

The Light company

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

February 15, 1995
ST-HL-AE-5000
File No.: G09.06
10CFR50.90,
10CFR50.92,
10CFR51

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
Unit 1 and Unit 2 Technical Specification 3.3.3.7 and 3.8.4.1

Houston Lighting & Power Company proposes to amend its Operating Licenses NPF-76 and NPF-80 for the South Texas Project Electric Generating Station, Units 1 and 2, by incorporating the attached proposed change to Technical Specifications 3.3.3.7 and 3.8.4.1. The purpose of this amendment is to modify (by relocation) Technical Specification 3.3.3.7, Chemical Detection Systems and Technical Specification 3.8.4.1, Electrical Equipment Protective Devices-Containment Penetration Conductor Overcurrent Protective Devices and the associated Bases. This relocation is being made pursuant to the guidance provided in the Final Policy Statement on Technical Specifications Improvements for Nuclear Power Reactors. This action is proposed to be taken ahead of the conversion to the Improved Standard Technical Specification now underway at the South Texas Project Electric Generating Station in order to resolve several technical issues associated with these Technical Specifications..

Houston Lighting & Power has reviewed the attached proposed amendment pursuant to 10CFR50.92 and determined that it does not involve a significant hazards consideration. In addition, Houston Lighting & Power has determined that 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 Electric Generating Station Nuclear Safety Review Board has reviewed and approved the proposed changes.

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

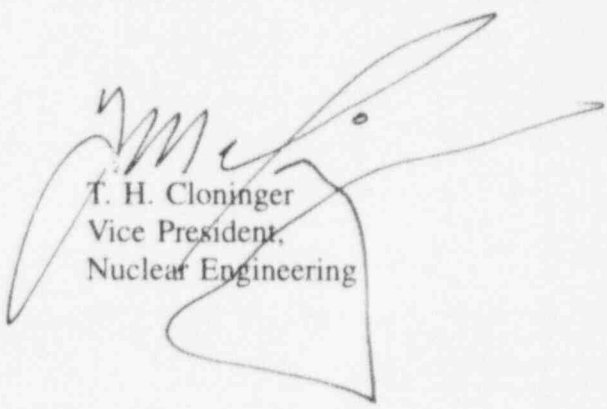
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Project Manager on Behalf of the Participants in the South Texas Project

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In accordance with 10CFR50.91(b), Houston Lighting & Power is providing the State of Texas with a copy of this proposed amendment.

If you should have any questions concerning this matter, please call Mr. M. A. McBurnett at (512) 972-7206 or myself at (512) 972-8787.



T. H. Cloninger
Vice President,
Nuclear Engineering

LW/lf

- Attachment:
1. Affidavit
 2. Safety Evaluation and No Significant Hazards Consideration Determination
 3. Mark-ups of Proposed Change to Technical Specifications 3.3.3.7 and 3.8.4.1.
 4. Technical Specification Screening evaluation based on the Final Policy Statement Criteria.

Houston Lighting & Power Company
South Texas Project Electric Generating Station

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c:

Leonard J. Callan
Regional Administrator, Region IV
U. S. Nuclear Regulatory Commission
611 Ryan Plaza Drive, Suite 400
Arlington, TX 76011-8084

Thomas W. Alexion
Project Manager
U. S. Nuclear Regulatory Commission
Washington, DC 20555-0001 13H15

David P. Loveless
Sr. Resident Inspector
c/o U. S. Nuclear Regulatory Comm.
P. O. Box 910
Bay City, TX 77404-0910

J. R. Newman, Esquire
Morgan, Lewis & Bockius
1800 M Street, N.W.
Washington, DC 20036-5869

K. J. Fiedler/M. T. Hardt
City Public Service
P. O. Box 1771
San Antonio, TX 78296

J. C. Lanier/M. B. Lee
City of Austin
Electric Utility Department
721 Barton Springs Road
Austin, TX 78704

G. E. Vaughn/C. A. Johnson
Central Power and Light Company
P. O. Box 2121
Corpus Christi, TX 78403

Rufus S. Scott
Associate General Counsel
Houston Lighting & Power Company
P. O. Box 61067
Houston, TX 77208

