

**C-E Power Systems**  
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Docket No. STN 50-470F

July 18, 1985  
LD-85-033

Cecil O. Thomas, Chief  
Standardization and Special  
Projects Branch  
Division of Licensing  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Subject: CESSAR System 80™ Technical Specifications

Dear Mr. Thomas,

In response to your letter dated July 3, 1985, which transmitted to Combustion Engineering (C-E) the proof and review copy of the CESSAR Technical Specifications, we are notifying you of the results of our review. In general, C-E concurs with the proposed Technical Specifications. Specific comments are provided in Attachment 1. Attachment 2 is a letter referenced in the comments in Attachment 1. Attachment 3 provides a marked up proof and review copy of the CESSAR Technical Specifications to help clarify our written comments. As noted on the cover page, pages with "C-E" in the upper right hand corner contain proposed changes from the proof and review version.

In response to your letter dated July 10, 1985, formal responses are being prepared for the subject questions and will be transmitted shortly.

If you have any questions on this subject, please feel free to call me or Mrs. R. O. Hoogewerff of my staff at (203) 285-5217.

Very truly yours,

COMBUSTION ENGINEERING, INC

A handwritten signature in cursive script, appearing to read 'A. E. Scherer'.

A. E. Scherer  
Director  
Nuclear Licensing

AES:bks  
Attachments

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ADMINISTRATIVE COMMENTS:

1. In several areas the names of systems have been changed to be consistent with the Standard Technical Specifications, Rev. 3. These changes, however, make the terminology in the System 80 Technical Specifications inconsistent with the designated system names in CESSAR FSAR. In order to support the CESSAR Technical Specifications certification effort, the following terminology changes should be made to the proof and review copy:
  - a. On pages VII, 3/4 6-4, and B 3/4 6-1, change all occurrences of Spray Additive System back to Iodine Removal System.
  - b. On pages IX, XIV, insert to page 3/4 9-4, and B 3/4 9-2, change all occurrences of Manipulator Crane back to Refueling Machine.
  - c. On pages VIII, 3/4 7-4 and the insert to 3/4 7-4, B2-4, and 3/4 3-19, change all occurrences of Auxiliary Feedwater back to Emergency Feedwater.
  - d. On pages 3/4 3-18 and 3/4 3-19, change all occurrences of AFAS to EFAS.
2. On page B 3/4 4-3, in the forth paragraph replace the reference to "40%" of the tube nominal wall thickness with "\*\*\*" and a footnote saying "Value to be determined in accordance with recommendations of Regulatory Guide 1.21, August 1976."
3. In the last paragraph of page B 3/4 4-10, delete the reference to the specific Edition and Addenda of the ASME Boiler and Pressure Vessel Code to be consistent with the CESSAR FSAR.
4. The following pages appear to have typographical errors or editorial inconsistencies:
  - a. On page XIII, The Technical Specification Bases for Area Temperature Monitoring should be numbered 3/4.7.13 and the Shutdown Cooling System should be numbered 3/4.7.14.
  - b. On page XIX, the title for Figure 3.1-3 should have "(COLSS IN SERVICE)" eliminated to be consistent with the actual title of the Figure.
  - c. On page XXII, the title for Table 3.7-2 should have "During Two Loop Operation With Four Pumps Operating" eliminated to be consistent with the actual title of the Table.

- d. On page 3/4 3-5, under Action 2, change "Specification 6.5.1.6.h" to "Specification 6.5" to be consistent with the level of hierarchy in the Table of Contents. (The CESSAR Technical Specifications do not contain a specific place holder for Specification 6.5.1.6.h, only 6.5 in general).
- e. On page 3/4 3-13, under Table Notation (2), the word "signals" was inadvertently deleted.
- f. On page 3/4 3-20, under Action 13, change "Specification 6.5.1.6.h" to "Specification 6.5" to be consistent with the Table of Contents.
- g. On page 3/4 4-18, under the Limiting Conditions for Operation, "3/4.5.1" should be "3/4.4.5.1".
- h. On pages 3/4 4-26 and 3/4 5-3, change "Specification 6.9.2" to "Specification 6.9" to be consistent with the Table of Contents.
- i. On page 3/4 6-7, under Surveillance Requirement 4.6.3.2.a, add the word "actuation" after "its applicable".
- j. On the insert to page 3/4 7-18, after 3/4.7.12, add "3/4.7.13 Area Temperature Monitoring" to be consistent with the Table of Contents.
- k. On page 3/4.7.19 change all occurrences of Technical Specification number 3/4.7.13 to 3/4.7.14 to be consistent with the Table of Contents.
- l. On page 3/4 10-4, under Action a, the words "within 1 hour" were inadvertently omitted. They should be included after "Specification 3.2.1".
- m. On page B 3/4 7-1; in the first sentence, both references to psia should be psig.
- n. On page 5-1, Section 5.1.3 was deleted in the Table of Contents. If it is meant to be included then Figure 5.1.3 should also be included. If not then Section 5.1.3 should be deleted from the text.

