



General Electric Company
175 Curtner Avenue, San Jose, CA 95125

February 25, 1993

Docket No. 52-004
MFN No. 031-93

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

Attention: J.N. Wilson, Acting Director Standardization Project Directorate

Subject: **Supplement to the Application for Design Certification of the Simplified Boiling Water Reactor (SBWR), Non-proprietary Information**

- Reference: 1) Application for Design Certification of the Simplified Boiling Water Reactor (SBWR), P.W. Marriott to R.C. Pierson, August 27, 1992, Project No. 681, MFN No. 161-92.
- 2) Results of Acceptance Review for GE Nuclear Energy's (GE's) Application for Final Design Approval (FDA) and Design Certification (DC) of the Simplified Boiling Water Reactor (SBWR) Design, D.M. Crutchfield to P.W. Marriott, December 10, 1992, Docket No. 52-004.
- 3) Application for Design Certification of the Simplified Boiling Water Reactor (SBWR), R.C. Mitchell to D.M. Crutchfield, December 18, 1992, Docket No. 52-004, MFN No. 205-92.

Dear Mr. Wilson:

Please find the attached fifty-two copies of additional information which is part of the non-proprietary portion of the SBWR Standard Safety Analysis Report (SSAR), 25A5113 Rev. A. Also included in this submittal is the SBWR Tier 1 Design Certification Document, 25A5354, Rev. A. The proprietary portion of the SSAR (17 x 22 drawings) is being sent under separate cover.

GE notified NRC in Reference 3 that this submittal completes GE's application for Design Certification (Reference 1) and includes all information requested by NRC as listed in Reference 2.

Sincerely,

P.W. Marriott, Manager
Regulatory and Analysis Services
MC-444, (408)925-6948

*Prop Drawings (17x22)
Processed Under
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Info of SBWR*

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**Instructions For Adding the February 28, 1993 SBWR SSAR Supplement
to the Previous Submittal (August 1992)**

<i>Box Label</i>	<i>Contents</i>	<i>Instructions</i>	<i>Approx. # Sheets</i>
Box 1 of 3 17 x 22 Binder Proprietary Drawings	New 17 x 22 Binder and proprietary drawings	New 17 x 22 Binder and proprietary drawings	265
Box 2 of 3 17 x 22 Drawing Inserts for Existing Binders Proprietary and Non-Proprietary	1 Paper-wrapped (17 x 22) set of proprietary drawings	Remove and discard all previous drawings in 17 x 22 binder labeled GE Proprietary Info. and replace with paper-wrapped packet	265
	1 Paper-wrapped (17 x 22) set of non-proprietary drawings	Insert or replace into existing (17 x 22) binder (Vol. 15) at the appropriate locations in numerical order. If figure number exists, replace with new figure.	109
Box 3 of 3 INSTRUCTIONS FOR ALL BOXES 2 Binders (8.5 x 11) SSAR 1 Binder (8.5 x 11) Tier 1 Document SSAR Inserts	3 New A size Binders titled: 1) Volume 3, Supplement containing Appendix 3E 2) Volume 7, Supplement containing Appendices 9A and 9B 3) Tier 1 Document - New Part of the Design Certification Application Multiple Shrink-wrapped packages - See subsequent sheets for a listing		300 250 300 1500

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Ltr NO MFN 051-93

Replacement Sections will have underline to annotate text additions, and ~~strikethrough~~ to annotate text deletions.

