

June 1, 1993

Mr. Harold B. Ray
Senior Vice President
Southern California Edison Co.
Irvine Operations Center
23 Parker Street
Irvine, California 92718

Mr. Edwin A. Guiles
Vice President
Engineering and Operations
San Diego Gas & Electric Co.
101 Ash Street
San Diego, California 92112

Gentlemen:

SUBJECT: ISSUANCE OF AMENDMENT FOR SAN ONOFRE NUCLEAR GENERATING STATION,
UNIT NO. 2 (TAC NO. M77450) AND UNIT NO. 3 (TAC NO. M77451)

The Commission has issued the enclosed Amendment No. 105 to Facility Operating License No. NPF-10 and Amendment No. 94 to Facility Operating License No. NPF-15 for San Onofre Nuclear Generating Station, Unit Nos. 2 and 3. The amendments consist of changes to the Technical Specifications (TS) in response to your application dated December 20, 1991, designated by you as PCN-358.

These amendments revise Technical Specification (TS) 3/4.4.8.3.1, "Overpressure Protection Systems-RCS Temperature $\leq 312^{\circ}\text{F}$ " for Unit 2 and "Overpressure Protection Systems-RCS Temperature $\leq 302^{\circ}\text{F}$ " for Unit 3, TS 3/4.1.2.3, "Charging Pump-Shutdown," and TS 3/4.5.3, "ECCS Subsystems-T_{avg} Less Than 350°F," and associated Bases, to implement the recommendations of Generic Letter 90-06.

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

Sincerely,

Original signed by:

Mel B. Fields, Project Manager
Project Directorate V
Division of Reactor Projects III/IV/V
Office of Nuclear Reactor Regulation

Enclosures:

- 1. Amendment No. 105 to NPF-10
- 2. Amendment No. 94 to NPF-15
- 3. Safety Evaluation

cc w/enclosures: 040055
See next page

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

June 1, 1993

Docket Nos. 50-361
and 50-362

Mr. Harold B. Ray
Senior Vice President
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Irvine Operations Center
23 Parker Street
Irvine, California 92718

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

Sincerely,

A handwritten signature in cursive script, appearing to read "Mel B. Fields".

Mel B. Fields, Project Manager
Project Directorate V
Division of Reactor Projects III/IV/V
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 105 to NPF-10
2. Amendment No. 94 to NPF-15
3. Safety Evaluation

cc w/enclosures:
See next page

Messrs. Ray and Guiles
Southern California Edison Company

cc:

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

SOUTHERN CALIFORNIA EDISON COMPANY

SAN DIEGO GAS AND ELECTRIC COMPANY

THE CITY OF RIVERSIDE, CALIFORNIA

THE CITY OF ANAHEIM, CALIFORNIA

DOCKET NO. 50-361

SAN ONOFRE NUCLEAR GENERATING STATION, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 105
License No. NPF-10

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Southern California Edison Company, et al. (SCE or the licensee) dated December 20, 1991, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, 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 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.

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-10 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No.105 , are hereby incorporated in the license. Southern California Edison Company shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of the date of its issuance and must be fully implemented no later than 30 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Theodore R. Quay, Director
Project Directorate V
Division of Reactor Projects III/IV/V
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: June 1, 1993

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 105 TO FACILITY OPERATING LICENSE NO. NPF-10

DOCKET NO. 50-361

Revise Appendix A Technical Specifications by removing the pages identified below and inserting the enclosed pages. The revised pages are identified by the captioned 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 1-8
3/4 4-32
3/4 4-32a
3/4 5-7
B 3/4 4-9

B 3/4 5-2

INSERT

3/4 1-8
3/4 4-32
3/4 4-32a
3/4 5-7
B 3/4 4-9
B 3/4 4-9a
B 3/4 5-2

REACTIVITY CONTROL SYSTEMS

FLOW PATHS - OPERATING

LIMITING CONDITION FOR OPERATION

3.1.2.2 The following boron injection flow paths to the RCS via the charging pumps(s) shall be OPERABLE:

- a. At least one of the following combinations:
 - 1) One boric acid makeup tank, with the tank contents in accordance with Figure 3.1-1, its associated gravity feed valve, and boric acid makeup pump.
 - 2) Two boric acid makeup tanks, with the combined contents of the tanks in accordance with Figure 3.1-1, their associated gravity feed valves, and boric acid makeup pumps,
 - 3) Two boric acid makeup tanks, each with contents in accordance with Figure 3.1-1, at least one gravity feed valve, and at least one boric acid makeup pump, and
- b. The flow path from the refueling water storage tank.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With fewer than the above required boron injection flow paths to the Reactor Coolant System OPERABLE, restore the required boron injection flow paths to the Reactor Coolant System to OPERABLE status within 72 hours or be in at least HOT STANDBY and borated to a SHUTDOWN MARGIN equivalent to at least 3.0% delta k/k at 200°F within the next 6 hours; restore the required flow paths to OPERABLE status within the next 7 days or be in COLD SHUTDOWN within the next 30 hours.

SURVEILLANCE REQUIREMENTS

4.1.2.2 The above required flow paths shall be demonstrated OPERABLE:

- a. Intentionally deleted.
- b. At least once per 31 days by verifying that each valve (manual, power operated or automatic) in the flow path that is not locked, sealed, or otherwise secured in position, is in its correct position.
- c. At least once per refueling interval during shutdown by verifying that each automatic valve in the flow path actuates to its correct position on a SIAS test signal.

REACTIVITY CONTROL SYSTEMS

CHARGING PUMP - SHUTDOWN

LIMITING CONDITION FOR OPERATION

3.1.2.3 At least one charging pump or one high pressure safety injection pump in the boron injection flow path required OPERABLE pursuant to Specification 3.1.2.1 shall be OPERABLE and capable of being powered from an OPERABLE emergency power source.