Institute of Nuclear Power
Operations - Records Center
700 Galleria Parkway
Atlanta, GA 30339-5957

Dr. Joseph M. Hendrie
50 Bellport Lane
Bellport, NY 11713

Richard A. Ratliff
Bureau of Radiation Control
Texas Department of Health
1100 West 49th Street
Austin, TX 78756-3189

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

J. R. Egan, Esquire
Egan & Associates, P.C.
2300 N Street, N.W.
Washington, D.C. 20037

ATTACHMENT 1

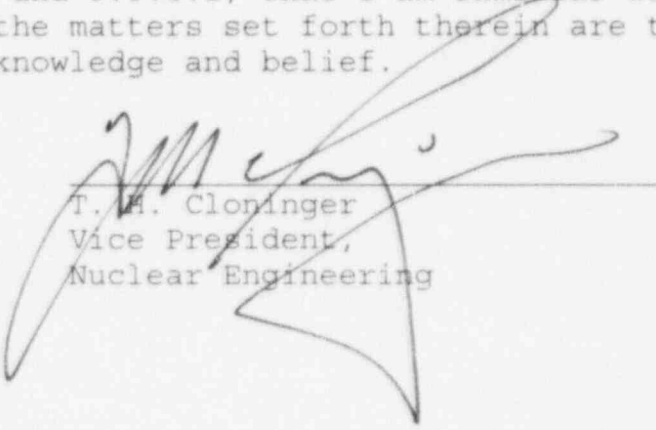
AFFIDAVIT

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

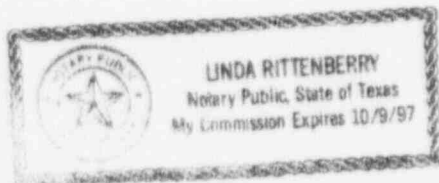
I, T. H. Cloninger, being duly sworn, hereby depose and say that I am Vice President, Nuclear Engineering, of Houston Lighting & Power Company; that I am duly authorized to sign and file with the Nuclear Regulatory Commission the attached revision to proposed changes to Technical Specification 3.3.3.7 and 3.8.4.1; 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 *15th* day of *February*, 1995.





Notary Public in and for the
State of Texas

ATTACHMENT 2

SAFETY EVALUATION
AND
NO SIGNIFICANT HAZARDS
CONSIDERATION DETERMINATION
FOR
RELOCATING SELECTED TECHNICAL SPECIFICATIONS
AND ASSOCIATED BASES
TO THE
TECHNICAL REQUIREMENTS MANUAL (TRM)

Background

The Nuclear Regulatory Commission (NRC) published a "Final Policy Statement on Technical Specifications Improvements for Nuclear Power Reactors" in the Federal Register on July 22, 1993. The Policy states "The purpose of Technical Specifications is to impose those conditions or limitations upon reactor operations necessary to obviate the possibility of an abnormal situation or event giving rise to an immediate threat to the public health and safety by identifying those features that are of controlling importance to safety and establishing on them certain conditions of operation which cannot be changed without prior Commission approval." The Policy provided four (4) Criteria to determine the necessary requirements to be included in the Technical Specifications. Items not meeting the four Criteria were to be relocated from Technical Specifications to a licensee-controlled document (e.g., the FSAR, the Security Plan, the QA Plan, the Fire Protection Plan, or other locations approved by the Nuclear Regulatory Commission).

The four Criteria are:

Criterion 1

Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary.

Discussion

A basic concept in the adequate protection of the public health and safety is the prevention of accidents. Instrumentation is installed to detect significant abnormal degradation of the reactor coolant pressure boundary so as to allow operator actions to either correct the condition or to shutdown the plant safely, thus reducing the likelihood of a loss-of-coolant accident. This criterion is intended to ensure that Technical Specifications control those instruments specifically installed to detect excessive reactor coolant system leakage.

Criterion 2

A process variable, design feature, or operating restriction that is an initial condition of a Design Bases Accident or Transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.

