

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

February 14, 1995

SUBJECT: SOUTH TEXAS PROJECT, UNITS 1 AND 2 - AMENDMENT NOS. 71
 AND 60 TO FACILITY OPERATING LICENSE NOS. NPF-76 AND NPF-80
 (TAC NOS. M90798 AND M90799)

Dear Mr. Cottle:

The Commission has issued the enclosed Amendment Nos. 71 and 60 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 (TS) in response to your application dated November 7, 1994, as supplemented by letters dated December 20, 1994, and January 23, 1995.

The amendments change the number of standby diesel generators (SDGs) (emergency power source) required to be operable during Mode 6 with greater than or equal to 23 feet of water above the reactor vessel flange, from two to one. The amendment would also allow limited substitution of an alternate onsite emergency power source for one of the two required SDGs, in Mode 5, and in Mode 6 with less than 23 feet of water. In addition, changes to certain system specifications that are affected by the changes for the emergency power source were also proposed.

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 Lawrence Kokajko for
 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. 71 to NPF-76
 2. Amendment No. 60 to NPF-80
 3. Safety Evaluation

cc w/encls: See next page

DISTRIBUTION:

Docket File	GHill (4)	PUBLIC	OGC	ABeach, RIV
CGrimes	PDIV-1 r/f	ACRS (4)	JWRoe	DHagan
OC/LFMB	EPeyton	TAlexion (2)	OPA	CMcCracken
			BJones	CBerlinger

Document Name: ST90798.AMD

OFC	LA/PD4-1	PM/PD4-1	BC/OTSB	OGC
NAME	EPeyton	TAlexion/vw	CGrimes	
DATE	2/3/95	2/6/95	2/7/95	2/8/95
COPY	YES/NO	(YES)NO	(YES)NO 95-033	YES/NO

*LEK
for TAC
2/14/95*

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DATE	2/3/95	2/6/95	2/7/95	2/8/95
COPY	YES/NO	(YES)/NO	(YES)NO 95-033	YES/NO

Handwritten:
 OK
 for TAC
 2/14/95

OFFICIAL RECORD COPY.



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

February 14, 1995

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

SUBJECT: SOUTH TEXAS PROJECT, UNITS 1 AND 2 - AMENDMENT NOS. 71
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Sincerely,

A handwritten signature in black ink, appearing to read "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. 71 to NPF-76
2. Amendment No. 60 to NPF-80
3. Safety Evaluation

cc w/encls: See next page

Houston Lighting & Power Company

South Texas, Units 1 & 2

cc w/enclosure:

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ATTN: Susan Rieff, Director
Environmental Policy
P. O. Box 12428
Austin, Texas 78711



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

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. 71
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 November 7, 1994, as supplemented by letters dated December 20, 1994, and January 23, 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.

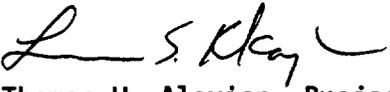
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and Paragraph 2.C.(2) of Facility Operating License No. NPF-76 is hereby amended to read as follows:

2. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 71, 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 31 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION


for 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: February 14, 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. 60
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 November 7, 1994, as supplemented by letters dated December 20, 1994, and January 23, 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.

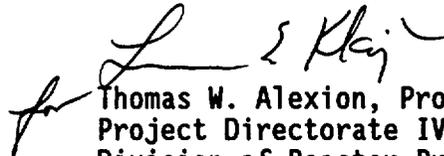
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and Paragraph 2.C.(2) of Facility Operating License No. NPF-80 is hereby amended to read as follows:

2. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 60, 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 31 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: February 14, 1995

ATTACHMENT TO LICENSE AMENDMENT NOS. 71 AND 60

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 8-9
--
3/4 8-13
3/4 8-16
3/4 9-14
B 3/4 8-14
B 3/4 8-15
--
B 3/4 9-3
B 3/4 9-4

INSERT

3/4 8-9
3/4 8-9a
3/4 8-13
3/4 8-16
3/4 9-14
B 3/4 8-14
B 3/4 8-15
B 3/4 8-16
B 3/4 9-3
B 3/4 9-4

ELECTRICAL POWER SYSTEMS

A.C. SOURCES

SHUTDOWN

LIMITING CONDITION FOR OPERATION

3.8.1.2 As a minimum, the following A.C. electrical power sources shall be OPERABLE:

- a. One circuit between the offsite transmission network and the Onsite Class 1E Distribution System, and
- b. Two¹ standby diesel generators each with a separate fuel tank containing a minimum volume of 60,500 gallons of fuel.

APPLICABILITY: MODE 5 and MODE 6 with water level in the refueling cavity <23 ft above the reactor pressure vessel flange.

ACTION:

With less than the above minimum required A.C. electrical power sources OPERABLE, immediately suspend all operations involving CORE ALTERATIONS, positive reactivity changes, movement of irradiated fuel, operations with a potential for draining the reactor vessel or crane operation with loads over the spent fuel pool. Immediately initiate actions to restore the inoperable A.C. electrical power source to OPERABLE status.

SURVEILLANCE REQUIREMENTS

4.8.1.2 The above required A.C. electrical power sources shall be demonstrated OPERABLE by the performance of each of the requirements of Specifications 4.8.1.1.1, 4.8.1.1.2 (except for Specification 4.8.1.1.2a.3), and 4.8.1.1.3.

4.8.1.2.1 The alternate onsite emergency power source shall be demonstrated functional by:

- a. Within 4 hours of taking credit for the onsite emergency power source as a standby diesel generator, verify it starts and achieves steady state voltage ($\pm 10\%$) and frequency ($\pm 2\%$) in 5 minutes.
- b. Within 4 hours of taking credit for the onsite emergency power source as a standby diesel generator and every 8 hours thereafter, verify the emergency power source is capable of being aligned to the required ESF bus by performing a breaker alignment check.

¹An alternate onsite emergency power source, capable of supplying power for one train of shutdown cooling may be substituted for one of the required diesels for 14² consecutive days (SR 4.8.1.2.1 is the only requirement applicable).