APPLICABILITY: MODES 5 and 6.*

ACTION:

With no charging pump or high pressure safety injection pump OPERABLE or capable of being powered from an OPERABLE emergency power source, suspend all operations involving CORE ALTERATIONS or positive reactivity changes.

SURVEILLANCE REQUIREMENTS

4.1.2.3 No additional Surveillance Requirements other than those required by Specification 4.0.5.

*See Specification 3.4.8.3.1 for the limit on the number of High Pressure Safety Injection Pumps OPERABLE in Modes 5 and 6.

REACTOR COOLANT SYSTEM

PRESSURIZER - HEATUP/COOLDOWN

LIMITING CONDITION FOR OPERATION

- 3.4.8.2 The pressurizer shall be limited to:
- a. A maximum heatup of 200°F in any one hour period,
 - b. A maximum cooldown of 200°F in any one hour period.

APPLICABILITY: At all times.

ACTION:

With the pressurizer temperature limits in excess of any of the above limits, restore the temperature to within the limits within 30 minutes; perform an engineering evaluation to determine the effects of the out-of-limit condition on the structural integrity of the pressurizer; determine that the pressurizer remains acceptable for continued operation or be in at least HOT STANDBY within the next 6 hours and reduce the pressurizer pressure to less than 500 psig within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.4.8.2.1 The pressurizer temperatures shall be determined to be within the limits at least once per 30 minutes during system heatup or cooldown.

4.4.8.2.2 The spray water temperature differential shall be determined for use in Table 5.7-1 for each cycle of main spray when less than 4 reactor coolant pumps are operating and for each cycle of auxiliary spray operation.

REACTOR COOLANT SYSTEM

OVERPRESSURE PROTECTION SYSTEMS

RCS TEMPERATURE < 312°F

LIMITING CONDITION FOR OPERATION

3.4.8.3.1 No more than two high-pressure safety injection pumps shall be OPERABLE and at least one of the following overpressure protection systems shall be OPERABLE:

- a. The Shutdown Cooling System Relief Valve (PSV9349) with:
 - 1) A lift setting of 406 ± 10 psig*, and
 - 2) Relief Valve isolation valves 2HV9337, 2HV9339, 2HV9377, and 2HV9378 open
- or,
- b. The Reactor Coolant System depressurized with an RCS vent of greater than or equal to 5.6 square inches.

APPLICABILITY: MODE 4 when the temperature of any one RCS cold leg is less than or equal to the enable temperatures specified in Table 3.4-3; MODE 5; and MODE 6 when the head is on the reactor vessel and the RCS is not vented.

ACTION:

- a. With the SDCS Relief Valve inoperable, reduce T_{avg} to less than 200°F, depressurize and vent the RCS through a greater than or equal to 5.6 square inch vent within the next 8 hours.
- b. With one or both SDCS Relief Valve isolation valves in a single SDCS Relief Valve isolation valve pair (valve pair 2HV9337 and 2HV9339 or valve pair 2HV9377 and 2HV9378) closed, open the closed valve(s) or power-lock open the OPERABLE SDCS Relief Valve isolation valve pair within 24 hours, or reduce T_{avg} to less than 200°F, depressurize and vent the RCS through a greater than or equal to 5.6 inch vent within the next 8 hours.
- c. With more than two high-pressure safety injection pumps OPERABLE, secure the third high-pressure safety injection pump by racking out its motor circuit breaker or locking close its discharge valve within 8 hours.

*For valve temperatures less than or equal to 130°F.

REACTOR COOLANT SYSTEM

LIMITING CONDITION FOR OPERATION

ACTION: (Continued)

- d. In the event either the SDCS Relief Valve or an RCS vent is used to mitigate an RCS pressure transient, a Special Report shall be prepared and submitted to the Commission pursuant to Specification 6.9.2 within 30 days. The report shall describe the circumstances initiating the transient, the effect of the SDCS Relief Valve or RCS vent on the transient and any corrective action necessary to prevent recurrence.
- e. The provisions of Specification 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.4.8.3.1.1 The SDCS Relief Valve shall be demonstrated OPERATE by:

- a. Verifying at least once per 72 hours when the SDCS Relief Valve is being used for overpressure protection that SDCS Relief Valve isolation valves 2HV9337, 2HV9339, 2HV9377, and 2HV9378 are open.
- b. Verifying relief valve setpoint at least once per 30 months when tested pursuant to Specification 4.0.5.

4.4.8.3.1.2 At least once per 12 hours, the third high-pressure safety injection pump shall be demonstrated to be secured by verifying that its motor circuit breaker is not racked-in or its discharge valve is locked closed. The requirement to rack out the third HPSI pump breaker is satisfied with the pump breaker racked out to its disconnected or test position.

4.4.8.3.1.3 At least once per 12 hours, the OPERABLE SDCS Relief Valve isolation valve pair (valve pair 2HV9337 and 2HV9339, or valve pair 2HV9377 and 2HV9378) that is used for overpressure protection due to the other SDCS Relief Valve isolation valve pair being INOPERABLE shall be verified to be in the power-lock open condition until the INOPERABLE SDCS Relief Valve isolation valve pair is returned to OPERABLE status or the RCS is depressurized and vented. The power-lock open requirement is satisfied either with the AC breakers open for valve pair 2HV9337 and 2HV9339 or the inverter input and output breakers open for valve pair 2HV9377 and 2HV9378, whichever valve pair is OPERABLE.

