

ATTACHMENT A

Revise the Technical Specification pages as follows:

Remove

5.3-1

Insert

5.3-1

9002260470 900216  
PDR ADCK 05000244  
P PDC

## 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. The reactor core is made up of 121 fuel assemblies<sup>(1)</sup> with each fuel assembly containing 179 fuel rod locations. Fuel rod locations may, at any time during plant life, have any combination of the following as determined in accordance with cycle specific reload analyses:

1. fuel rods clad with Zircaloy -4
2. filler rods fabricated from Zircaloy -4 or stainless steel
3. vacancies.

Each fuel assembly also contains 16 guide tubes and one instrumentation thimble all arranged in a 14 x 14 array to form a fuel assembly.

- 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 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.<sup>(5)</sup>



## ATTACHMENT B

Rochester Gas and Electric (RG&E) desires the flexibility to reconstitute fuel assemblies in order to reduce coolant activity and utilize the remaining energy in fuel assemblies which contain small numbers of defective fuel rods. In the reconstitution process, the fuel rods which are known to be defective will be removed and replaced with dummy rods (Zircaloy or stainless steel), or not replaced leaving vacancies. This reconstitution will be accomplished by either removing the top nozzle or by removing the bottom nozzle after inverting the assembly, inspecting and removing the defective rods, replacing the failed rods with dummy rods or leaving defective rod locations empty, and reattaching the nozzle. If a fuel assembly skeleton is damaged, serviceable fuel rods and dummy rods may be transferred to a new skeleton. Fuel and dummy rod insertion and nozzle removal/reattachment remain the same as in the reconstitution process previously discussed. The reconstituted assembly will meet the original assembly design criteria.

The R.E. Ginna Nuclear Power Plant Technical Specification 5.3.1.a describes the reactor core as consisting of assemblies containing 179 fuel rods. In order to allow for the insertion of reconstituted assemblies with dummy rods and/or vacancies, this statement must be modified as proposed in Attachment A.

The use of reconstituted fuel assemblies in a reload core is considered acceptable because each reload that contains reconstituted assemblies will be evaluated using standard methods as described in Reference 1. The reload analysis will evaluate the effect of the actual reconstitution on core performance parameters, peaking factors, and core average linear heat rate effects to ensure the existing safety criteria and design limits are met. In addition, reconstituted assemblies will meet the original assembly design criteria.

In accordance with 10CFR50.91, these changes to the Technical Specifications have been evaluated to determine if the operation of the facility in accordance with the proposed Amendment would:

1. involve a significant increase in the probability or consequences of an accident previously evaluated; or
2. create the possibility of a new or different kind of accident from any accident previously evaluated; or
3. involve a significant reduction in the margin of safety.

The reconstituted fuel assemblies meet the same design requirements and satisfy the same design criteria as the original fuel assemblies. Cycle specific reload evaluations will apply existing safety criteria and design limits. Therefore use of reconstituted fuel assemblies does not involve a significant increase in the probability or consequences of an accident previously evaluated.

The reconstituted fuel assemblies satisfy the original design criteria and the reload in which the fuel assemblies are used is evaluated to ensure existing safety criteria and design limits are met. Therefore, the possibility of a new or different kind of accident is not created by the use of reconstituted fuel.

The required cycle specific reload analysis will ensure existing safety criteria and design limits are met. This will ensure there is no reduction in a margin of safety.

Based on the above discussions, Rochester Gas and Electric submits that the issues associated with this Amendment request are outside the criteria of 10CFR50.91 and a no significant hazards finding is warranted.

Reference 1. WCAP-9273A "Westinghouse Reload Safety Evaluation Methodology", July 1985

TABLE 1

DETAILED TECHNICAL SPECIFICATION CHANGES

<u>Location</u>	<u>Description of Change</u>	<u>Reason for Change</u>
Page 5.3-1	<p>"179 fuel rods" has been replaced with "The reactor core is made up of 121 fuel assemblies<sup>(1)</sup> with each fuel assembly containing 179 fuel rod locations. Fuel rod locations may, at any time during plant life, have any combination of the following as determined in accordance with cycle specific reload analyses:</p> <ol style="list-style-type: none"><li>1. fuel rods clad with Zircaloy -4</li><li>2. filler rods fabricated from Zircaloy -4 or stainless steel</li><li>3. vacancies.</li></ol> <p>Each fuel assembly also contains"...</p>	Allow use of reconstituted fuel.
	Replaced "are" with "all"	Wording
	Deleted "The reactor core is made up of 121 fuel assemblies. <sup>(1)</sup> "	Used in the above insertion.