²21 consecutive days for 1RE05 and 2RE04 Refueling Outages only.

ELECTRICAL POWER SYSTEMS

A.C. SOURCES

SHUTDOWN

LIMITING CONDITION FOR OPERATION

3.8.1.3 As a minimum, the following A.C. electrical power sources shall be OPERABLE:

- a. One circuit between the offsite transmission network and the Onsite Class 1E Distribution System, and
- b. One standby diesel generator with a separate fuel tank containing a minimum volume of 60,500 gallons of fuel.

APPLICABILITY: MODE 6 with water level in the refueling cavity ≥ 23 ft above the reactor pressure vessel flange.

ACTION:

With less than the above minimum required A.C. electrical power sources OPERABLE, immediately suspend all operations involving CORE ALTERATIONS, positive reactivity changes, movement of irradiated fuel, operations with a potential for draining the reactor vessel or crane operation with loads over the spent fuel pool. Immediately initiate actions to restore the inoperable A.C. electrical power source to OPERABLE status.

SURVEILLANCE REQUIREMENTS

4.8.1.3 The above required A.C. electrical power sources shall be demonstrated OPERABLE by the performance of each of the requirements of Specifications 4.8.1.1.1, 4.8.1.1.2 (except for Specification 4.8.1.1.2a.3), and 4.8.1.1.3.

ELECTRICAL POWER SYSTEMS

3/4.8.2 D.C. SOURCES

OPERATING

LIMITING CONDITION FOR OPERATION

3.8.2.1 As a minimum, the following D.C. electrical sources shall be OPERABLE:

- a. Channel I 125-volt Battery Bank E1A11 (Unit 1), E2A11 (Unit 2) and its two associated chargers,
- b. Channel II 125-volt Battery Bank E1D11 (Unit 1), E2D11 (Unit 2) and its associated full capacity charger,
- c. Channel III 125-volt Battery Bank E1B11 (Unit 1), E2B11 (Unit 2) and its associated full capacity charger, and
- d. Channel IV 125-volt Battery Bank E1C11 (Unit 1), E2C11 (Unit 2) and its two associated chargers.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTION:

- a. With one of the required battery banks, and/or one of the required chargers for the Channels II or III inoperable, restore the inoperable battery bank and/or charger to OPERABLE status within 2 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- b. With only one charger on Channel I or IV OPERABLE, demonstrate the OPERABILITY of the associated battery bank by performing Surveillance Requirement 4.8.2.1.a.1) within 1 hour and at least once per 8 hours thereafter. If any Category A limit in Table 4.8-2 is not met, declare the battery inoperable. Restore the inoperable charger to OPERABLE status within 24 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.8.2.1 Each 125-volt battery bank and charger shall be demonstrated OPERABLE:

- a. At least once per 7 days by verifying that:
 - 1) The parameters in Table 4.8-2 meet the Category A limits, and
 - 2) The total battery terminal voltage is greater than or equal to 129 volts on float charge.

ELECTRICAL POWER SYSTEMS

D.C. SOURCES

SHUTDOWN

LIMITING CONDITION FOR OPERATION

3.8.2.2 DC electrical power subsystem shall be OPERABLE to support the DC electrical power distribution subsystem(s) required by LCO 3.8.3.2, "Onsite Power Distribution - Shutdown."

APPLICABILITY: MODES 5 and 6.

ACTION:

With one or more required DC electrical power subsystems inoperable, immediately declare affected required feature(s) inoperable OR immediately initiate action to suspend operations with a potential for draining the reactor vessel, suspend all operations involving CORE ALTERATIONS, positive reactivity changes, or movement of irradiated fuel; initiate corrective action to restore the required DC electrical power subsystems to OPERABLE status as soon as possible.

SURVEILLANCE REQUIREMENT

4.8.2.2 The required DC sources shall be demonstrated OPERABLE in accordance with Specification 4.8.2.1.

ELECTRICAL POWER SYSTEMS

3/4.8.3 ONSITE POWER DISTRIBUTION

OPERATING

LIMITING CONDITION FOR OPERATION

3.8.3.1 The following electrical busses shall be energized in the specified manner:

- a. Train A A.C. ESF Busses consisting of:
 - 1) 4160-Volt ESF Bus # E1A (Unit 1), E2A (Unit 2), and
 - 2) 480-Volt ESF Busses # E1A1 and E1A2 (Unit 1), E2A1 and E2A2 (Unit 2) from respective load center transformers.
- b. Train B A.C. ESF Busses consisting of:
 - 1) 4160-Volt ESF Bus # E1B (Unit 1), E2B (Unit 2), and
 - 2) 480-Volt ESF Busses # E1B1 and E1B2 (Unit 1), E2B1 and E2B2 (Unit 2) from respective load center transformers.
- c. Train C A.C. ESF Busses consisting of:
 - 1) 4160-Volt ESF Bus # E1C (Unit 1), E2C (Unit 2), and
 - 2) 480-Volt ESF Busses # E1C1 and E1C2 (Unit 1), E2C1 and E2C2 (Unit 2) from respective load center transformers.
- d. 120-Volt A.C. Vital Distribution Panels DP1201 and DP001 energized from their associated inverters connected to D.C. Bus # E1A11* (Unit 1), E2A11* (Unit 2),
- e. 120-Volt A.C. Vital Distribution Panel DP1202 energized from its associated inverter connected to D.C. Bus # E1D11* (Unit 1), E2D11* (Unit 2),
- f. 120-Volt A.C. Vital Distribution Panel DP1203 energized from its associated inverter connected to D.C. Bus # E1B11* (Unit 1), E2B11* (Unit 2),
- g. 120-Volt A.C. Vital Distribution Panels DP1204 and DP002 energized from their associated inverters connected to D.C. Bus # E1C11* (Unit 1), E2C11* (Unit 2),
- h. 125-Volt D.C. Bus E1A11 (Unit 1) E2A11 (Unit 2) energized from Battery Bank E1A11 (Unit 1), E2A11 (Unit 2),
- i. 125-Volt D.C. Bus E1D11 (Unit 1) E2D11 (Unit 2) energized from Battery Bank E1D11 (Unit 1), E2D11 (Unit 2),
- j. 125-Volt D.C. Bus E1B11 (Unit 1) E2B11 (Unit 2) energized from Battery Bank E1B11 (Unit 1), E2B11 (Unit 2), and
- k. 125-Volt D.C. Bus E1C11 (Unit 1) E2C11 (Unit 2) energized from Battery Bank E1C11 (Unit 1), E2C11 (Unit 2).

