

## 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.:** 509-8591  
**SRP Section:** 16 – Technical Specifications  
**Application Section:** Subsections 3.4.10 and 3.4.16 of Section 16  
**Date of RAI Issue:** 08/01/2016

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### **Question No. 16-207**

Paragraph (a)(11) of 10 CFR 52.47 states that a design certification (DC) applicant is to propose Technical Specifications (TS) prepared in accordance with 10 CFR 50.36 and 50.36a. NUREG-1432, “Standard Technical Specifications (STS)-Combustion Engineering Plants,” Rev. 4, provides NRC guidance on format and content of technical specifications as one acceptable means to meet 10 CFR 50.36 requirements. Staff needs to evaluate all technical differences from standard TS (STS) NUREG-1432, STS Combustion Engineering Plants, Rev. 4, which is referenced by the DC applicant in DCD Tier 2 Section 16.1, and the docketed rationale for each difference because conformance to STS provisions is used in the safety review as the initial point of guidance for evaluating the adequacy of the generic TS to ensure adequate protection of public health and safety, and the completeness and accuracy of the generic TS Bases.

The Writer’s Guide for Plant-Specific Improved Technical Specifications (TSTF-GG-05-01) also provides guidance for the format and content of the TS. There are format and content differences between the DCD and the Writer’s Guide. These following corrections are necessary to ensure the completeness and accuracy of the TS and Bases.

Correct the punctuation in the LCO statements for two Technical Specifications (TS), TS 3.4.10 and 3.4.16.

For both of these LCO statements, the statement “b” needs a period at the end of the sentence.

This correction is required to ensure the accuracy and completeness of the LCO statements.

**Response**

Technical Specifications 3.4.10 and 3.4.16 will be revised to incorporate the comments on the punctuation.

(See Attachment\_16-207)

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**Impact on DCD**

Same as changes described in Impact on Technical Specifications section.

**Impact on PRA**

There is no impact on the PRA.

**Impact on Technical Specifications**

Technical Specifications 3.4.10 and 3.4.16 will be revised as shown in the attachment.

**Impact on Technical/Topical/Environmental Reports**

There is no impact on the Technical/Topical/Environmental Report.

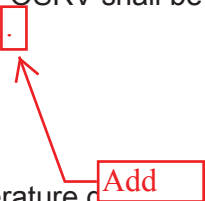
3.4 REACTOR COOLANT SYSTEM (RCS)

3.4.10 Pressurizer Pilot Operated Safety Relief Valves (POSRVs)

LCO 3.4.10 Four pressurizer POSRVs shall be OPERABLE such that:

- a. Two spring-loaded pilot valves shall be OPERABLE with lift settings  $\geq 171.1 \text{ kg/cm}^2\text{A}$  (2,433 psia) and  $\leq 176.3 \text{ kg/cm}^2\text{A}$  (2,507 psia).
- b. The opening time of pressurizer POSRV shall be OPERABLE within 0.5 seconds, including dead time.

APPLICABILITY: MODES 1, 2, and 3,  
 MODE 4 with all RCS cold leg temperature greater than the LTOP enable temperature specified in the PTLR.



ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One pressurizer POSRV inoperable.	A.1 Restore pressurizer POSRV to OPERABLE status.	15 minutes
B. Required Action and associated Completion Time of Condition A not met.  <u>OR</u>  Two or more pressurizer POSRVs inoperable.	B.1 Be in MODE 3.  <u>AND</u>  B.2.1 Be in MODE 4 with all RCS cold leg temperatures less than or equal to LTOP enable temperature specified in PTLR.  <u>OR</u>  B.2.2 Be in MODE 4 on shutdown cooling with requirements of LCO 3.4.11 met.	6 hours  12 hours  12 hours

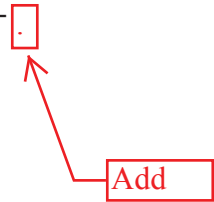
3.4 REACTOR COOLANT SYSTEM (RCS)

3.4.16 Reactor Coolant Gas Vent (RCGV) Function

LCO 3.4.16 The following RCGV paths shall be OPERABLE:

- a. Two paths from the reactor vessel closure head to in-containment refueling water storage tank (IRWST), and
- b. Two paths from the pressurizer steam space to the IRWST.

APPLICABILITY: MODES 1, 2, and 3,  
MODE 4 with RCS pressure  $\geq 31.6 \text{ kg/cm}^2\text{A}$  (450 psia).



ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One required RCGV path inoperable.	A.1 Restore RCGV path to OPERABLE status.	72 hours
B. Two required RCGV paths from the same location inoperable.	B.1 Restore one RCGV path to OPERABLE status.	6 hours
C. Required Action and associated Completion Time of Condition A or B not met.	C.1 Be in MODE 3.	6 hours
	<u>AND</u> C.2 Be in MODE 4 with RCS pressure $< 31.6 \text{ kg/cm}^2\text{A}$ (450 psia).	12 hours