Attachment A

1. Replace page 5.3-1 and 5.3-2 with the enclosed replacement pages.

2. Replace page 5.4-1 with the enclosed replacement page.

5.3 Reactor Design Features

5.3.1 Reactor Core

a. The reactor core contains approximately 45 metric tons of uranium in the form of uranium dioxide pellets. The pellets are encapsulated in Zircaloy 4 tubing to form fuel rods. 179 fuel rods, 16 guide tubes and one instrumentation thimble are arranged in a 14 x 14 array to form a fuel assembly. The reactor core is made up of 121 fuel assemblies.(1)

b. The enrichment of reload fuel shall be no more than 3.5 weight per cent U-235 for regions delivered prior to January 1, 1984 (Regions 1-15), 4.25 weight per cent U-235 for regions delivered after January 1, 1984, or their equivalents in terms of reactivity.

c. There are 29 full-length RCC assemblies in the reactor core. Each RCC assembly contains 16 144 inch lengths of silver-indium-cadmium alloy clad with stainless steel which act as neutron absorbers when inserted into the core.(5)

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5.3.2 Reactor Coolant System

a. The design of the reactor coolant system complies with the code requirements.[3]

b. All piping, components and supporting structures of the reactor coolant system are designed to Class I requirements, and have been designed to withstand:

i. The design seismic ground acceleration, 0.08g, with stresses maintained within code allowable working stresses.

ii. The maximum potential seismic ground acceleration, 0.2g, acting in the horizontal and vertical directions simultaneously with no loss of function.

c. The nominal liquid volume of the reactor coolant system, at rated operating conditions, is 6236 cubic feet.

5.4 **Fuel Storage**

Specification

5.4.1 The new and spent fuel pit structures are designed to withstand the anticipated earthquake loadings as Class I structures. The spent fuel pit has a stainless steel liner to ensure against loss of water.

5.4.2 The new and spent fuel storage racks are designed so that it is impossible to insert assemblies in other than the prescribed locations. The fuel is stored vertically in an array with sufficient center-to-center distance between assemblies to assure $K_{eff} \leq 0.95$ for (1) unirradiated fuel assemblies delivered prior to January 1, 1984 (Region 1-15) containing no more than 39.0 gms U-235 per axial cm, and (2) unirradiated fuel assemblies delivered after January 1, 1984 containing no more than 41.9 gms U-235 per axial cm. Both cases assume unborated water used in the pool.

5.4.3 The spent fuel storage pit is filled with borated water at a concentration to match that used in the reactor cavity and refueling canal during refueling operations whenever there is fuel in the pit.

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Proposed

Attachment B

In 1976, Rochester Gas and Electric replaced the original R. E. Ginna spent fuel racks, increasing storage capacity from 210 to 595 spaces. In the submission to the NRC a nuclear criticality analysis was made assuming an Exxon Nuclear fuel assembly design enriched to 3.5 weight per cent U-235. This was approved by the NRC in Amendment No. 11 dated November 15, 1976. With the fuel reload in the spring of 1984, fuel assemblies of a Westinghouse design incorporating axial natural uranium blankets will be used. This change in design, along with the adoption of low radial leakage fuel management, require central region enrichments in excess of the 3.5 percent used in the previous analysis.

This new analysis assumes an unirradiated fuel assembly enrichment of 4.25 weight per cent U-235. This analysis incorporates no changes to the storage rack or pool design described in the referenced documents. The additional margin in the limiting enrichment is because the 3.5 per cent analysis yielded K_{eff} of only .88 as compared to a K_{eff} in the attached analysis of .93.