TECHNICAL COMMENTS:

1. The System 80 Variable Overpower Trip replaces the Linear Power Level High Trip used in older plant designs. As described in Section 7.2.1.1.1.1 of the CESSAR FSAR, "The variable overpower trip is provided to trip the reactor when indicated neutron flux power either (1) increases at a great enough rate, or (2) reaches a present value." The Linear Power Level High Trip is provided in other designs to trip the reactor when indicated neutron flux reaches a preset value. A Loss of Load trip is not part of the System 80 RPS design and is not credited in any Safety Analyses. The System 80 Reactor Power Cutback System is a control system designed to handle loss of load events. Based on the above discussion, references to a Linear Power Level High Trip and Loss of Load Trip should be deleted from the following pages:

B2-7  
3/4 3-3  
3/4 3-9  
3/4 3-11

2. On page 3/4 7-19, under Action a, the phrase "and be in COLD SHUTDOWN within the next 30 hours" should be removed. This action is not necessary since the technical specification is only applicable to Modes 1, 2, and 3.
3. On page 3/4 4-19, under Limiting Condition for Operation, item c, the asterik and footnote "See Applicants SAR" should be removed and a leakage of 720 gallons should be specified. This value is appropriate for any System 80 plant.
4. On page 3/4 7-9, under Action a, the word "two" should be put in parentheses to denote that two is a typical value that may vary from plant to plant. The reason for this is that there are no requirements on minimum valve size for ADVs, hence, a utility could choose to have several smaller valves in place of one large valve. Also on page 3/4 7-9, Surveillance Requirement "a" should be deleted in its entirety. It is not standard practice to specify surveillance requirements on valve actuators (e.g. see 3.7.1.5, "Main Steam Isolation Values"). Palo Verde Unit 1 is a special exception due to the unusual nature of the valve actuator and because Palo Verde has no ADV block valves.
5. On page 3/4 3-40, the action statement associated with the Reactor Vessel Water Level should be 31 and 32 as originally submitted. A letter from the CEOG to Hugh Thompson (Attachment 2) documents the justification for this position. The technical specification provided in this letter for the C-E

RVLMS is approved for Arizona and should be applicable to all System 80 plants. In addition, the referenced letter notified the staff that utilities would be submitting a similar technical specification on their dockets. The Action Statements associated with Items 17 and 18 should be changed to 32. On page 3/4 3-41, Action 31 should not be deleted and the current Action 31 should be changed to Action 32.

6. On page 3/4 3-37, specific values for "Minimum Channels Operable" should be presented in this column. These values should correspond to those originally submitted which are consistent with the C-E Standard Technical Specifications, Rev. 03. (These changes are provided in the attached proof and review copy of the CESSAR Technical Specifications).
7. On page 3/4 3-37, several changes need to be made in order for Table 3.3-9 to be consistent with information contained in the CESSAR FSAR.
  - a. "Log Neutron Power Level" should be changed back to "Logarithmic Neutron Channel."
  - b. "Reactor Coolant Cold Leg Temperature" is not required in CESSAR to achieve and maintain a safe shutdown. This instrument should be deleted from the table.
  - c. Under "Control Circuits", a list of systems and components is provided which appear in Section 7.4.1.1 of the CESSAR FSAR. The "Switch Location" should refer to the Applicants SAR.
8. On page 3/4 3-38, change "Log Neutron Power Level" to "Logarithmic Neutron Channel" and delete "Reactor Coolant Cold Leg Temperature" to be consistent with the CESSAR FSAR.
9. On pages 3/4 3-28, 3/4 3-29, 3/4 3-30, 3/4 3-31 and 3/4 3-32, note (3) for Automatic Actuation Logics should be associated with a Semi-Annual (SA) test interval as opposed to a monthly test interval. A Semi-Annual test interval is consistent with the staff approved technical specification for SONGS Unit 2. In addition, PRA analyses have demonstrated that there is no significant change in system reliability due to an increased sub-group relay testing frequency. Plant specific subgroup relay tests on equipment outside C-E's scope of supply could result in cycling of components beyond the designed test interval and adversely impact the life of the component.
10. Page 3/4 3-33 should include a list of actuation devices that cannot be tested at power.

11. On page 3/4 9-10, under the Limiting Condition for Operation, 8 inches should be added to the 23 feet minimum water level requirement as originally submitted. This value is necessary in order to be consistent with the discussion of Fuel Handling in the CESSAR FSAR. In addition, the bases associated with Technical Specifications 3/4.9.10 and 3/4.9.11 should have the phrase "(at least 23 feet above the top of the spent fuel)" deleted as it is not consistent with both Technical Specifications.