

The Light company

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

August 6, 1997
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File No.: G20.02.01
G21.02.01
10CFR50.90
10CFR2.790

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

South Texas Project
Units 1 & 2

Docket Nos. STN 50-498, STN 50-499

Proposed Amendment to Technical Specification Table 2.2-1 and 3/4.2.5 for
Reactor Coolant System Flow Monitoring - Revised

Reference: Correspondence from T. H. Cloninger, South Texas Project, to NRC Document
Control Desk, dated July 16, 1997 (ST-HL-AE-5692)

The referenced correspondence submitted for review and approval a proposed amendment to the South Texas Project Unit 1 and Unit 2 Technical Specifications. The proposed amendment revises Technical Specification Table 2.2-1 and 3/4.2.5 to allow the Reactor Coolant System total flow to be determined using cold leg elbow tap differential pressure measurements.

The previous submittal contained information proprietary to Westinghouse Electric Corporation. This submittal supersedes the July 16 letter and provides proprietary and non-proprietary versions of the safety evaluation. Other than complying with the administrative requirements of 10CFR2.790 for proprietary information, there are no changes from the first submittal.

As noted in the referenced correspondence, hot leg streaming effects have resulted in measured Reactor Coolant System flow lower than actual. The apparent total flow reductions caused by hot leg streaming have resulted in precision calorimetric measured flow close to the total flow limit given in the Technical Specifications. This revision to the Technical Specifications will allow more accurate measurement through use of the elbow tap differential pressure method.

The South Texas Project requests that this proposed Technical Specification be assigned Restart Priority to support approval prior to the next refueling outage for Unit 1, which is currently scheduled to begin September 13, 1997. The effective date is requested to be one week after approval by the Nuclear Regulatory Commission.

If the amendment is not approved, flow reduction due to steam generator tube plugging and flow bias from increased hot leg streaming effects of the low leakage core loading has a high potential to cause indicated Reactor Coolant System flow to be less than that required per Technical Specification 3.2.5 for Departure from Nucleate Boiling parameters. Without this amendment in place, the South Texas Project may have to take action as follows to compensate for the reduced indicated flow:

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

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- Sleeve Steam Generator tubes at a conservatively estimated cost of \$1,280,000, assuming 1% of the tubes are sleeved.
- Derate Unit 1 to 95%, assuming maximum steam generator tube plugging of 10% and a hot leg streaming bias flow reduction of 0.35%. This derating in itself would require Nuclear Regulatory Commission approval as an emergency Technical Specification change.
- Delay startup of the unit until the amendment is approved, at a cost of approximately \$400,000 per day.

A low margin to required reactor coolant flow was first identified in early March 1997 on restart from the last Unit 2 refueling outage, during which an unexpectedly high number of steam generator tubes were plugged and a lower leakage core pattern was loaded. In anticipation of possible impact of similar conditions on Unit 1, the South Texas Project initiated prompt action to prepare for it. Following evaluations of available options, the South Texas Project submitted plant-specific flow data to Westinghouse in April 1997 and requested preparation of plant-specific analyses on a high priority basis. The supporting evaluation performed by Westinghouse was received by the South Texas Project on June 30, 1997. This submittal is timely with consideration for the review and analysis required for its preparation.

The South Texas Project has reviewed the attached proposed amendment pursuant to 10CFR50.92 and determined that it does not involve a significant hazards consideration. In addition, there is no significant increase in the amounts of any effluents that may be released offsite, and there is no significant increase in individual or cumulative occupational radiation exposure. Consequently, the proposed amendment satisfies the criteria of 10CFR51.22(c)(9) for categorical exclusion from the requirement for an environmental assessment.

The South Texas Project Nuclear Safety Review Board has reviewed and approved the proposed change.

The required affidavit, along with a Safety Evaluation and No Significant Hazards Consideration Determination associated with the proposed change, and the marked-up proposed replacement pages of the Technical Specifications and Bases are included as attachments to this letter.

In accordance with 10CFR50.91(b), the South Texas Project is providing the State of Texas with a copy of this proposed amendment.

Enclosed are:

1. One copy of "RCS Flow Measurement Using Elbow Tap Methodology Licensing Submittal," July, 1997 (Proprietary)

2. One copy of "RCS Flow Measurement Using Elbow Tap Methodology Licensing Submittal," July, 1997 (Non-Proprietary)

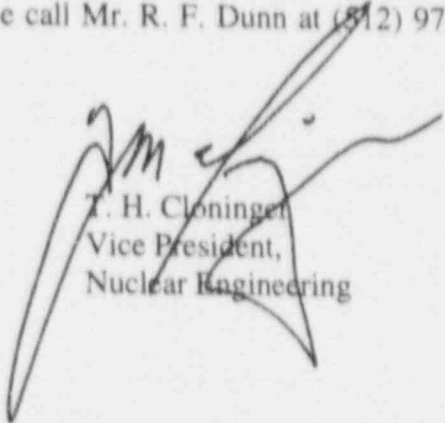
Also enclosed are a Westinghouse authorization letter, CAW-97-1144, accompanying affidavit, Proprietary Information Notice, and Copyright Notice.

