

DESCRIPTION OF PROPOSED CHANGE NPF-10-62 AND
NPF-15-62 AND SAFETY ANALYSIS

This is a request to revise Appendix A, Technical Specifications.

Existing Specifications

Section 3/4.3.2 ENGINEERED SAFETY FEATURES ACTUATION SYSTEM INSTRUMENTATION

Table 3.3-5

6. Refueling Water Storage Tank-Low

a. RAS

- | | |
|----------------------------------|-------|
| (1) Containment-Sump Valves Open | 50.7* |
| (2) ECCS Miniflow Valves Shut | 40.7* |

Section 3/4.5.2 ECCS SUBSYSTEMS -Tavg GREATER THAN OR EQUAL TO 350°F

Item 4.5.2.e

3. Verifying that on a Recirculation Actuation Test Signal, the containment sump isolation valves open and that recirculation valves to the refueling water tank close.

Proposed Specifications

Section 3/4.3.2

6. Refueling Water Storage Tank - Low

a. RAS

- | | |
|----------------------------------|-------|
| (1) Containment Sump Valves Open | 50.7* |
|----------------------------------|-------|

Section 3/4.5.2

Item 4.5.2.e

3. Verifying that on a recirculation Actuation Test Signal, the containment sump isolation valves open.

Reason for Proposed Change

The proposed change permits removal of the recirculation Actuation Signal (RAS) from the ECCS miniflow isolation valves (2HV9306, 2HV9307, 2HV9347, 2HV9348 for Unit 2, and 3HV9306, 3HV9307, 3HV9347, 3HV9348 for Unit 3).

In the event of spurious RAS with SIAS, this change will prevent rapid damage (seizing) of the multi-stage HPSI pumps due to the deadheading which would otherwise occur. The LPSI and containment spray pumps are also affected but are not a concern since deadheading of these single stage pumps will not result in pump damage. Operator action to prevent HPSI damage from deadheading in the absence of this change would be required within the first 30 seconds (actual seizing could occur in as little as 2 minutes), which is considered insufficient as a long-term corrective action. Preventing the deadhead conditions by removing the automatic closure signal to the miniflow isolation valves eliminates the need for rapid operator action to protect the HPSI pumps and is therefore expected to increase HPSI availability.

Safety Evaluation

As discussed in the Reason for Proposed Change, removal of the RAS automatic closure signal to the ECCS miniflow isolation valves is expected to increase HPSI availability by precluding deadheading as a result of spurious RAS with SIAS. Manual operator action from the control room will then be required in lieu of automatic actuation to close the miniflow isolation valves during actual accident conditions. The most limiting accident for manual operator action of the affected valves will be a large break loss of coolant accident (LOCA) wherein recirculation from the containment sump could occur in approximately 18.5 minutes. Isolation of the ECCS miniflow lines is required for the recirculation phase of a LOCA to prevent transport of potentially contaminated sump water to the atmosphere-vented refueling water storage tanks. For the largest break LOCA and most limiting single failure in terms of flow rate to the tanks (one LPSI pump failing to trip on RAS), sump water could arrive at the tank approximately 2 minutes post-RAS; at least one isolation valve in each miniflow line (there is one line per ECCS train) must be shut by this time. Closure of the miniflow isolation valves requires a maximum of 40 seconds per valve (this limit is in the ASME Inservice Test Program). Therefore a worst case time of approximately 20 minutes is available before at least one valve per miniflow line must be closed. For smaller LOCAs, considerably more time is available before recirculation begins (up to several hours). For steam or feedwater line breaks, recirculation of reactor coolant would not occur (since the reactor coolant system is not breached), and no closure of the ECCS miniflow isolation valves is required. Administratively, closure will be effected upon receipt of the RAS pretrip alarm (in order to ensure isolation is not performed prematurely) which will occur at least 6 minutes before miniflow isolation must be complete. Since closure of the ECCS miniflow isolation valves is performed by key switches located on the control room ECCS panel, which is already manned, there is considered to be adequate time available for the operator actions required

(i.e., turn two keyswitches). Further, since there are two isolation valves in each miniflow line, failure to isolate the line by at least one of the valves within the time available is considered to be very unlikely.

Accordingly, it is concluded that: (1) Proposed Change NPF-10-62 and NPF-15-62 does not present significant hazard considerations not described or implicit in the Final Safety Analysis; (2) there is reasonable assurance that the health and safety of the public will not be endangered by the proposed change; and (3) this action will not result in a condition which significantly alters the impact of the station or the environment as described in the NRC Final Environmental Statement.

ELP:6621

DESCRIPTION OF PROPOSED CHANGES NPF-10-64
AND NPF-15-64 AND SAFETY ANALYSIS

This is a request to revise Technical Specification 4.5.2.f, EMERGENCY CORE COOLING SYSTEMS.

Existing Specifications

Unit 2 Technical Specification 4.5.2.f.1:

1. High-Pressure Safety Injection pumps developed head, at an indicated flow rate of 650 gpm, greater than or equal to 2142 feet for P017, 2101 feet for P018 and 2103 for P019.