4.4.8.3.1.4 The RCS vent shall be verified to be open at least once per 12 hours* when the vent is being used for overpressure protection.

*Except when the vent pathway is provided with a valve which is locked, sealed, or otherwise secured in the open position, then verify these valves open at least once per 31 days.

EMERGENCY CORE COOLING SYSTEMS

3/4.5.3 ECCS SUBSYSTEMS - T_{avg} LESS THAN 350°F

LIMITING CONDITION FOR OPERATION

3.5.3 As a minimum, one ECCS subsystem comprised of the following shall be OPERABLE:

- a. One OPERABLE high-pressure safety injection pump, and
- b. An OPERABLE flow path capable of taking suction from the refueling water tank on a Safety Injection Actuation Signal and automatically transferring suction to the containment sump on a Recirculation Actuation Signal.

APPLICABILITY: MODES 3* and 4**.

ACTION:

- a. With no ECCS subsystem OPERABLE, restore at least one ECCS subsystem to OPERABLE status within 1 hour or be in COLD SHUTDOWN within the next 20 hours.
- b. In the event the ECCS is actuated and injects water into the Reactor Coolant System, a Special Report shall be prepared and submitted to the Commission pursuant to Specification 6.9.2 within 90 days describing the circumstances of the actuation and the total accumulated actuation cycles to date. The current value of the usage factor for each affected safety injection nozzle shall be provided in this Special Report whenever its value exceeds 0.70.

SURVEILLANCE REQUIREMENTS

4.5.3 The ECCS subsystem shall be demonstrated OPERABLE per the applicable Surveillance Requirements of 4.5.2.

*With pressurizer pressure less than 400 psia.

**See Specification 3.4.8.3.1 for the limit on the number of OPERABLE High Pressure Safety Injection Pumps OPERABLE in Mode 4.

EMERGENCY CORE COOLING SYSTEMS

3/4.5.4 REFUELING WATER STORAGE TANK

LIMITING CONDITION FOR OPERATION

3.5.4 The refueling water storage tank shall be OPERABLE with:

- a. A minimum borated water volume of 362,800 gallons above the ECCS suction connection,
- b. Between 2350 and 2800 ppm of boron, and
- c. A solution temperature between 40°F and 100°F.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With the refueling water storage tank inoperable, restore the tank to OPERABLE status within 1 hour or be in at least HOT STANDBY within 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.5.4 The RWST shall be demonstrated OPERABLE:

- a. At least once per 7 days by:
 1. Verifying the contained borated water volume in the tank, and
 2. Verifying the boron concentration of the water.
- b. At least once per 24 hours by verifying the RWST temperature when the outside air temperature is less than 40°F or greater than 100°F.

REACTOR COOLANT SYSTEM

BASES

PRESSURE/TEMPERATURE LIMITS (Continued)

The OPERABILITY of the Shutdown Cooling System relief valve or a RCS vent opening of greater than 5.6 square inches ensures that the RCS will be protected from pressure transients which could exceed the limits of Appendix G to 10 CFR Part 50 when one or more of the RCS cold legs are less than or equal to that specified in Table 3.4-3. The Shutdown Cooling System relief valve has adequate relieving capability to protect the RCS from overpressurization when the transient is limited to either (1) the start of an idle RCP with the secondary water temperature of the steam generator less than or equal to 100°F above the RCS cold leg temperatures or (2) inadvertent safety injection actuation with two HPSI pumps injecting into a water-solid RCS with full charging capacity and letdown isolated.

The design basis of the LTOP assumes unrestricted flow from two HPSI pumps and three Charging pumps (full charging capacity) without letdown. Because there are three HPSI pumps and three charging pumps, the limitation on the number of HPSI pumps to be maintained OPERABLE during the specified MODES ensures that a mass addition to the RCS that exceeds the design basis assumptions of the LTOP will not occur. This limitation on the number of HPSI pumps that can provide makeup and injection to the RCS implements the guidance provided in Generic Letter 90-06.

The 24-hour Allowable Outage Time (AOT) for a single channel SDCS Relief Valve isolation valve(s) increases the availability of the LTOP system to mitigate low temperature overpressure transients especially during MODES 5 and 6 when the potential for these transients are highest (RCS temperatures between 80°F and 190°F and the RCS is water-solid). The 24-hour AOT implements the guidance provided in Generic Letter 90-06.

One SDCS Relief Valve isolation valve pair is capable of mitigating an LTOP event that is bounded by the limiting SDCS pressure transients. When one or both SDCS Relief Valve isolation valve(s) in one isolation valve pair becomes INOPERABLE, the other OPERABLE SDCS Relief Valve isolation valve pair is placed in a power-lock open condition to preclude a single failure which might cause undesired mechanical motion of one or both of the OPERABLE SDCS Relief Valve isolation valve(s) in a single isolation valve pair and result in loss of system function. This power-lock open condition of the OPERABLE SDCS Relief Valve isolation valve pair is consistent with the guidance provided in Branch Technical Position ICSB 18 (PSB), "Application of the Single Failure Criterion to Manually-Controlled Electrically-Operated Valves."

3/4.4.9 STRUCTURAL INTEGRITY

The inservice inspection and testing programs for ASME Code Class 1, 2 and 3 components ensure that the structural integrity and operational readiness of these components will be maintained at an acceptable level throughout the life of the plant. These programs are in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as required by 10 CFR Part 50.55a(g) except where specific written relief has been granted by the Commission pursuant to 10 CFR Part 50.55a(g)(6)(i).

REACTOR COOLANT SYSTEM

BASES

STRUCTURAL INTEGRITY (Continued)

Components of the reactor coolant system were designed to provide access to permit inservice inspections in accordance with Section XI of the ASME Boiler and Pressure Vessel Code, 1974 Edition and Addenda through Summer 1975.

