



TU ELECTRIC

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June 17, 1988

William G. Council
Executive Vice President

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D.C. 20555

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSSES)
DOCKET NOS. 50-445 AND 50-446
EVALUATION OF AMENDMENT 69 AND 70 CHANGES TO FINAL
SAFETY ANALYSIS REPORT

REF: (1) Letter from Stewart D. Ebner (NRC) to William G. Council
(TU Electric) dated May 17, 1988

(2) TU Electric letter TXX-88467, dated June 1, 1988

Gentlemen:

In Reference (1), the NRC Staff requested that TU Electric identify portions of the FSAR which were previously evaluated and found acceptable in the Staff's Safety Evaluation Report (SER), or supplements thereto (SSERs), and for which the licensing basis was changed by FSAR amendments after Amendment 54. The NRC Staff indicated that the response should identify and summarize the nature of the FSAR changes since SSER No. 12 was issued. In addition, the Staff requested that TU Electric evaluate each FSAR change with respect to the overall safety of the facility and broadly categorize each change based on the safety significance determined by the evaluation.

In response to the NRC Staff's request, TU Electric provided in Reference (2), a detailed listing and description of every change to the FSAR, through Amendment 68, that caused that document to differ from the version reviewed and accepted by the NRC Staff through SSER No. 12. Further, all changes were placed in one of four groups based upon their relative significance. Attached is a similar listing, description, and relative significance grouping for Amendments 69 and 70.

Again it should be emphasized that, prior to submittal of each FSAR change, TU Electric had reviewed the technical merits of such change and had concluded that all aspects of the change satisfied applicable NRC requirements. None of the changes has "safety significance" in the sense that it would create a potentially unsafe situation, i.e., a facility not in compliance with NRC requirements. The term "relative significance" as used in this review denotes

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only that the FSAR changes -- all of which are acceptable from a safety standpoint -- have been classified into groups, in increasing order of possible importance of the change to the NRC Staff. The classification, which involved a number of subjective considerations, is intended only for purposes of aiding the Staff in planning and scheduling its review.

This completes the information requested in Reference (1). Please let us know if we can provide any further information to facilitate the Staff's planning and scheduling of its review.

Very truly yours,

W. G. Council

By: 

R. D. Walker
Manager, Nuclear Licensing

BSD/amb
attachment

c - Mr. R. D. Martin, Region IV
Resident Inspectors, CPSES (3)

TU Electric

FSAR Change Review Information

Chapter : 01

Page: 1

SEP	Group	Evaluation Number	FSAR Amended Description (Page Numbering per Am-70)	Change Classification
1.1	2	1.6-3-1.1	TI.6-1 [Am-69](Sht. 18) This change incorporates WCAP-10271 (through Supplement 2) and WCAP-11312 into Table 1.6-1 to indicate their applicability to CPSES with regard to CPSES Technical Specifications. (88-145)	Addition

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SER	Group	Evaluation Number	FSAR Amended Description (Page Numbering per Am-70)			Change Classification	
2.4	4	2.4-21-2.4	T2.4-13 (Am-69) Provides minor editorial corrections to T2.4-13 from Am-68. (88-302)			Editorial	

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SER	Group	Evaluation Number	FSAR Amended Description (Page Numbering per Am-70)	Change Classification	
3.2.2	3	17A-100-3.2.2	T17A-1 (Am-69)(Sht. 13) Adds "Breakdown orifices" and Orifices" to the table listing of components for the Auxiliary Feedwater System. These items were inadvertently omitted from the listing. (88-164)	Addition	
3.2.2	4	3.2-027-3.2.2	T3.2-3 (Am-69)(Shts. 6,7) Adds flow diagrams to the list of flow diagrams for the Fire Protection System. These diagrams have been redrawn incorporating outstanding design changes. (88-752)	Addition	

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FSAR Change Review Information

Chapter : 03

Page: 2

SER	Group	Evaluation Number	FSAR Amended Description (Page Numbering per Am-70)	Change Classification
3.7.1	4	3.7-65-3.7.1-N	3.7B-4 [Am-69] Provides a change to allow the use of ASME Code Case N-411 damping values in an analysis of the primary system loop to determine seismic loads for the reactor coolant pump tie supports and the reactor vessel supports. (See evaluation no. 3.7-009-3.7.1-N, Att. 2 of TXX-88467, page 71) (8B-147)	Correction

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SER	Group	Evaluation Number	FSAR Amended Description (Page Numbering per Am-70)	Change Classification
3.7.2	2	3.7-66-3.7.2	3.7B-42 [Am-69] Provides a change to correct the statement discussing how structural failure of the Turbine Building in the direction of the adjacent Category I structures is prevented. Internal bracing will prevent the Turbine Building from interacting with the adjacent Category I structures. (88-159)	Correction

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SER	Group	Evaluation Number	FSAR Amended Description (Page Numbering per Am-70)	Change Classification
3.8.3	3	3.8-092-3.8.3	130-50 [Am-69] Revises the number of masonry walls in the Electrical and Control Building which were modified to prevent seismic interactions and the number which were evaluated to have acceptable seismic interactions. Also, adds one additional removable block enclosure in the Safeguards Building which was evaluated and found to have acceptable seismic interactions. (88-245)	Revision

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SER	Group	Evaluation Number	FSAR Amended Description (Page Numbering per Am-70)	Change Classification
3.10	2	3.10-004-3.10	3.10N-3 and 3.10B-4 [Am-69] Details how Class 1E equipment located in a mild environment area will be seismically qualified. (88-281)	Revision
3.10	4	3.10-007-3.10	Sec. 3.10N [Am-69] This section is being issued in computerized format.	Editorial

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S.R	Group	Evaluation Number	FSAR Amended Descriptor. (Page Numbering per Am-70)	Change Classification
3.11	2	1AB-37-3.11	1A(B)-7 [Am-69] References 10CFR50.49 statements of consideration for exception to Reg. Guide 1.89 for Class 1E equipment located in a mild environment area. (88-281)	Update
3.11	2	1AN-8-3.11	1A(N)-48 [Am-69] Reflects current status of WCAP-8587, Revision 6-A, and references 10CFR50.49 statements of consideration for exception to Reg. Guide 1.89 for Class 1E equipment located in a mild environment area. (88-281)	Update
3.11	3	1AN-9-3.11	1A(N)-56 [Am-69] Details how Class 1E equipment located in a mild environment area will meet Reg. Guide 1.100. (88-281)	Revision

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FSAP Change Review Information

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Change Classification

SER Group Evaluation Number FSAP Amended Description (Page Numbering per Am-70)

SER	Group	Evaluation Number	FSAP Amended Description (Page Numbering per Am-70)	Clarification
5.2.4	4	5.2-021-5.2.4	5.2-31 [Am-09] Provides clarification by identifying which edition of the ASME Section XI code is applicable to Units 1 and 2. Adds the following wording "... for Unit 1 and to the 1993 Edition for Unit 2." This change was requested and approved during the sign-off reviews for Amendment 66, but was inadvertently omitted. (88-155)	

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SER	Group	Evaluation Number	FSAR Amended Description (Page Numbering per Am-70)	Change Classification
5.3.1	3	5.3-004-5.3.1	5.3-11 [Am-70] Changes the pressure vessel surveillance capsule withdrawal schedule to be consistent with the Westinghouse recommendations, ASTM-E185-82, 10 CFR 50 App. H, and CPSES tech spec or Tech Spec Improvement Program (Item 2.2). (88-355) SER/SSER IMPACT: SER Subsection 5.3.1.2, Page 5-10, second paragraph, and SSER 1, Subaction 5.3.1.2, page 5-2, second paragraph, are not consistent as a result of this change.	Revision

