

Mr. William T. Cottle
 Group Vice-President, Nuclear
 Houston Lighting & Power Company
 South Texas Project Electric
 Generating Station
 P. O. Box 289
 Wadsworth, TX 77483

July 2, 1995

SUBJECT: SOUTH TEXAS PROJECT, UNITS 1 AND 2 - AMENDMENT NOS. 78
 AND 67 TO FACILITY OPERATING LICENSE NOS. NPF-76 AND NPF-80
 (TAC NOS. M92292 AND M92293)

Dear Mr. Cottle:

The Commission has issued the enclosed Amendment Nos. 78 and 67 to Facility Operating License Nos. NPF-76 and NPF-80 for the South Texas Project, Units 1 and 2 (STP). The amendments consist of changes to the Technical Specifications (TSs) in response to your application dated May 2, 1995.

The amendments revise TSs 3.4.2.2. and 3.7.1.1 (Table 3.7-2) by relaxing the lift setting tolerances of the pressurizer safety valves from plus or minus 1% to plus or minus 2% and the main steam safety valves from plus or minus 1% to plus or minus 3%, respectively. In addition, a footnote is added to require that the pressurizer safety valves and main steam safety valves setpoint tolerances be restored to within plus or minus 1% whenever a lift setting is determined to be outside plus or minus 1% following valve testing.

A copy of our related Safety Evaluation is enclosed. The Notice of Issuance will be included in the Commission's next biweekly Federal Register notice.

Sincerely,

ORIGINAL SIGNED BY:
 Thomas W. Alexion, Project Manager
 Project Directorate IV-1
 Division of Reactor Projects III/IV
 Office of Nuclear Reactor Regulation

Docket Nos. 50-498 and 50-499

- Enclosures: 1. Amendment No. 78 to NPF-76
 2. Amendment No. 67 to NPF-80
 3. Safety Evaluation

cc w/encls: See next page

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TWA signed on 7/25/95
 WJL/ll

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

July 25, 1995

Mr. William T. Cottle
Group Vice-President, Nuclear
Houston Lighting & Power Company
South Texas Project Electric
Generating Station
P. O. Box 289
Wadsworth, TX 77483

SUBJECT: SOUTH TEXAS PROJECT, UNITS 1 AND 2 - AMENDMENT NOS. 78
AND 67 TO FACILITY OPERATING LICENSE NOS. NPF-76 AND NPF-80
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A copy of our related Safety Evaluation is enclosed. The Notice of Issuance will be included in the Commission's next biweekly Federal Register notice.

Sincerely,

A handwritten signature in cursive script that reads "Thomas W. Alexion".

Thomas W. Alexion, Project Manager
Project Directorate IV-1
Division of Reactor Projects III/IV
Office of Nuclear Reactor Regulation

Docket Nos. 50-498 and 50-499

Enclosures: 1. Amendment No. 78 to NPF-76
2. Amendment No. 67 to NPF-80
3. Safety Evaluation

cc w/encls: See next page

Mr. William T. Cottle
Houston Lighting & Power Company

South Texas, Units 1 & 2

cc:

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

HOUSTON LIGHTING & POWER COMPANY
CITY PUBLIC SERVICE BOARD OF SAN ANTONIO
CENTRAL POWER AND LIGHT COMPANY
CITY OF AUSTIN, TEXAS
DOCKET NO. 50-498
SOUTH TEXAS PROJECT, UNIT 1
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 78
License No. NPF-76

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Houston Lighting & Power Company* (HL&P) acting on behalf of itself and for the City Public Service Board of San Antonio (CPS), Central Power and Light Company (CPL), and City of Austin, Texas (COA) (the licensees), dated May 2, 1995, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance: (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this license amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

*Houston Lighting & Power Company is authorized to act for the City Public Service Board of San Antonio, Central Power and Light Company and City of Austin, Texas and has exclusive responsibility and control over the physical construction, operation and maintenance of the facility.