3/4.4.10 REACTOR COOLANT GAS VENT SYSTEM

Reactor coolant system gas vents are provided to exhaust noncondensable gases from the primary system that could inhibit natural circulation core cooling following a non-design bases accident. The OPERABILITY of at least one reactor coolant system vent path from the reactor vessel head and the pressurizer steam space ensures the capability exists to perform this function.

The design redundancy of the Reactor Coolant Gas Vent System serves to minimize the probability of inadvertent or irreversible actuation while ensuring that a single failure of a vent valve, or control system does not prevent isolation of the vent path.

The function, capabilities, and testing requirements of the Reactor Coolant Gas Vent System are consistent with the requirements of Item II.b.1 of NUREG-0737, "Clarification of TMI Action Plan Requirements," November 1980.

3/4.5 EMERGENCY CORE COOLING SYSTEMS

BASES

3/4.5.1 SAFETY INJECTION TANKS

The OPERABILITY of each of the Reactor Coolant System (RCS) safety injection tanks ensures that a sufficient volume of borated water will be immediately forced into the reactor core through each of the cold legs in the event the RCS pressure falls below the pressure of the safety injection tanks. This initial surge of water into the core provides the initial cooling mechanism during large RCS pipe ruptures.

The limits on safety injection tank volume, boron concentration and pressure ensure that the assumptions used for safety injection tank injection in the accident analysis are met.

The safety injection tank power operated isolation valves are considered to be "operating bypasses" in the context of IEEE Std. 279-1971, which requires that bypasses of a protective function be removed automatically whenever permissive conditions are not met. In addition, as these safety injection tank isolation valves fail to meet single failure criteria, removal of power to the valves is required.

The limits for operation with a safety injection tank inoperable for any reason except an isolation valve closed minimizes the time exposure of the plant to a LOCA event occurring concurrent with failure of an additional safety injection tank which may result in unacceptable peak cladding temperatures. If a closed isolation valve cannot be immediately opened, the full capability of one safety injection tank is not available and prompt action is required to place the reactor in a mode where this capability is not required.

3/4.5.2 and 3/4.5.3 ECCS SUBSYSTEMS

The OPERABILITY of two separate and independent ECCS subsystems ensures that sufficient emergency core cooling capability will be available in the event of a LOCA assuming the loss of one subsystem through any single failure consideration. Either subsystem operating in conjunction with the safety injection tanks is capable of supplying sufficient core cooling to limit the peak cladding temperatures within acceptable limits for all postulated break sizes ranging from the double ended break of the largest RCS cold leg pipe downward. In addition, each ECCS subsystem provides long term core cooling capability in the recirculation mode during the accident recovery period.

EMERGENCY CORE COOLING SYSTEMS

BASES

ECCS SUBSYSTEMS (Continued)

With the RCS temperature below 350°F, one OPERABLE ECCS subsystem is acceptable without single failure consideration on the basis of the stable reactivity condition of the reactor and the limited core cooling requirements.

The Surveillance Requirements provided to ensure OPERABILITY of each component ensure that at a minimum, the assumptions used in the accident analyses are met and that subsystem OPERABILITY is maintained. Surveillance requirements for flow balance testing provide assurance that proper ECCS flows will be maintained in the event of a LOCA. Maintenance of proper flow resistance and pressure drop in the piping system to each injection point is necessary to: (1) prevent total pump flow from exceeding runout conditions when the system is in its minimum resistance configuration, (2) provide the proper flow split between injection points in accordance with the assumptions used in the ECCS-LOCA analyses, and (3) provide an acceptable level of total ECCS flow to all injection points equal to or above that assumed in the ECCS-LOCA analyses.

3/4.5.4 REFUELING WATER STORAGE TANK (RWST)

The OPERABILITY of the RWST as part of the ECCS ensures that a sufficient supply of borated water is available for injection by the ECCS in the event of a LOCA. The limits on RWST minimum volume and boron concentration ensure that 1) sufficient water is available within containment to permit recirculation cooling flow to the core, and 2) the reactor will remain subcritical in the cold condition following mixing of the RWST and the RCS water volumes with all control rods inserted except for the most reactive control assembly. The limit on maximum boron concentration is to ensure that boron does not precipitate in the core following LOCA. The limit on RWST solution temperature is to ensure that the assumptions used in the LOCA analyses remain valid.



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

SOUTHERN CALIFORNIA EDISON COMPANY

SAN DIEGO GAS AND ELECTRIC COMPANY

THE CITY OF RIVERSIDE, CALIFORNIA

THE CITY OF ANAHEIM, CALIFORNIA

DOCKET NO. 50-362

SAN ONOFRE NUCLEAR GENERATING STATION, UNIT NO. 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 94
License No. NPF-15

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Southern California Edison Company, et al. (SCE or the licensee) dated December 20, 1991, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, 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 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.

