## Chapter 4 Reactor

### 4.1 Summary Description

This section of the referenced DCD is incorporated by reference with no departures or supplements.

## 4.2 Fuel System Design

This section of the referenced DCD is incorporated by reference with no departures or supplements.

### 4.3 Nuclear Design

This subsection of the referenced DCD is incorporated by reference with the following departures and/or supplements.

#### 4.3.3.1 Nuclear Design Description

Replace the last paragraph with the following.

**STD COL 4.3-1-A** There are no changes to the fuel, control rod, or core design from that described in the referenced certified design.

#### 4.3.5 COL Information

- 4.3-1-A Variances from Certified Design
- **STD COL 4.3-1-A** This COL Item is addressed in Section 4.3.3.1.

#### 4.4 Thermal and Hydraulic Design

This section of the referenced DCD is incorporated by reference with no departures or supplements.

#### 4.5 Reactor Materials

This section of the referenced DCD is incorporated by reference with no departures or supplements.

## 4.6 Functional Design of Reactivity Control System

This section of the referenced DCD is incorporated by reference with no departures or supplements.

#### Appendix 4A Typical Control Rod Patterns and Associated Power Distribution for ESBWR

This section of the referenced DCD is incorporated by reference with the following departures and/or supplements.

4A.1 Introduction

Replace the third paragraph with the following.

**STD COL 4A-1-A** There are no changes to the fuel, control rod, or core design from that described in the referenced certified design.

4A.3 COL Information 4A-1-A Variances from Certified Design STD COL 4A-1-A This COL item is addressed in Appendix 4A.1.

## Appendix 4B Fuel Licensing Acceptance Criteria

This section of the referenced DCD is incorporated by reference with no departures or supplements.

# Appendix 4C Control Rod Licensing Acceptance Criteria

This section of the referenced DCD is incorporated by reference with no departures or supplements.

## Appendix 4D Stability Evaluation

This section of the referenced DCD is incorporated by reference with no departures or supplements.