KHNPDCDRAIsPEm Resource

From: Ciocco, Jeff
Sent: Tuesday, October 20, 2015 2:07 PM
To: KHNPDCDRAIsPEm Resource
Subject: FW: APR1400 Design Certification Application RAI 257-8331 (08.02 - Offsite Power System)
Attachments: APR1400 DC RAI 257 EEB 8331.pdf

From: Ciocco, Jeff
Sent: Monday, October 19, 2015 12:39 PM
To: apr1400rai@khnp.co.kr; Harry (Hyun Seung) Chang <hyunseung.chang@gmail.com>; Andy Jiyong Oh <jiyong.oh5@gmail.com>; Steven Mannon <steven.mannon@aecom.com>
Cc: Ray, Sheila <Sheila.Ray@nrc.gov>; Zimmerman, Jacob <Jacob.Zimmerman@nrc.gov>; Wunder, George <George.Wunder@nrc.gov>; Lee, Samuel <Samuel.Lee@nrc.gov>
Subject: APR1400 Design Certification Application RAI 257-8331 (08.02 - Offsite Power System)

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,

Jeff Ciocco
New Nuclear Reactor Licensing
301.415.6391
jeff.ciocco@nrc.gov

U.S.NRC
United States Nuclear Regulatory Commission
Protecting People and the Environment

Hearing Identifier: KHNP_APR1400_DCD_RAI_Public
Email Number: 306

Mail Envelope Properties (d0fd4a35c08e423cac4266a1109ac420)

Subject: FW: APR1400 Design Certification Application RAI 257-8331 (08.02 - Offsite Power System)
Sent Date: 10/20/2015 2:07:03 PM
Received Date: 10/20/2015 2:07:05 PM
From: Ciocco, Jeff

Created By: Jeff.Ciocco@nrc.gov

Recipients:
"KHNPDCDRAIsPEm Resource" <KHNPDCDRAIsPEm.Resource@nrc.gov>
Tracking Status: None

Post Office: HQPWMSMRS07.nrc.gov

Files	**Size**	**Date & Time**
MESSAGE	1099	10/20/2015 2:07:05 PM
APR1400 DC RAI 257 EEB 8331.pdf	104471	
image001.jpg	5040	

Options
Priority: Standard
Return Notification: No
Reply Requested: No
Sensitivity: Normal
Expiration Date:
Recipients Received:

REQUEST FOR ADDITIONAL INFORMATION 257-8331

Issue Date: 10/19/2015
Application Title: APR1400 Design Certification Review – 52-046
Operating Company: Korea Hydro & Nuclear Power Co. Ltd.
Docket No. 52-046
Review Section: 08.02 - Offsite Power System
Application Section:

QUESTIONS

08.02-8

By letter dated September 9, 2015, the applicant provided a response to RAI 8089, Question 08.02-5. In the table of periodic equipment tests, the gas insulated substation (GIS) including bus and disconnecting switch has specific required inspection and testing as well as the frequency of such tests.

GDC 17 requires an offsite power system to permit the functioning of structures, systems, and components important to safety.

In regards to the GIS design please provide the following information:

a) Identify the standards (Institute of Electrical and Electronics Engineers (IEEE) etc.) that are being followed for the design, testing and installation of the GIS.

b) Provide a description of the GIS components/equipment for the site-specific interconnection provisions between the GIS and the transformers (main transformer and step-up auxiliary transformer).

c) Confirm that the insulation coordination for the switchyard has been performed to arrive at the basic impulse level (BIL) selected for the switchyard equipment. Provide summary results and assumptions.

d) In letter dated July 29, 2015, the applicant provided a revised COL Item 8.2(6) to state that the COL applicant is to provide an failure modes and effects analysis of the switchyard components. Please confirm that the failure modes and effects analysis, to be performed by the COL applicant, will include the GIS equipment. Since the GIS equipment maintains high pressure, a sudden release of pressure could result in missile effects and damage to the GIS equipment.

Please revise DCD Tier 1 and 2 accordingly, considering impacts on offsite power testing for GIS.


U.S.NRC
United States Nuclear Regulatory Commission
Protecting People and the Environment