Discussion

A basic concept in the adequate protection of the public health and safety is that the plant will be operated within the bounds of the initial conditions assumed in existing Design Bases Accident and Transient Analyses. These analyses consist of postulated events, analyzed in the Final Safety Analysis report, for which a structure, system, or component must meet specified functional goals. These analyses are contained in chapters 6 and 15 of the Final Safety Analysis report and are identified as Condition II, III or IV events that either assume the failure of or present a challenge to a fission product barrier.

As used in criterion 2, process variables are only those parameters for which specific values or ranges of values have been chosen as reference bounds in the Design Basis Accidents or Transient Analyses and which are monitored and controlled during power operation such that process values remain within the analysis bounds.

The purpose of this criterion is to capture those process variables that have initial values assumed in the Design Basis Accident and Transient Analyses, and which are monitored and controlled during power operations. So long as these variables are maintained within the established values, risk to the public safety is presumed to be acceptable low.

Criterion 3

A structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a Design Basis Accident or Transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.

Discussion

A third concept in the adequate protection of the public health and safety is that in the event of a postulated Design Basis Accident or Transient should occur, structures, systems, and components are available to function or to actuate in order to mitigate the consequences of the Design Basis Accident or Transient. Safety sequence analyses or their equivalent have been performed in recent years and provide a method of presenting the plant response to an accident. These can be used to define the primary success paths.

A safety sequence analysis is a systematic examination of the actions required to mitigate the consequences of events considered in the plant's Design Basis Accidents or Transient Analyses, as presented in Chapters 6 and 15 of the plant's Final Safety Analysis Report. Such a safety sequence analysis considers all applicable events, whether explicitly or implicitly presented. The primary success path of a safety sequence analysis consists of the combination and sequences of equipment needed to operate, so that the plant response to Design Basis Accidents and Transients limits the consequences of these events to within the appropriate acceptance criteria.

It is the intent of this criterion to capture into Technical Specifications only those structures, systems, and components that are part of the primary success path of a safety sequence analysis. Also captured by this criterion are those support and actuation systems that are necessary for items in the primary success path to successfully function.

Criterion 4

A structure, system, or component which operating experience or probabilistic safety assessment has shown to be significant to the public health and safety.

Discussion

It is the intent of this criterion that those requirements that PSA or operating experience exposes as significant to public health and safety, consistent with the Commission's Safety Goal and Severe Accident Policies, be retained or included in Technical Specifications.

Proposed Change

Houston Lighting & Power proposes to modify (by relocation) Technical Specifications 3.3.3.7, Chemical Detection Systems and 3.8.4.1, Electrical Equipment Protective Devices-Containment Penetration Conductor Overcurrent Protective Devices and the associated Bases. A markup of the proposed change to the Technical Specifications and their Bases is included as Attachment 3 of this request. The document selected to contain these requirements will meet the requirements in the Final Policy Statement. The proposed document is the Technical Requirements Manual (TRM). The Technical Requirements Manual (TRM) will be considered as a Licensing Basis Document and as such, changes will be controlled in accordance with the approved station procedures (0PGP05-ZN-0004, Changes to Licensing Basis Documents and Amendments to the Operating License) and the requirements of 10 CFR 50.59. Each of the Technical Specifications listed have been reviewed by station personnel against the four Criteria of the Final Policy Statement and against WCAP 11618 (WOG Merits Program - Improved Technical Specifications Merits Program Phase II Task 5, Criteria Application). This review has concluded that the listed Technical Specifications do not meet any of the four Criteria and can be relocated to Licensee-controlled documents.

Safety Evaluation

The purpose of Technical Specifications is to impose those conditions or limitations upon reactor operations necessary to obviate the possibility of an abnormal situation or event giving rise to an immediate threat to the public health and safety by identifying those features that are of controlling importance to safety and establishing on them certain conditions of operation which cannot be changed without prior Commission approval. Technical Specifications 3.3.3.7 and 3.8.4.1 were evaluated against the four Criteria and based on the following discussion it was determined that they did not meet any of the Criteria in the Final Policy Statement for inclusion into the Technical Specifications.

