PORTLAND GENERAL ELECTRIC COMPANY
EUGENE WATER & ELECTRIC BOARD
AND
PACIFIC POWER & LIGHT COMPANY

TROJAN NUCLEAR PLANT

Operating License NPF-1
Docket 50-344
License Change Application 71

Licensee hereby requests an amendment to License NPF-1 to incorporate a change in the MODE 5 shutdown margin requirement.

PORTLAND GENERAL ELECTRIC COMPANY

By _____
Bart D. Withers
Vice President
Nuclear

Subscribed and sworn to before me this 16th day of March 1981.

_____
Notary Public of Oregon

My Commission Expires: August 9, 1983

BDW/GMY/41m4A16

LICENSE CHANGE APPLICATION

Technical Specification 3/4.1.1.1, requiring a minimum shutdown margin of 1.6 percent Δk/k, applies to Plant operational MODES 1 through 4. Technical Specification 3/4.1.1.2 requires a shutdown margin of 1.0 percent Δk/k and applies to MODE 5. This proposed Technical Specification revision consolidates these two Technical Specifications, eliminating Technical Specification and Technical Specification Bases 3/4.1.1.2 and increasing the MODE 5 minimum shutdown requirement to 1.6 percent Δk/k. Shutdown requirements for MODES 1 through 4 remain unchanged. Proposed Technical Specification Surveillance Requirement 4.1.1.1.1.e applies to MODES 3, 4, and 5 to properly consolidate the MODE 5 surveillance requirements. In addition, proposed Technical Specification Bases 3/4.1.1.1 is amended to describe the bases for the boron dilution event minimum shutdown margin requirement as the limiting condition for MODE 5 ($T_{avg} \leq 200°F$). The proposed Technical Specifications, including changes in the Index, are shown in Attachment A of this LCA.

REASON FOR CHANGE

This License Change Application (LCA) incorporates a Technical Specification change to the MODE 5 shutdown margin. This Technical Specification change is in response to the NRC letter dated September 30, 1980 concerning the consequences of an inadvertent boron dilution event during MODES 4 and 5. The PGE analysis concluded that return to criticality due to a boron dilution event will not occur for the Trojan Nuclear Plant, as current available shutdown margins preclude this from happening (see Figure 1). However, the Technical Specification shutdown margin requirement plus stuck rod worth will not guarantee an adequate shutdown margin for a boron dilution event during MODE 5 operation. Therefore, PGE committed in its response to the NRC dated November 26, 1980 to submit this Technical Specification revision changing the MODE 5 shutdown margin from 1.0 percent Δk/k to 1.6 percent Δk/k to ensure that minimum shutdown margin requirements are met. This LCA modifies the Technical Specifications to complete this commitment.

SAFETY EVALUATION

The proposed Technical Specification changes have been reviewed and determined to not constitute an unreviewed safety question. These changes are required in order to assure that return to criticality is not a concern for a postulated boron dilution event during MODE 5 operation. No new accidents are created, and the probability of occurrence of accidents already considered remains unchanged. Since these Technical Specification changes increase the minimum shutdown margin requirement for MODE 5, the potential for and/or consequences of an accident are reduced or remain unchanged. The proposed changes do not impact previously evaluated environmental considerations and do not pose an unreviewed environmental question.

SCHEDULE CONSIDERATIONS

This LCA is submitted in response to the NRC letter dated September 30, 1980. The PGE response dated November 26, 1980 committed to submit the License Change Application prior to or on March 1, 1981. Internal processing of this application was delayed due to scheduling difficulties, however, the 180 day submittal deadline is still met.

BASES FOR DETERMINATION OF AMENDMENT CLAUSE

This LCA will result in a License Amendment involving a single complex issue that is clearly defined by an NRC position and would not involve significant hazards consideration. Thus, this would be a Class III amendment.