Section	Title	Replace Section	New Section	New Binder	New Tab
Chapter 1	Table of Contents	✓			
1.7	Engineering Drawings	✓			
1.8	Summary of SBWR Standard Plant COL Licensing Information		✓		
1.9	Conformance with SRP & Applicability of Codes & Standards		✓		
App. 1A	Response to TMI-Related Matters		✓		
App. 1B	Failure Modes and Effects Analysis		✓		
App. 1C	SBWR Compliance with EPRI URD		✓		
Chapter 3	Table of Contents	✓			
3.9	Mechanical Systems and Components	✓			
App. 3A	Seismic Soil-Structure Interaction Analysis		✓		
App. 3D	EQ Design Environmental Conditions	✓			
Appendix 3E	Table of Contents		✓	In Binder with 3E	
App. 3E	Eval. of Results of Seismic Category I Structures		✓	✓	
Chapter 6	Table of Contents	✓			
6.2	Safety Envelope Functional Design	✓			
6.3	Gravity-Driven Cooling System	✓			
6.6	Inservice Inspection of Class 2 & 3 Components		✓		
App. 6A	Containment Loads		✓		
Chapter 9	Table of Contents	✓			
9.4	Air Conditioning, Heating, Cooling, and Ventilation	✓			
Appendix 9A	Table of Contents		✓		
App. 9A	Fire Hazards Analysis		✓	✓	
App. 9B	Summary of Analysis Supporting Fire Protection Design Requirements		✓	In Binder with 9A	✓
Chapter 11	Table of Contents	✓			
11.2	Liquid Waste Management System	✓			
11.4	Solid Waste Management System	✓			
Chapter 12	Table of Contents	✓			
12.2	Plant Sources	✓			
12.3	Radiation Protection	✓			
Chapter 15	Table of Contents	✓			
15.6	Decrease in Reactor Coolant Inventory	✓			
Chapter 18	Table of Contents	✓			
App. 18A	Emergency Procedure Guidelines	✓			
App. 18F	Emergency Operation & Controls		✓		✓

Section	Title	Replace Section	New Section	New Binder	New Tab
Chapter 19	Table of Contents	✓			
19.1	Introduction	✓			
19.2	Plant Description, Assumptions & Methodology	✓			
19.3	Internal Event Accident Sequence Analysis	✓			
19.4	Containment Performance		✓		
19.5	External Events Analysis		✓		
19.6	Consequence Analysis		✓		
19.7	Sensitivity and Uncertainty Studies		✓		✓
19.8	Conclusions	✓			
App. 19A	Internal Events		✓		
Att. 19AA	Success Criteria	✓			
Att. 19AB	Dependent Failures	✓			
Att. 19AC	Human Reliability	✓			
Att. 19AD	Event Trees	✓			
Att. 19AE.1	Systems Analysis General Topics	✓			
Att. 19AE.2	Containment Isolation System.	✓			
Att. 19AE.3	Primary Coolant Boundary Isolation	✓			
Att. 19AE.4	Isolation Condenser System	✓			
Att. 19AE.5	Control Rod Drive System	✓			
Att. 19AE.6	Standby Liquid Control System	✓			
Att. 19AE.7	Gravity Driven Cooling System	✓			
Att. 19AE.8	Automatic Depressurization System	✓			
Att. 19AE.9	FAPCS	✓			
Att. 19AE.10	RWCU/SDC	✓			
Att. 19AE.11	Misc. Air Systems	✓			
Att. 19AE.12	RCCWS	✓			
Att. 19AE.13	Plant Service Water System	✓			
Att. 19AE.14	Instrument, Logic & Control	✓			
Att. 19AE.15	6.9 kVAC & 480 VAC Power	✓			
Att. 19AE.16	DC Power Supply	✓			
Att. 19AE.17	Reactivity Control	✓			
Att. 19AE.18	Feedwater & Condensate System & Main Control	✓			
Att. 19AE.19	High Pressure Nitrogen System	✓			
Att. 19AF	Shutdown Risk Analysis		✓		

Section	Title	Replace Section	New Section	New Binder	New Tab
App. 19B	Containment Performance		✓		
Att. 19BA	Deterministic Model for DCH		✓		
Att. 19BB	Fuel Coolant interaction		✓		
Att. 19BC	IC/PCC Tube Rupture		✓		
App. 19C	External Events		✓		
Att. 19CA	Screening		✓		
Att. 19CB	Fire		✓		
Att. 19CC	Flood		✓		
App. 19D	External Events (Seismic)		✓		
App. 19E	Consequence Analysis		✓		
App. 19F	Severe Accident Mitigation Design Alternatives		✓		✓
App. 19G	Response to CP/ML Rule		✓		
App. 19H	USI/GSI Applicability		✓		

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