*The inverter(s) associated with one channel may be disconnected from its D.C. bus for up to 24 hours as necessary, for the purpose of performing an equalizing charge on its associated battery bank provided: (1) its vital distribution panels are energized, and (2) the vital distribution panels associated with the other battery banks are energized from their associated inverters and connected to their associated D.C. busses.

ELECTRICAL POWER SYSTEMS

LIMITING CONDITION FOR OPERATION (Continued)

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTION:

- a. With one of the required trains of A.C. ESF busses not fully energized, reenergize the train within 8 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- b. With one A.C. vital distribution panel either not energized from its associated inverter, or with the inverter not connected to its associated D.C. bus: (1) reenergize the A.C. distribution panel within 2 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours; and (2) reenergize the A.C. vital distribution panel from its associated inverter connected to its associated D.C. bus within 24 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- c. With one D.C. bus not energized from its associated battery bank, reenergize the D.C. bus from its associated battery bank within 2 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.8.3.1 The specified busses shall be determined energized in the required manner at least once per 7 days by verifying correct breaker alignment and indicated voltage on the busses.

ELECTRICAL POWER SYSTEMS

ONSITE POWER DISTRIBUTION

SHUTDOWN

LIMITING CONDITION FOR OPERATION

3.8.3.2 The necessary portion of AC, DC, and AC vital bus electrical power distribution subsystems shall be OPERABLE to support equipment required to be OPERABLE.

APPLICABILITY: MODES 5 and 6.

ACTION:

With one or more required AC, DC, or AC vital bus electrical power distribution subsystems inoperable, immediately declare associated supported required feature(s) inoperable OR immediately initiate action to suspend operations with a potential for draining the reactor vessel, suspend all operations involving CORE ALTERATIONS, positive reactivity changes, movement of irradiated fuel, and immediately initiate corrective action to restore required AC, DC, and AC vital bus electrical power distribution subsystems to OPERABLE status and declare associated required residual heat removal subsystem(s) inoperable and not in operation.

SURVEILLANCE REQUIREMENT

4.8.3.2 Verify correct breaker alignment and voltage to required AC, DC, and AC vital bus electrical power distribution subsystems at least once per 7 days.

REFUELING OPERATIONS

IN-CONTAINMENT STORAGE POOL

LIMITING CONDITION FOR OPERATION

3.9.11.2 At least 23 feet of water shall be maintained over the top of irradiated fuel assemblies seated in the storage racks.

APPLICABILITY: Whenever irradiated fuel assemblies are in the in-containment storage pool.

ACTION:

- a. With the requirements of the above specification not satisfied, suspend all movement of fuel assemblies and crane operations with loads in the fuel storage areas and restore the water level to within its limit within 4 hours.
- b. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.9.11.2 The water level in the in-containment storage pool shall be determined to be at least its minimum required depth at least once per 7 days when irradiated fuel assemblies are in the in-containment storage pool.

REFUELING OPERATIONS

3/4.9.12 FUEL HANDLING BUILDING EXHAUST AIR SYSTEM

LIMITING CONDITION FOR OPERATION

3.9.12 The FHB Exhaust Air System¹ comprised of the following components shall be OPERABLE:

- a. Two exhaust air filter trains,
- b. Two of three exhaust booster fans,
- c. Two of three main exhaust fans, and
- d. Associated dampers.

APPLICABILITY: Whenever irradiated fuel is in the spent fuel pool.

ACTION:

- a. With less than the above FHB Exhaust Air System components OPERABLE but with at least one FHB exhaust air filter train, one FHB exhaust booster fan, one FHB main exhaust fan, and associated dampers OPERABLE, fuel movement within the spent fuel pool or crane operation with loads over the spent fuel pool may proceed provided the OPERABLE FHB Exhaust Air System components are capable of being powered from an OPERABLE emergency power source and are in operation and discharging through at least one train of HEPA filters and charcoal absorbers.
- b. With no FHB exhaust air filter train OPERABLE, suspend all operations involving movement of fuel within the spent fuel pool or crane operation with loads over the spent fuel pool.
- c. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.9.12 The above required FHB Exhaust Air Systems shall be demonstrated OPERABLE:

- a. At least once per 31 days on a STAGGERED TEST BASIS by initiating, from the control room, flow through the HEPA filters and charcoal adsorbers and verifying that the system operates for at least 10 continuous hours with the heaters operating with the operable exhaust booster fans and the operable main exhaust fans operating to maintain adequate air flow rate;

¹ At least one FHB exhaust air filter train, one FHB exhaust booster fan, and one FHB main exhaust fan are capable of being powered from an OPERABLE onsite emergency power source.

ELECTRICAL POWER SYSTEMS

BASES

A.C. SOURCES, D.C. SOURCES, and ONSITE POWER DISTRIBUTION (Continued)

SR 4.8.1.1.2.e.11

As required by Regulatory Guide 1.108, paragraph 2.a.(2), each DG is required to demonstrate proper operation for the DBA loading sequence to ensure that voltage and frequency are maintained within the required limits. Under accident conditions, prior to connecting the DGs to their respective busses, all loads are shed except load center feeders and those motor control centers that power Class 1E loads (referred to as "permanently connected" loads). Upon reaching 90% of rated voltage and frequency, the DGs are then connected to their respective busses.