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SER	Group	Evaluation Number	FSAR Amended Description (Page Numbering per Am-70)	Change Classification
5.4.2	3	5.4-032-5.4.2	5.4-18 [Am-70] Provides an updated description of a dated discussion of plants with Inconel-600, which have operated with AVT water treatment, and describes how this operating experience has been considered at CPSES. (88-279)	Update
5.4.2	4	5.4-031-5.4.2	5.4-16 [Am-70] Deletes the words "and pitting type" from the description of the corrosion resistance of Inconel-600. Inconel- 600 has only moderate resistance to pitting corrosion in severe water chemistries. (88-279)	Correction

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FSAR Change Review Information

Chapter : 06

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SER	Group	Evaluation Number	FSAR Amended Description (Page Numbering per Am-70)	Change Classification
6.2.1	1	6.2-150-6.2.1	<p>Sec.6.2 [Am-69] The analyses of LOCA and Main Steam Line Breaks (MSLB) inside containment were re-performed using the Stone & Webster LOCTIC computer code. These reanalyses were necessary because of errors discovered in the version of CONTEMPT-LT 26 used in the original containment analyses, resulting in the under-prediction of certain containment parameters. This condition was previously reported to the NRC in our letters TXX-6512 dated June 12, 1987, and TXX-88120 dated January 18, 1988. Since a new analysis was being performed, the most current information was used. This included new information, such as the deletion of the Boron Injection Tank (BIT) and revised containment heat sink data based on current plant drawings and revised LOCA structural heat transfer coefficient.</p> <p>The revised containment analysis resulted in an increased containment peak temperature for the MSLB case. All safety related equipment required to be qualified for this condition were determined to be qualified to the higher temperature. Tables and Figures in this FSAR section have been revised to reflect the results of the revised containment analysis.</p> <p>SER sections 6.2.1.1 and 6.2.1.2 reference the use of the CONTEMPT code for containment analyses along with the resultant containment conditions. As result of this FSAR change the SER sections are no longer correct. (88-114)</p>	Revision
6.2.1	1	6.2-160-6.2.1	<p>6.2-6 [Am-69] The analyses performed by CONTEMPT-LT/MOD 22[1, 2, 3, 4] and CONTEMPT-LT/MOD 26 computer codes have been replaced by analyses using the LOCTIC code. (See discussion under evaluation number 6.2-150-6.2.1)</p>	Revision
6.2.1	1	6.2-172-6.2.1	<p>6.2-10 thru 6.2-22 [Am-69] A new Section 6.2.1.1.3.11 has been added to describe the analytic modeling of the LOCTIC computer code. (See discussion under evaluation no. 6.2-150-6.2.1.)</p>	Revision
6.2.1	2	6.2-153-6.2.1	<p>6.2-4 [Am-69] Of the steam line breaks analyzed, the FSAR is revised to present one small double ended rupture at two power levels (30% and 70%) instead of the previous two small double ended ruptures at four power levels (102%, 70%, 30% and hot shutdown). The small ruptures presented were determined to envelope all the small rupture conditions previously presented. (88-114)</p>	Revision
6.2.1	2	6.2-155-6.2.1	<p>6.2-4 [Am-69] Provides description of a sensitivity study performed to determine the effects of varying containment initial conditions on peak pressure and temperature for the DEPSG and 9.908 square foot</p>	Addition

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SER	Group	Evaluation Number	FSAR Amended Description (Page Numbering per Am-70)	Change Classification
			steam line breaks. (88-114)	
6.2.1	2	6.2-156-6.2.1	6.2-5 [Am-69] The parameters that were provided as a function of time (i.e., previous item numbers 1 thru 9 for the design basis LOCA case and 1 thru 5 for containment pressure transients for other analyzed LOCAs) have been revised, consolidated and rearranged consistent with the parameters supplied by the LOCTIC code. The parameters to be included in FSAR figures have been identified for specific analyzed breaks. The following figures for the LOCA case, were duplicative of information contained in tables, were not used, or were not sufficiently useful to update, and thus the figures have been deleted: 1. Containment steam partial pressure (Figure 6.2.1-4) This figure was not sufficiently useful to update. 2. Energy addition to containment (Figure 6.2.1-5) This information is already contained in the mass and energy release rates contained in Tables 6.2.1-3A, 6.2.1-3B, 6.2.1-3C, 6.2.1-4, and 6.2.1-50. 3. Energy removal from containment (Figure 6.2.1-6) 4. Energy distribution in Containment (Figure 6.2.1-7) 5. Energy removal by spray from containment vapor region (Figure 6.2.1-8) The information contained in Figures 6.2.1-6, 6.2.1-7 and 6.2.1-8 was duplicative of information contained in Tables 6.2.1-50 and 6.2.1-50A. (88-114) (See also evaluation no. 6.2-150-6.2.1)	Revision
6.2.1	2	6.2-163-6.2.1	6.2-8 [Am-69] The assumption of a one-eighth inch air gap with thermal conductance of 1.6 Btu/hr-sq ft-F, has been replaced with a more realistic assumption for interface conductance of 10 Btu/hr-sq ft-F. This is a realistic and conservative assumption because; 1) the containment liner was used as a form for concrete pour during containment construction and therefore, for the most part, the liner is in direct/close contact with the concrete, and 2) during the times of interest for the LOCA and MSLB events, the containment is pressurized forcing the liner into closer contact with the concrete. (88-114)	Revision
6.2.1	2	6.2-164-6.2.1	6.2-8 [Am-69] The paint heat conductances for steel and concrete painted surfaces have been revised to be more realistic. (88-114)	Revision
6.2.1	2	6.2-166-6.2.1	6.2-8 [Am-69] The LOCTIC code uses the Tagami structural heat transfer coefficient for LOCA analysis and the Uchida coefficient for MSLB analysis. The Uchida heat transfer coefficient was previously used for CPSES LOCA analyses. Because of the difference in the pipe break exit fluid conditions between LOCA and MSLB scenarios and the differing containment saturation conditions, the Tagami heat transfer coefficient is more conservative for LOCA analyses whereas	Revision

