

## 5.0 DESIGN FEATURES

### 5.1 SITE

#### EXCLUSION AREA

5.1.1 The exclusion area shall be as shown in Figure 5.1.1-1.

#### LOW POPULATION ZONE

5.1.2 The low population zone shall be as shown in Figure 5.1.2-1, based on the information given in Section 2.2 of the FSAR.

#### SITE BOUNDARY

5.1.3 The SITE BOUNDARY shall be as a shown in Figure 5.1.3-1. For the purpose of effluent release calculations, the boundary for atmospheric releases is the SITE BOUNDARY and the boundary for liquid releases is the SITE BOUNDARY prior to dilution in the Atlantic Ocean.

### 5.2 CONTAINMENT

#### CONFIGURATION

5.2.1 The PRIMARY CONTAINMENT is a steel-lined reinforced concrete structure composed of a series of vertical right cylinders and truncated cones which form a drywell. This drywell is attached to a suppression chamber through a series of vents. The suppression chamber is a concrete steel-lined pressure vessel in the shape of a torus. The primary containment has a minimum free air volume of (288,000) cubic feet.

#### DESIGN TEMPERATURE AND PRESSURE

5.2.2 The primary containment is designed and shall be maintained for:

- a. Maximum internal pressure 62 psig.
- b. Maximum internal temperature: drywell 300°F.  
suppression chamber 200°F.
- c. Maximum external pressure 2 psig.

### 5.3 REACTOR CORE

#### FUEL ASSEMBLIES

5.3.1 The reactor core shall contain 560 fuel assemblies, with each 8 x 8 fuel assembly containing 63 fuel rods and each 8 x 8R fuel assembly containing 62 fuel rods. All fuel rods shall be clad with Zircaloy 2. Each fuel rod shall have a nominal active fuel length of 146 inches for 8 x 8 fuel and 150 inches for 8 x 8R fuel.

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TABLE 3.3.2-3 (Continued)

<u>ISOLATION SYSTEM INSTRUMENTATION RESPONSE TIME</u>	
<u>TRIP FUNCTION AND INSTRUMENT NUMBER</u>	<u>RESPONSE TIME (Seconds)#</u>
b. Reactor Core Isolation Cooling System Isolation	
1. RCIC Steam Line Flow - High (E51-PDT-N017; E51-PDT-N018)  (E51-PDTS-N017-2; E51-PDTS-N018-2)	$\leq 13^{(a)###}$
2. RCIC Steam Line High Flow Time Delay Relay (E51-TDR-K32; E51-TDR-K12)	NA
3. RCIC Steam Supply Pressure - Low (E51-PS-N019A,B,C,D)	NA
4. RCIC Steam Line Tunnel Temp - High (E51-TS-3319; E51-TS-3320; E51-TS-3321; E51-TS-3322; E51-TS-3323; E51-TS-3355; E51-TS-3487)	NA
5. Bus Power Monitor (E51-K42 and E51-K43)	NA
6. RCIC Turbine Exhaust Diaphragm Pressure - High (E51-PS-N012A,B,C,D)	NA
7. RCIC Steam Line Ambient Temperature - High (E51-TS-N603A,B)	NA
8. RCIC Steam Line Area $\Delta$ Temp - High (E51-dTS-N604A,B)	NA
9. Emergency Area Cooler Temperature - High (E51-TS-N602A,B)	NA
10. RCIC Equipment Room $\Delta$ Temp - High (E51-dTS-N601A,B)	NA
5. <u>SHUTDOWN COOLING SYSTEM ISOLATION</u>	
a. Reactor Vessel Water Level - Low, Level 1 (B21-LT-N017A-1,B-1,C-1,D-1) (B21-LTM-N017A-1,B-1,C-1,D-1)	NA
b. Reactor Steam Dome Pressure - High (B32-PS-N018A,B)	NA