

REACTOR CORE

1. The core shall contain 157 fuel assemblies with each assembly initially containing 204 fuel rods clad with Zircaloy-4. The reactor core contains approximately 71 metric tons of uranium in the form of natural or slightly enriched uranium dioxide pellets. Each fuel rod shall have a nominal active length of 144 inches.
2. The average enrichment of the initial core is a nominal 2.50 weight percent of U-235. Three fuel enrichments are used in the initial core. The highest enrichment is a nominal 3.10 weight percent of U-235.
3. Reload fuel will be similar in design to the initial core.
4. Burnable poison rods are in the form of rod clusters which are located in vacant rod cluster control guide tubes, or integral to the fuel design and are used for reactivity and/or power distribution control.
5. There are 45 full-length RCC assemblies in the reactor core. The full-length RCC assemblies contain a 144 inch length of silver-indium-cadmium alloy clad with the stainless steel.

REACTOR COOLANT SYSTEM

1. The design of the Reactor Coolant System complies with the code requirements.
2. All piping, components and supporting structures of the Reactor Coolant System are designed to Class I requirements and have been designed to withstand:
  - a. The design seismic ground acceleration, 0.05g acting in the horizontal and 0.033g acting in the vertical planes simultaneously, with stress maintained within code allowable working stresses.
  - b. The maximum potential seismic ground acceleration, 0.15g, acting in the horizontal and 0.10g acting in the vertical directions simultaneously with no loss of function.
3. The nominal liquid volume of the Reactor Coolant System, at rated operating conditions, is 9088 cubic feet.

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