KHNPDCDRAIsPEm Resource

From: Ward, William
Sent: Friday, August 12, 2016 11:59 PM
To: 'apr1400rai@khnp.co.kr'; KHNPDCDRAIsPEm Resource; 'daegeun.ahn@gmail.com'; 'Andy Jiyong Oh'; 'Jungho Kim (jhokim082@gmail.com)'; Mannon, Steven (steven.mannon@aecom.com)
Cc: Williams, Donna; Ciocco, Jeff; Roy, Tarun; Zimmerman, Jacob; Ray, Sheila
Subject: APR1400 Design Certification Application RAI 515-8681 [14.2 - Initial Plant Test Program - Design Certification and New License Applicants]
Attachments: APR1400 DC RAI 515 EEB 8681.pdf

KHNP,

The attachment contains the subject request for additional information (RAI). This RAI was sent to you in draft form. Your licensing review schedule assumes technically correct and complete responses within 30 days of receipt of RAIs. However, KHNP requests, and we grant, 45 days to respond to this RAI. We may adjust the schedule accordingly.

Please submit your RAI response to the NRC Document Control Desk.

Thank you,

William R. Ward, P.E.
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U.S. Nuclear Regulatory Commission
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Hearing Identifier: KHNP_APR1400_DCD_RAI_Public
Email Number: 573

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Subject: APR1400 Design Certification Application RAI 515-8681 [14.2 - Initial Plant Test Program - Design Certification and New License Applicants]
Sent Date: 8/12/2016 11:59:02 PM
Received Date: 8/12/2016 11:59:06 PM
From: Ward, William

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MESSAGE	773	8/12/2016 11:59:06 PM
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Options
Priority: Standard
Return Notification: No
Reply Requested: No
Sensitivity: Normal
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REQUEST FOR ADDITIONAL INFORMATION 515-8681

Issue Date: 08/12/2016
Application Title: APR1400 Design Certification Review – 52-046
Operating Company: Korea Hydro & Nuclear Power Co. Ltd.
Docket No. 52-046
Review Section: 14.02 - Initial Plant Test Program - Design Certification and New License Applicants
Application Section: 14.2.12.1.86

QUESTIONS

14.02-68

In RAI 191-8210, Question 14.02-12, the staff asked for additional information on DCD Tier 2 Section 14.2.12.1.86, “EDG mechanical system test.” For preoperational testing, the applicable regulatory requirements are GDC 17, which requires that onsite and offsite power systems provide sufficient capacity and capability and GDC 18, which requires the testing of electrical power systems.

In part g of RAI 8210, Question 14.02-12, the staff asked for confirmation that demonstrating capability of 35 consecutive starts was 35 consecutive starts without failure. In its response on June 28, 2016 (ADAMS Accession No. ML16180A269), the applicant revised the pre-operational test to 25 consecutive starts instead of 35. Furthermore, the applicant stated in letter dated June 28, 2016 that “to demonstrate an acceptable level of reliability of the EDG starting, reliability tests are performed by ensuring 25 consecutive tests without failures in accordance with IEEE 387, ‘Standard for Diesel-Generator Units Applied as Standby Power Supplies for Nuclear Power Generating Stations.’ “Section 7.3, “Pre-operational testing” of IEEE Std. 387-1995 states that “reliability tests shall demonstrate that an acceptable level of reliability has been achieved to place the new diesel-generators into operation. This shall be achieved by a minimum of 25 valid start and load tests without failure on each installed diesel-generator” [Emphasis added].

Please confirm that 25 consecutive tests without failures is 25 start and load tests, as in accordance with IEEE Std. 387-1995 and confirm that the load tests are in accordance with IEEE Std. 387-1995, Section 7.2.1.3, “Rated Load test.” Please revise the DCD as needed.