

REVISED RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

APR1400 Design Certification

Korea Electric Power Corporation / Korea Hydro & Nuclear Power Co., LTD

Docket No. 52-046

RAI No.: 285-8202

SRP Section: 14.02 - Initial Test Program - Design Certification and License Applicants

Application Section: 14.02

Date of RAI Issue: 11/02/2015

Question No. 14.02-66

GDC 1, "Quality standards and records" of Appendix A, "General Design Criteria for Nuclear Power Plants" to 10 CFR Part 50 states, in part, that structures, systems, and components important to safety shall be tested to qualify standards commensurate with the importance of the safety functions to be performed.

The NRC staff review of DCD section 14.2.12.1.18 has identified a possible typo mistake in the acceptance criteria. DCD section 14.2.12.1.18 has the title of "Process Radiation Monitor Subsystem Test" and yet the acceptance criteria does not specify or request that the process sampling monitor is built in accordance with DCD section 9.3.4.5.5.2, "Process Radiation Monitor." Instead a reference is made to DCD section 9.3.4.5.6, which directs the reader to the Boronmeter topic.

The NRC Staff requests the applicant review the information provided as acceptance criteria in DCD section 14.2.12.1.18 and provide a clarification as to the correct acceptance criteria.

Please address this item and provide a markup for the proposed DCD changes.

Response

KHNP has reviewed the subject question and understands the staff's request. KHNP is in the process of upgrading the test plans presented in Section 14.2 of the DCD. This effort is focused on adding additional SSCs that are important to safety and risk significant as well as increasing the level of detail described in the DCD for test prerequisites, test methods and acceptance criteria for the various tests. It has been determined that the actions to be taken as a result of this question is within the scope of the upgrade effort. Therefore, KHNP will address the noted items in the upgrade effort, which is scheduled to be completed by February 1, 2016. A revised response to this question that incorporates the results of the

upgrade effort will be submitted to the NRC after completion.

Response – (Rev. 1)

In DCD section 14.2.12.1.18, Acceptance Criteria 5.1 the incorrect reference number of 9.3.4.5.6 will be changed to 9.3.4.5.5.2.

Impact on DCD

Section 14.2.12.1.18 will be revised as shown in the attached mark-up.

Impact on PRA

There is no impact on the PRA.

Impact on Technical Specifications

There is no impact on the Technical Specifications.

Impact on Technical/Topical/Environmental Reports

There is no impact on any Technical, Topical, or Environmental Report.

APR1400 DCD TIER 2**2.0 PREREQUISITES**

- 2.1 The process radiation monitor has been installed, all interconnections have been completed, and the sample chamber has been filled with reactor makeup water.
- 2.2 The process radiation monitor has been calibrated.
- 2.3 A check source is available.
- 2.4 Support systems required for operation of the process radiation monitor are complete and operational.

3.0 TEST METHOD

- 3.1 Using the built-in test features, observe process monitor indications, outputs to interface equipment, and alarm operation.
- 3.2 Using the check source, verify calibration of the process monitor.

4.0 DATA REQUIRED

- 4.1 Check source data
- 4.2 Process monitor operating data
- 4.3 Process monitor response to the check source
- 4.4 Value of parameters required to actuate alarms

5.0 ACCEPTANCE CRITERIA

- 5.1 The process radiation monitor of the process sampling system performs as described in Subsections 9.3.2.3 and ~~9.3.4.5.6~~.



9.3.4.5.2