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			the Uchida coefficient is more appropriate for MSLB analyses. (See also evaluation no. 6.2-150-6.2.1) (88-114)	
6.2.1	2	6.2-169-6.2.1	6.2-9 [Am-69] Revises maximum external differential pressure from 3.37 psid to 3.79 psid based on the conservative revision to the initial containment pressure. (88-114)	Revision
6.2.1	2	6.2-173-6.2.1	6.2-10 thru 6.2-22 [Am-69] The Westinghouse mass and energy release rates for the post-reflood phase are modified as discussed in the Broken Loop and Intact Loop Steam Generator analyses as a result of the lower containment pressure (p) computed by the LOCTIC code. In addition, the mass and energy release rates have been modified to include core decay heat and safety injection flow. (88-114)	Revision
6.2.1	2	6.2-174-6.2.1	6.2-21 thru 6.2-22 [Am-69] ECCS spillage is accounted for separately by the LOCTIC code since it was not included in the Westinghouse WREFLOOD calculation of mass and energy release for the reflood phase. (88-114)	Revision
6.2.1	2	6.2-181-6.2.1	6.2-54 [Am-69] For the MSLB events the statement that containment spray actuation occurs within 60 seconds of containment pressure reaching 20 psig, has been replaced with an expanded description of the time it takes to achieve full containment spray flow. The two cases are, the full double ended rupture case and the partial double ended rupture / split break case. The primary difference between these cases is the energy release rate and the resultant speed at which containment pressure increases (and thus the speed at which the S and P signals are generated). The S signal initiates spray pump start (at approximately 5 psig) and the P signal initiates spray valve opening (at approximately 20 psig). As a result of the relatively long time differential between S signal and P signal initiation for the partial rupture case, the time delays associated with pump start (i.e., diesel generator start, sequencing pump load to Class 1E bus, and pump acceleration) are satisfied prior to P signal initiation. Thus full spray flow can occur within 38 seconds after containment pressure reaches 20 psig. For the full double ended rupture case P signal initiation occurs before pump start time delays are satisfied and thus full flow is conservatively assumed to be achieved in 60 seconds after the 20 psig containment pressure is reached. (88-114)	Revision
6.2.1	2	6.2-189-6.2.1	T6.2.1-2 & 6.2.1-2A [Am-65] These tables are revised to reflect the revised containment analysis using the LOCTIC code. (See evaluation no. 6.2-150-6.2.1).	Revision

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			(88-114)		
6.2.1	2	6.2-190-6.2.1	T6.2.1-3, 6.2.1-3A & 6.2.1-4 [Am-69] These Tables replace previous Table 6.2.1-3. The new tables reflect the revised containment analysis using the LOCTIC code. (See evaluation under no. 6.2-150-6.2.1)		Revision
6.2.1	2	6.2-191-6.2.1	T6.2.1-4 thru T6.2.1-6 [Am-69] These tables are revised to reflect the revised containment analysis using the LOCTIC code. (See evaluation under no. 6.2-150-6.2.1) (88-114)		Revision
6.2.1	2	6.2-193-6.2.1	T6.2.1-8 thru T6.2.1-10 [Am-69] These tables are revised to reflect the revised containment analysis using the LOCTIC code. (See evaluation under no. 6.2-150-6.2.1) (88-114)		Revision
6.2.1	2	6.2-194-6.2.1	T6.2.1-50 and -50A [Am-69] Tables are revised to reflect the revised containment analysis using the LOCTIC code. (See discussion for evaluation no. 6.2-150-6.2.1) (88-114)		Revision
6.2.1	2	6.2-195-6.2.1	F6.2.1-1 thru F6.2.1-3 [Am-69] Figures revised to reflect the revised containment analysis using the LOCTIC code. (See discussion under evaluation no. 6.2-150-6.2.1) (88-114)		Revision
6.2.1	2	6.2-198-6.2.1	F6.2.1-9 thru F6.2.1-15 [Am-69] These figures are revised to reflect the revised containment analysis using the LOCTIC code. (See discussion under evaluation no. 6.2-150-6.2.1) (88-114)		Revision
6.2.1	2	6.2-200-6.2.1	F6.2.1-17 [Am-69] This figure is revised to reflect the revised containment analysis using the LOCTIC code. (See discussion under evaluation no. 6.2-150-6.2.1) (88-114)		Revision
6.2.1	2	6.2-202-6.2.1	F6.2.1-20 [Am-69] This figure was revised to reflect the revised containment analysis using the LOCTIC code. (See discussion under evaluation no. 6.2-150-6.2.1) (88-114)		Revision
6.2.1	3	6.2-158-6.2.1	6.2-6 [Am-69] Figure 6.2.1-18, Containment External Wall Temperature, and Figure 6.2.1-19, Containment Internal Concrete Temperature, have been deleted. These parameters are included as part of the containment heat sink analysis, however, the figures were not sufficiently useful to update. (88-114)		Revision

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SER	Group	Evaluation Number	FSAR Amended Description (Page Numbering per Am-70)	Change Classification	
6.2.1	3	6.2-161-6.2.1	6.2-7 [Am-69] Dew point temperature is use. instead of relative humidity. (88-114)	Revision	
6.2.1	3	6.2-162-6.2.1	6.2-7 [Am-69] Service water temperature is added to Table 6.2.1-5. (88-114)	Addition	
6.2.1	3	6.2-165-6.2.1	6.2-8 [Am-69] The paragraph discussing mesh spacing for heat sinks is deleted. A discussion of the LOCTIC methodology for mesh spacing is presented in FSAR Section 6.2.1.1.3.11(See also evaluation no. 6.2-150-6.2.1). (88-114)	Revision	
6.2.1	3	6.2-168-6.2.1	6.2-9 [Am-69] Revises containment initial pressure from 14.7 psia to a more conservative 14.2 psia. (88-114)	Revision	
6.2.1	3	6.2-170-6.2.1	6.2-9 [Am-69] Deletes the statement regarding percent margin. The revised computed external differential pressure is still well below the maximum design differential. A statement as to percent margin is unnecessary. (88-114)	Revision	
6.2.1	3	6.2-171-6.2.1	6.2-8 [Am-69] Replaces the paragraph discussing the impact of Boron Injection Tank (BIT) removal on the previous containment MSLB analysis. The revised containment MSLB analysis considered the removal of the BIT. (88-114)	Revision	
6.2.1	3	6.2-175-6.2.1	6.2-43 [Am-69] The discussions of items 7, 8, 9, 10 and 11, Broken Loop Steam Generators - Equilibrium Stage, Broken Loop Steam Generators - Depressurization Stage, Intact Loop Steam generator- Equilibrium Stage, Intact Loop Steam Generator -Depressurization Phase, and Illustration of Method, have been deleted. These discussions have been modified and are discussed under new Section 6.2.1.1.3.11, p. 6.2-18 through -21. (See evaluation no. 6.2-172-6.2.1) (88-114)	Revision	
6.2.1	3	6.2-176-6.2.1	6.2-43 [Am-69] Provides reference to Tables 6.2.1-50 and 6.2.1-50A for additional design basis LOCA energy distributions. (88-114)	Addition	
6.2.1	3	6.2-179-6.2.1	6.2-51 [Am-69] Revises the volume of the Unisolated feedline from 260 to 571 cu. ft. Although it was not necessary to postulate a failure of the feedwater isolation valve, the new volume includes the fluid between the isolation valve and the feedwater control valve.	Revision	

