
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.: 260-8283
SRP Section: 18 – Human Factors Engineering
Application Section: 18.6
Date of RAI Issue: 10/19/2015

Question No. 18-33

Section 5.4 (2), "Review Criteria," of NUREG-0711 states that "the applicant should describe the screening methodology used to select the tasks for analysis, based on criteria specifically established to determine whether analyzing a particular task is necessary." Additionally, Section 1.2.2, "Review Elements," of NUREG-0711 states in part, "To determine whether an implementation plan (IP) is acceptable, the NRC staff evaluates whether the IP is:... detailed, i.e., the IP describes the methodology in a step-by-step format to ensure that the applicant's design personnel can reliably use the IP, and that knowledgeable engineers will obtain consistent results from executing the methodology..."

Section 4.1.1.3, "Functional Requirements Analysis/Function Allocation" (FRA/FA) of the TA IP, Revision 0 describes at a general level of detail how the SME performing the task analysis will use the FRA/FA results (and the FRA/FA database) to select tasks. Section 4.5, "Allocation of Functions," of APR1400-E-I-NR-14003-P, "Function Requirements Analysis and Function Allocation Implementation Plan" (FRA/FA IP), Revision 0 describes the range of function allocation from manual to fully automatic, and identifies how these function allocations are labeled in the FRA/FA database (refer to Table 4-3, Column 8). It is not clear if the SMEs will evaluate control actions that are allocated to a combination of manual and automatic actions, as described in Section 4.5 of the FRA/FA IP (under the heading, "Column 8 Control").

1. Specify the types of control allocations the SME should review and decompose to identify and select tasks.
2. Revise the submittal as necessary.

Response

Section 4.1.1.3 of the TA IP will be revised to describe the control actions that are allocated to a combination of manual and automatic actions, 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-14004-NP, Rev.0, "Task Analysis Implementation Plan," Section 4.1.1.3 will be revised, as indicated in the attachment associated with this response.

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4.1.1.2. Treatment of Important Human Actions

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4.1.1.3. Functional Requirements Analysis and Function Allocation

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