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

April 17, 1996
ST-HL-AE-5304
File No.: G03.08
10CFR50.54(f)

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D. C. 20555-0001

South Texas Project
Units 1 and 2
Docket Nos. STN 50-498, STN 50-499
Response to NRC Generic Letter 96-01,
"Testing of Safety-Related Logic Circuits"

Pursuant to 10CFR50.54(f), the South Texas Project submits this response to NRC Generic Letter 96-01, "Testing of Safety-Related Logic Circuits."

The Nuclear Regulatory Commission staff has requested that licensees take the following actions:

1. Compare electrical schematic drawings and logic diagrams for the reactor protection system, emergency diesel generator load shedding and sequencing, and actuation logic for the engineered safety features systems against plant surveillance test procedures to ensure that all portions of the logic circuitry, including the parallel logic, interlocks, bypasses and inhibit circuits, are adequately covered in the surveillance procedures to fulfill the Technical Specification requirements, This review should also include relay contacts, control switches, and other relevant electrical components within these systems, utilized in the logic circuits performing a safety function.

2. Modify the surveillance procedures as necessary for complete testing to comply with the technical specifications. Additionally, the licensee may request an amendment to the technical specifications if relief from certain testing requirements can be justified.

Generic Letter 96-01 requests that completion of these actions be accomplished prior to startup from the first refueling outage commencing one year after issuance of this generic letter.

A program for review and enhancement of surveillance procedures was performed at the South Texas Project which substantially addressed the scope of review identified in

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Generic Letter 96-01. The Surveillance Procedure Enhancement Program was developed by the South Texas Project to incorporate good human factor principles as well as to ensure that the surveillance procedures accurately reflect the design basis and adequately perform their intended function. The objectives of the enhancement program were:

- To ensure surveillances are technically adequate to ensure equipment will perform the intended safety function;
- To comply with Technical Specifications;
- To establish a documented technical basis for future reference; and
- To minimize the risk of reactor trips or actuation of Engineered Safety Features.

Future procedure enhancements will follow the Improved Technical Specifications implementation schedule using similar procedure development techniques that were used in the surveillance procedure enhancement program.

Existing South Texas Project procedures require that surveillance procedures be reviewed for technical accuracy. In addition to ensuring proper tracking of Technical Specification requirements in the surveillance program database and implementation of acceptance criteria and testing methodology, factors essential to appropriate revision and review of surveillance procedures are included in a checklist. Implementation of this checklist is expected to result in surveillance procedures that are complete and technically accurate as they are reviewed and revised

Generic Letter 96-01 also states that:

> Some licensees may have already performed the requested reviews and taken appropriate corrective actions. These licensees do not need to perform any additional reviews unless modifications have been made to the logic circuits for the identified systems. In these cases, modifications should be reviewed, and full functional testing of the modification conducted following modifications to safety-related logic circuits. Furthermore, routine surveillance testing should not be relied upon for confirming proper performance of logic circuits following modifications.

The South Texas Project reactor protection system, standby diesel generator load shedding and sequencing, and actuation logic for the engineered safety features systems have been reviewed for actuation logic modifications made since implementation of the surveillance procedure enhancement program. The South Texas Project will verify that

where modifications were made, full functional testing was completed at the time of modification completion and procedures were changed as needed.

Procedural requirements are in place to ensure that plant modifications are reviewed for impact on surveillance procedures. Plant procedures require that testing to verify full functionality be performed after installation of a modification. Procedures require that functional testing ensure the design basis function(s) of the component or integrated system is accomplished in all required modes and conditions.

The Nuclear Regulatory Commission provided clarification of a number of issues related to Generic Letter 96-01 at the Atlanta workshop on March 19, 1996. Consequently, the South Texas Project will perform an additional review of the surveillance procedures for the reactor protection system, standby diesel generator load shedding and sequencing, and actuation logic for the engineered safety features systems ensuring that the issues identified in the Generic Letter have been addressed consistent with the clarification provided at the workshop.

Rather than establishing a completion schedule based upon startup from a refueling outage, required modifications to procedures will be completed concurrent with the implementation of the Improved Technical Specifications, currently scheduled for completion by December 31, 1997. Operability concerns will be addressed and resolved as they are identified.

If there are any questions, please contact either Mr. P. L. Walker at (512) 972-8392, or me at (512) 972-8787.

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PLW/bc

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
Houston Lighting & Power Company, et al.,	)	Docket Nos. 50-498 50-499
South Texas Project Units 1 and 2	)	

AFFIDAVIT

I, T. H. Cloninger, being duly sworn, hereby depose and say that I am Vice President, Nuclear Engineering, of Houston Lighting & Power Company; that I am duly authorized to sign and file with the Nuclear Regulatory Commission the attached response to NRC Generic Letter 96-01, "Testing of Safety - Related Circuits"; that I am familiar with the content thereof; and that the matters set forth therein are true and correct to the best of my knowledge and belief.

T.H. Cloninger
Vice President,
Nuclear Engineering

STATE OF TEXAS)
)
COUNTY OF MATAGORDA)

Subscribed and sworn to before me, a Notary Public in and for the State of Texas, this 17th day of April, 1996.

LINDA RITTENBERRY
Notary Public, State of Texas
My Commission Expires 10/9/97

Linda Rittenberry
Notary Public in and for the
State of Texas