

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

Application of SOUTHERN, CALIFORNIA)
EDISON COMPANY, ET AL. for a class 103) Docket No. 50-361
License to Acquire, Possess, and Use)
a Utilization Facility as Part of) Amendment Application
Unit No. 2 of the San Onofre Nuclear) No. 181
Generating Station)

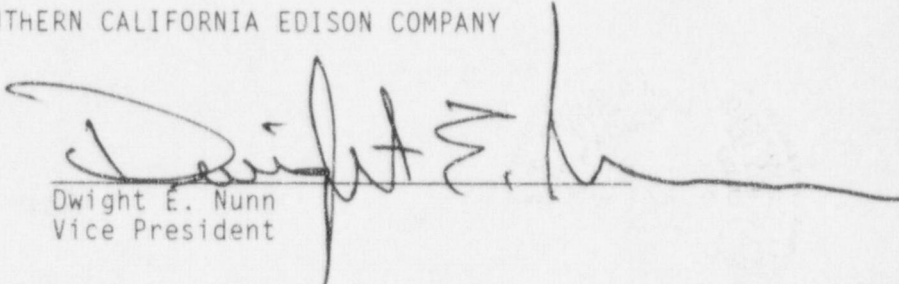
SOUTHERN CALIFORNIA EDISON COMPANY, ET AL. pursuant to 10CFR50.90, hereby submit Amendment Application No. 181. This amendment application consists of Proposed Change No. PCN-500 to Facility Operating License NPF-10. PCN-500 is a request to revise footnotes (a) and (d) to Table 3.3.1-1 in Technical Specification 3.3.1.

Subscribed on this 22 day of Sept., 1998.

Respectfully Submitted,

SOUTHERN CALIFORNIA EDISON COMPANY

By:


Dwight E. Nunn
Vice President

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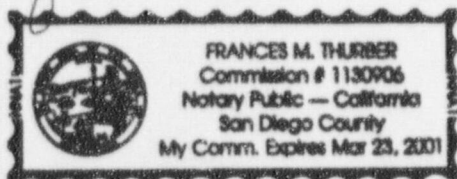
State of California
County of San Diego

On Sept. 22, 1998 before me, Frances M. Thurber

personally appeared Dwight E. Nunn, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature Frances M. Thurber



UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

Application of SOUTHERN, CALIFORNIA)
EDISON COMPANY, ET AL. for a class 103) Docket No. 50-362
License to Acquire, Possess, and Use)
a Utilization Facility as Part of) Amendment Application
Unit No. 3 of the San Onofre Nuclear) No. 167
Generating Station)

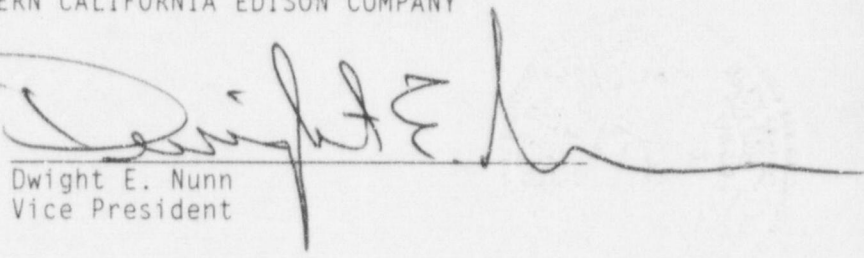
SOUTHERN CALIFORNIA EDISON COMPANY, ET AL. pursuant to 10CFR50.90, hereby submit Amendment Application No. 167. This amendment application consists of Proposed Change No. PCN-500 to Facility Operating License NPF-15. PCN-500 is a request to revise footnotes (a) and (d) to Table 3.3.1-1 in Technical Specification 3.3.1.

Subscribed on this 22 day of Sept., 1998.

Respectfully Submitted,

SOUTHERN CALIFORNIA EDISON COMPANY

By:


Dwight E. Nunn
Vice President

State of California
County of San Diego

On Sept. 22, 1998 before me, Frances M. Thurber

personally appeared Dwight E. Nunn, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature

Frances M. Thurber



ENCLOSURE
AMENDMENT APPLICATIONS 181 AND 167
(PCN-500)

**DESCRIPTION OF
TECHNICAL SPECIFICATION CHANGE PCN-500
SAN ONOFRE Units 2 and 3**

Change Number PCN-500 will revise Technical Specification (TS) 3.3.1, "Reactor Protective System (RPS) Instrumentation — Operating."

Existing Technical Specifications:

Unit 2: See Attachment A

Unit 3: See Attachment B

Proposed Technical Specifications:

Unit 2: See Attachment C (redline and strikeout)

Unit 3: See Attachment D (redline and strikeout)

Proposed Technical Specifications:

Unit 2: See Attachment E

Unit 3: See Attachment F

Description of Change:

The proposed change to TS 3.3.1 consists of revising Notes (a) and (d) to Table 3.3.1-1 to change the input process variable from "THERMAL POWER" to "logarithmic power."