Loads are then sequentially connected to the bus by the automatic load sequencer. This sequencing logic controls the permissive and starting signals to motor breakers to prevent overloading of the DGs due to high motor starting currents. The 10% load sequence time interval tolerance ensures that sufficient time exists for the DG to restore frequency and voltage prior to applying the next load and that safety analysis assumptions regarding ESF equipment time delays are not violated.

The Frequency of 18 months is consistent with the recommendation of Regulatory Guide 1.108, paragraph 2.a.(2), takes into consideration unit conditions required to perform the Surveillance, and is intended to be consistent with expected fuel cycle lengths.

SR 4.8.1.1.2.e.12

This SR verifies that the diesel will not start when the emergency stop lockout feature is tripped. This prevents any further damage to the diesel engine or generator.

SR 4.8.1.1.2.e.13

This SR verifies the requirements of Branch Technical Position PSB-1 that the load shedding scheme automatically prevents load shedding during the sequencing of the emergency loads to the bus. It also verifies the reinstatement of the load shedding feature upon completion of the load sequencing action.

SR 4.8.1.1.2.f

This Surveillance demonstrates that the DG starting independence has not been compromised. Also, this Surveillance demonstrates that each engine can achieve proper speed within the specified time when the DGs are started simultaneously.

ELECTRICAL POWER SYSTEMS

BASES

A.C. SOURCES, D.C. SOURCES, and ONSITE POWER DISTRIBUTION (Continued)

The 10 year Frequency is consistent with the recommendations of Regulatory Guide 1.108, paragraph 2.b, and Regulatory Guide 1.137, paragraph C.2.f.

SR 4.8.1.1.2.g

This SR provided assurance that any accumulation of sediment over time or the normal wear on the system has not degraded the diesels.

The OPERABILITY of the minimum specified A.C. and D.C. power sources and associated distribution systems during shutdown and refueling ensures that: (1) the facility can be maintained in the shutdown or refueling condition for extended time periods, and (2) sufficient instrumentation and control capability is available for monitoring and maintaining the unit status.

The alternate onsite emergency power source will be capable of being loaded with, but not limited to, one train of the following equipment: RHR, ECW, CCW, associated instrumentation, Control Room Makeup and Cleanup Filtration System and a 150 ton EAB Chiller. This alternate onsite emergency power source will be capable of being started and loaded in sufficient time to prevent the reactor coolant temperature from exceeding design limits.

The Surveillance Requirements for demonstrating the OPERABILITY of the diesel generators are in accordance with the recommendations of Regulatory Guides 1.9, "Selection of Diesel Generator Set Capacity for Standby Power Supplies," Revision 2, December 1979; 1.108, "Periodic Testing of Diesel Generator Units Used as Onsite Electric Power Systems at Nuclear Power Plants," Revision 1, August 1977; and ASTM D975-81, ASTM D1552-79, ASTM D2622-82, ASTM D4294-83, and ASTM D2276-78. The standby diesel generators auxiliary systems are designed to circulate warm oil and water through the diesel while the diesel is not running, to preclude cold ambient starts. For the purposes of surveillance testing, ambient conditions are considered to be the hot prelude condition.

The Surveillance Requirements for demonstrating the OPERABILITY of the station batteries are based on the recommendations of Regulatory Guide 1.129, "Maintenance Testing and Replacement of Large Lead Storage Batteries for Nuclear Power Plants," February 1978, and IEEE Std 450-1980, "IEEE Recommended Practice for Maintenance, Testing, and Replacement of Large Lead Storage Batteries for Generating Stations and Substations."

Verifying average electrolyte temperature above the minimum for which the battery was sized, total battery terminal voltage on float charge, connection resistance values, and the performance of battery service and discharge tests ensures the effectiveness of the charging system, the ability to handle high discharge rates, and compares the battery capacity at that time with the rated capacity.

ELECTRICAL POWER SYSTEMS

BASES

A.C. SOURCES, D.C. SOURCES, and ONSITE POWER DISTRIBUTION (Continued)

Table 4.8-2 specifies the normal limits for each designated pilot cell and each connected cell for electrolyte level, float voltage, and specific gravity. The limits for the designated pilot cells float voltage and specific gravity, greater than 2.13 volts and 0.015 below the manufacturer's full charge specific gravity or a battery charger current that had stabilized at a low value, are characteristic of a charged cell with adequate capacity. The normal limits for each connected cell for float voltage and specific gravity, greater than 2.13 volts and not more than 0.020 below the manufacturer's full charge specific gravity with an average specific gravity of all the connected cells not more than 0.010 below the manufacturer's full charge specific gravity, ensures the OPERABILITY and capability of the battery.

Operation with a battery cell's parameter outside the normal limit but within the allowable value specified in Table 4.8-2 is permitted for up to 7 days. During this 7-day period: (1) the allowable values for electrolyte level ensures no physical damage to the plates with an adequate electron transfer capability; (2) the allowable value for the average specific gravity of all the cells, not more than 0.020 below the manufacturer's recommended full charge specific gravity, ensures that the decrease in rating will be less than the safety margin provided in sizing; (3) the allowable value for an individual cell's specific gravity, ensures that an individual cell's specific gravity will not be more than 0.040 below the manufacturer's full charge specific gravity and that the overall capability of the battery will be maintained within an acceptable limit; and (4) the allowable value for an individual cell's float voltage, greater than 2.07 volts, ensures the battery's capability to perform its design function.

3/4.8.4 ELECTRICAL EQUIPMENT PROTECTIVE DEVICES

Containment electrical penetrations and penetration conductors are protected by either deenergizing circuits not required during reactor operation or by demonstrating the OPERABILITY of primary and backup overcurrent protection circuit breakers during periodic surveillance.

The Surveillance Requirements applicable to lower voltage circuit breakers provide assurance of breaker reliability by testing a representative sample of at least 10% of each manufacturer's brand of circuit breaker. Each manufacturer's molded case and metal case circuit breakers are grouped into representative samples which are then tested on a rotating basis to ensure that all breakers are tested. If a wide variety exists within any manufacturer's brand of circuit breakers it is necessary to divide that manufacturer's breakers into groups and treat each group as a separate type of breaker for surveillance purposes.