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			Previously this volume was not included. This is a conservative assumption and still less than the volume of 800 cu. used in the analysis. (88-114)	
6.2.1	3	6.2-184-6.2.1	6.2-60 thru 6 52 [Am-69] Deletes refere. as associated with the CONTEMP code and replaces them with references related to the LOCTIC code, heat transfer information, and boron injection tank removal. Also adds new references 9 through 14 related to Safety Evaluation Reports issued to plants which used the LOCTIC code for containment analysis. (88-114)	Revision
6.2.1	3	6.2-186-6.2.1	6.2-74 [Am-69] Deletes reference to Figures 6.2.1-7 and 6.2.1-8 and replaces them with Tables 6.2.1-50 and 6.2.1-50A for integrated energy content of the containment. (88-114)	Revision
6.2.1	3	6.2-192-6.2.1	T6.2.1-7 [Am-69] This table is deleted. The mesh spacing for heat sinks is performed within the LOCTIC code. (This is consistent with evaluation number 6.2-165-6.2.1) (88-114)	Revision
6.2.1	3	6.2-196-6.2.1	F6.2.1-4 [Am-69] This figure has been deleted because it was not sufficiently useful to update. (See discussion under evaluation no. 6.2-156-6.2.1) (88-114)	Revision
6.2.1	3	6.2-197-6.2.1	F6.2.1-5 thru F6.2.1-8 [Am-69] These figures are deleted since they are duplicative of information contained in tables. (See discussion under evaluation no. 6.2-156-6.2.1) (88-114)	Revision
6.2.1	3	6.2-199-6.2.1	F6.2.1.16A [Am-69] This figure is deleted because it was not sufficiently useful to update. (See also evaluation no. 6.2-150-6.2.1) (88-114)	Revision
6.2.1	3	6.2-201-6.2.1	F6.2.1-18 and F6.2.1-19 [Am-69] These figures were deleted because they were not sufficiently useful to update. (See also the discussion under evaluation no. 6.2-158-6.2.1) (88-114)	Revision
6.2.1	4	6.2-151-6.2.1	6.2-3 [Am-69] Adds the words "minimum Containment Spray System (CSS) operation" to indicate that one out of two containment spray trains in operation is the minimum CSS operating condition. (88-114)	Clarification
6.2.1	4	6.2-152-6.2.1	6.2-4 [Am-69] Expands the discussion of the initial conditions of the ECCS and CSS operation for various break analyses. (88-114)	Clarification

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SER	Group	Evaluation Number	FSAR Amended Description (Page Numbering per Am-70)	Change Classification
6.2.1	4	6.2-154-6.2.1	6.2-4 [Am-69] Replaces previous Table 6.2.1-2 which considered LOCA and MSLS together, with two tables, a new Table 6.2.1-2 which considers only LOCA and a new Table 6.2.1-2A which considers only MSLS. (88-114) (Evaluate with number 6.2-150-6.2.1)	Editorial
6.2.1	4	6.2-157-6.2.1	6.2-5 [Am-69] Containment "vapor" is revised to read containment "atmosphere". (88-114)	Clarification
6.2.1	4	6.2-159-6.2.1	6.2-6 [Am-69] Adds description of conditions for the analysis of containment pressure temperature responses. (88-114)	Clarification
6.2.1	4	6.2-167-6.2.1	6.2-8 [Am-69] Revises figure number for the LOCA heat transfer coefficient as a function of time from Figure 6.2.1-9 to 6.2.1-13. (88-114)	Editorial
6.2.1	4	6.2-177-6.2.1	6.2-44 [Am-69] Adds "RCS hot leg" to clarify the location of the temperature referred to. (88-114)	Clarification
6.2.1	4	6.2-178-6.2.1	6.2-45 [Am-69] Adds reference for the LOCTIC code. (88-114)	Addition
6.2.1	4	6.2-182-6.2.1	6.2-54 [Am-69] The words "among the steam breaks analyzed" are deleted. These words imply that there may be an unanalyzed break which is more limiting. (88-114)	Clarification
6.2.1	4	6.2-183-6.2.1	6.2-54 [Am-69] Revises the reference to WCAP-8822 for the mass and energy release data. (88-114)	Editorial

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SER	Group	Evaluation Number	FSAR Amended Description (Page Numbering per Am-70)	Change Classification
6.2.2	3	6.2-187-6.2.2	6.2-75 [Am-69] The overall thermal efficiency of spray droplets in cooling the containment is revised from 1.0 to 0.99. This is a more conservative assumption than was used previously. (88-114)	Revision
6.2.2	4	6.2-185-6.2.2	6.2-73 [Am-69] Deletes the statement which says that no credit is taken for cooling by the ECCS. The cooling effects of the ECCS (i.e., RHR heat exchangers) are taken in account during the recirculation phase. It is unnecessary to state that credit is not taken during the injection phase. (88-114)	Correction

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SER	Group	Evaluation Number	FSAR Amended Description (Page Numbering per Am-70)	Change Classification
5.2.2	4	5.2-188-6.2.3-E	6.2-93 [Am-7J] Adds the valve arrangements 1, 6 and 29 for containment penetrations that have been provided with thermal relief valves as shown in FSAR Fig. 6.2.4-1 sheets 1, 2 and 8. These configurations were inadvertently not included in Amendment 66. (See evaluation number 6.2-29-6.2.3-E, Att. 2 of TXX-88467, page 161). (88-184)	Correction

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SER	Group	Evaluation Number	FSAR Amended Description (Page Numbering per Am-70)	Change Classification
6.3.3	3	6.5-030-6.3.3	6.5-29 [Am-70] Corrects the method used to assure the design flowrates of the chemical eductors and spray nozzles. Note: These devices are "performance tested" not "calibrated". (88-356)	Correction
6.3.3	4	6.2-180-6.3.3	6.2-52 [Am-69] Adds "5 sec" which was previously omitted. (88-114)	Clarification

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SER	Group	Evaluation Number	FSAR Amended Description (Page Numbering per Aa-70)	Change Classification
6.4	4	6.4-030-6.4	6.4-8 [Am-69] Adds the word "unprotected" to clarify that during accident conditions general area radiation level which would result in a maximum exposure to 75 rem of beta to unprotected skin is acceptable provided that special protective clothing and eye protection is worn.	Clarification

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SER	Group	Evaluation Number	FSAR Amended Description (Page Numbering per Am-70)	Change Classification	
7.1.2	2	7.1-13-7.1.2	T7.1-2.2 thru T7.1-2.7 [Am-70] Discusses applicability of Regulatory Guides 1.45, 1.89, 1.100 and 1.105 and IEEE Stds. 33, 344, and 384 to the "Process and Effluent Radiation Monitors" of Table 7.1- 2.6 due to design development that has resulted in upgrading some monitors and adding others that are Category I. As a result, safety-related criteria are being identified as being applicable. (88-146)	Addition	
7.1.2	3	7.1-18-7.1.2	T7.1-1 and T7.1-2.2 thru T7.1-2.7 [Am-70] Adds GDC-30, 63 and 64 to the listing of applicable criteria. These GDC's were discussed in the specific sections of the FSAR, but were not reflected in this table. This change brings the table into agreement with other sections of the FSAR. (88-146)	Addition	
7.1.2	3	7.1-20-7.1.2	T7.1-2.3 [Am-70] Adds GDC-44 and 46 to "Control Room Conditioning" requirements because the GDC applies to systems that transfer heat from safety systems to an ultimate heat sink and Control Room Air Conditioning system performs that function. (88-146)	Addition	
7.1.2	3	7.1-21-7.1.2	T7.1-2.3 [Am-70] Adds GDC-40 to "Component Cooling Water" and "ESF Ventilation" because the GDC applies to associated cooling systems which include CCW and ESF Ventilation (room coolers). (88-146)	Addition	
7.1.2	3	7.1-22-7.1.2	T7.1-2.3 [Am-70] Adds GDC-46 to "ESF Ventilation" and "Service Water Intake Structure HVAC" because the GDC applies to these systems. (88-146)	Addition	
7.1.2	3	7.1-23-7.1.2	T7.1-2.6 [Am-70] Adds GDC-30 for "Reactor Coolant Pressure Boundary (RCPB) Leak Detection" and "Interlocks RCS Pressure Control" to cover the GDC applicable to instrumentation and controls for Reactor Coolant pressure boundary functions. (88-146)	Addition	
7.1.2	3	7.1-24-7.1.2	T7.1-2.6 [Am-70] Adds GDC-63 for "Process and EFF Radiation Monitors" and GDC-64 for "Accident Monitors" and "Process and EFF Radiation Monitors" to cover the GDCs applicable to these instrumentation and controls. (88-146)	Addition	
7.1.2	3	7.1-25-7.1.2	T7.1-2.6 [Am-70] Adds GDC-4 and 5 to "Process and EFF Radiation Monitors" because of the design change that upgrades the control room intake radiation monitor from non-Class 1E to Class 1E and redundant. (88-146)	Addition	
7.1.2	3	7.1-26-7.1.2	T7.1-2.6 [Am-70] Adds GDC-34 to "RHR Isolation Valves" to cover design provisions to assure the RHR system remains functional. (88-146)	Addition	

