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April 16, 1996

Document Control Desk
US Nuclear Regulatory Commission
Washington DC 20555

Subject: Response to Questions
NRC letter March 25, 1996
Docket 50-602

Dear Sir:

The following information is in response to the Request for Additional Information letter dated 3/25/96. This response supplements the response made 11/11/95 and the original amendment request dated 25/1/95. The request and response to questions correct language in the original Technical Specification. No change to the reactor operating conditions is being proposed. Revisions to the affected pages of the Technical Specifications have been made and are enclosed. The changes replace those provided in the original request (25/1/95) and subsequent response 11/11/95.

Sincerely,

T.L. Bauer
Assistant Director/Reactor Supervisor
Nuclear Engineering Teaching Laboratory

Enclosures: Affidavit
Response to Questions
TS amendment pages 9, 14, 15, 44

cc: B.W. Wehring
D. Klein

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Response to Question

Docket 50-602

Amendment Request 25/1/93

- 1)
 - a. The Specification 3.2.2 Reactor Control Systems has been revised to clarify the modes. Each mode is separately identified by column and the appropriate "X" is made to identify the applicable interlocks. A modification has been made to the definition of shim rod (page 9) to avoid possible ambiguity in applying the definition. Changes have been made to page 15 to maintain the format and style of the table on page 14 for the tables on page 15.
 - b. The basis for the specification in (a) has been rewritten to use the term "mode" only as intended by the definitions in the specifications. In this case, the mode of operation is defined by the position of the corresponding mode switch. The description includes revisions to improve readability.

- 2) The relative meaning of the terms in the response to Question #4 (8/2/94) are inconsistent with the terminology. The use of "period increase" and "shorter period" were stated relative to the startup rate instead of the period as used in the paragraph. Revise parts (b) and (c) to read as follows:

 - 4(b). As the power rate of change signal exceeds the limiting value, the automatic control signal changes from positive (or zero) to negative. The corresponding reactor period decreases driving the regulating rod down. The change in the period combines with the difference between the current and demand power to control the down motion of the rod until the demand power condition is met. At the maximum drive down speed the reactivity change is roughly equivalent to that of the shim rod.

4(c). Automatic mode control will maintain the reactor period at the limiting period condition only if the error signal exceeds 20% of the demand signal. A progressively longer period limit applies as the automatic mode approaches the setpoint for demand power until the period becomes infinite at the control point.