appreciates the recent letter from the ACRS and the committee's acknowledgement that their final review and evaluation of the design of the APR1400 fulfilled the requirements of both 10 CFR § 52.53 and 10 CFR § 52.141 (Reference 4). KEPCO/KHNP also appreciates the NRC staff's recognition of the ACRS letter and that the staff is finalizing the final safety evaluation report of the APR1400 design and related topical reports (Reference 5).

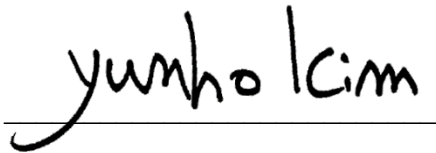
¹ In Reference 3, KEPCO/KHNP inadvertently referred to a "Final Design Approval" (FDA) approval pursuant to Subpart E, where in fact the request was meant to seek a "Standard Design Approval" (SDA) as provided for under the revised subpart which had also changed the design approval terminology [72 FR 49391, Aug. 28, 2007].

At this time, KEPCO/KHNP respectfully reaffirms its request that, upon completion of its review and issuance of the NRC Staff's Final Safety Evaluation Report (FSER) of the APR1400 design review, the NRC publish its SDA determination and provide a copy of the SDA by letter to KEPCO/KHNP when it becomes effective.

With the issuance of the enclosed Revision 3 of the APR1400 DCD, Tier 1 and Tier 2, the APR1400 team looks forward to working with the NRC staff to complete any remaining Phase 6 review activities, receiving the SDA and proceeding with Design Certification Rulemaking on schedule.

I declare under penalty of perjury that the foregoing information is true and correct to the best of my knowledge, information, and belief.

Sincerely,



Yun-ho Kim
Project Manager
Advanced Reactors Development Laboratory
Korea Hydro & Nuclear Power Co., Ltd.

Enclosures:

1. APR1400 DCD RAI Tracking Report (Revision 3) (Non-Proprietary)
2. APR1400 DCD Change List (Revision 3) (Non-Proprietary)
3. APR1400 DCD Revision 3 (CD1 & CD2)
4. APR1400 DCD Renumbering Matrix Table (Non-Proprietary)

Enclosure 1

APR1400 DCD RAI Tracking Report (Revision 3)

(Non-Proprietary)

Enclosure 2

APR1400 DCD Change List (Revision 3)

(Non-Proprietary)

Enclosure 3

APR1400 Design Control Document Revision 3

(CD 1 & CD 2)

Enclosure 4

APR1400 DCD Renumbering Matrix Table

(Non-Proprietary)