ELECTRICAL POWER SYSTEMS

BASES

A.C. SOURCES, D.C. SOURCES, and ONSITE POWER DISTRIBUTION (Continued)

The molded case circuit breakers will be tested in accordance with NEMA Standard Publication No. AB-2-1980. For a frame size of 250 amperes or less, the field tolerance of the high and low setting of the injected current will be within + 40%, -25% of the setpoint (pickup) value. For a frame size of 400 amperes or greater, the field tolerance will be $\pm 25\%$ of the setpoint (pickup) value. The circuit breakers should not be affected when tested within their tolerance.

REFUELING OPERATIONS

BASES

3/4.9.8 RESIDUAL HEAT REMOVAL AND COOLANT CIRCULATION

The requirement that at least one residual heat removal (RHR) loop be in operation ensures that: (1) sufficient cooling capacity is available to remove decay heat and maintain the water in the reactor vessel below 140°F as required during the REFUELING MODE, and (2) sufficient coolant circulation is maintained through the core to minimize the effect of a boron dilution incident and prevent boron stratification.

The requirement to have two RHR loops OPERABLE when there is less than 23 feet of water above the reactor vessel flange ensures that a single failure of the operating RHR loop will not result in a complete loss of residual heat removal capability. With the reactor vessel head removed and at least 23 feet of water above the reactor pressure vessel flange, a large heat sink is available for core cooling. Thus, in the event of a failure of the operating RHR loop, adequate time is provided to initiate emergency procedures to cool the core.

3/4.9.9 CONTAINMENT VENTILATION ISOLATION SYSTEM

The OPERABILITY of this system ensures that the containment purge and exhaust penetrations will be automatically isolated upon detection of high radiation levels in the purge exhaust. The OPERABILITY of this system is required to restrict the release of radioactive material from the containment atmosphere to the environment.

3/4.9.10 and 3/4.9.11 WATER LEVEL - REFUELING CAVITY AND STORAGE POOLS

The restrictions on minimum water level ensure that sufficient water depth is available to remove 99% of the assumed 10% iodine gas activity released from the rupture of an irradiated fuel assembly. The minimum water depth is consistent with the assumptions of the safety analysis.

3/4.9.12 FUEL HANDLING BUILDING EXHAUST AIR SYSTEM

The limitations on the Fuel Handling Building Exhaust Air System ensure that all radioactive material released from an irradiated fuel assembly will be filtered through the HEPA filters and charcoal adsorber prior to discharge to the atmosphere. Operation of the system with the heaters operating for at least 10 continuous hours in a 31-day period is sufficient to reduce the buildup of moisture on the adsorbers and HEPA filters. The OPERABILITY of this system and the resulting iodine removal capacity are consistent with the assumptions of the safety analyses. ANSI N510-1980 will be used as a procedural guide for surveillance testing. This Specification has been modified by a note that states, at least one FHB exhaust air filter train, one FHB exhaust booster fan, and one FHB main exhaust fan are capable of being powered from an Onsite emergency power source. This note ensures that required FHB exhaust train components will have an emergency power source available, even if the limiting conditions for operation can be satisfied.

REFUELING OPERATIONS

BASES

3/4.9.12 FUEL HANDLING BUILDING EXHAUST AIR SYSTEM (Continued)

Examples of onsite emergency power sources that satisfy this requirement are: In all MODES/CONDITIONS, (a) OPERABLE ESF diesel generator for the associated required components; IN MODES/CONDITIONS below MODE 4, (b) OPERABLE ESF diesel generator capable of supplying the required components via cross tied trains, allowing one diesel generator to supply all required components, (c) an approved non-safety related diesel generator, capable of supplying the required filter train loads in conjunction with an ESF diesel.

3/4.9.13 SPENT FUEL POOL MINIMUM BORON CONCENTRATION

The restrictions on the boron concentration of the spent fuel pool ensures that the rack K_{eff} is maintained less than or equal to 0.95 in the event that one or more fuel assemblies are improperly loaded in the spent fuel pool storage racks (with respect to Specification 5.6). Since the presence of boron is ensured, the rack K_{eff} will be maintained less than or equal to 0.95 in the event of improper loading of fuel assemblies. This boron concentration is more than adequate to ensure the K_{eff} limit of 0.95, specified in Specification 5.6.1.1.a, will not be violated under the following scenarios:

- (1) in Region 1, any misloading of Category 1, 2, 3, and 4 assemblies; or
- (2) in Region 2, the misloading of one Category 1 assembly into the center of a fully loaded checkerboard area also containing Category 1 assemblies; or,
- (3) the misloading of a Category 1 assembly in a Region 1 rack adjacent to a Category 1 assembly in a Region 2 rack.

This boron concentration limit is the value necessary to ensure that the 0.95 K_{eff} limit for rack criticality will not be violated in the event of a Category 1 assembly dropped in the gap between the pool wall and a Region 2 rack module.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NOS. 71 AND 60 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 November 7, 1994, as supplemented by letters dated December 20, 1994, and January 23, 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 amendments would change the number of standby diesel generators (SDGs) (emergency power supply) required to be operable during Mode 6 with greater than or equal to 23 feet of water above the reactor vessel flange, from two to one. The amendments would also allow limited substitution of an alternate onsite emergency power source for one of the two required SDGs, in Mode 5, and in Mode 6 with less than 23 feet of water. In addition, changes to certain system specifications that are affected by the changes for the emergency power supply were also proposed.

The December 20, 1994, and January 23, 1995, supplements provided additional information in response to staff questions. The January 23, 1995, supplement also revised the TS changes initially proposed in the November 7, 1994, application to that summarized above and discussed below.

2.0 EVALUATION

The SDG system for STP consists of three identical 5500 kW SDGs and their associated controls and support systems. Each SDG unit including its power sources for controls and support systems, is completely separate from and independent of the others. Each unit provides 4.16 kV power to its respective Class 1E switchgear bus. During a loss of offsite power, each SDG automatically starts and energizes its associated 4.16 kV bus. The system has no inherent cross-train capability or dependability. No sharing capability

exists between Unit 1 and Unit 2. A brief description of the changes and the staff's evaluation of them follow.