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SER	Group	Evaluation Number	FSAR Amended Description (Page Numbering per Am-70)	Change Classification
7.1.2	3	7.1-27-7.1.2	T7.1-2.6 [Am-70] Adds GDC-35 and 37 to "Accumulator MOVs" since these are integral ECCS components including their instrumentation and controls. (88-146)	Addition
7.1.2	3	7.1-28-7.1.2	T7.1-2.3 [Am-70] Adds the "UPS Ventilation" to ESF Support and Hot Standby Support to reflect the addition of the system to the design in earlier FSAR Amendments. (88-146)	Addition
7.1.2	3	7.1-29-7.1.2	T7.1-2.4 [Am-70] Adds the "ESF Ventilation" to Hot Standby support. This appears to have been an oversight in the original table. (88-146)	Correction
7.1.2	3	7.1-30-7.1.2	T7.1-2.5 [Am-70] Deletes the ESF status monitoring column which has been incorporated into accident monitoring. (88-146)	Correction
7.1.2	4	7.1-19-7.1.2	T7.1-2.2 thru T7.1-2.7 [Am-70] Table 7.1-2 was reformatted and reissued as Tables 7.1-2.2 through 7.1-2.7 to improve readability. (88-146)	Editorial
7.1.2	4	7.1-31-7.1.2	T7.1-2.5 [Am-70] Adds a note to "SSII" to reference the section where it is discussed in more detail. (88-146)	Clarification
7.1.2	4	7.1-32-7.1.2	T7.1-2.5 [Am-70] Deletes the "Post" from "Post Accident Monitors" to reflect post-TMI changes. (88-146)	Clarification

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SER	Group	Evaluation Number	FSAR Amended Description (Page Numbering per Am-70)	Change Classification	
7.2	2	4-014-7.2	4.3-10 [Am-70] Reflects that the ATWS rule, 10 CFR 50.62, provides the design requirements for the CPSES AMSAC equipment. (88-309)	Update	
7.2	2	7.7-1-7.2	T7.7-1 [Am-70] Generic Letter 85-06 requires all Westinghouse near term operating licensees to establish quality assurance requirements for the non-safety related ATWS equipment which will meet 10CFR50.62 paragraph (c)(1) requirements. The addition of the AMSAC C-20 interlock to this Table reflects this design change. (88-277)	Addition	
7.2	2	7.8-1-7.2	7.8-1 thru 7.8-14 [Am-70] 10CFR20.62 (ATWS rule) entitled "Requirements for reduction of Risk from Anticipated Transients Without Scram (ATWS) Events for Light-Water-Cooled Nuclear Power Plants," requires all PWR facilities to have equipment (ATWS Mitigation System Actuation Circuitry (AMSAC)) that is diverse/independent from the existing reactor trip system that will automatically initiate a turbine trip and the auxiliary feedwater system following an anticipated operational occurrence without a reactor trip. In addition, Generic Letter 85-06 was issued to provide QA guidance for the non-safety related ATWS equipment. This Section of the FSAR is being added to describe CPSES's compliance with the ATWS rule and the Generic Letter. (88-277)	Addition	
7.2	2	7.8-2-7.2	F7.8-1 [Am-70] Adds the AMSAC Actuation Logic System diagram to indicate the system logic from input to output. (88-277)	Addition	
7.2	2	14.1-46-7.2	423-45 [Am-70] The Q423.20 and R423.20 sections have been updated to cross reference the CPSES's summary test program for ATWS (Sections 7.8 and 14.1). Prior to this update, the effects of ATWS were not described in the FSAR. (88-309)	Update	
7.2	3	17A-101-7.2	T17A-1 (Shts. 38 and 47) [Am-70] Generic Letter 85-06 requires all Westinghouse Near Term Operating Licensees to establish quality assurance requirements for the non-safety related ATWS equipment which will meet 10 CFR 50.62 paragraph (c)(1) requirements. The addition of the AMSAC equipment to this table satisfies the above requirements. (88-270)	Addition	

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7.5.2	2	7.5-92-7.5.2	TO32.110-1 [Am-69](Sht. 3) Changes "WR" to "NR". (88-144)	Correction	
7.5.2	2	7.5-103-7.5.2	TO32.110-4 [Am-69](Sht. 1) At CPSES, we do not display RCS Soluble Boron Concentration parameters in the control room. Instead portable instruments are used to obtain this information. (88-144)	Correction	
7.5.2	2	7.5-104-7.5.2	TO32.110-4 [Am-69](Sht. 3) For consistency throughout this table, delete the phrase "of usable volume." (88-144)	Correction	
7.5.2	3	7.5-76-7.5.2	7.5-13 [Am-69] All types D and E variables are not included under Category 2 variables. Containment Radiation Level (High Range) is an E1 variable which is the exception. (88-144)	Correction	
7.5.2	3	7.5-77-7.5.2	7.5-16 [Am-69] Adds a statement to address the information processing and display interface criteria for Category 3 variables. Like Category 2, as minimum, Category 3 instrumentation at CPSES is processed for display on demand. This is consistent with existing Table 7.5-1. (88-144)	Correction	
7.5.2	3	7.5-79-7.5.2	7.5-21 [Am-69] Safety Chilled Water was unintentionally omitted from the Type D variables list and is now being added. (88-144)	Correction	
7.5.2	3	7.5-82-7.5.2	T7.5-7 [Am-69](Sht. 1) Adds the new tag number, PT-437, for the third pressure transmitter for the RCS Pressure (WR). This third channel was added to meet the Reg. Guide 1.97, Rev. 2 requirements for diversity for Category 1 variables. (88-144)	Addition	
7.5.2	3	7.5-89-7.5.2	T7.5-7 [Am-69](Sht. 20) The accident monitoring variable "Station Service Water Pump Status" was unintentionally omitted from a previous amendment and is now being added. (88-144)	Addition	
7.5.2	3	7.5-90-7.5.2	TO32.110-1 [Am-69](Sht. 2) Adds the new tag number, PT-437, for the third pressure transmitter for the RCS Pressure (WR). This third channel was added to meet the Reg. Guide 1.97, Rev. 2 requirements for diversity for Category 1 variables. (88-144)	Addition	
7.5.2	3	7.5-93-7.5.2	TO32.110-1 [Am-69](Sht. 4) Under Accident Sampling, the upper range for "Dissolved Oxygen" and the measured parameter "Gamma Spectrum" were unintentionally	Correction	