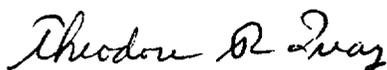
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C(2) of Facility Operating License No. NPF-15 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 94, are hereby incorporated in the license. Southern California Edison Company shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of the date of its issuance and must be fully implemented no later than 30 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Theodore R. Quay, Director
Project Directorate V
Division of Reactor Projects III/IV/V
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: June 1, 1993

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 94 TO FACILITY OPERATING LICENSE NO. NPF-15

DOCKET NO. 50-362

Revise Appendix A Technical Specifications by removing the pages identified below and inserting the enclosed pages. The revised pages are identified by the captioned 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 1-8
3/4 4-33
3/4 4-34
3/4 5-7
B 3/4 4-10

INSERT

3/4 1-8
3/4 4-33
3/4 4-34
3/4 5-7
B 3/4 4-10
B 3/4 4-10a

REACTIVITY CONTROL SYSTEMS

FLOW PATHS - OPERATING

LIMITING CONDITION FOR OPERATION

3.1.2.2 The following boron injection flowpaths to the RCS via the charging pump(s) shall be OPERABLE:

- a. At least one of the following combinations:
 - 1) One boric acid makeup tank, with the tank contents in accordance with Figure 3.1-1, its associated gravity feed valve, and boric acid makeup pump.
 - 2) Two boric acid makeup tanks, with the combined contents of the tanks in accordance with Figure 3.1-1, their associated gravity feed valves, and boric acid makeup pumps,
 - 3) Two boric acid makeup tanks, each with contents in accordance with Figure 3.1-1, at least one gravity feed valve, and at least one boric acid makeup pump, and
- b. The flow path from the refueling water storage tank.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With fewer than the above required boron injection flow paths to the Reactor Coolant System OPERABLE, restore the required boron injection flow paths to the Reactor Coolant System to OPERABLE status within 72 hours or be in at least HOT STANDBY and borated to a SHUTDOWN MARGIN equivalent to at least 3.0% delta k/k at 200°F within the next 6 hours; restore the required flow paths to OPERABLE status within the next 7 days or be in COLD SHUTDOWN within the next 30 hours.

SURVEILLANCE REQUIREMENTS

4.1.2.2 The above required flow paths shall be demonstrated OPERABLE:

- a. Intentionally deleted.
- b. At least once per 31 days by verifying that each valve (manual, power operated or automatic) in the flow path that is not locked, sealed, or otherwise secured in position, is in its correct position.
- c. At least once per refueling interval during shutdown by verifying that each automatic valve in the flow path actuates to its correct position on a SIAS test signal.

REACTIVITY CONTROL SYSTEMS

CHARGING PUMP - SHUTDOWN

LIMITING CONDITION FOR OPERATION

3.1.2.3 At least one charging pump or one high pressure safety injection pump in the boron injection flow path required OPERABLE pursuant to Specification 3.1.2.1 shall be OPERABLE and capable of being powered from an OPERABLE emergency power source.

APPLICABILITY: MODES 5 and 6.*

ACTION:

With no charging pump or high pressure safety injection pump OPERABLE or capable of being powered from an OPERABLE emergency power source, suspend all operations involving CORE ALTERATIONS or positive reactivity changes.

SURVEILLANCE REQUIREMENTS

4.1.2.3 No additional Surveillance Requirements other than those required by Specification 4.0.5.

* See Specification 3.4.8.3.1 for the limit on the number of High Pressure Safety Injection Pumps OPERABLE in Modes 5 and 6.

REACTOR COOLANT SYSTEM

OVERPRESSURE PROTECTION SYSTEMS

RCS TEMPERATURE < 302°F

LIMITING CONDITION FOR OPERATION

3.4.8.3.1 No more than two high-pressure safety injection pumps shall be OPERABLE and at least one of the following overpressure protection systems shall be OPERABLE:

- a. The Shutdown Cooling System Relief Valve (PSV9349) with:
 - 1) A lift setting of 406 ± 10 psig*, and
 - 2) Relief valve isolation valves 3HV9337, 3HV9339, 3HV9377, and 3HV9378 openor,
- b. The Reactor Coolant System depressurized with an RCS vent of greater than or equal to 5.6 square inches.

APPLICABILITY: MODE 4 when the temperature of any one RCS cold leg is less than or equal to the enable temperatures specified in Table 3.4-3; MODE 5; and MODE 6 when the head is on the reactor vessel and the RCS is not vented.

ACTION:

- a. With the SDCS Relief Valve inoperable, reduce T_{avg} to less than 200°F, depressurize and vent the RCS through a greater than or equal to 5.6 square inch vent within the next 8 hours.
- b. With one or both SDCS Relief Valve isolation valves in a single SDCS Relief Valve isolation valve pair (valve pair 3HV9337 and 3HV9339 or valve pair 3HV9377 and 3HV9378) closed, open the closed valve(s) or power-lock open the other SDCS Relief Valve isolation valve pair within 24 hours, reduce T_{avg} to less than 200°F, depressurize and vent the RCS through a greater than or equal to 5.6 inch vent within the next 8 hours.
- c. With more than two high-pressure safety injection pumps OPERABLE, secure the third high-pressure safety injection pump by racking out its motor circuit breaker or locking close its discharge valve within 8 hours.

*The lift setting pressure applicable to valve temperatures of less than or equal to 130°F.

REACTOR COOLANT SYSTEM

LIMITING CONDITION FOR OPERATION

ACTION: (Continued)

- d. In the event either the SDCS Relief Valve or an RCS vent is used to mitigate an RCS pressure transient, a Special Report shall be prepared and submitted to the Commission pursuant to Specification 6.9.2 within 30 days. The report shall describe the circumstances initiating the transient, the effect of the SDCS Relief Valve or RCS vent on the transient and any corrective action necessary to prevent recurrence.
- e. The provisions of Specification 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.4.8.3.1.1 The SDCS Relief Valve shall be demonstrated OPERABLE by:

- a. Verifying at least once per 72 hours when the SDCS Relief Valve is being used for overpressure protection that SDCS Relief Valve isolation valves 3HV9337, 3HV9339, 3HV9377, and 3HV9378 are open.
- b. Verifying relief valve setpoint at least once per 30 months when tested pursuant to Specification 4.0.5.

