

## 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.: 485-8601

SRP Section: 13.2.1 – Reactor Operator Requalification Program; Reactor Operator Training

Application Section: 13.2.1 - Plant Staff Training Program

Date of RAI Issue: 05/17/2016

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### **Question No. 13.02.01-1**

**Regulatory Basis:** An application for a Design Certification (DC) filed under Subpart B of 10 CFR 52 is filed with intent of the approved design being referenced by a Combined License (COL) approved under Subpart C of 10 CFR 52. In Subpart C, 10 CFR 52.79(a)(14) requires a description of operator training programs required to meet 10 CFR 55.

The staff wants the applicant to address the following inconsistency in APR1400 DCD Tier 2, Chapter 13, "Conduct of Operations," Section 13.2, "Training," pertaining to training of the plant staff:

Section 13.2.1 of the DCD states that the plant staff training programs for both the licensed and non-licensed staff are to be developed by using NEI 06-13A as the template for the basic structure and content. Accordingly COL 13.2(2), COL 13.2(3), and 13.2(4) in DCD Section 13.2.1 refer to NEI 06-13A. However, in Section 13.2.3 of the DCD (titled: Combined License Information), COL 13.2(3) and COL 13.2(4), pertaining to licensed plant staff training program and non-licensed staff training program, respectively, it states that these training programs are to be in accordance with NUREG-0800, Sections 13.2.1-I.3 and 13.2.2.I.3, respectively.

NUREG-0800, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants; LWR Edition," provides guidance to the NRC staff in performing safety reviews and is not intended to provide applicants guidance in the creation Safety Analysis Reports, nor for the applicants to reference as guidance to create operator training programs. NRC staff believes that the applicant intended to reference NEI 06-13A in section 13.2.3 of the DCD. The applicant is requested to provide the correct reference in DCD section 13.2.3.

### **Response**

COL 13.2(3) and 13.2(4) items of DCD Tier 2, Subsection 13.2.3, "Combined License Information," will be revised to provide the correct reference.

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**Impact on DCD**

DCD Tier 2, Subsection 13.2.3, "Combined License Information," and Table 1.8-2 will be revised as indicated in the attached markup.

**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 Environment Report.

**APR1400 DCD TIER 2****13.2.2 Applicable Nuclear Regulatory Commission Documents**

The COL applicant is to determine the extent of the NRC guidance that is applicable to the facility training program or the justification of exceptions (COL 13.2(6)).

**13.2.3 Combined License Information**

- COL 13.2(1) The COL applicant is to develop the description and schedule of the training program for licensed reactor operators and non-licensed plant staff.
- COL 13.2(2) The COL applicant is to develop the site-specific training program by using NEI 06-13A as the template for the basic structure and content.
- COL 13.2(3) The COL applicant is to provide a licensed plant staff training program in accordance with ~~NUREG 0800, Section 13.2.1.I.3 (Reference 3)~~.
- COL 13.2(4) The COL applicant is to provide a non-licensed plant staff training program in accordance with ~~NUREG 0800, Section 13.2.2.I.3~~.
- COL 13.2(5) The COL applicant is to develop training programs. The programs are to include a chart that shows the schedule of ~~the~~ training program for each functional group of employees in the organization in relation to the schedule for preoperational testing, expected fuel loading, and expected time for examinations prior to plant criticality for licensed operators.
- COL 13.2(6) The COL applicant is to determine the extent of the NRC guidance that is applicable to the facility training program or the justification of exceptions.

**13.2.4 References**

1. Regulatory Guide 1.8, "Qualification and Training of Personnel for Nuclear Power Plants," Rev. 3, U.S. Nuclear Regulatory Commission, May 2000.
2. 10 CFR Part 55, "Operators' Licenses," U.S. Nuclear Regulatory Commission.

**APR1400 DCD TIER 2**

Table 1.8-2 (22 of 29)

Item No.	Description
COL 13.1(8)	The COL applicant is to provide organizational information such as the functions, responsibilities, and authorities of the plant position. The COL applicant is to develop a description of the line of succession of authority and responsibility for overall station operation in the event of unexpected temporary contingencies, and the delegation of authority.
COL 13.1(9)	The COL applicant is to develop a description of the position titles, applicable operator licensing requirements for each, and the minimum numbers of personnel planned for each shift for all combinations of units proposed to be at the station in either operating or cold shutdown mode. The COL applicant is also to develop the description of shift crew staffing plans unique to refueling operations.
COL 13.1(10)	The COL applicant is to provide a description of the education, training, and experience requirements for each management, operating, technical, and maintenance position in the operating organization.
COL 13.1(11)	The COL applicant is to provide the qualification requirements of the initial appointees to plant positions for key plant managerial and supervisory personnel through the shift supervisory level.
COL 13.2(1)	The COL applicant is to develop the description and schedule of the training program for licensed reactor operators and non-licensed plant staff.
COL 13.2(2)	The COL applicant is to develop the site-specific training program by using NEI 06-13A as the template for the basic structure and content.
COL 13.2(3)	The COL applicant is to provide a licensed plant staff training program in accordance with <del>NUREG-0800, Subsection 13.2.1.1.3.</del>
COL 13.2(4)	The COL applicant is to provide a non-licensed plant staff training program in accordance with <del>NUREG-0800, Subsection 13.2.2.1.3.</del>
COL 13.2(5)	The COL applicant is to develop training programs. The programs are to include a chart that shows the schedule of each training program for each functional group of employees in the organization in relation to the schedule for preoperational testing, expected fuel loading, and expected time for examinations prior to plant criticality for licensed operators.
COL 13.2(6)	The COL applicant is to determine the extent of the NRC guidance that is applicable to the facility training program or the justification of exceptions.
COL 13.3(1)	The COL applicant is to develop the interfaces of design features with site-specific designs and site parameters.
COL 13.3(2)	The COL applicant is to develop a comprehensive emergency plan. The plan is developed as a physically separate document and includes copies of letters of agreement (or other certifications) from state and local governmental agencies with emergency planning responsibilities.