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			omitted from the text in a previous FSAR amendment and are now being added. (88-144)	
7.5.2	3	7.5-105-7.5.2	T032.110-4 [Am-69](Sht. 4) Reflects the correct temperature range for the Containment Atmospheric Temperature variable. (88-144)	Correction
7.5.2	4	7.5-75-7.5.2	7.5-5 [Am-69] Clarifies that the key variables are the required information for which backup variables monitor. (88-144)	Clarification
7.5.2	4	7.5-78-7.5.2	7.5-18 [Am-69] Clarifies that the monitored variable for Auxiliary Feedwater Flow is to each steam generator. (88-144)	Clarification
7.5.2	4	7.5-80-7.5.2	7.5-23 [Am-69] The word "perform" is more technically correct than the word "provide" for this application. In general, we speak of equipment performing its intended function as opposed to equipment providing its intended functions. (88-144)	Clarification
7.5.2	4	7.5-81-7.5.2	T7.5-2, T7.5-3 [Am-69](Sht 2) Clarifies that the monitored variable for Auxiliary Feedwater Flow is to each steam generator. (88-144)	Clarification
7.5.2	4	7.5-83-7.5.2	T7.5-7 [Am-69](Sht. 8&9) Reflects the correct tag numbers for the ECCS valves. (88-144)	Correction
7.5.2	4	7.5-84-7.5.2	T7.5-7 [Am-69](Sht. 14) Reflects the correct tag numbers for the UPS Ventilation monitors. (88-144)	Correction
7.5.2	4	7.5-85-7.5.2	T7.5-7 [Am-69](Sht. 14) Reflects the correct bus identification for the 110-130 VAC busses. (88-144)	Correction
7.5.2	4	7.5-86-7.5.2	T7.5-7 [Am-69](Sht. 16) Reflects the correct tag numbers for the Wind Speed monitoring instrumentation. (88-144)	Correction
7.5.2	4	7.5-87-7.5.2	T7.5-7 [Am-69](Sht. 16) Reflects the correct tag numbers for the Wind Direction monitoring instrumentation. (88-144)	Correction
7.5.2	4	7.5-88-7.5.2	T7.5-7 [Am-69](Sht. 17) Reflects the correct tag numbers for the High Level Radioactive Liquid Tank Level instrumentation. (88-144)	Correction
7.5.2	4	7.5-91-7.5.2	T032.110-1 [Am-69](Sht. 2) Changes the sensor location to reference the correct figure. (88-144)	Correction

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			References Figure 7.1-3 as the correct figure that shows the sensor location for RCS Subcooling.		
7.5.2	4	7.5-94-7.5.2	TO32.110-1 [Am-69](Sht. 5) Changes "ml" to "mR". (89-144)		Editorial
7.5.2	4	7.5-95-7.5.2	TO32.110-1 [Am-69](Sht. 13) Reflects the correct tag numbers for the High Level Radioactive Liquid Tank Level instrumentation. (89-144)		Correction
7.5.2	4	7.5-96-7.5.2	TO32.110-1 [Am-69](Sht. 14) Reflects the correct bus identification for the 110- 130 VAC busses. (88-144)		Correction
7.5.2	4	7.5-97-7.5.2	TO32.110-1 [Am-69](Sht. 17) Reflects the correct tag numbers for the Wind Speed monitoring instrumentation. (88-144)		Correction
7.5.2	4	7.5-98-7.5.2	TO32.110-1 [Am-69](Sht. 17) Reflects the correct tag numbers for the Wind Direction monitoring instrumentation. (88-144)		Correction
7.5.2	4	7.5-99-7.5.2	TO32.110-1 [Am-69](Sht. 18) Under Accident Samplings, the upper range for "Dissolved Oxygen" and the measured parameter "Gamma Spectrum" were unintentionally omitted from the text in a previous FSAR amendment and are now being added. (88-144)		Correction
7.5.2	4	7.5-100-7.5.2	TO32.110-2 [Am-69] Reflects the correct tag numbers for the ECCS valves. (88-144)		Correction
7.5.2	4	7.5-101-7.5.2	TO32.110-2 [Am-69](Sht. 6) Reflects the correct tag numbers for the Main Feedwater Isolation Valve Status. (88-144)		Correction
7.5.2	4	7.5-102-7.5.2	TO32.110-2 [Am-69](Sht. 11) Reflects the correct tag numbers for the UPS Ventilation monitors. (88-144)		Correction

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SER	Group	Evaluation Number	FSAR Amended Description (Page Numbering per Am-70)	Change Classification
8.3.1	3	8.3-131-8.3.1	8.3-13 [Am-69] Clarifies what is meant as a "bus fault" and reflects design change to allow the diesel generator circuit breaker to close automatically in the event of a single line to ground fault coincident with a safety injection signal. The ground fault current is minimal and will have no adverse effect on the continued operation of the diesel generator. The design change increases the availability of the diesel generator during the design accident. (88-160)	Revision
8.3.1	3	8.3-135-8.3.1	8.3-21 [Am-69] Corrects description of diesel generator "non-DBA" trips to reflect the design basis documentation and as-built plant. Corrections to items "c" thru "m" involve updated nomenclature. The Engine/Turbo high vibration trip is split into two separate items. Three trips are added: Left or right bank turbo low oil pressure, generator overexcitation, and generator neutral ground overcurrent. (88-161)	Correction
8.3.1	4	8.3-132-8.3.1	T8.3-1A [Am-70](Sht. 3) Corrects description of isolation transformers to "TXEC 3 & 4", since they are not solely used for the Technical Support Center and the transformer equipment number is more specific. (88-294)	Correction

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SER	Group	Evaluation Number	FSAR Amended Description (Page Numbering per Am-70)	Change Classification
8.4.5	2	8.3-13-8.4.5-E	8.3-51 [Am-70] Adds current transformers to the list of acceptable isolation devices for isolation between Class 1E primary circuits and non-Class 1E secondary circuits based on testing. (88-357)	Revision
8.4.5	3	8.3-134-8.4.5-E	8.3-95 [Am-70] Adds reference to the test report that supports the use of current transformers as isolation devices. (88-357)	Addition

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SER	Group	Evaluation Number	FSAR Amended Description (Page Numbering per Am-70)	Change Classification
9.2.1	2	9.2-085-9.2.1	9.2-2 [Am-69] Revises the Station Service Water System outlet temperature to 133 degrees F instead of 120 degrees F based on the recent system calculations. (88-153)	Revision
9.2.1	4	9.2-086-9.2.1	9.2-4 [Am-69] Clarifies the existing sentence to say that only component cooling water heat exchangers uses a cleanliness factor of 80% and other heat exchangers served by Station Service Water allow some fouling. (88-154)	Clarification
9.2.1	4	9.2-087-9.2.1	9.2-4 [Am-69] Clarifies that the reservoir water is corrosive based on stability and saturation index (which includes scale-forming tendencies at low index). (88-118)	Clarification
9.2.1	4	9.2-088-9.2.1	9.2-5 [Am-69] Clarifies the system operation under normal unit shutdown mode that two trains are used for normal cooldown of each unit. (88-153)	Clarification
9.2.1	4	9.2-089-9.2.1	9.2-6 [Am-69] Revises to include the recirculation phase operation of Station Service Water and to be consistent with the third paragraph of Section 9.2.1.2.4. (88-118)	Correction

