The Light company
Houston Lighting & Power South Texas Project Electric Generating Station P. O. Box 289 Wadsworth, Texas 77483

August 05, 1993
ST-HL-AE-4522
File No.: G20.02.01
10CFR50.90
10CFR50.91
10CFR50.92

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555

South Texas Project
Units 1
Docket No. STN 50-498
Proposed Licensing Amendment to Unit 1 Concerning the
RWST and SI Accumulators Allowable Boron Concentration Ranges

Reference: "South Texas Project Units 1 & 2, Docket Nos. STN 50-498; 50-499, Proposed Licensing Amendment Concerning the RWST and SI Accumulators Allowable Boron Concentration Ranges," Letter from S.L. Rosen, HL&P, to USNRC Document Control Desk, dated January 14, 1993, ST-HL-AE-4281.

"Issuance of Amendment Nos. 51 and 40 to Facility Operating License Nos. NPF-76 and NPF-80, South Texas Project, Units 1 and 2 (TAC Nos. M85717 and M85718)," Letter from L.E. Kokajko, USNRC to W.T. Cottle, HL&P, date May 25, 1993.

Pursuant to 10CFR50.90, Houston Lighting & Power (HL&P) hereby proposes to amend its Operating Licenses NPF-76 by incorporating the proposed changes to the Technical Specifications and Updated Final Safety Analysis Report for the South Texas Project Electric Generating Station (STPEGS).

The purpose of this proposed licensing amendment is to change the implementation from that originally submitted in the referenced submittal of "Unit 1 fifth refueling outage" to "prior to Unit 1 restart from the current outage". There have been no changes to Unit 1 that deviate from the original submittal.

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Project Manager on Behalf of the Participants in the South Texas Project

HL&P submitted the referenced proposed amendment change with an implementation date of the third refueling outage for Unit 2 and the fifth refueling outage for Unit 1. The submitted amendment change was granted and the referenced amendment was received with an implementation of the third refueling outage for Unit 2. The implementation for Unit 1 was not granted. The referenced amendments stated that for Unit 1 HL&P must resubmit for the necessary final implementation and state any changes that have been made in the intervening period which would affect the original application or the NRC staff's safety evaluation.

HL&P has reviewed the referenced proposed amendment pursuant to 10CFR50.92 and determined that no changes have been made that would affect the original application or the NRC staff's safety evaluation and it involves no significant hazards considerations. The basis for this determination is provided in the attachment and the referenced original submittal. In addition, based on the information contained in this submittal, the original submittal, and the NRC Final Environmental Assessment for STP Unit 1, HL&P has concluded that, pursuant to 10CFR51, there are no significant radiological or non-radiological impacts associated with the proposed action and the proposed license amendment will not have a significant effect on the quality of the environment.

HL&P's Plant Operations Review Committee and Nuclear Safety Review Board have reviewed and approved this proposed amendment change.

In accordance with 10CFR50.91(b), HL&P is providing the State of Texas with a copy of this revision.

If the NRC should have any questions concerning this matter, please contact Mr. A. W. Harrison at (512) 972-7298 or me at (512) 972-8787.

T. H. Cloninger
Vice President,
Nuclear Engineering

HRP/sr

Attachments: 1) Affidavit from T. H. Cloninger
2) Determination of No Significant Hazards
3) Annotated Technical Specifications

c:

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Nuclear Regulatory Commission
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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter	)	
	)	
Houston Lighting & Power Company, et al.,	)	Docket Nos. 50-498
	)	
South Texas Project Units 1 and 2	)	

AFFIDAVIT

T. H. Cloninger being duly sworn, hereby deposes and says that he is Vice President, Nuclear Engineering, of Houston Lighting & Power Company; that he is duly authorized to sign and file with the Nuclear Regulatory Commission the proposed amendment concerning the RWST and SI accumulators allowable boron concentration ranges; is familiar with the content thereof; and that the matters set forth therein are true and correct to the best of his knowledge and belief.

T. H. Cloninger
Vice President, Nuclear Engineering

STATE OF TEXAS)
)
)

Subscribed and sworn to before me, a Notary Public in and for The State of Texas this 5th day of August, 1993.

B. DIANA SCHUMANN
Notary Public, State of Texas
My Commission Expires 7-1-95

B. Diana Schumann
Notary Public in and for the
State of Texas

TSC\93-200.001

ATTACHMENT 2

No Significant Hazards Evaluation
for the
Proposed Revision to the
Refueling Water Storage Tank and SI Accumulators
Allowable Boron Concentration Ranges

No Significant Hazards
Evaluation for the
Proposed Revision to the
Refueling Water Storage Tank and SI Accumulators
Allowable Boron Concentration Ranges

Pursuant to 10CFR50.91, this analysis provides a determination that the proposed change to the Technical Specifications does not involve significant hazards considerations as defined in 10CFR50.92.