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2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and Paragraph 2.C.(2) of Facility Operating License No. NPF-80 is hereby amended to read as follows:

2. Technical Specifications

- The Technical Specifications contained in Appendix A, as revised through Amendment No. 78, and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. The license amendment is effective as of its date of issuance to be implemented within 30 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Thomas W. Alexion, Project Manager
Project Directorate IV-1
Division of Reactor Projects III/IV
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical
Specifications

Date of Issuance: July 25, 1995



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

HOUSTON LIGHTING & POWER COMPANY
CITY PUBLIC SERVICE BOARD OF SAN ANTONIO
CENTRAL POWER AND LIGHT COMPANY
CITY OF AUSTIN, TEXAS
DOCKET NO. 50-499
SOUTH TEXAS PROJECT, UNIT 2
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 67
License No. NPF-80

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Houston Lighting & Power Company* (HL&P) acting on behalf of itself and for the City Public Service Board of San Antonio (CPS), Central Power and Light Company (CPL), and City of Austin, Texas (COA) (the licensees), dated May 2, 1995, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance: (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this license amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

*Houston Lighting & Power Company is authorized to act for the City Public Service Board of San Antonio, Central Power and Light Company and City of Austin, Texas and has exclusive responsibility and control over the physical construction, operation and maintenance of the facility.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and Paragraph 2.C.(2) of Facility Operating License No. NPF-76 is hereby amended to read as follows:

2. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 67, and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. The license amendment is effective as of its date of issuance to be implemented within 30 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Thomas W. Alexion, Project Manager
Project Directorate IV-1
Division of Reactor Projects III/IV
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical
Specifications

Date of Issuance: July 25, 1995

ATTACHMENT TO LICENSE AMENDMENT NOS. 78 AND 67
FACILITY OPERATING LICENSE NOS. NPF-76 AND NPF-80
DOCKET NOS. 50-498 AND 50-499

Replace the following pages of the Appendix A Technical Specifications with the attached pages. The revised pages are identified by Amendment number and contain marginal lines indicating the areas of change. The corresponding overleaf pages are also provided to maintain document completeness.

REMOVE

3/4 4-8
3/4 7-3

INSERT

3/4 4-8
3/4 7-3

REACTOR COOLANT SYSTEM

3/4.4.2 SAFETY VALVES

SHUTDOWN

LIMITING CONDITION FOR OPERATION

3.4.2.1 A minimum of one pressurizer Code safety valve shall be OPERABLE with a lift setting of 2485 psig \pm 1%.*

APPLICABILITY: MODES 4 and 5.

ACTION:

With no pressurizer Code safety valve OPERABLE, immediately suspend all operations involving positive reactivity changes and place an OPERABLE RHR loop into operation in the shutdown cooling mode.

SURVEILLANCE REQUIREMENTS

4.4.2.1 No additional requirements other than those required by Specification 4.0.5.

*The lift setting pressure shall correspond to ambient conditions of the valve at nominal operating temperature and pressure.

REACTOR COOLANT SYSTEM

OPERATING

LIMITING CONDITION FOR OPERATION

3.4.2.2 All pressurizer Code safety valves shall be OPERABLE with a lift setting¹ of 2485 psig \pm 2%.²

APPLICABILITY: MODES 1, 2, and 3.

ACTION:

With one pressurizer Code safety valve inoperable, either restore the inoperable valve to OPERABLE status within 1 hour or be in at least HOT STANDBY within 6 hours and in at least HOT SHUTDOWN within the following 6 hours.

SURVEILLANCE REQUIREMENTS

4.4.2.2 No additional requirements other than those required by Specification 4.0.5.

¹The lift setting pressure shall correspond to ambient conditions of the valve at nominal operating temperature and pressure.

²The as left lift setting shall be within \pm 1% following valve testing.

