

KHNPDCDRAIsPEm Resource

From: Ciocco, Jeff
Sent: Thursday, July 23, 2015 9:44 AM
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Cc: Ray, Sheila; Wunder, George; Lee, Samuel
Subject: APR1400 Design Certification Application RAI 109-8079 (08.02 - Offsite Power System)
Attachments: APR1400 DC RAI 109 EEB 8079.pdf; image001.jpg

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.

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

Thank you,

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REQUEST FOR ADDITIONAL INFORMATION 109-8079

Issue Date: 07/23/2015

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

08.02-5

GDC 18 requires that electric power systems important to safety be designed to permit appropriate periodic inspection and testing of important areas and features to assess the continuity of the systems and the condition of their components. SRP Section 8.2 provides information on compliance with GDC 18 and states: “[The electric power] systems shall be designed to test periodically: (1) the operability and functional performance of the components of the offsite power systems, such as onsite power sources, relays, switches, circuit breakers, and buses, and (2) the operability of the systems as a whole and, under conditions as close to design as practical, the full operational sequence that brings the systems into operation, including operation of applicable portions of the protection system, and the transfer of power among the nuclear power unit, the offsite power system, and the onsite power system.”

DCD Tier 2, Section 8.2.2.1 discusses conformance with GDC 18, stating that “[t]he offsite power system of the APR1400 has the capability to perform integral testing on a periodic basis.”

Please provide a discussion of the periodic testing of the offsite power system, addressing the operability and functional performance of the components of the offsite power system, such as relays, switches, circuit breakers, and buses. Please confirm whether the testing includes: (1) verification of the correct circuit breaker alignment in the switchyard, (2) indication of offsite power availability, and (3) transfer of power among the nuclear power unit, the offsite power system, and the onsite power system.