Unit 3 Technical Specification 4.5.2.f.1:

1. High Pressure Safety Injection pumps developed head, at an indicated flow rate of 650 gpm, greater than or equal to 2093 feet for P017, 2132 feet for P018 and 2099 for P019.

Proposed Specification

Change Unit 2 Technical Specification 4.5.2.f.1 to read as follows:

1. High Pressure Safety Injection (HPSI) Pumps
 - (a) With the plant operating at a power level less than or equal to 83%, the HPSI pumps developed head, at an indicated flow rate of at least 650 gpm, is greater than or equal to 1982 feet for P017, 1965 feet for P018 and 1945 feet for P019.
 - (b) With the plant operating at a power level greater than 83%, the HPSI pumps developed head, at an indicated flow rate of at least 650 gpm, is greater than or equal to 2142 feet for P017, 2101 feet for P018 and 2103 feet for P019.

Change Unit 3 Technical Specification 4.5.2.f.1 to read as follows:

1. High Pressure Safety Injection (HPSI) Pumps
 - (a) With the plant operating at a power level less than or equal to 83%, the HPSI pumps developed head, at an indicated flow rate of at least 650 gpm, is greater than or equal to 1956 feet for P017, 1992 feet for P018 and 1944 feet for P019.
 - (b) With the plant operating at a power level greater than 83%, the HPSI pumps developed head, at an indicated flow rate of at least 650 gpm, is greater than or equal to 2093 feet for P017, 2132 feet for P018 and 2099 feet for P019.

Reason for Proposed Change

Technical Specification 4.5.2.f.1 requires surveillance testing of the High Pressure Safety Injection (HPSI) pumps in accordance with ASME Section XI. The surveillance test is to demonstrate that the HPSI pumps develop the required head at the specified flow to satisfy the limiting small break LOCA analysis. The heads listed for the HPSI pumps in Technical Specification 4.5.2.f are those resulting from the small break LOCA analysis at 102% power. The existing margin between measured HPSI pump performance and the Technical Specification requirement is small and SCE experienced difficulty in meeting the requirements for the last surveillance test performed on the Unit 2 HPSI pumps. As a result of this, SCE has requested that Combustion Engineering evaluate means of increasing the margin between pump performance and the small break LOCA accident analysis requirements. Formulation of a long term solution will not be completed prior to the next surveillance on Unit 2 test which is scheduled for January 22, 1983. The proposed change requests reduced developed head requirements for operation at power levels less than 83%. This will allow for increased margin between measured HPSI pump performance and the technical specification required head.

Safety Analysis

Current Technical Specification HPSI pump performance requirements were derived from the small break LOCA analysis at 102% power which is the limiting event. At lower power levels, correspondingly less restrictive requirements can be placed on HPSI pump performance.

The proposed change establishes reduced HPSI pump performance requirements for plant operation at power levels up to 83%. Combustion Engineering (CE) has confirmed the acceptability of these reduced requirements by performing an evaluation for the limiting small break LOCA. The evaluation assumed a power level of 85% and based HPSI pump delivery on meeting the reduced requirements. The results of the evaluation satisfy the NRC's acceptance criteria of 10 CFR 50.46.

The effect of the reduced HPSI pump performance requirements on other potentially impacted accident analyses has also been reviewed. CE has determined that the reduced requirements will not adversely affect the results of any of those analyses.

Accordingly, it is concluded that: (1) Proposed Changes NPF-10-64 and NPF-15-64 do not present significant hazard considerations not described or implicit in the Final Safety Analysis; (2) there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes; and (3) this action will not result in a condition which significantly alters the impact of the station on the environment as described in the NRC Final Environmental Statement.

BEFORE THE UNITED STATES
NUCLEAR REGULATORY COMMISSION

Application of SOUTHERN CALIFORNIA EDISON)	
COMPANY, <u>ET AL.</u> for a Class 103 license to)	DOCKET NO. 50-362
Acquire, Possess, and Use a Utilization)	
Facility as part of Unit No. 3 of the)	Amendment Application
San Onofre Nuclear Generating Station)	No. 4

SOUTHERN CALIFORNIA EDISON COMPANY, ET AL. pursuant to 10 CFR 50.90,
hereby submit Amendment Application No. 4.

This amendment application consists of the following proposed
changes to Facility Operating License NPF-15, Technical Specifications
incorporated as Appendix A:

Proposed Change NPF-15-62 is a request to revise Technical
Specification Sections 3/4.3.2 (Table 3.3-5) ENGINEERED SAFETY FEATURES
ACTUATION SYSTEM INSTRUMENTATION and 3/4.5.2 ECCS SUBSYSTEMS - Tavg GREATER
THAN OR EQUAL TO 350⁰F. The proposed change allows plant modifications to
mitigate the consequences of simultaneous occurrence of a Safety Injection
Actuation Signal and a Recirculation Actuation Signal.