4.4.8.3.1.2 At least once per 12 hours, the third high-pressure safety injection pump shall be demonstrated to be secured by verifying that its motor circuit breaker is not racked-in or its discharge valve is locked closed. The requirement to rack out the third HPSI pump breaker is satisfied with the pump breaker racked out to its disconnected or test position.

4.4.8.3.1.3 At least once per 12 hours, the OPERABLE SDCS Relief Valve isolation valve pair (valve pair 3HV9337 and 3HV9339, or valve pair 3HV9377 and 3HV9378) that is used for overpressure protection due to the other SDCS Relief Valve isolation valve pair being INOPERABLE shall be verified to be in the power-lock open condition until the INOPERABLE SDCS Relief Valve isolation valve pair is returned to OPERABLE status or the RCS is depressurized and vented. The power-lock open requirement is satisfied either with the AC breakers open for valve pair 3HV9337 and 3HV9339 or the inverter input and output breakers open for valve pair 3HV9377 and 3HV9378, whichever valve pair is OPERABLE.

4.4.8.3.1.4 The RCS vent shall be verified to be open at least once per 12 hours* when the vent is being used for overpressure protection.

*Except when the vent pathway is provided with a valve which is locked, sealed, or otherwise secured in the open position, then verify these valves open at least once per 31 days.

EMERGENCY CORE COOLING SYSTEMS

3/4.5.3 ECCS SUBSYSTEMS - T_{avg} LESS THAN 350°F

LIMITING CONDITION FOR OPERATION

3.5.3 As a minimum, one ECCS subsystem comprised of the following shall be OPERABLE:

- a. One OPERABLE high-pressure safety injection pump, and
- b. An OPERABLE flow path capable of taking suction from the refueling water tank on a Safety Injection Actuation Signal and automatically transferring suction to the containment sump on a Recirculation Actuation Signal.

APPLICABILITY: MODES 3* and 4**.

ACTION:

- a. With no ECCS subsystem OPERABLE, restore at least one ECCS subsystem to OPERABLE status within 1 hour or be in COLD SHUTDOWN within the next 20 hours.
- b. In the event the ECCS is actuated and injects water into the Reactor Coolant System, a Special Report shall be prepared and submitted to the Commission pursuant to Specification 6.9.2 within 90 days describing the circumstances of the actuation and the total accumulated actuation cycles to date. The current value of the usage factor for each affected safety injection nozzle shall be provided in this Special Report whenever its value exceeds 0.70.

SURVEILLANCE REQUIREMENTS

4.5.3 The ECCS subsystem shall be demonstrated OPERABLE per the applicable Surveillance Requirements of 4.5.2.

* With pressurizer pressure less than 400 psia.

** See Specification 3.4.8.3.1 for the limit on the number of OPERABLE High Pressure Safety Injection Pumps.

EMERGENCY CORE COOLING SYSTEMS

3/4.5.4 REFUELING WATER STORAGE TANK

LIMITING CONDITION FOR OPERATION

3.5.4 The refueling water storage tank shall be OPERABLE with:

- a. A minimum borated water volume of 362,800 gallons above the ECCS suction connection,
- b. Between 2350 and 2800 ppm of boron, and
- c. A solution temperature between 40°F and 100°F.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With the refueling water storage tank inoperable, restore the tank to OPERABLE status within 1 hour or be in at least HOT STANDBY within 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.5.4 The RWST shall be demonstrated OPERABLE:

- a. At least once per 7 days by:
 1. Verifying the contained borated water volume in the tank, and
 2. Verifying the boron concentration of the water.
- b. At least once per 24 hours by verifying the RWST temperature when the outside air temperature is less than 40°F or greater than 100°F.

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B 3/4 4-9

TABLE B 3/4 4-1 (Continued)

Piece No.	Code No.	Material	Vessel Location	Drop Weight Results	Temperature of Charpy V-Notch		Minimum Upper Shelf Cv energy for Longitudinal Direction-ft lb
					@ 30 ft - lb	@ 50 ft - lb	
205-03	C-6831-1	A508CL1	Inlet Nozzle Forging S/E	-20	12	40	124
205-03	C-6831-2	A508CL1	Inlet Nozzle Forging S/E	-20	12	40	124
205-03	C-6831-3	A508CL1	Inlet Nozzle Forging S/E	-20	-15	50	114
205-03	C-6831-4	A508CL1	Inlet Nozzle Forging S/E	-20	-15	50	114
205-07	C-6832-1	A508CL1	Outlet Nozzle Forging S/E	-20	-20	0	159
205-07	C-6832-2	A508CL1	Outlet Nozzle Forging S/E	-20	-20	0	152
231-01	C-6833-1	A533GRBCL1	Closure Head Peel	-40	20	NA	NA
231-01	C-6834-1	A533GRBCL1	Closure Head Peel	-30	10	NA	NA
231-02	C-6835-1	A533GRBCL1	Closure Head Dome	-40	10	NA	NA

NA = Not Available

REACTOR COOLANT SYSTEM

BASES

PRESSURE/TEMPERATURE LIMITS (Continued)

The OPERABILITY of the Shutdown Cooling System relief valve or an RCS vent opening of greater than 5.6 square inches ensures that the RCS will be protected from pressure transients which could exceed the limits of Appendix G to 10 CFR Part 50 when one or more of the RCS cold legs is less than or equal to that specified in Table 3.4-3. The Shutdown Cooling System relief valve has adequate relieving capability to protect the RCS from overpressurization when the transient is limited to either (1) the start of an idle RCP with the secondary water temperature of the steam generator less than or equal to 100°F above the RCS cold leg temperatures or (2) inadvertent safety injection actuation with two HPSI pumps injecting into a water-solid RCS with full charging capacity and letdown isolated.

