

GENERAL TABLE OF CONTENTS

Chapter 1

INTRODUCTION AND GENERAL DESCRIPTION OF PLANT

- 1.1 Introduction
- 1.2 General Plant Description
- 1.3 Comparison Tables
- 1.4 Identification of Agents and Contractors
- 1.5 Requirements for Further Technical Information
- 1.6 Material Incorporated by Reference
- 1.7 Acronyms
- 1.8 Conformance to NRC Regulatory Guides

Chapter 2

SITE CHARACTERISTICS

- 2.1 Geography and Demography
- 2.2 Nearby Industrial, Transportation, and Military Facilities
- 2.3 Meteorology
- 2.4 Hydrology Engineering
- 2.5 Geology, Seismology, and Geotechnical Engineering

Chapter 3

DESIGN CRITERIA - STRUCTURES, COMPONENTS, EQUIPMENT, AND SYSTEMS

- 3.1 Conformance with NRC General Design Criteria
- 3.2 Classification of Structures, Components, and Systems
- 3.3 Wind and Tornado Loadings
- 3.4 Water Level (Flood) Design
- 3.5 Missile Protection
- 3.6 Protection Against Dynamic Effects Associated with the Postulated Rupture of Piping
- 3.7 Seismic Design
- 3.8 Design of Seismic Category I Structures
- 3.9 Mechanical Systems and Components
- 3.10 Seismic and Dynamic Qualification of Safety-Related Instrumentation and Electrical Equipment
- 3.11 Environmental Design of Mechanical and Electrical Equipment
- 3.12 Computer Programs for Structural Analysis and Design
- 3A Plant Design Assessment Report (DAR) for SRV and LOCA Loads

GENERAL TABLE OF CONTENTS

Chapter 4

REACTOR

- 4.1 Summary Description
- 4.2 Fuel System Design
- 4.3 Nuclear Design
- 4.4 Thermal-Hydraulic Design
- 4.5 Reactor Materials
- 4.6 Functional Design of Reactivity Control Systems

Chapter 5

REACTOR COOLANT SYSTEMS AND CONNECTED SYSTEMS

- 5.1 Summary Description
- 5.2 Integrity of Reactor Coolant Pressure Boundary
- 5.3 Reactor Vessel
- 5.4 Component and Subsystem Design

Chapter 6

ENGINEERED SAFETY FEATURES

- 6.1 Engineered Safety Feature Materials
- 6.2 Containment Systems
- 6.3 Emergency Core Cooling System
- 6.4 Habitability Systems
- 6.5 Fission Product Removal and Control Systems
- 6.6 Inservice Inspection of ASME Code Class 2 and Class 3 Components
- 6.7 Main Steam Isolation Valve Leakage Control System

GENERAL TABLE OF CONTENTS (Continued)

Chapter 7

INSTRUMENTATION AND CONTROL SYSTEMS

- 7.1 Introduction
- 7.2 Reactor Protection (Trip) System
- 7.3 Engineered Safety Feature Systems
- 7.4 Systems Required for Safe Shutdown
- 7.5 Safety-Related Display Instrumentation
- 7.6 All Other Instrumentation Systems Required for Safety
- 7.7 Control Systems Not Required for Safety

Chapter 8

ELECTRIC POWER

- 8.1 Introduction
- 8.2 Offsite Power System
- 8.3 Onsite Power Systems
- 8A Station Blackout

Chapter 9

AUXILIARY SYSTEMS

- 9.1 Fuel Storage and Handling
- 9.2 Water Systems
- 9.3 Process Auxiliaries
- 9.4 Heating, Ventilating, and Air Conditioning Systems
- 9.5 Other Auxiliary Systems

Chapter 10

STEAM AND POWER CONVERSION SYSTEM

- 10.1 Summary Description
- 10.2 Turbine Generator
- 10.3 Main Steam Supply System
- 10.4 Other Features of Steam and Power Conversion System

GENERAL TABLE OF CONTENTS (Continued)

Chapter 11

RADIOACTIVE WASTE MANAGEMENT

- 11.1 Source Terms
- 11.2 Liquid Waste Management System
- 11.3 Gaseous Waste Management Systems
- 11.4 Solid Waste Management System
- 11.5 Process and Effluent Radiological Monitoring and Sampling Systems
- 11.6 Postaccident Sampling System

Chapter 12

RADIATION PROTECTION

- 12.1 Ensuring that Occupational Radiation Exposures and Radiation Exposures to Members of the Public are As Low As Is Reasonably Achievable
- 12.2 Radiation Sources
- 12.3 Radiation Protection Design Features
- 12.4 Dose Assessment
- 12.5 Radiation Protection Program

Chapter 13

CONDUCT OF OPERATIONS

- 13.1 Organization Structure
- 13.2 Training
- 13.3 Emergency Planning
- 13.4 Review and Audit
- 13.5 Plant Procedures
- 13.6 Industrial Security

Chapter 14

INITIAL TEST PROGRAM

- 14.1 Specific Information Included in Preliminary Safety Analysis Reports
- 14.2 System Lineup, Preoperational, and Initial Startup Test Program

GENERAL TABLE OF CONTENTS (Continued)

Chapter 15

ACCIDENT ANALYSES

- 15.0 General
- 15.1 Decrease in Reactor Coolant Temperature
- 15.2 Increase in Reactor Pressure
- 15.3 Decrease in Reactor Coolant System Flow Rate
- 15.4 Reactivity and Power Distribution Anomalies
- 15.5 Increase in Reactor Coolant Inventory
- 15.6 Decrease in Reactor Coolant Inventory
- 15.7 Radioactive Release from Subsystems and Components
- 15.8 Anticipated Transients without Scram

Chapter 16

TECHNICAL SPECIFICATIONS

(Separate Volume)

Chapter 17

QUALITY ASSURANCE

- 17.1 Quality Assurance During the Design and Construction Phases
- 17.2 Quality Assurance During the Operations Phase

APPENDIXES

- B Response to Regulatory Issues Resulting from TMI-2
- F Fire Protection Evaluation
- I Licensing Review Group Issues
- J Shielding Evaluation Report