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

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

South Texas Project
Units 1 and 2
Docket Nos. STN 50-498; STN 50-499
Response to NRC Bulletin 96-02 - Movement of Heavy Loads Over Spent Fuel, in the Reactor Core or Over Safety-Related Equipment

Attached is South Texas Project's response to the information requested by the Nuclear Regulatory Commission Bulletin 96-02 regarding movement of heavy loads over spent fuel, in the reactor core, or over safety-related equipment.

If you have any questions regarding this subject, please contact Mr. S. E. Thomas at (512) 972-7162 or me at (512) 972-8787.

T. H. Cloninger
Vice President,
Nuclear Engineering

JMP/

Attachments: 1. Affidavit
2. Response to Nuclear Regulatory Commission Bulletin 96-02

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AFFIDAVIT

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
	)	
Houston Lighting & Power	)	Docket Nos. 50-498
Company, et al.,	)	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 Nuclear Regulatory Commission Bulletin 96-02; 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)
)
)

Subscribed and sworn to before me, a Notary Public in and for the State of Texas, this 8th day of May, 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

Response to Nuclear Regulatory Commission Bulletin 96-02

Bulletin 96-02 Requirements

To ensure that the handling of heavy loads is performed safely and within the conditions and requirements specified under Title 10 of the *Code of Federal Regulations*, all addressees are requested to take the following actions:

- Review plans and capabilities for handling heavy loads while the reactor is at power (in all modes other than cold shutdown, refueling, and defueled) in accordance with existing regulatory guidelines. Determine whether the activities are within the licensing basis and, if necessary, submit a license amendment request. Determine whether changes to Technical Specifications will be required in order to allow the handling of heavy loads (e.g., the dry storage canister shield plug and associated lifting devices) over fuel assemblies in the spent fuel pool.

Pursuant to Section 182a, the Atomic Energy Act of 1954, as amended, and 10 CFR 50.54(f), all addressees must submit the following written information:

(1) For licensees planning to implement activities involving the handling of heavy loads over spent fuel, fuel in the reactor core, or safety-related equipment within the next 2 years from the date of this bulletin, provide the following:

- A report, within 30 days of the date of this bulletin, that addresses the licensee's review of its plans and capabilities to handle heavy loads while the reactor is at power (in all modes other than cold shutdown, refueling, and defueled) in accordance with existing regulatory guidelines. The report should also indicate whether the activities are within the licensing basis and should include, if necessary, a schedule for submission of a license amendment request. Additionally, the report should indicate whether changes to Technical Specifications will be required.

(2) For licensees planning to perform activities involving the handling of heavy loads over spent fuel, fuel in the reactor core, or safety-related equipment while the reactor is at power (in all modes other than cold shutdown, refueling, and defueled) and that involve a potential load drop accident that has not previously been evaluated in the Final Safety Analysis Report, submit a license amendment request in advance (6-9 months) of the planned movement of the loads so as to afford the staff sufficient time to perform an appropriate review.

(3) For licensees planning to move dry storage casks over spent fuel, fuel in the reactor core, or safety-related equipment while the reactor is at power (in all modes other than cold shutdown, refueling, and defueled) include in item 2 above, a statement of the capability of performing the actions necessary for safe shutdown in the presence of radiological source term that may result from a breach of the dry storage cask, damage to the fuel, and damage to safety-related equipment as a result of a load drop inside the facility.

(4) For licensees planning to perform activities involving the handling of heavy loads over spent fuel, fuel in the reactor core, or safety-related equipment while the reactor is at power (in all modes other than cold shutdown, refueling, and defueled), determine whether changes to Technical Specifications will be required in order to allow the handling of heavy loads (e.g., the dry storage canister shield plug) over fuel assemblies in the spent fuel pool and submit the appropriate information in advance (6-9 months) of the planned movement of the loads for NRC review and approval.

The South Texas Project provides the following response:

The South Texas Project has reviewed the "Heavy Loads" program in place at the South Texas Project. The program continues to meet the current licensing basis and continues to ensure that the South Texas Project controls for handling heavy loads are in accordance with existing regulatory guidelines.

The South Texas Project established controls for the movement of heavy loads based on the requirements of the Nuclear Regulatory Commission Generic Letter dated December 22, 1980. Compliance with the requirements of the Generic Letter was documented in the South Texas Project's Heavy Loads Program and responses to the Nuclear Regulatory Commission Requests for Information during the initial licensing review of the South Texas Project Units (See attached Heavy Loads Correspondence Reference Table). The Nuclear Regulatory Commission's acceptance of the implementation of the South Texas Project's Heavy Loads Program are documented in the Safety Evaluation Report (NUREG 0781 dated April, 1986).