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9.2.2 3 9.2-090-5.2.2

9.2-15 and 9.2-17 [Am-69]
Deletes the "reactor coolant post accident sampling system sample cooler" from the non-safeguard loops of the CCW system and adds it to the safeguard loops of train "A" for the CCW system. This was an inadvertent mistake to the list. (88-243)

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SER	Group	Evaluation Number	FSAR Amended Description (Page Numbering per Am-70)	Change Classification
9.3.1	2	9.3-037-9.3.1-U	9.3-3 thru 9.3-13 [Am-69] The Instrument Air System (IAS) design has been changed to incorporate rotary air compressors as an additional system capacity is warranted. This change in design includes the rotary air compressors and their various components. Also, the component description, system operation, instrumentation and power supply sections have been changed to reflect this system design change. (88-128) SER Impact: As a result of this change, the SER Section 9.3.1, pages 9-15 and 9-16, paragraphs 1 and 2, need to be revised to reflect the current design of Instrument Air System which adds additional compressor capacity to the system.	Revision
9.3.1	3	9.3-040-9.3.1	9.3-8 [Am-69] Deletes the "Pressurizer PORV's" as these PORV's are supplied by nitrogen accumulators. (88-128)	Revision
9.3.1	3	9.3-041-9.3.1-U	T9.3-1 [Am-69] Adds the Rotary Air Compressor packages and associated equipment data and revises the existing data in the table for Reciprocating Air Compressors and associated equipment. (See Evaluation no. 9.3-037-9.3.1-U) (89-128)	Revision
9.3.1	3	9.3-042-9.3.1	T9.3-3 [Am-69] Deletes Pressurizer PORV from the table as it is supplied by nitrogen instead of Air. (See also 9.3-040-9.3.1). (88-128)	Revision
9.3.1	4	9.3-036-9.3.1	9.3-2 [Am-69] Corrects a typographical error. Changes "31.3" to ANSI B31.1. (88-128)	Editorial
9.3.1	4	9.3-038-9.3.1	9.3-6 [Am-69] Changes ft ³ /min to Actual ft ³ /min (ACFM). (88-128)	Clarification
9.3.1	4	9.3-039-9.3.1	9.3-6 [Am-69] Corrects the typographical error. Changes "11.3" to ANSI B31.1 and deletes Petroleum Refinery Piping. (88-128)	Editorial

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SER Group Evaluation Number FSAR Amended Description (Page Numbering per Am-70) Change Classification

9.4.1	4	9.4-110-9.4.1	9.4-9 [Am-70] Clarifies that the control room humidity is maintained at 50% during normal modes of operation (see Table 9.4-12) and below 50% during emergency conditions, based on Revised Calculations. (88-312)	Clarification
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SER	Group	Evaluation Number	FSAR Amended Description (Page Numbering per Am-70)	Change Classification	
9.4.5	4	9.4-112-9.4.5	F9.4-15 (Am-70) Adds the drain lines for the UPS Air Conditioning System cooling coil to correct drafting error. (89-06c)	Editorial	

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SER	Group	Evaluation Number	FSAR Amended Description (Page Numbering per Am. (O))	Change Classification
9.4.6	3	9.4-111-9.4.6	F9.4-12 [Am-70] Revises the figure to reflect the following changes as per as-built: <ol style="list-style-type: none">1. Adds thermal relief valves on safety-related chilled water recirculation pump discharge lines for the overpressure protection of the system. (88-068)2. Misc. technical changes such as relocation of lines, valves and pipe breaks, and addition of flanges and vent valves. (88-056)	Revision

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SER	Group	Evaluation Number	FSAR Amended Description (Page Numbering per Am-70)	Change Classification
9.5.1	3	14.2-48-9.5.1	T14.2-2 [Am-70](Sht. 8 and 8A) Provides description of test methods for new fire water supply system. References Fire Protection Report instead of Technical Specifications for acceptance criteria. Organizational title update. (88-295)	Correction

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SER	Group	Evaluation Number	FSAR Amended Description (Page Numbering per Am-70)	Change Classification
9.5.3	3	9.5-250-9.5.3-0	9.5-138 [Am-69] Deletes AC Essential Lighting System from verification during the periodic diesel loading test. The AC Essential Lighting System has been reclassified as non-Class 1E. As already stated in FSAR Section 9.5.3.2.4, "The AC essential lighting is used on a day-to-day basis to provide apart of the ordinary operational lighting. Therefore, periodic tests are not required." During diesel generator sequence loading, AC essential lighting panels are a base load dependent on feeder breaker alignment prior to diesel generator sequence loading. Breaker alignment actually verifies onsite standby AC power being available to the AC Essential Lighting System, not the periodic diesel loading test. (88-167)	Revision

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9.5.4	2	9.5-251-9.5.4-V	9.5-139 [Am-70] Deletes "30% diesel generator set efficiency" and replaces it with "Fuel Consumption based on test data". No basis can be identified for the assumption used for 30% diesel generator set efficiency. Actual basis is the test data, which is increased by 3450 gallons to permit periodic testing of diesel generator. (88-311)	Revision	
9.5.4	3	9.5-252-9.5.4-V	9.5-142 [Am-70] Changes "15% add for fuel-oil storage tank capacity" to 3450 gallon margin based on test data. This permits periodic testing of the diesel generator. (88-311)	Revision	
9.5.4	3	9.5-253-9.5.4	9.5-143 [Am-70] Add tech spec requirements for diesel generator fuel oil in addition to the requirements of ASTM D 975. (88-311)	Revision	
9.5.4	3	9.5-254-9.5.4-V	9.5-144 [Am-70] Changes the reference from "IEEE 308-1971" to "NRC R.G. 1.137" for the fuel oil storage capacity of seven days of operation of the diesel generator at rated load. (88-311)	Revision	
9.5.4	3	9.5-255-9.5.4-V	9.5-144 [Am-70] Changes the "15% margin" to "3450 gallons margin" to allow for periodic testing of the diesel generator. (See also evaluation no. 9.5-252-9.5.4-V). (88-311)	Revision	
9.5.4	3	9.5-256-9.5.4-V	T9.5-11 [Am-70] Changes the "15% margin" to "3450 gallons margin" to allow for periodic testing of the diesel generator. (See also evaluation no. 9.5-252-9.5.4-V) (88-311)	Revision	

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SER	Group	Evaluation Number	FSAR Amended Description (Page Numbering per Am-70)	Change Classification
10.3.1	2	10.3-032-10.3.1-N	10.3-3 [Am-70] MSIV actuators are designed to ASME B&PV Code Section VIII in lieu of ASME B&PV Code Section III as per ASME Code Section III subarticles NA-1120 & NA-1130 (88-055)	Revision
10.3.1	3	10.3-035-10.3.1-N	T10.3-4 [Am-70] Revises the MSIV actuator design to ASME B&PV Code, Section VIII, in lieu of ASME III as per ASME III subarticles NA-1120 and NA-1130. (See also evaluation no. 10.3-032-10.3.1-N). (88-055) Note: SER Section 10.3.1, page 10-4, para 2 states that, "MSIV actuators are designed to Quality Group B". The MSIV actuators are designed to ASME B&PV Code Section VIII.	Revision
10.3.1	4	10.3-033-10.3.1	10.3-6 [Am-69] Clarifies the capability to operate the Power-related relief valves during safe shutdown earthquake coincident with loss of offsite power. (88-111)	Clarification
10.3.1	4	10.3-034-10.3.1-A	T10.3-3 [Am-69] Corrected the lower limit for natural cooldown from 125 psia to 100 psia. This change was inadvertently left out in Amendment 66. (See evaluation no. 10.3-006-10.3.1-A, Att. 2 of TXK-88467, page 345) (88-111)	Correction

