

February 25, 2000

Mr. William T. Cottle
President and Chief Executive Officer
STP Nuclear Operating Company
South Texas Project Electric
Generating Station
P. O. Box 289
Wadsworth, TX 77483

SUBJECT: SOUTH TEXAS PROJECT, UNITS 1 AND 2 - NEW FUEL DESIGN
(TAC NOS. MA1472 AND MA1473)

Dear Mr. Cottle:

By letter dated March 11, 1998, the U.S. Nuclear Regulatory Commission (NRC) requested information related to the potential for irregular fuel rod bowing with the new fuel design due to the placement of the fuel rods near the bottom nozzle at South Texas Project (STP), Units 1 and 2. You provided your response in a letter dated March 31, 1998. The NRC issued a request for additional information (RAI) in a letter dated November 24, 1998. You responded to the RAI in a letter dated February 4, 1999. The NRC staff has reviewed the material provided in your submittals. The STP response provided answers to our questions regarding the potential for irregular fuel rod bowing with the new fuel design.

After identification of the possible root causes of fuel rod bowing several years ago, design modifications were incorporated into all Westinghouse fuel assembly designs. These modifications are incorporated into the XL fuel assembly designs used at STP. Post irradiation examination (PIE) data have confirmed a decrease in fuel rod bow since these features have been used. It should be noted that this PIE data is limited to peripheral rods. However, the NRC staff does not believe that interior rods would behave differently. The features of the previous STP fuel and the new fuel designs have been compared and the staff has reviewed the effects of the changes. Based on our review of all the material submitted, the staff concluded that fuel rod bowing should not be increased by the use of the phase 1 or phase 2 fuel introduced into the STP Units.

Sincerely,

/RA/

John A. Nakoski, Senior Project Manager, Section 1
Project Directorate IV & Decommissioning
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-498 and 50-499

cc: See next page

South Texas, Units 1 & 2

cc:

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Docket Nos. 50-498 and 50-499

cc: See next page

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