

SECTION 6.0 - CORE STANDBY COOLING SYSTEMS

TABLE OF CONTENTS

<u>SECTION</u>	<u>TITLE</u>
6.1	<u>SAFETY OBJECTIVE</u>
6.2	<u>SAFETY DESIGN BASIS</u>
6.3	<u>SUMMARY DESCRIPTION</u>
6.4	<u>DESCRIPTION</u>
6.4.1	High-Pressure Coolant Injection System
6.4.2	Automatic Depressurization System
6.4.3	Core Spray System
6.4.4	Low-Pressure Coolant Injection
6.4.5	Core Standby Cooling System NPSH
6.4.6	Gas Management Program
6.5	<u>SAFETY EVALUATION</u>
6.5.1	Summary
6.5.2	Analysis Models
6.5.3	Individual System Adequacy
6.5.3.1	High-Pressure Coolant Injection System
6.5.3.2	Automatic Depressurization System
6.5.3.3	Core Spray System
6.5.3.4	Low-Pressure Coolant Injection System
6.5.4	Integrated Operation of Core Standby Cooling Systems
6.6	<u>INSPECTION AND TESTING</u>
6.7	<u>CONFORMANCE OF PEACH BOTTOM ATOMIC POWER STATION UNITS 2 AND 3 EMERGENCY CORE COOLING SYSTEMS TO AEC/NRC INTERIM ACCEPTANCE CRITERIA FOR LIGHT WATER REACTORS</u>
6.7.1	Introduction
6.7.2	Request for Additional Information
6.7.3	Additional Information Response
6.7.4	Summary
6.7.5	Effect of Revised Core Design on Emergency Core Cooling System's Analysis

SECTION 6.0 - CORE STANDBY COOLING SYSTEMS

LIST OF TABLES

<u>TABLE</u>	<u>TITLE</u>
6.3.1	Core Standby Cooling Systems Equipment Design Data Summary
6.7.1	Peak Clad Temperatures

SECTION 6.0 - CORE STANDBY COOLING SYSTEMS

LIST OF FIGURES

<u>FIGURE</u>	<u>TITLE</u>
6.3.1	CSCS's Performance Capability Chart
6.4.1	Deleted
6.4.2	Deleted
6.5.1	Peak Cladding Temperature versus Time, Design Basis Accident Break.
6.5.2	Water Level in Hot and Average Channel vs Time, Design Basis Accident Break.
6.5.3	Reactor Pressure versus Time, Design Basis Accident Break.
6.5.4	Peak Cladding Temperature versus Time, 80% Design Basis Accident Break.
6.5.5	Water Level in Hot and Average Channel vs Time, 80% Design Basis Accident Break.
6.5.6	Reactor Pressure versus Time, 80% Design Basis Accident Break.
6.5.7	Peak Cladding Temperature versus Time, 60% Design Basis Accident Break.
6.5.8	Water Level in Hot and Average Channel vs Time, 60% Design Basis Accident Break.
6.5.9	Deleted.
6.5.10	Deleted.
6.5.11	Deleted.
6.5.12	Deleted.
6.7.1	Peak Clad Temperature Versus Break Area, Two Core Spray Systems, AEC/NRC Assumptions

**PBAPS UFSAR**

LIST OF FIGURES (cont'd)

<u>FIGURE</u>	<u>TITLE</u>
6.7.2	Cladding Temperature Versus Time, Two Core Spray Systems Plus ADS, AEC/NRC Assumptions, .02-Sq Ft Break
6.7.3	Cladding Temperature Versus Time, Two Core Spray Systems Plus ADS, AEC/NRC Assumptions, .05-Sq Ft Break
6.7.4	Design Basis Accident, Two Core Spray Systems, AEC/NRC Assumptions
6.7.5	Core Flow Following Design Basis Accident Versus Time
6.7.6	Heat Transfer Coefficient Versus Time, Two Core Spray Systems Plus ADS, AEC/NRC Assumptions, .02-Sq Ft Break
6.7.7	Heat Transfer Coefficient Versus Time, Two Core Spray Systems Plus ADS, AEC/NRC Assumptions, .05-Sq Ft Break
6.7.8	Heat Transfer Coefficient Versus Time, Two Core Spray Systems, AEC/NRC Assumptions, Design Basis Accident
6.7.9	Reactor Pressure Vessel Water Level Versus Time, Two Core Spray Systems Plus ADS, AEC/NRC Assumptions, .02-Sq Ft Break
6.7.1	Reactor Pressure Vessel Water Level Versus Time, Two Core Spray Systems Plus ADS, AEC/NRC Assumptions, .05-Sq Ft Break
6.7.11	Reactor Pressure Vessel Water Level Versus Time, Two Core Spray Systems, AEC/NRC Assumptions, Design Basis Accident
6.7.12	Minimum Critical Heat Flux Ratio Versus Time Following a Design Basis Accident
6.7.13	Peak Clad Temperature Versus Time, 1,000 MWd/T Exposure, Two Core Spray Systems, AEC/NRC Assumptions, .05-Sq Ft Break

**PBAPS UFSAR**

LIST OF FIGURES (cont'd)

<u>FIGURE</u>	<u>TITLE</u>
6.7.14	Peak Clad Temperature Versus Time, 10,000 MWd/T Exposure, Two Core Spray Systems, AEC/NRC Assumptions, .05-Sq Ft Break
6.7.15	Peak Clad Temperature Versus Time, 25,000 MWd/T Exposure, Two Core Spray Systems, AEC/NRC Assumptions, .05-Sq Ft Break
6.7.16	Peak Clad Temperature Versus Time, 1,000 MWd/T Exposure, Two Core Spray Systems, AEC/NRC Assumptions, Design Basis Accident
6.7.17	Peak Clad Temperature Versus Time, 10,000 MWd/T Exposure, Two Core Spray Systems, AEC/NRC Assumptions, Design Basis Accident
6.7.18	Peak Clad Temperature Versus Time, 25,000 MWd/T Exposure, Two Core Spray Systems, AEC/NRC Assumptions, Design Basis Accident
6.7.18a	Peaking Factor Study, Effect of Exposure on Maximum Cladding Temperature for Peach Bottom Units 2 and 3
6.7.19	Power Generation Following a Design Basis LOCA
6.7.20	Quality Versus Time for the Design Basis Accident