TS 3/4.8.1.2, Electrical Power Systems, A.C. Sources, Shutdown

This TS currently requires that one offsite circuit and two SDGs be operable during Modes 5 and 6. The proposed change splits 3/4.8.1.2 into two TSs, adding a new TS 3/4.8.1.3. Revised TS 3/4.8.1.2 provides the AC power requirements for Mode 5 (during all conditions) and Mode 6 during reduced reactor coolant inventory conditions (when water level in the refueling cavity is less than 23 feet above the reactor vessel flange). TS 3/4.8.1.2 will require the following AC electrical power sources to be operable: (1) one circuit between the offsite transmission network and the onsite Class 1E distribution system, and (2) two SDGs with a separate fuel tank² containing a minimum volume of 60,500 gallons of fuel.

Revisions to Action Statement 3/4.8.1.2 are also proposed. One required action is to be added: suspend all operations with a potential for draining the reactor vessel or crane operation with loads over the spent fuel pool. The current action to depressurize and vent the reactor coolant system would then be deleted. In the December 20, 1994, supplement, the licensee stated that the proposed deleted phrase is redundant to another TS, and that the proposed added phrase will eliminate the possibility of an event that has greater potential to cause core damage. The staff finds the licensee's reasons to be acceptable and notes that the revised wording is consistent with NUREG-1431 (Improved Standard Technical Specifications for Westinghouse Plants).

Additionally, the revised TS 3/4.8.1.2 includes a footnote which would allow the use of a non-safety alternate AC onsite emergency power source as a substitute for one of the two required Class 1E SDGs during reduced reactor coolant inventory conditions. The licensee intends to provide a rented non-safety diesel generator (NDG) capable of powering, at a minimum, the equipment required for one train of shutdown cooling.

In a conference call on December 22, 1994, the staff informed the licensee that the NDG used for one of the Class 1E SDGs during reduced reactor coolant inventory conditions should be highly reliable and that there should be some time limit for its use as a substitute for a Class 1E SDG. In the past, the staff has allowed an SDG to be inoperable for up to 14 days during reduced reactor coolant inventory conditions when an alternate AC source is substituted for it, provided the alternate source is demonstrated to be functional and is capable of being aligned to the engineered safety feature (ESF) buses associated with the inoperable SDG. The staff informed the licensee that if the NDG is substituted for one Class 1E SDG, the proposed TS 3/4.8.1.2 needs to be revised to include the following requirements: (1) verify that the NDG is functional by verifying, within 4 hours, it starts and achieves steady state voltage and frequency within an appropriate time (minutes), (2) verify that it is capable of being aligned to the ESF buses associated with the inoperable Class 1E SDG within 4 hours and once per 8 hours thereafter, and (3) restore the required SDG to operable status within 14 days.

In a letter dated January 23, 1995, the licensee submitted a revised TS 3/4.8.1.2. The licensee stated that the reliability of the NDG will be established by conducting 5 start and load tests at the manufacturer's site. The testing will also include starting a pump equivalent to the largest load needed during shutdown and verifying that the voltage and frequency requirements are met. The licensee will then subject the NDG to various tests, including a load rejection test, a rated load test, a load acceptance test, and subsystem tests. In addition, the licensee will review the vendor's available maintenance records to verify the suitability of the NDG for its intended function. The licensee will verify that the NDG is not scheduled for any major recommended maintenance during the expected duration of its use at STP.

The NDG is self-contained, with its own battery start system, engine controls, switchgear, and cooling system. The NDG has a continuous rating of 2000 kW and a short-term rating of 2200 kW. The total required loading on the NDG during shutdown is 1926 kW. Fuel is provided from a temporary storage tank located near the unit.

The NDG will be manually started. During the outage, the licensee will station an individual near the NDG when the TSs require the NDG to be available. Operators in the main control room and the individual near the NDG will communicate via the plant radio system. The plant radio system has backup power sources independent of offsite power and the Class 1E SDG.

After the NDG is installed at the site, its reliability will be verified by two start and load tests. The NDG will be manually started at the local panel. The ESF bus will be energized with the bus unloaded. Once the ESF bus has been energized, loads will be manually connected to the bus. The NDG will be capable of powering simultaneously at least the following equipment: one train of the residual heat removal (RHR), essential cooling water (ECW), component cooling water (CCW), control room makeup and cleanup filtration systems and a 150-ton electrical auxiliary building chiller. The NDG will be capable of being started and loaded in sufficient time to prevent the reactor temperature from exceeding design limits.

Additionally, within 4 hours of taking credit for the NDG as a Class 1E SDG, the licensee will demonstrate the NDG is functional by verifying that it starts and achieves steady state voltage within ± 10 percent and frequency within ± 2 percent in 5 minutes. Within 4 hours of taking credit for the NDG as a Class 1E SDG and every 8 hours thereafter, the licensee will also perform a breaker alignment check to verify that the NDG is capable of being aligned to the required ESF bus. The NDG may be substituted for one of the required Class 1E SDGs for up to 14 days. However, for Unit 1 Refueling Outage 5 and Unit 2 Refueling Outage 4, the licensee has requested a one-time substitution of an NDG for a Class 1E SDG for up to 21 days instead of 14 days. This extension is necessary because the licensee is doing a 10-year teardown on one of the SDGs in each unit. The staff finds this one time request to be acceptable, considering the work involved for a complete teardown of the SDGs.

The licensee has reviewed their Updated Final Safety Analysis Report (UFSAR) for events that would be affected by this proposed TS change. They also reviewed the safety functions required during an outage and the systems required to mitigate the consequences of accidents. They determined that required systems can (1) perform their required safety functions during any postulated design basis accident condition during the applicable Modes, and (2) perform their system design functions and meet their operability requirements during the applicable Modes with the power supplies required by the proposed TSs. Based on the licensee's determinations and with the onsite power redundancy provided by the NDG (and the associated reliability testing and maintenance review of the NDG), the staff finds that the proposed changes are acceptable.

