
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.: 400-8425
SRP Section: 18 – Human Factors Engineering
Application Section:
Date of RAI Issue: 02/04/2016

Question No. 18-121

Regulations in 10CFR 50.34(f)(2)(xviii) require unambiguous indication of inadequate core cooling (ICC).

The HD IP, Section 4.1.4.6, “Core Cooling,” describes one type of display that will provide indication of ICC variables. However, different information is written in DCD Tier 2, Section 7.5.1.2(a), “Primary ICC displays,” which states that indications of ICC will be displayed on “summary pages.” The staff could not find a description of “summary pages” in the HD IP or the Basic HSI Technical Report

Clarify where ICC variables are displayed. Align the information in DCD Tier 2, Section 7.5.1.2(a) and the information in the HD IP, Section 4.1.4.6. Revise the submittal as necessary.

Response

Section 4.1.4.6 of the Human-System Interface Design Implementation Plan, APR1400-E-I-NR-14007 will be revised to indicate that the inadequate core cooling (ICC) variables are displayed on the SPADES+ displays of the information flat panel display and the qualified indication and alarm system-P, in order to be consistent with DCD Tier 2, Section 7.5.1.2, as indicated in the attachment associated with this response.

Impact on DCD

There is no impact on the DCD.

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

Technical Report APR1400-E-I-NR-14007-NP, Rev. 0, "HSI Design Implementation Plan," Section 4.1.4.6 will be revised as indicated in the attachment associated with this response.

TS

4.1.4.3 Relief and Safety Valve Position Monitoring

TS

4.1.4.4 Manual Feedwater Control

TS

4.1.4.5 Containment Monitoring

TS

4.1.4.6 Core Cooling

TS

4.1.4.7 Post-Accident Monitoring Instrumentation

TS