The design basis of the LTOP assumes unrestricted flow from two HPSI pumps and three Charging pumps (full charging capacity) without letdown. Because there are three HPSI pumps and three charging pumps, the limitation on the number of HPSI pumps to be maintained OPERABLE during the specified MODES ensures that a mass addition to the RCS that exceeds the design basis assumptions of the LTOP will not occur. This limitation on the number of HPSI pumps that can provide makeup and injection to the RCS implements the guidance provided in Generic Letter 90-06.

The 24-hour Allowable Outage Time (AOT) for a single channel SDCS Relief Valve isolation valve(s) increases the availability of the LTOP system to mitigate low temperature overpressure transients especially during MODES 5 and 6 when the potential for these transients are highest (RCS temperatures between 80°F and 190°F and the RCS is water-solid). The 24-hour AOT implements the guidance provided in Generic Letter 90-06.

One SDCS Relief Valve isolation valve pair is capable of mitigating an LTOP event that is bounded by the limiting SDCS pressure transients. When one or both SDCS Relief Valve isolation valve(s) in one isolation valve pair becomes INOPERABLE, the other OPERABLE SDCS Relief Valve isolation valve pair is placed in a power-lock open condition to preclude a single failure which might cause undesired mechanical motion of one or both of the OPERABLE SDCS Relief Valve isolation valve(s) in a single isolation valve pair and result in loss of system function. This power-lock open condition of the OPERABLE SDCS Relief Valve isolation valve pair is consistent with the guidance provided in Branch Technical Position ICSB 18 (PSB), "Application of the Single Failure Criterion to Manually-Controlled Electrically-Operated Valves."

3/4.4.9 STRUCTURAL INTEGRITY

The inservice inspection and testing programs for ASME Code Class 1, 2 and 3 components ensure that the structural integrity and operational readiness of these components will be maintained at an acceptable level throughout the life of the plant. These programs are in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as required by 10 CFR Part 50.55a(g) except where specific written relief has been granted by the Commission pursuant to 10 CFR Part 50.55a(g)(6)(i).

REACTOR COOLANT SYSTEM

BASES

STRUCTURAL INTEGRITY (Continued)

Components of the Reactor Coolant System were designed to provide access to permit inservice inspections in accordance with Section XI of the ASME Boiler and Pressure Vessel Code, 1974 Edition and Addenda through Summer 1975.

3/4.4.10 REACTOR COOLANT GAS VENT SYSTEM

Reactor coolant system gas vents are provided to exhaust noncondensable gases from the primary system that could inhibit natural circulation core cooling following a non-design bases accident. The OPERABILITY of at least one reactor coolant system vent path from the reactor vessel head and the pressurizer steam space ensures the capability exists to perform this function.

The design redundancy of the Reactor Coolant Gas Vent System serves to minimize the probability of inadvertent or irreversible actuation while ensuring that a single failure of a vent valve, or control system does not prevent isolation of the vent path.

The function, capabilities, and testing requirements of the Reactor Coolant Gas Vent System are consistent with the requirements of Item II.b.1 of NUREG-0737, "Clarification of TMI Action Plan Requirements," November 1980.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO.105 TO FACILITY OPERATING LICENSE NO. NPF-10
AND AMENDMENT NO.94 TO FACILITY OPERATING LICENSE NO. NPF-15
SOUTHERN CALIFORNIA EDISON COMPANY
SAN DIEGO GAS AND ELECTRIC COMPANY
THE CITY OF RIVERSIDE, CALIFORNIA
THE CITY OF ANAHEIM, CALIFORNIA
SAN ONOFRE NUCLEAR GENERATING STATION, UNITS 2 AND 3
DOCKET NOS. 50-361 AND 50-362

1.0 INTRODUCTION

On June 25, 1990, the staff issued Generic Letter 90-06, "Resolution of Generic Issue 70, 'Power-Operated Relief Valve and Block Valve Reliability,' and Generic Issue 94, 'Additional Low-Temperature Overpressure Protection for Light-Water Reactors,' Pursuant to 10 CFR 50.54(f)." The generic letter represented the technical resolution of the above mentioned generic issues.

Generic Issue 70, "Power-Operated Relief Valve and Block Valve Reliability," involves the evaluation of the reliability of power-operated relief valves (PORVs) and block valves and their safety significance in PWR plants. Generic Issue 70 does not apply to San Onofre Units 2 and 3 since these plants do not have PORVs or block valves.

Generic Issue 94, "Additional Low-Temperature Overpressure Protection for Light-Water Reactors," addresses concerns with the implementation of the requirements set forth in the resolution of Unresolved Safety Issue (USI) A-26, "Reactor Vessel Pressure Transient Protection (Overpressure Protection)." Generic Letter 90-06 discussed the continuing occurrence of overpressure events and the need to further restrict the allowed outage time for a low-temperature overpressure protection channel in operating MODES 4, 5, and 6. This issue is only applicable to Westinghouse and Combustion Engineering facilities.

By letter dated December 20, 1990, Southern California Edison Company, et al. (SCE or the licensee) submitted a request for changes to the Technical Specifications (TS) for San Onofre Nuclear Generating Station, Unit Nos. 2 and 3. The proposed changes would revise TS 3/4.4.8.3.1, "Overpressure Protection Systems-RCS Temperature $\leq 312^{\circ}\text{F}$ " for Unit 2 and "Overpressure Protection

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Systems-RCS Temperature $\leq 302^{\circ}\text{F}$ for Unit 3, TS 3/4.1.2.3, "Charging Pump-Shutdown," and TS 3/4.5.3, "ECCS Subsystems- T_{avg} Less Than 350°F " to implement the recommendations of Generic Letter 90-06. In addition, the Bases for TS 3/4.4.8 is changed to document the reasons for these TS changes.

