

**Table of Contents**

15.0 Transient and Accident Analysis ..... 15-2

15.0.1 Radiological Consequence Analysis..... 15-2

15.0.2 Computer Codes Used in Analysis ..... 15-2

15.0.3 Radiological Consequences of Design Basis Accidents..... 15-2

15.0.4 Post Chapter 15 Events Cooldown ..... 15-2

15.0.5 Compliance with Section C.I.15, "Transient and Accident Analyses," of  
Regulatory Guide 1.206 ..... 15-2

15.0.6 References..... 15-2

**15.1 Increase in Heat Removal by the Secondary System ..... 15-2**

**15.2 Decrease in Heat Removal by the Secondary System ..... 15-2**

**15.3 Decrease in Reactor Coolant System Flow Rate ..... 15-2**

**15.4 Reactivity and Power Distribution Anomalies..... 15-2**

**15.5 Increase in Reactor Coolant Inventory..... 15-2**

**15.6 Decrease in Reactor Coolant Inventory Events ..... 15-3**

**15.7 Radioactive Release from a Subsystem or Component ..... 15-3**

**15.8 Anticipated Transients Without Scram ..... 15-3**

**15.9 Boiling Water Reactor Stability ..... 15-3**

**15.10 Spent Fuel Pool Criticality and Boron Dilution Analysis ..... 15-3**

15.10.1 References..... 15-3

## **15.0 TRANSIENT AND ACCIDENT ANALYSIS**

This chapter of the U.S. EPR Final Safety Analysis Report (FSAR) is incorporated by reference with departures and/or supplements as identified in the following sections.

### **15.0.1 RADIOLOGICAL CONSEQUENCE ANALYSIS**

No departures or supplements.

### **15.0.2 COMPUTER CODES USED IN ANALYSIS**

No departures or supplements.

### **15.0.3 RADIOLOGICAL CONSEQUENCES OF DESIGN BASIS ACCIDENTS**

No departures or supplements

### **15.0.4 POST CHAPTER 15 EVENTS COOLDOWN**

No departures or supplements

### **15.0.5 COMPLIANCE WITH SECTION C.I.15, "TRANSIENT AND ACCIDENT ANALYSES," OF REGULATORY GUIDE 1.206**

No departures or supplements.

### **15.0.6 REFERENCES**

No departures or supplements.

### **15.1 INCREASE IN HEAT REMOVAL BY THE SECONDARY SYSTEM**

This section of the U.S. EPR FSAR is incorporated by reference.

### **15.2 DECREASE IN HEAT REMOVAL BY THE SECONDARY SYSTEM**

This section of the U.S. EPR FSAR is incorporated by reference.

### **15.3 DECREASE IN REACTOR COOLANT SYSTEM FLOW RATE**

This section of the U.S. EPR FSAR is incorporated by reference.

### **15.4 REACTIVITY AND POWER DISTRIBUTION ANOMALIES**

This section of the U.S. EPR FSAR is incorporated by reference.

### **15.5 INCREASE IN REACTOR COOLANT INVENTORY**

This section of the U.S. EPR FSAR is incorporated by reference.

**15.6 DECREASE IN REACTOR COOLANT INVENTORY EVENTS**

This section of the U.S. EPR FSAR is incorporated by reference.

**15.7 RADIOACTIVE RELEASE FROM A SUBSYSTEM OR COMPONENT**

This section of the U.S. EPR FSAR is incorporated by reference.

**15.8 ANTICIPATED TRANSIENTS WITHOUT SCRAM**

This section of the U.S. EPR FSAR is incorporated by reference.

**15.9 BOILING WATER REACTOR STABILITY**

This section of the U.S. EPR FSAR is incorporated by reference.

**15.10 SPENT FUEL POOL CRITICALITY AND BORON DILUTON ANALYSIS**

This section of the U.S. EPR FSAR is incorporated by reference with the following supplements.

The design and analysis for the new spent fuel storage racks will be incorporated into a future revision of the U.S. EPR FSAR. This revision will be based on the analysis in UniStar Topical Report UN-TR-08-001, Spent and New Fuel Storage Analysis for U.S. EPR Topical Report, dated March 2008 (UniStar 2008) and incorporated additional analyses to bound the site-specific conditions at {Nine Mile Point 3 Nuclear Power Plant (NMP3NPP)}.

**15.10.1 REFERENCES**

{**UniStar, 2008.** Spent and New Fuel Storage Analyses for U.S. EPR Topical Report, UniStar Topical Report UN-TR-08-001, March 2008.}