As Item 1 contains information proprietary to Westinghouse Electric Corporation, it is accompanied by an affidavit signed by Westinghouse, the owner of the information. The affidavit sets forth the basis on which the information may be withheld from public disclosure by the Commission and addresses with specificity the considerations listed in paragraph (b)(4) of Section 2.790 of the Commission's regulations.

Accordingly, it is respectfully requested that the information which is proprietary to Westinghouse be withheld from public disclosure in accordance with 10CFR2.790 of the Commission's regulations.

Correspondence with respect to the copyright or proprietary aspects of the items listed above or the supporting Westinghouse Affidavit should reference CAW-97-1144 and should be addressed to N. J. Liparulo, Manager of Equipment Design and Regulatory Engineering, Westinghouse Electric Corporation, P.O. Box 355, Pittsburgh, Pennsylvania 15230-0355.

If there are any questions associated with this change, please call Mr. R. F. Dunn at (512) 972-7743 or me at (512) 972-8787.



T. H. Cloninger
Vice President,
Nuclear Engineering

PLW

- Attachments:
1. Affidavit
 2. Proprietary Information Notice
 3. Copyright Notice
 4. Westinghouse Letter "Application for Withholding Proprietary Information from Public Disclosure" (CAW-97-1144) with Affidavit CAW-97-1144
 5. RCS Flow Measurement Using Elbow Tap Methodology Licensing Submittal - July 1997 (Proprietary)
 6. RCS Flow Measurement Using Elbow Tap Methodology Licensing Submittal - July 1997 (Non-Proprietary)

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* Above copies distributed without Attachment 5

ATTACHMENT 1

AFFIDAVIT

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of)

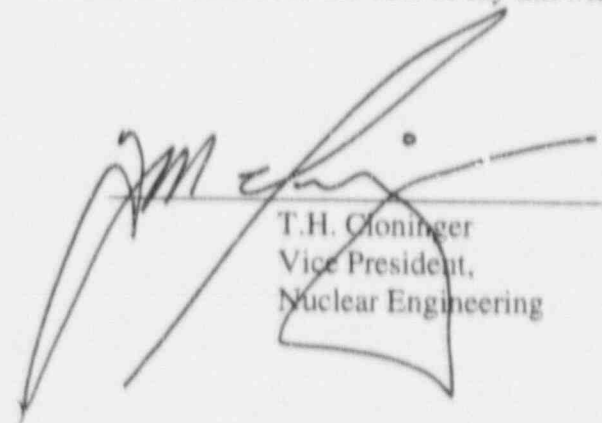
Houston Lighting & Power)
Company, et al.,)

Docket Nos. 50-498
50-499

South Texas Project)
Units 1 and 2)

AFFIDAVIT

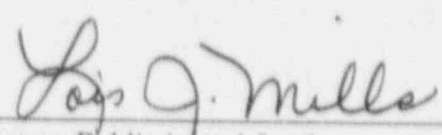
I, T. H. Cloninger, being duly sworn, hereby depose and say that I am Vice President, Nuclear Engineering, of Houston Lighting & Power Company; that I am duly authorized to sign and file with the Nuclear Regulatory Commission the attached proposed Technical Specification amendment; that I am familiar 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 6th day of August, 1997.


Lois G. Mills
Notary Public in and for the
State of Texas



ATTACHMENT 2

Proprietary Information Notice

Proprietary Information Notice

Transmitted herewith are proprietary and/or non-proprietary versions of documents furnished to the NRC in connection with requests for generic and/or plant-specific review and approval.

In order to conform to the requirements of 10 CFR 2.790 of the Commission's regulations concerning the protection of proprietary information so submitted to the NRC, the information which is proprietary in the proprietary versions is contained within brackets, and where the proprietary information has been deleted in the non-proprietary versions, only the brackets remain (the information that was contained within the brackets in the proprietary versions having been deleted). The justification for claiming the information so designated as proprietary is indicated in both versions by means of lower case letters (a) through (f) contained within parentheses located as a superscript immediately following the brackets enclosing each item of information being identified as proprietary or in the margin opposite such information. These lower case letters refer to the types of information Westinghouse customarily holds in confidence identified in Sections (4)(ii)(a) through (4)(ii)(f) of the affidavit accompanying this transmittal pursuant to 10 CFR 2.790(b)(1).

ATTACHMENT 3

Copyright Notice

Copyright Notice

The reports transmitted herewith each bear a Westinghouse copyright notice. The NRC is permitted to make the number of copies of the information contained in these reports which are necessary for its internal use in connection with generic and plant-specific reviews and approvals as well as the issuance, denial, amendment, transfer, renewal, modification, suspension, revocation, or violation of a license, permit, order, or regulation subject to the requirements of 10 CFR 2.790 regarding restrictions on public disclosure to the extent such information has been identified as proprietary by Westinghouse, copyright protection notwithstanding. With respect to the non-proprietary versions of these reports, the NRC is permitted to make the number of copies beyond those necessary for its internal use which are necessary in order to have one copy available for public viewing in the appropriate docket files in the public document room in Washington, DC and in local public document rooms as may be required by NRC regulations if the number of copies submitted is insufficient for this purpose. Copies made by the NRC must include the copyright notice in all instances and the proprietary notice if the original was identified as proprietary.

ATTACHMENT 4

**Westinghouse Letter "Application for Withholding Proprietary Information from
Public Disclosure" (CAW-97-1144) with Affidavit CAW-97-1144**