2.0 EVALUATION

In GL 90-06, the NRC staff determined that Low Temperature Overpressure Protection (LTOP) system unavailability is the "dominant contributor to risks from low temperature overpressure transients." Therefore, the NRC staff recommended a shorter time period for LTOP equipment INOPERABILITY. GL 90-06 also requested that restrictions previously identified as part of the resolution of A-26 be implemented, if they are not already incorporated in the TS. The technical findings and the regulatory analysis related to Generic Issue 94 are discussed in NUREG-1326, "Regulatory Overpressure Protection for Light-Water Reactors."

The licensee's proposed revision to TS 3/4.4.8.3.1 incorporates both the GL 90-06 recommended LTOP INOPERABILITY time and the USI A-26 restriction on the OPERABILITY of High Pressure Safety Injection (HPSI) pumps that has not yet been incorporated in the TS. In addition, TS 3/4.4.8.3.1 is revised to permit operation beyond 24 hours with one OPERABLE pair of Shutdown Cooling System (SDCS) Relief Valve isolation valves in the power-lock open condition until the other pair of SDCS Relief Valve isolation valves is returned to OPERABLE status, or until the Reactor Coolant System (RCS) is depressurized and vented. The proposed revisions to TSs 3/4.1.2.3, and 3/4.5.3 reference TS 3/4.4.8.3.1 for the USI A-26 restriction on HPSI pump OPERABILITY.

The proposed revisions to TS 3/4.4.8.3.1 are as follows:

1. The Allowable Outage Time (AOT) for SDCS Relief Valve isolation valve(s) in a single SDCS Relief Valve isolation valve pair during LTOP conditions is shortened from 7 days to 24 hours. The revised AOT increases the availability of the LTOP system to mitigate low temperature overpressure transients and reduces the risk from such events.
2. A limit to the number of OPERABLE HPSI pumps is provided to preclude the potential for mass addition to the RCS that exceeds the design basis of the LTOP system. Consistent with the design basis, there is no limit to the number of OPERABLE Charging pumps.

Making the third HPSI pump incapable of RCS makeup and injection during LTOP operating conditions does not affect plant operation because one HPSI pump or one Charging pump is adequate to provide the boron injection flow required in TS 3/4.1.2.3. In addition, with RCS temperatures below 200°F in MODES 5 and 6, one injection system with either a HPSI or a Charging pump is acceptable based on the stable reactivity condition of the reactor and the additional TS restrictions prohibiting core alterations and positive reactivity changes in the event the single injection system becomes INOPERABLE. Likewise, plant operation is not affected in MODE 4 because with RCS cold leg temperatures less than or

equal to that specified in Table 3.4-3, only one Emergency Core Cooling System (ECCS) subsystem with a HPSI pump is required by TS 3/4.5.3 on the basis of the stable reactivity condition of the reactor and the limited core cooling requirements.

3. An alternate ACTION is provided to power-lock open the OPERABLE SDCS Relief Valve isolation valves in a single isolation valve pair when one or both isolation valves in the other SDCS Relief Valve isolation valve pair become INOPERABLE. This alternate ACTION permits operation, until the INOPERABLE SDCS Relief Valve isolation valve pair is returned to OPERABLE status. During this power-lock open condition, position indication for valves 2HV9337, 2HV9377, 3HV9337, and 3HV9377 is provided by the use of existing instrumentation in the control room. Position indication for isolation valves 2HV9339, 2HV9378, 3HV9339, and 3HV9378 would be provided by the Critical Function Monitoring System and Plant Monitoring System computers or from Shutdown Cooling Flow instrumentation in the control room.

This power-lock open condition of the OPERABLE SDCS Relief Valve isolation valve pair, which is used for overpressure protection during the INOPERABILITY of the other pair of SDCS Relief Valve isolation valves, meets the criterion in Branch Technical Position ICSB-18 (PSB), "Application of the Single Failure Criterion to Manually-Controlled Electrically-Operated Valves." With the OPERABLE valve pair in a power-lock open condition, no single failure can restore power to the valves' electrical system which might cause mechanical motion of the valve that results in loss of system safety function.

There is no change in plant equipment or accident analysis assumptions from the proposed revision to TS 3/4.4.8.3.1 and its associated BASES. The alternate requirement to power-lock open one pair of OPERABLE SDCS Relief Valve isolation valves when the other pair of SDCS Relief Valve isolation valves is INOPERABLE enhances safety by precluding a single failure that might cause undesirable motion of the OPERABLE pair of isolation valves which would result in loss of system safety function.

The proposed revisions to TS 3/4.1.2.3 and TS 3/4.5.3 reference TS 3/4.4.8.3.1 for the limit on the number of OPERABLE HPSI pumps used for RCS makeup and injection during LTOP operating conditions. The proposed revisions do not have a negative safety impact as discussed in Item 2 above.

The proposed change to the Unit 2 TS 3/4.5.4, "Refueling Water Storage Tank," BASES is to correct a spelling error and has no safety impact.

The staff has reviewed the licensee's proposed modifications to the San Onofre Unit 2 and 3 TS. Since the proposed modifications are consistent with the staff's position previously stated in Generic Letter 90-06 and justified in the above mentioned regulatory analysis, the staff finds the proposed modifications to be acceptable.

3.0 STATE CONSULTATION

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

4.0 ENVIRONMENTAL CONSIDERATION

The amendments change a requirement with respect to the 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 (58 FR 8780). Accordingly, the amendments meet 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.

5.0 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 amendment will not be inimical to the common defense and security or to the health and safety of the public.

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