TABLE 3.7-2
STEAM LINE SAFETY VALVES PER LOOP

<u>VALVE NUMBER</u>					<u>LIFT SETTING¹ ($\pm 3\%$)²</u>	<u>ORIFICE SIZE </u>
	<u>LOOP A</u>	<u>LOOP B</u>	<u>LOOP C</u>	<u>LOOP D</u>		
1.	PSV-7410	PVS-7420	PSV-7430	PSV-7440	1285 psig	16 in. ²
2.	PSV-7410A	PVS-7420A	PSV-7430A	PSV-7440A	1295 psig	16 in. ²
3.	PSV-7410B	PVS-7420B	PSV-7430B	PSV-7440B	1305 psig	16 in. ²
4.	PSV-7410C	PVS-7420C	PSV-7430C	PSV-7440C	1315 psig	16 in. ²
5.	PSV-7410D	PVS-7420D	PSV-7430D	PSV-7440D	1325 psig	16 in. ²

¹The lift setting pressure shall correspond to ambient conditions of the valve at nominal operating temperature and pressure. |

²The as left lift setting shall be within $\pm 1\%$ following valve testing. |

PLANT SYSTEMS

AUXILIARY FEEDWATER SYSTEM

LIMITING CONDITION FOR OPERATION

3.7.1.2 At least four independent steam generator auxiliary feedwater pumps and associated flow paths shall be OPERABLE with:

- a. Three motor-driven auxiliary feedwater pumps, each capable of being powered from separate emergency busses, and
- b. One steam turbine-driven auxiliary feedwater pump capable of being powered from an OPERABLE steam supply system.

APPLICABILITY: MODES 1, 2, and 3.

ACTION:

- a. With the Train A motor-driven auxiliary feedwater pump inoperable, initiate corrective actions to restore the pump to OPERABLE status as soon as possible. The provisions of Specification 4.0.4 are not applicable.
- b. With any of the following combinations of auxiliary feedwater pumps inoperable:
 - 1) Train B or Train C motor-driven pump,
 - 2) Train D turbine-driven pump and any one motor-driven pump,
 - 3) Train A and either Train B or Train C motor-driven pump, or
 - 4) Train D turbine-driven pump

Restore the affected auxiliary feedwater pump(s) to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours.

- c. With Train B and Train C motor driven pumps, or any three auxiliary feedwater pumps inoperable, be in at least HOT STANDBY within 6 hours and in HOT SHUTDOWN within the following 6 hours.
- d. With four auxiliary feedwater pumps inoperable, immediately initiate corrective action to restore at least one auxiliary feedwater pump to OPERABLE status as soon as possible.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NOS. 78 AND 67 TO

FACILITY OPERATING LICENSE NOS. NPF-76 AND NPF-80

HOUSTON LIGHTING & POWER COMPANY

CITY PUBLIC SERVICE BOARD OF SAN ANTONIO

CENTRAL POWER AND LIGHT COMPANY

CITY OF AUSTIN, TEXAS

DOCKET NOS. 50-498 AND 50-499

SOUTH TEXAS PROJECT, UNITS 1 AND 2

1.0 INTRODUCTION

By application dated May 2, 1995, Houston Lighting & Power Company, et.al., (the licensee) requested changes to the Technical Specifications (TSs) (Appendix A to Facility Operating License Nos. NPF-76 and NPF-80) for the South Texas Project, Units 1 and 2 (STP). The proposed changes would revise TSs 3.4.2.2. and 3.7.1.1 (Table 3.7-2) by relaxing the lift setting tolerances of the pressurizer safety valves (PSVs) from plus or minus 1% to plus or minus 2% and the main steam safety valves (MSSVs) from plus or minus 1% to plus or minus 3%, respectively. In addition, a footnote would be added to require that the PSVs and MSSVs setpoint tolerances be restored to within plus or minus 1% whenever a lift setting is determined to be outside plus or minus 1% following valve testing.

2.0 BACKGROUND

At STP, there are three PSVs set at 2485 psig. The four main steam lines have a total of 20 MSSVs (five per main steam line), each set at increments that range from 1285 to 1325 psig. The PSVs are Class 1 components, designed and manufactured to meet Section III of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code. The MSSVs are Class 2 components, designed and manufactured to meet Section III of the ASME Code. Currently, testing for the PSVs and the MSSVs is performed in accordance with ASME Section XI, every refueling outage, to assure a tolerance of plus or minus 1% of the valve setpoint.