Technical Specification 3.3.3.7 Chemical Detection System

The Chemical Detection System Instrumentation is used to detect an accidental toxic gas release and isolate the control room atmosphere. An accidental toxic gas release does not meet the definition of a Design Basis Accident or transient.

The Chemical Detection System Instrumentation is not installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary. The Chemical Detection System Instrumentation does not meet Criterion 1.

The Chemical Detection System Instrumentation is not a process variable, design feature, or operating restriction that is an initial condition of a Design Bases Accident or Transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. The Chemical Detection System Instrumentation does not meet Criterion 2.

The Chemical Detection System Instrumentation is not a structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a Design Bases Accident or Transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. The Chemical Detection System Instrumentation does not meet Criterion 3.

The Chemical Detection System Instrumentation is not a structure, system, or component which operating experience or probabilistic safety assessment has shown to be significant to the public health and safety. Based on the calculations performed in the plant specific PSA for the South Texas Project, it was concluded that the frequency of core melt at the South Texas Project due to release of hazardous chemicals is much smaller than 7.55×10^{-6} per year. The Chemical Detection System Instrumentation does not meet Criterion 4.

Technical Specification 3.8.4.1 Electrical Equipment Protective Devices

The Electrical Equipment Protective Devices-Containment Penetration Conductor Overcurrent Protective Devices are installed to minimize the potential for a fault in a component inside containment, or in cabling which penetrates the containment structure. This prevents an electrical penetration from being damaged in such a way that the containment structure is breached.

The Electrical Equipment Protective Devices-Containment Penetration Conductor Overcurrent Protective Devices are not installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary. The Electrical Equipment Protective Devices-Containment Penetration Conductor Overcurrent Protective Devices do not meet Criterion 1.

The Electrical Equipment Protective Devices-Containment Penetration Conductor Overcurrent Protective Devices do help preserve the assumptions of the safety analysis by enhancing proper equipment operation, however they are not a process variable, design feature, or operating restriction that is an initial condition of a Design Bases Accident or Transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. The Electrical Equipment Protective Devices-Containment Penetration Conductor Overcurrent Protective Devices do not meet Criterion 2.

The Electrical Equipment Protective Devices-Containment Penetration Conductor Overcurrent Protective Devices provide equipment and distribution system protection from faults or improper operation of other protective devices in addition to that provided by the design of the distribution system. However, the Electrical Equipment Protective Devices-Containment Penetration Conductor Overcurrent Protective Devices are not a structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a Design Bases Accident or Transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. The Electrical Equipment Protective Devices-Containment Penetration Conductor Overcurrent Protective Devices do not meet Criterion 3.

The Electrical Equipment Protective Devices-Containment Penetration Conductor Overcurrent Protective Devices are not a structure, system, or component which operating experience or probabilistic safety assessment has shown to be significant to the public health and safety. The Electrical Equipment Protective Devices-Containment Penetration Conductor Overcurrent Protective Devices do not meet Criterion 4.

The relocation of the listed Technical Specifications to the Technical Requirements Manual is an administrative change in that the listed Technical Specifications and Bases will be relocated in their entirety to the Technical Requirements Manual (TRM). Any future changes to the relocated requirements will be in accordance with 10CFR 50.59 and approved station procedures.

Current Licensing Basis

The listed Technical Specifications were included in the South Texas Project Technical Specifications during initial licensing of the station. This was primarily the result of structuring the South Texas Project Technical Specifications using NUREG-0452 (Standard Technical Specifications) as a model. In recent years the Commission and the Industry have developed a new standard (NUREG-1431, Improved Standard Technical Specifications) for plant Technical Specifications.

The purpose of Technical Specification 3.3.3.7, Chemical Detection Systems, is to ensure that sufficient capability is available to promptly detect and initiate protective action in the event of an accidental chemical release. This capability is required to protect control room personnel and is consistent with the recommendations of Regulatory Guide 1.78, "Assumptions for Evaluating the Habitability of a Nuclear Power Plant Control Room During a Postulated Hazardous Chemical Release," June 1974.