Over the past several years, the NRC staff has become increasingly concerned about the safety of operations during shutdown of nuclear power reactors. The loss of decay heat removal during shutdown and refueling has been a continuing problem. The staff decided a rule was needed to ensure that public health and safety are adequately protected when plants are in shutdown and low power conditions. A proposed rule, 10 CFR 50.67, "Shutdown and Low-Power Operations," was published in the Federal Register and sent out for comment on October 19, 1994 (59 FR 52707).

The staff also finds the proposed revisions to the requirements of the number of SDGs required to be operable during Mode 5 (during all operations) and Mode 6 with water level in the refueling cavity less than 23 feet above the reactor vessel flange, in TS 3/4.8.1.2, to be consistent with the requirements of the proposed rule. The staff finds the use of the NDG as a substitute for a Class 1E SDG to be consistent with the proposed rule. The proposed rule permits the use of non-safety as well as safety equipment to provide safety functions during reduced reactor coolant inventory conditions.

TS 3/4.8.1.3, Electrical Power Systems, A.C. Sources, Shutdown

This new TS provides the requirements for Mode 6 when water level in the refueling cavity is greater than or equal to 23 feet above the reactor vessel flange. It will require the following AC electrical power sources to be operable: (1) one circuit between the offsite transmission network and the onsite Class 1E distribution system, and (2) one SDG with a separate fuel tank containing a minimum volume of 60,500 gallons of fuel. The action statement for this proposed TS is the same as that proposed for TS 3/4.8.1.2, and is acceptable for the same reasons.

The licensee has reviewed their UFSAR for events that would be affected by this proposed TS change. They also reviewed the safety functions required during an outage and the systems required to mitigate the consequences of accidents. They determined that required systems can (1) perform their required safety functions during any postulated design basis accident condition during the applicable Mode, and (2) perform their system design functions and meet their operability requirements during the applicable Mode with the power supplies required by the proposed TSs. Based on the licensee's

determinations and with the redundancy to remove decay heat provided by the water level in the refueling cavity being greater than or equal to 23 feet above the reactor vessel flange, the staff finds that the proposed changes are acceptable.

The staff also finds the proposed revision to the requirements of the number of SDGs required to be operable during Mode 6 when water level in the refueling cavity is greater than or equal to 23 feet above the reactor vessel flange, to be consistent with the requirements of the proposed rule.

TS 3/4.8.2.2, Electrical Power Systems, D.C. Sources, Shutdown

This TS currently requires that both Channel I and the Channel IV batteries along with two battery chargers, be operable during Modes 5 and 6. The licensee proposes to use the wording of NUREG-1431 for this TS. The proposed change will require these DC power sources to support trains of distribution subsystems required to be operable by TS 3/4.8.3.2. This ensures the availability of sufficient DC power sources to operate the unit in a safe manner and to mitigate the consequences of postulated events during shutdown.

The proposed changes to the action statement include (1) revising the wording to refer to DC power subsystem rather than specific components, (2) adding the requirement to suspend operations involving the potential for draining the reactor vessel, (3) adding an alternative action to declare the supported equipment inoperable, and (4) deleting the action to depressurize and vent the reactor coolant system.

The staff finds that the proposed changes to TS 3/4.8.2.2 ensures the availability of sufficient DC power sources without imposing unnecessary constraints on the licensee, are consistent with NUREG-1431, and are acceptable.

TS 3/4.8.3.2, Electrical Power Systems, Onsite Power Distribution, Shutdown

This specification currently requires that Train A and Train C of ESF buses, four 120 volt AC vital distribution panels and Channel I and Channel IV 125 volt DC buses be operable during Mode 5 and 6. The licensee proposes to use the wording of NUREG-1431 for this TS. The proposed change will require the necessary portion of AC, DC, and AC vital bus electrical power distribution subsystems to be operable to support the equipment required to be operable to shutdown the reactor and maintain it in a safe condition, for all conditions during Modes 5 and 6.

The proposed changes to the action statement include (1) revised wording to reflect the revised limiting condition for operation, (2) adding the requirement to suspend operations involving the potential for draining the reactor vessel, (3) adding an alternative action to declare the supported equipment inoperable, and (4) deleting the action to depressurize and vent the reactor coolant system.

The staff finds that the proposed changes to TS 3/4.8.3.2 ensures that the necessary portion of AC, DC, and AC vital bus electrical power distribution subsystems are operable without imposing unnecessary constraints on the licensee, are consistent with NUREG-1431, and are acceptable.

TS 3/4.9.12, Refueling Operations, Fuel Handling Building Exhaust Air System

The proposed changes to TS 3/4.9.12 and its Bases clarifies the emergency power requirements for the fuel handling building (FHB) exhaust air system during refueling operations (whenever irradiated fuel is in the spent fuel pool). The current TS requires both (two) filter trains, three booster fans, three main exhaust fans, and associated dampers to be operable. The proposed revision would require two filter trains, two of three exhaust booster fans, two of three main exhaust fans, and associated dampers to be operable. Additionally, the licensee added a note to the limiting condition for operation to specify that at least one FHB exhaust air filter train, one FHB exhaust booster fan, and one main exhaust fan must be capable of being powered from an operable emergency power source. The corresponding Bases section was also modified to describe examples of onsite power sources that satisfy requirements of this TS.