Note (a) to TS Table 3.3.1-1 currently permits bypassing the Logarithmic Power Level — High (log Power) trip when THERMAL POWER is $> 1E-4\%$ RATED THERMAL POWER (RTP) and requires automatic enable of the Log Power trip to occur when THERMAL POWER is $\leq 1E-4\%$ RTP when reactor power is decreasing. Note (d) to Table 3.3.1-1 currently permits bypassing the Reactor Coolant Flow -- Low, the Local Power Density -- High, and the Departure From Nucleate Boiling Ratio -- Low (RCS Flow/LPD/DNBR) trips when THERMAL POWER is $< 1E-4\%$ RTP and requires automatic enable of the RCS Flow/LPD/DNBR trips to occur when THERMAL POWER is $\geq 1E-4\%$ RTP when reactor power is increasing.

"THERMAL POWER" is defined in TS 1.1 as: "...the total reactor core heat transfer rate to the reactor coolant."

Discussion:

THERMAL POWER is an incorrect choice for the input process variable for the operating bypass permissive and trip enable bistables. The definition of THERMAL POWER includes the decay heat produced by the core. As such, THERMAL POWER for the San Onofre Unit 2 and Unit 3 (SONGS 2 & 3) reactors would not decay to $\leq 1E-4\%$ RTP for many years after shutdown. This is not the intent of the TS. The intent is, rather, to use the process variable sensed by the log power detectors, namely, neutron flux at the detector location. This is intimated by the NOTES for such Surveillance Requirements as 3.3.1.9 and 3.3.1.13, which, by exempting neutron detectors from CHANNEL CALIBRATIONS and RPS RESPONSE TIME tests, tacitly assume that neutron flux is the parameter of interest for neutron detecting channels. This position is further supported by the Bases of the SONGS 2 & 3 TS and the Standard Technical Specifications for Combustion Engineering Plants (NUREG-1432), which for TS 3.3.1 clearly state that, for the RCS Flow/LPD/DNBR trips, the automatic bypass removal parameter is sensed by the wide range (logarithmic) nuclear instrumentation.

Use of THERMAL POWER in the current TS wording for TS Table 3.3.1-1 Note (d) prevents the return to power of a shutdown reactor. Note (d) applies to the RCS Flow/LPD/DNBR reactor trips, and states in part: "Trip may be bypassed when THERMAL POWER is $< 1E-4\%$ RTP. Bypass shall be automatically removed when THERMAL POWER is $\geq 1E-4\%$ RTP." As noted above, for a shutdown of normal duration, THERMAL POWER will not decrease to $\leq 1E-4\%$ RTP due to decay heat. Hence, it is not permissible to bypass the RCS Flow/LPD/DNBR reactor trips during a shutdown and subsequent startup. However, the very reason for providing bypass capability for the LPD/DNBR reactor trips is to prevent inadvertent trips due to deep regulating and shutdown control element assembly bank insertions. LPD/DNBR reactor protection is not required at power levels less than approximately $1E-4\%$ RTP.

Replacing "THERMAL POWER" with "logarithmic power" in Note (d) will resolve this condition. PCN-500 also requests like replacement in Note (a) to TS Table 3.3.1-1. Note (a) applies to the log power reactor trip. This then makes the TS consistent with the wording in the Bases to the TS.

No Significant Hazards Considerations:

The Commission has provided standards for determining whether a significant hazards consideration exists as stated in 10 CFR 50.92. A proposed amendment to a facility operating license involves no significant hazards consideration if operation of the facility in accordance with a proposed 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. A discussion of these standards as they relate to this amendment request follows.

- 1) Does the proposed amendment involve a significant increase in the probability or consequences of an accident previously evaluated?

No.

The proposed change to Technical Specification (TS) 3.3.1 does not adversely impact structure, system, or component design or operation in a manner which would result in a change in the frequency of occurrence of accident initiation. The reactor trip bypass and automatic enable functions are not accident initiators. Consequently, the proposed TS change will not significantly increase the probability of accidents previously evaluated. Clarifying the input process variable of the operating bypasses and automatic bypass removals of the affected reactor trips does not alter the setpoint nor the manner of operation of the operating bypasses and automatic bypass removals. Therefore, the consequences of previously evaluated accidents remain unchanged.

- 2) Does this amendment request create the possibility of a new or different kind of accident from any accident previously evaluated?

No.

No new or different accidents result from clarifying the input process variable of the operating bypasses and automatic bypass removals of the affected reactor trips. The results of previously performed accident analyses remain valid. Therefore, this amendment request does not create the possibility of a new or different kind of accident.

- 3) Does this amendment request involve a significant reduction in a margin of safety?

No.

The proposed change does not alter the setpoint nor the manner of operation of the operating bypasses and automatic bypass removals of the affected reactor trips. The change merely replaces the identification of the input process variable with the appropriate identification of power. Therefore, this amendment request does not involve a significant reduction in any margin of safety.

Based on the negative responses to these three Commission criteria, SCE concludes that the proposed amendment involves no significant hazards consideration.

Environmental Consideration:

Southern California Edison has determined that the proposed TS change involves no changes in the amount or type of effluent that may be released offsite, and results in no increase in individual or cumulative occupational radiation exposure. As described above, the proposed TS amendment involves no significant hazards consideration and, as such, meets the eligibility criteria for categorical exclusion set forth in 10CFR51.22(c)(9).