This proposal will relax the "as found" lift settings for operable PSVs from plus or minus 1% to plus or minus 2% and for operable MSSVs from plus or minus 1% to plus or minus 3%. This relaxation is applicable for drift of PSV and

MSSV lift settings which occur during the operating cycle. The PSVs and MSSVs setpoint tolerances will be restored to plus or minus 1% whenever it is determined (i.e., by testing per TS 4.0.5) to be outside plus or minus 1%.

3.0 DISCUSSION

On May 27, 1994, the NRC staff approved TS changes proposed by the licensee on May 27, 1993, regarding the transition to the Vantage 5 Hybrid fuel design. The licensee's safety evaluation included mechanical, nuclear, thermal and hydraulic, and accident conditions. As part of this analysis, use of a plus or minus 2% PSV and a plus or minus 3% MSSV valves setpoint tolerance was examined. In addition, the licensee's safety evaluation portion of the May 2, 1995, application specifically examines the impact of increased PSV and MSSV setpoint tolerance on the safety analysis. The licensee summarizes this impact as follows:

The analysis for the non-LOCA [loss-of-coolant accident] safety analysis performed for the Vantage 5 Hybrid fuel upgrade amendment considered the effects of an increased tolerance for the PSVs and MSSVs. The transients which primarily examine peak reactor coolant system pressure include the loss of load/turbine trip event (Update Final Safety Analysis Report Sections 15.2.2 and 15.3.3). In this event the effects of the increased PSV tolerance was explicitly modeled. The results of these analyses and the evaluations of the remaining non-LOCA transients demonstrate that the PSVs will provide sufficient relief even when an analytical tolerance totalling plus or minus 2% is assumed.

The transients which examine secondary pressure are the loss of normal feedwater/loss of offsite power event. In this event the effects of the increased MSSV tolerance was explicitly modeled. In addition the analysis took credit for the staggered pressure setpoints currently in the TSs. The results of the analysis demonstrated that the MSSVs will provide sufficient relief to keep secondary pressure below 110% of the steam generator shell design pressure even when an analytical tolerance totalling plus 3% is added to the relief pressure setpoint.

The staff also requested that the licensee supplement the above discussion to expand on some of the details of their analyses. The licensee provided the following additional information to the staff. The decrease from minus 1% to minus 2% will result in an approximate minimum pressure of 2435 psig. This is well above both the reactor trip setpoint of 2380 psig and the pressurizer power-operated relief valve (PORV) setpoint of 2335. The pressurizer PORV is assumed to open during the departure from nucleate boiling (DNB) accident analysis since this will provide the worst case situation. The request to decrease the MSSV as found setpoint tolerance value from minus 1% to minus 3% is consistent with the safety analysis and normal plant operating conditions. The decrease from minus 1% to minus 3% will result in an approximate minimum pressure of 1246 psig, which is well above the normal maximum hot zero power operating pressure of approximately 1200 psig. Therefore, these changes will not impact the safe operation of STP.

4.0 EVALUATION

The licensee has determined that the proposed TS changes do not result in a significant reduction in the margin of safety. The limiting transient in each category has been analyzed to determine the effect of the change in the setpoint tolerances. The licensee determined that the results of these analyses meet all acceptance criteria and demonstrate that the peak pressures in the primary and secondary systems do not exceed 110% of the system design pressures in accordance with the ASME Code.

Further, in order to prevent the setpoints from drifting outside the plus or minus 2% range for the PSVs and the plus or minus 3% range for the MSSVs, the licensee will continue to require both PSV and MSSV setpoint tolerances to be restored to plus or minus 1% when the as-found lift setting exceeds plus or minus 1% prior to declaring the PSVs and MSSVs operable. This will prevent excessive setpoint drift that would cause the peak system pressures to exceed the allowable limits.

Based on the above evaluation, the staff finds that the proposed TS changes are acceptable.

5.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Texas State official was notified of the proposed issuance of the amendments. The State official had no comments.

6.0 ENVIRONMENTAL CONSIDERATION

The amendments change a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendments involve no significant hazards consideration, and there has been no public comment on such finding (60 FR 29877). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendments.

7.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: T. Alexion

Date: July 25, 1995