(1) **The proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.**

The proposed increase in boron concentrations increases the amount of boron delivered to the reactor core under accident conditions. This will decrease the reactivity of the core and will not increase in the probability or consequences of an accident previously evaluated.

The reduction in the switchover time for the post-LOCA hot leg injection will ensure that the maximum allowable boric acid concentration will not be exceeded, thus maintaining the current margin to safety.

The proposed increase in the required volume of the Boric Acid Storage Tanks is to ensure that sufficient boric acid is available to borate the reactor coolant system and the water in the refueling canal such that the criticality limit during shutdown and refueling can be met for future cores.

The increase in the required minimum boron concentration in the refueling canal in Mode 6 does not modify or replace the K_{eff} reactivity limit. The design of each reload core is checked to ensure that the refueling criticality limit is met.

Therefore, the changes do not involve a significant increase in the probability or consequences of an accident previously evaluated.

No Significant Hazards
Evaluation for the
Proposed Revision to the
Refueling Water Storage Tank and SI Accumulators
Allowable Boron Concentration Ranges

(2) **The proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.**

The proposed increase in boron concentrations increases the amount of boron delivered to the reactor core under accident conditions. This increase in boron will not create the possibility of a new or different kind of accident from any accident previously evaluated.

The reduction in the switchover time for the post-LOCA hot leg injection will ensure that the maximum allowable boric acid concentration will not be exceeded. This reduction in switchover time will maintain the current margin to safety. Therefore, the increase in the boron concentration will not create the possibility of a new or different kind of accident from any accident previously evaluated.

The proposed increase in the required volume of the Boric Acid Storage Tanks during shutdown and refueling is to ensure the reactor coolant system can be adequately borated during shutdown. This increase in volume does not create the possibility of a new or different kind o accident from any accident previously evaluated.

The increase in the required minimum boron concentration in the refueling canal in Mode 6 does not modify or replace the K_{eff} reactivity limit. therefore, the increase in the boron concentration will not create the possibility of a new or different kind of accident from any accident previously evaluated.

<u>The proposed changes do not create the possibility of a new or different kind of accident from any accident previously evaluated.</u>

No Significant Hazards
Evaluation for the
Proposed Revision to the
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Allowable Boron Concentration Ranges

(3) **The proposed change does not involve a significant reduction in a margin of safety.**

The proposed increase in boron concentrations increases the amount of boron delivered to the reactor core under accident conditions. This will decrease the reactivity of the core and will not cause a decrease in a margin of safety.

The reduction in the switchover time for the post-LOCA hot leg injection will ensure that the maximum allowable boric acid concentration will not be exceeded, thus maintaining the current margin to safety.

The proposed increase in the required volume of the Boric Acid Storage Tanks is to ensure that sufficient boric acid is available to borate the water in the reactor coolant system and the refueling canal such that the criticality limit during shutdown and refueling can be met for future cores. Also, the increase in the required minimum boron concentration in the refueling canal in Mode 6 does not modify or replace the K_{eff} reactivity limit. The design of each reload core is checked to ensure that the refueling criticality limit and serve to maintain the current margin to safety.

Therefore, the proposed changes do not involve a significant reduction in a margin of safety.

The proposed changes to the Technical Specifications are acceptable because they do not pose a significant increase in hazard or involve a significant reduction in a margin of safety.

This determination of No Significant Hazards is the same as that submitted to the USNRC for approval to implement the changes for both Units 1 and 2 (Reference 1), and subsequently approved for Unit 2 only (Reference 2).

HL&P requests approval of the proposed changes.

No Significant Hazards Evaluation for the Proposed Revision to the Refueling Water Storage Tank and SI Accumulators Allowable Boron Concentration Ranges

REFERENCES:

1. "South Texas Project Units 1 & 2, Docket Nos. STN 50-498; 50-499, Proposed Licensing Amendment Concerning the RWST and SI Accumulators Allowable Boron Concentration Ranges", Letter from S. L. Rosen, HL&P, to USNRC, Document Control Desk, dated 14 January 1993, ST-HL-AE-4281.

2. "Issuance of Amendment Nos. 51 and 40 to Facility Operating License Nos. NPF-76 and NPF-80 - South Texas Project, Units 1 and 2 (TAC Nos. M85717 and M85718)", Letter from L. E. Kokajko, USNRC, to W. Cottle, HL&P, dated 25 May 1993.