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SER	Group	Evaluation Number	FSAR Amended Description (Page Numbering per Am-70)			
10.4.9	2	10.4-091-10.4.9	10.4-96 [Am-69] Revises the sentence to indicate that, "the low-discharge pressure alarms are only provided for each motor driven auxiliary feedwater pumps," based on existing design. (88-232)			Revision
10.4.9	4	10.4-090-10.4.9	10.4-88 [Am-69] A change to clarify that the auxiliary feedwater pumps auto starts are based on the AFW system design basis. (88-247)			Clarification

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SER	Group	Evaluation Number	FSAR Amended Description (Page Numbering per Am-70)	Change Classification
13.6	3	1AB-16-13.6	1A(B)-7 [Am-69] CPSES complies with the criteria of Reg. Guide 1.17 by implementing the criteria of ANSI/ANS 3.3-1982 which supersedes ANSI N18.17-1973 (88-156)	Revision

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SER	Group	Evaluation Number	FSAR Amended Description (Page Numbering per Am-70)	Chapter : 14	Page: 1	Change Classification
14	3	14.2-47-14	TI4.2-2 [Am-70] (Shrs. 2 and 53) Adds AMSAC to this table to indicate the preoperational testing requirements for the system. (88-309)			Addition

TU Electric		F. JR Change Review Information		Chapter : 15	Page: 1
SER	Group	Evaluation Number	FSAR Amended Description (Page Numbering per Am-70)		Change Classification
15.3.8	4	15.2-030-15.3.3.6	15.2-29 thru 15.2-31 [Am-69] Part of Section 15.2.8.2 and all of Sections 15.2.8.3 and 15.2.8.4 were inadvertently deleted in Amendment 66. (CS-275)		Correction

APC 100-101 to 1
100-101 to 1
100-101 to 1

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Evaluation
Number

15.8-001-15.3.9 Update
15.8.1 and 15.8-2 (Am-70)
Provides additional information and references concerning the
ATWS rule and Westinghouse design documents. (88-277)

SEP	Group	Evaluation Number	FSAR Amended Description (Page Numbering per Am-70)	Change Classification
15.4.4	2	15.6-050-15.4.4-M	15.6-6 thru 15.6-18 [Am-70] Provides accident description, analysis methods, and analysis results for the revised design basis steam generator tube rupture analysis. (See also evaluation no. 15.0-005-15.4.4-M) REF: RXE-88-101. (88-149)	Revision
15.4.4	2	15.6-052-15.4.4-M	T15.6-1 [Am-70] (Sht. 1) Adds sequence of event for revised design for the basis steam generator tube rupture analysis. (See also evaluation number: 15.6-050-15.4.4-M) (88-149)	Addition
15.4.4	2	15.6-053-15.4.4-M	T15.6-2 [Am-70] Modifies to reflect design basis for the steam generator tube rupture analysis. Also deletes the "realistic case". (88-149)	Revision
15.4.4	3	15.0-003-15.4.4-N	15.0-24 and 15.0-25 [Am-70] Adds description of RETRAN02, the computer code used for the SGTR analysis. Ref: RXE-88-101 (88-149)	Addition
15.4.4	3	15.0-005-15.4.4-M	T15.0-2 [Am-70] (Sht 5) Updates to reflect revised design basis for the steam generator tube rupture analysis. (88-149)	Update
15.4.4	3	15.0-007-15.4.4-M	T15.0-4 [Am-70] (Sht. 1) Adds Note a and limiting trip point for low pressurizer pressure to reflect revised design basis for the steam generator tube rupture analysis. (88-149)	Addition
15.4.4	3	15.0-008-15.4.4-M	T15.0-6 [Am-70] (Sht 5) Modifies to reflect revised design basis for the steam generator tube rupture analysis. (88-149)	Revision
15.4.4	3	15.0-009-15.4.4-M	F15.0-24 [Am-70] Modifies to reflect revised design basis for the steam generator tube rupture analysis. (88-149)	Revision
15.4.4	3	15.6-055-15.4.4-M	F15.6-3 thru F15.6-3C [Am-70] Modifies to reflect revised design basis for the steam generator tube rupture analysis. (See evaluation no. 15.6-050-15.4.4-M). (88-149)	Revision
15.4.4	4	15.0-002-15.4.4-M	15.0-10 [Am-70] Modifies to be consistent with SGTR assumptions. (88-149)	Editorial
15.4.4	4	15.0-004-15.4.4-N	15.0-27 [Am-70] Adds reference for RETRAN02, the computer code used for the SGTR analysis. (88-149)	Addition

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SER	Group	Evaluation Number	FSAR Amended Description (Page Numbering per Am-70)			
15.4.4	4	15.0-006-15.4.4-M	T15.6-3 [Am-70] Adds Note b to reflect revised design basis for the steam generator tube rupture analysis. (88-149)			Addition
15.4.4	4	15.6-051-15.4.4-M	15.6-46 [Am-70] Adds reference for SCGR analysis, RME-68-101. (89-149)			Addition
15.4.4	4	15.6-054-15.4.4-M	T15.6-3 [Am-70] Modifies to reflect revised design basis for the steam generator tube rupture analysis. (88-149)			1, data

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SER	Group	Evaluation Number	FSAR Amended Description (Page Numbering per Am-70)	Change Classification
17.2	3	1AB-38-17.2	1A(B)-16 [AM-70] CP&ES' position on Regulatory Guide 1.39 is updated to provide a site wide criteria for Housekeeping control for design, construction and operational phase activities. Previously our commitment applied to operational phase activities only. (38-290)	Revision

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SER	Group	Evaluation Number	FSAR Amended Description (Page Numbering per Am-70)	Change Classification
17.3	2	17.2-040-17.3	17.2-30 [Am-69] Change provides a calibration program flexibility by allowing the use of an alternate accuracy criteria for the 4:1 accuracy ratio. This criteria will be used when the 4:1 accuracy ratio is not reasonably achievable. During such times, documentation is required to ensure that the assumptions used in the setpoint methodologies for the calibration error are not violated, or that new setpoints are established. This documentation will ensure that the accepted safety related margins are not reduced. (87-237)	Revision
17.3	4	17.2-041-17.3	17.2-34 [Am-69] Change the wording to more clearly address that replacement of items during performance of normal maintenance activities is accomplished by scrapping the old item and replacing with an acceptable item. Nonconforming items are marked and segregated, when required, in accordance with station procedures. Changes the wording from "Station procedures required marking and segregation of nonconforming items and also require ..." to "Marking and segregation of nonconforming items, when required, are addressed in station procedures. In addition, station procedures require ..." (87-463)	Clarification

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SER	Group	Evaluation Number	FSAR Amended Description (Page Numbering per Am-70)	Change Classification
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22.2	1	TMI-044-22.2
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I.C.9 [Am-70]

Addition

Allows the independent verification of safety related components, being removed from and restored to service, to be completed by a licensed operator or an auxiliary operator qualified in that specific area. This change permits better utilization of available manpower while maintaining assurance of proper system status afforded by an independent verification. Previously the FSAR had not identified who should perform the independent verification but plant procedures and SSER-1 had identified licensed operators. (88-169)