The basis for the proposed change is that any single train of filters and any single train of main exhaust and booster fans are capable of performing the required accident mitigation functions when the plant is not in Modes 1 through 4. Since the proposed change is to the refueling operations TSs, this is an acceptable basis for the revised TS 3/4.9.12. When only SDG A or B is available, emergency onsite power is available to a single train of all the required components to meet all the postulated accident scenarios in Modes 5 and 6. The heaters for the two filter trains are powered by either electrical train A or B. Electrical train C, which is backed by SDG C, does not power either train of heaters, which is the only electrical component associated with a filter train. Therefore, when only SDG C is available, other actions are necessary to assure that a complete single train of required components remain available in the event of a loss of offsite power. The revised Bases section describes the onsite emergency power sources that satisfy this requirement. In Modes 5 and 6, these sources include supplying all the required components via cross tied trains (necessary if only the C train SDG is available), allowing one safety-related emergency diesel generator to supply all the loads, or a non-safety-related diesel generator capable of supplying the required filter train loads (heaters) in conjunction with a safety-related SDG (if only SDG C is available).

Based on its evaluation, the staff finds that any single train of filters, main exhaust and booster fans is adequate to mitigate the effects of any postulated event in Modes 5 and 6, and, therefore, the TSs during refueling should be equivalent to any plant with two 100-percent fuel building ventilation system trains (the current TSs requiring three trains of certain equipment is excessive). The proposed change to only require two air filter trains, two booster fans, two main exhaust fans, and associated dampers to be operable during refueling operations is, therefore, acceptable. The other changes related to operable emergency power sources are also acceptable

because they are necessary to support single train operation for the plant-specific design (three power trains, two filter trains). The staff, therefore, finds that the proposed changes are acceptable.

Evaluation Summary

Based on the above evaluation, the staff finds that the proposed changes to the TSs for the AC sources, DC sources and onsite power distribution, and the fuel handling building exhaust air system, are acceptable. Implicit in the staff's acceptance of this license amendment is that the licensee will address the objectives of Attachments 4, 6 and 7 (Engineering Test Guidelines for Vendor Site Testing, Engineering Test Guidelines for Onsite Testing, and Engineered Safety Features Bus Cross-Connect Description) of their January 23, 1995, supplement in plant procedures, with the attendant procedural controls thereof.

3.0 EXIGENT CIRCUMSTANCES

The Commission's regulations, 10 CFR 50.91, contain provisions for issuance of amendments when the usual 30-day public notice period cannot be met. One type of special exception is an exigency. An exigency is a case where the staff and licensee need to act promptly and the staff has determined that the amendment involves no significant hazards considerations.

Under such circumstances, the Commission notifies the public in one of two ways: by issuing a Federal Register notice providing an opportunity for hearing and allowing at least two weeks for prior public comments, or by issuing a press release discussing the proposed changes, using the local media. In this case, the Commission used the first approach.

The licensee's initial application was noticed in the Federal Register on December 7, 1994 (59 FR 63122), at which time the staff proposed a no significant hazards consideration determination. In the initial application, dated November 7, 1994, the licensee stated that approval of these changes was required by February 2, 1995, to support the scheduled refueling outage beginning on March 5, 1995. They also stated that they would need this lead time to cover planning and implementation periods. The licensee has been very prompt and attentive to addressing all of the staff's questions and concerns, and has provided two supplements, and revised proposed technical specifications (by letter dated January 23, 1995), to address them. The staff questions and concerns were not of a nature that could have been reasonably anticipated by the licensee. Approval of this change will allow the licensee to complete the refueling outage (and commence startup) significantly earlier than without the change.

The staff renoticed the supplemented application on January 30, 1995, (60 FR 5739) to include all of the supplements, because the supplemental letters represented a significant change from what was previously noticed. The staff again proposed to determine that the supplemented application involves no significant hazards considerations. The net effect of the supplements is a more restrictive and comprehensive set of TSs than that originally proposed.

Accordingly, pursuant to 10 CFR 50.91(a)(6), the Commission has determined that an exigent situation exists and that failure to act in a timely way will result in an unnecessary delay in the startup from the refueling outage. Further, the Commission has determined that the exigent situation is not due to the failure of the licensee to act in a timely manner.

There was no public comments in response to the notice published in the Federal Register.

4.0 FINAL NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

The Commission's regulations in 10 CFR 50.92 state that the Commission may make a final determination that a license amendment involves no significant hazards considerations if operation of the facility in accordance with the amendment would not (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety.

Operation of the facility in accordance with the proposed amendment will not involve a significant increase in the probability or consequences of an accident previously evaluated. The equipment affected by the proposed changes are not accident initiators, therefore, the probability of accidents previously evaluated are not increased. The staff's review of the ability to mitigate the consequences of an accident finds that (1) for the TS changes to AC sources, the required systems can perform their required safety functions during any postulated design basis accident condition, (2) for the TS changes to DC sources and onsite power distribution, there is sufficient availability of DC power sources and the necessary portion of AC, DC, and AC vital bus electrical power distribution subsystems, to mitigate the consequences of postulated events, and (3) for the TS changes to the fuel handling building exhaust air system, the required filter trains, main exhaust fans and booster fans are capable of performing the postulated accident mitigation functions.

Operation of the facility in accordance with the proposed amendment will not create the possibility of a new or different kind of accident from any accident previously evaluated. The design and purpose of the equipment discussed in (1), (2) and (3) above, is not affected by the proposed changes. Any postulated failure of the equipment discussed above is already addressed in existing accident analysis.

Operation of the facility in accordance with the proposed amendment will not involve a significant reduction in a margin of safety for the same reasons discussed in (1), (2) and (3) above. In addition, regarding the TS changes to AC sources, the staff finds that the NDG or the required water level provide an acceptable amount of redundancy to remove decay heat. Regarding the fuel handling building exhaust air subsystem, there is also an acceptable level of redundancy since any single train of filters, main exhaust and booster fans are capable of performing the required accident mitigation functions. Regarding the DC power sources and AC, DC, and AC vital bus distribution

subsystems, adopting the standard wording of NUREG-1431 simplifies the TSs, while still requiring that power to and availability of equipment needed for accident mitigation, is provided.

Based on the above considerations, the staff concludes that the amendments meet the three criteria of 10 CFR 50.92. Therefore, the staff has made a final determination that the proposed amendments do not involve a significant hazards consideration.

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 and change surveillance requirements. 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 5739). 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.

6.0 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.

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