The purpose of Technical Specification 3.8.4.1, Electrical Equipment Protective Devices-Containment Penetration Conductor Overcurrent Protective Devices is to provide primary and backup overcurrent protection circuit breakers to ensure containment electrical penetrations are not damaged by an electrical fault.

The licensing basis for these requirements remains unchanged. The administrative relocation of these Technical Specifications and bases has no impact on their licensing basis.

Impact of Proposed Change

The proposed change is an administrative relocation of the listed Technical Specifications to a Licensee-controlled document in accordance with the Criteria published in the "Final Policy Statement on Technical Specifications Improvements for Nuclear Power Reactors" of the Federal Register July 22, 1993. The listed Technical Specifications have been evaluated against the Criteria as specified and it has been determined that the listed Technical Specifications do not meet the Criteria in the Final Policy Statement for inclusion into the Technical Specifications. The proposed change will relocate the listed Technical Specifications and Bases to the Technical Requirements Manual.

No Significant Hazards Consideration Determination

Pursuant to 10CFR50.91, this analysis provides a determination that the proposed change to the Technical Specifications described previously, does not involve any significant hazards consideration as defined in 10CFR50.92, as described below:

1. Does the proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?

The proposed change to Technical Specification 3.3.3.7, Chemical Detection Systems and 3.8.4.1, Electrical Equipment Protective Devices-Containment Penetration Conductor Overcurrent Protective Devices, is of an administrative nature in that the listed Technical Specifications and Bases will be relocated in entirety to the Technical Requirements Manual (TRM). Any future changes to the relocated requirements will be in accordance with 10CFR 50.59 and approved station procedures. Whether the listed Technical Specifications and Bases are located in Technical Specifications or the Technical Requirements Manual has no effect on the probability or consequences of any accident previously evaluated.

The proposed change does not alter the assumptions previously made in the listed Technical Specifications. The proposed change allows the Commission and South Texas more effective use of personnel resources to control requirements that meet the four Criteria in the Final Policy Statement. The proposed change will not change the dose to workers.

Since the probability of a accident is unaffected by the administrative relocation of the listed Technical Specifications, and the doses are not affected and do not exceed acceptance limits, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the proposed change create the possibility of a new or different kind of accident from any accident previously evaluated?

The proposed change to Technical Specification 3.3.3.7, Chemical Detection Systems and 3.8.4.1, Electrical Equipment Protective Devices-Containment Penetration Conductor Overcurrent Protective Devices, is of an administrative nature in that the listed Technical Specifications and Bases will be relocated in entirety to the Technical Requirements Manual (TRM). Any future changes to the relocated requirements will be in accordance with 10CFR 50.59 and approved station procedures. Whether the listed Technical Specifications and Bases are located in Technical Specifications or the Technical Requirements Manual has no effect on any previously evaluated accident. It does not represent a change in the configuration or operation of the plant and, therefore, does not create the possibility of a new or different type of accident from any accident previously evaluated.

3. Does the proposed change involve a significant reduction in the margin of safety?

The proposed change to Technical Specification 3.3.3.7, Chemical Detection Systems and 3.8.4.1, Electrical Equipment Protective Devices-Containment Penetration Conductor Overcurrent Protective Devices, is of an administrative nature in that the listed Technical Specifications and Bases will be relocated in entirety to the Technical Requirements Manual (TRM). Any future changes to the relocated requirements will be in accordance with 10CFR 50.59 and approved station procedures. The margin of safety is not reduced when the requirements are relocated to a Licensee-controlled document because the requirements to change a License Basis Document via the 10CFR 50.59 process ensures the same questions concerning the margin to safety required for a License Amendments are asked. The major difference is the time and expense required for the License Amendments. Therefore, this proposed change does not significantly reduce the margin of safety.

Implementation Plan

Houston Lighting & Power requests an implementation time of 30 days from the effective date of the approved license amendment to facilitate distribution and to make appropriate changes to plant documents.