The Nuclear Regulatory Commission Safety Evaluation Report concluded that the South Texas Project program for resolving the concerns of NUREG 0612 were acceptable. In addition, the South Texas Project's response provided analyses of load drops throughout the plant, including containment, showed that unacceptable releases of radioactivity or damage to safety-related equipment would not occur, and stated that safe load paths and handling procedures were developed for the loads. The staff concluded that requirements had been satisfied for the overhead heavy load handling systems at South Texas Units 1 and 2.

As described in the South Texas Project letter dated October 19, 1984 (Reference 3), "Should changes to the safe load paths become necessary through design evolution or operating constraints, revised safe load paths will be established and incorporated into plant procedures in accordance with the guidelines used to establish the initial safe load paths." The South Texas Project has controls established in the heavy loads procedure to ensure that the appropriate requirements are followed. Changes to the procedure are reviewed in accordance with the guidelines in the Generic Letter. In addition, changes are reviewed and approved by the South Texas Project Plant Operations Review Committee.

ITEM 1

The submittal of this letter satisfies the requirement to submit a report within 30 days of the date of the bulletin which addresses the South Texas Project's review of its plans and capabilities to handle heavy loads while the reactor is at power (in all modes other than cold shutdown, refueling, and defueled) in accordance with existing regulatory guidelines. As described above, the control of heavy loads program remains within the existing licensing basis utilizing the guidelines in the Generic Letter. Since the current Heavy Loads Program is in compliance, there is no need to submit a license amendment request. Also, there are no changes to Technical Specifications required.

ITEM 2

Activities involving the handling of heavy loads over spent fuel, fuel in the reactor core, or safety-related equipment while the reactor is at power (in all modes other than cold shutdown, refueling, and defueled) are within the evaluations previously performed in the Final Safety Analysis Report. Therefore, no license amendment request is required.

ITEM 3

The South Texas Project has no plans at this time to move dry fuel storage casks over spent fuel, fuel in the reactor core, or safety-related equipment while the reactor is at power (in all modes other than cold shutdown, refueling, and defueled).

ITEM 4

For activities involving the handling of heavy loads over spent fuel, fuel in the reactor core, or safety-related equipment while the reactor is at power (in all modes other than cold shutdown, refueling, and defueled), there are no changes to Technical Specifications required in order to allow the handling of heavy loads over fuel assemblies in the spent fuel pool.

SUMMARY AND CONCLUSIONS:

The South Texas Project has reviewed the "Heavy Loads" program in place at the South Texas Project. The program continues to meet the current licensing basis and continues to ensure that the South Texas Project controls for handling heavy loads are in accordance with existing regulatory guidelines.

Key elements of the Heavy Loads program, which ensure deviations from the current Heavy Loads program are evaluated in accordance with the Licensing Basis, are:

- Work activities requiring a Safe Load Path not defined in the Heavy Loads procedure require Engineering Evaluation (e.g. field sketch of path, crane type, load weight) prior to lifting the load over station equipment.

- An engineering response to deviations from Safe Load Paths to the heavy loads procedure shall be prepared. Deviations shall follow the guidelines as described in the South Texas Project revised response to Generic Letter 81-07 dated October 19, 1984 (ST-HL-AE-1129). The Plant Operations Review Committee's approval of deviations via the 10CFR50.59 process is required prior to lifting the load.

HEAVY LOADS CORRESPONDENCE REFERENCES TABLE

1.	ST-HL-AE-718	08/25/81	LTR TO NRC	Submittal of Preliminary Response
2.	ST-HL-AE-1031	12/19/83	LTR TO NRC	Initial Complete Submittal [Supersedes previous response]
3.	ST-HL-AE-1129	10/19/84	LTR TO NRC	Submittal of Revised Response (Rev. 1) - **Final Report**. Addresses EG&G's (NRC's consultant) comments.
4.	ST-HL-AE-1305	7/29/85	LTR TO NRC	Response to request for additional information
5.	ST-HL-AE-1738	9/5/86	LTR TO NRC	Clarification on Reactor Vessel Head Lift Rig and Reactor Vessel Internals Lift Rig
6.	ST-HL-AE-1862	1/27/87	LTR TO NRC	Redefined heavy load to 2500 lbs
7.	TS 4.9.7	--	Technical Specification	Crane Travel -Spent Fuel Storage Areas