Proposed Change NPF-15-64 is a request to revise Technical
Specification 4.5.2.f EMERGENCY CORE COOLING to reduce High Pressure Safety
Injection Pump performance requirements for power levels less the 83%.

Pursuant to 10 CFR 170.22, the Proposed Changes contained in Amendment Application No. 4 are each considered to constitute a Class I amendment. The basis for this determination is that the Proposed Changes contained in Amendment Application No. 4 are duplicates of those contained in Amendment Application No. 18 to Operating License NPF-10 for San Onofre Nuclear Generating Station, Unit 2.

Accordingly, the fee of \$800.00 corresponding to this determination is remitted herewith as required by 10 CFR 170.22.

Subscribed on this 17th day of February 1983

Respectfully submitted,

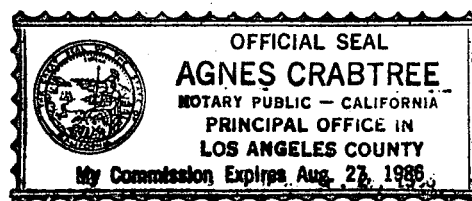
SOUTHERN CALIFORNIA EDISON COMPANY

By Robert Dietch
ROBERT DIETCH

Subscribed and sworn to before me this
17th day of February 1983.

Agnes Crabtree
Notary Public in and for the County of
Los Angeles, State of California

My Commission Expires: Aug 27, 1986



Charles R. Kocher
James A. Beoletto
Attorneys for Southern
California Edison Company

By James A. Beoletto

SAN DIEGO GAS & ELECTRIC COMPANY

By

G.D. Cotton

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David R. Pigott
Samuel B. Casey
Orrick, Herrington & Sutcliffe
Attorneys for San Diego
Gas & Electric Company

By

David R. Pigott

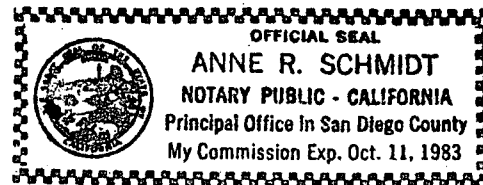
DAVID R. PIGOTT

Subscribed and sworn to before me this

7 day of February 1983.

Anne R. Schmidt

Notary Public in and for the County of
San Diego, State of California



THE CITY OF ANAHEIM

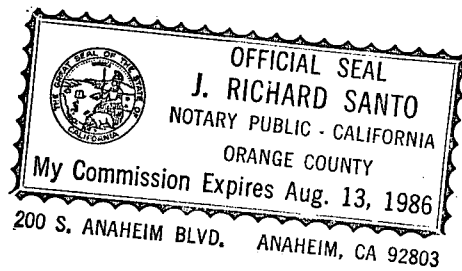
By

Gordon W. Hoyt
GORDON W. HOYT

Alan R. Watts
Rourke & Woodruff
Attorney for the City of Anaheim

By

Alan R. Watts
ALAN R. WATTS



Subscribed and sworn to before me
this 4 day of FEB, 1983

J. Richard Santo
Notary Public in and for the County
of ORANGE, State of California

THE CITY OF RIVERSIDE

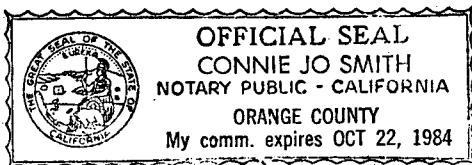
By 


EVERETT C. ROSS

Alan R. Watts
Rourke & Woodruff
Attorney for the City of Riverside

By 

Subscribed and sworn to before me
this 3rd day of February, 1983




Notary Public in and for the County
of Orange, State of California

DESCRIPTION OF PROPOSED CHANGE NPF-10-62 AND
NPF-15-62 AND SAFETY ANALYSIS

This is a request to revise Appendix A, Technical Specifications.

Existing Specifications

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Table 3.3-5

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a. RAS

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| (1) Containment-Sump Valves Open | 50.7* |
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Item 4.5.2.e

3. Verifying that on a Recirculation Actuation Test Signal, the containment sump isolation valves open and that recirculation valves to the refueling water tank close.

Proposed Specifications

Section 3/4.3.2

6. Refueling Water Storage Tank - Low

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| (1) Containment Sump Valves Open | 50.7* |
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Section 3/4.5.2

Item 4.5.2.e

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(i.e., turn two keyswitches). Further, since there are two isolation valves in each miniflow line, failure to isolate the line by at least one of the valves within the time available is considered to be very unlikely.

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ELP:6621

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The effect of the reduced HPSI pump performance requirements on other potentially impacted accident analyses has also been reviewed. CE has determined that the reduced requirements will not adversely affect the results of any of those analyses.

Accordingly, it is concluded that: (1) Proposed Changes NPF-10-64 and NPF-15-64 do not present significant hazard considerations not described or implicit in the Final Safety Analysis; (2) there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes; and (3) this action will not result in a condition which significantly alters the impact of the station on the environment as described in the NRC Final Environmental Statement.