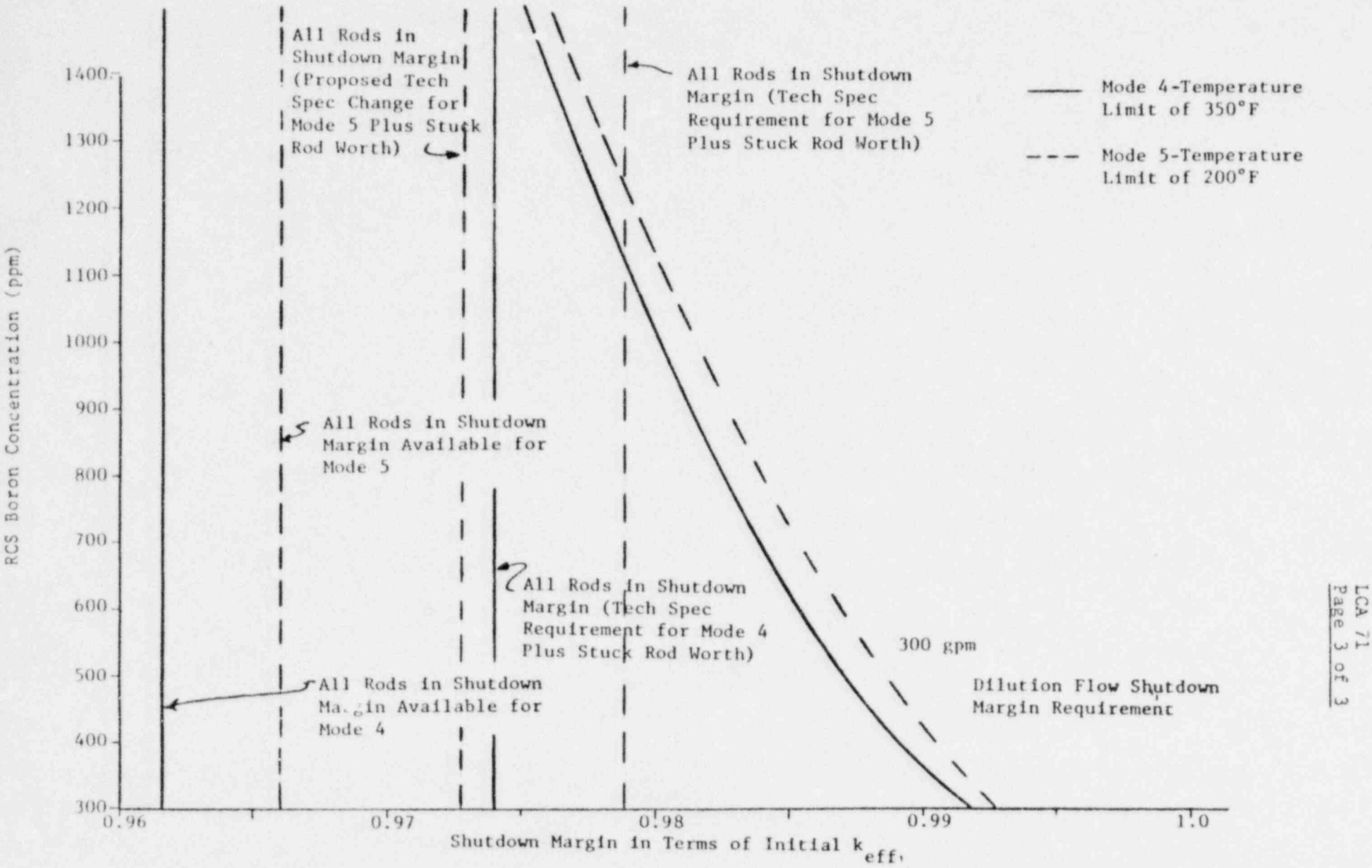

Figure 1 Shutdown Margin Requirements and Availability for a Boron Dilution Accident at Trojan