

## DESIGN FEATURES

### 5.3 REACTOR CORE

#### FUEL ASSEMBLIES

*except for two fuel assemblies which may each contain up to twelve (12) fuel rods clad with ZIRLO™.*

5.3.1 The core shall contain 193 fuel assemblies with each fuel assembly containing 264 fuel rods clad with Zircaloy-4. Each fuel rod shall have a nominal active fuel length of 144 inches. The initial core loading shall have a maximum enrichment not to exceed 3.2 weight percent U-235. Reload fuel shall be similar in physical design to the initial core loading and shall have a maximum enrichment not to exceed 4.55 weight percent U-235.

#### CONTROL ROD ASSEMBLIES

5.3.2 The core shall contain 53 full-length control rod assemblies. The control rod assemblies shall contain a nominal 142 inches of absorber material. The nominal absorber composition shall be 95.5% natural hafnium and 4.5% natural zirconium and/or 80% silver, 15% indium, and 5% cadmium. All control rods shall be clad with stainless steel.

### 5.4 REACTOR COOLANT SYSTEM

#### DESIGN PRESSURE AND TEMPERATURE

5.4.1 The Reactor Coolant System is designed and shall be maintained:

- a. In accordance with the Code requirements specified in Section 5.2 of the FSAR, with allowance for normal degradation pursuant to the applicable Surveillance Requirements,
- b. For a pressure of 2485 psig, and
- c. For a temperature of 650°F, except for the pressurizer which is 680°F.

#### VOLUME

5.4.2 The total water and steam volume of the Reactor Coolant System is 12,240 ± 100 cubic feet at a nominal  $T_{avg}$  of 588.5°F.

### 5.5 METEOROLOGICAL TOWER LOCATION

5.5.1 The meteorological tower shall be located as shown on Figure 5.1-1 and 5.1-2.

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