



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

SAFETY EVALUATION

AMENDMENT NO. 25 TO NPF-10

AMENDMENT NO. 14 TO NPF-15

SAN ONOFRE NUCLEAR GENERATING STATION, UNITS 2 & 3

DOCKET NOS. 50-361 AND 50-362

Introduction

Southern California Edison Company, on behalf of itself and the other licensees, San Diego Gas and Electric Company, the City of Riverside, California, and The City of Anaheim, California has submitted several applications for license amendments for San Onofre Nuclear Generating Station, Units 2 and 3. The evaluations of four such requests are presented below.

- A. By letters dated December 1, 1982, January 25, 1983 and December 5, 1983, the Southern California Edison Company requested changes (Proposed Change Number 36 or PCN-36) in the following ESFAS response time Technical Specifications for San Onofre Nuclear Generating Station, Units 2 and 3:
1. Table 2.2-5, Item 3.a(1) Safety Injection
 2. Table 3.3-5, Item 2.b, Containment Isolation Actuation Signal
 3. Table 3.3-5, Item 5, Main Steam Isolation Signal
 4. Table 3.3-5, Items 8 and 9, Emergency Feedwater Actuation Signal
- B. By letter dated January 6, 1983, Southern California Edison Company requested a change to the San Onofre Unit 2 Technical Specifications to temporarily suspend Technical Specification 3.0.4 for up to 18 hours to allow the plant to be heated up prior to the hot setting of the pressurizer code safety valve (PCN-56).
- C. By letter dated April 15, 1983, Southern California Edison Company requested a change to the San Onofre 2 Technical Specifications 3/4.3.3.7 Fire Detection Instrumentation and 3/4.7.8.3 Spray/and/or Sprinkler Systems to reflect the installation of additional fire protection equipment (PCN-72).
- D. By letter dated August 1, 1983, Southern California Edison Company requested a change to the San Onofre Units 2 & 3 Technical Specifications 6.9.1.10, 6.13, 6.14 and 6.15 to correct an error relating to the groups and individuals required to review revisions and modifications to the Monthly Operating Report, Offsite Dose Calculations Manual, Process Control Program and Major Changes to Radioactive Waste Treatment Systems by the Onsite Review Committee (PCN-79).

Evaluation

A. ESFAS Response Times (PCN-36)

- (1) Table 3.3-5, Item 2.a(1), Safety Injection, is revised to include an additional item: (c) Charging Pumps. The revised table also includes a response time of 31.2 seconds for the Charging Pumps. This item is being added because charging flow is required on pressurizer pressure low (only) to augment High Pressure Safety Injection (HPSI) flow for the small break LOCA. Because it is used to augment HPSI flow, the charging pump response time is the same as the response time for high pressure safety injection.
- (2) Response time requirements for the main feedwater backup isolation valves (HV 1105, HV 1106, HV 4047, and HV 4051) are added to Table 3.3-5, Item 3.b, CIAS. The main feedwater backup isolation valves are required to isolate main feedwater in the event of a main steam or feedline break inside containment concurrent with a single failure of a main feedwater isolation valve (MFWIV). The response time requirement for the backup isolation valves is the same as that for the MFWIV's.
- (3) Table 3.3-5, Item 5, Main Steam Isolation Signal (MSIS), is revised by the addition of response time requirements which apply to individual classes of valves actuated by a MSIS. Specifically added are Steam, Blowdown, Sample, and Drain Isolation Valves and Auxiliary Feedwater Isolation Valves. The response times listed correspond to those assumed in the accident analysis.
- (4) The response time for Emergency Feedwater Actuation Signal (EFAS), Table 3.3-5 Items 8 and 9, are increased to the analyzed limits for auxiliary feedwater delivery. The allowed response time for non-LOCA events, bounded by the loss of normal feedwater event, is changed from 30.9 seconds for the steam/DC auxiliary feedwater train and 40.9 seconds for the AC train, to 42.7 seconds for each train. The response time for events which require AFW with SIAS is bounded by the coincident loss of normal AC power event at 53 seconds. For these cases the response time is changed from 50.9 to 52.7 seconds.
- (5) An additional surveillance requirement is added to Specification 4.7.1.2.1.a which requires the licensee to verify that the AFW piping is full. This change is required to support the EFAS response time relaxation described in (4) above. The AFW lines are long enough that system transport time could result in unacceptable delivery time, if less than completely filled, even though the pumps and valves meet the revised response time requirements.

Items (1), (2), (3), and (5) above have been reviewed and found to be acceptable because they provide additional assurance that the accident analyses in the FSAR (upon which the staff's SER was based) are valid. Specifically, item (1) provides additional assurance that charging pump flow will be available within the time assumed in the accident analyses; item (2) provides additional assurance that main feedwater isolation will occur within the time assumed in the accident analyses; item (3) provides additional assurance that main steam isolation will occur within the time assumed in the accident analyses; and item (5) provides additional assurance that auxiliary feedwater delivery time will not exceed the time assumed in the accident analyses. Item (4) is a change in the allowed EFAS response times. These times are defined as the interval between the auxiliary feedwater system initiation signal (low steam generator water level) and the time that auxiliary feedwater reaches the steam generators(s). The revised response times are based upon the licensee's safety analyses in Chapter 15 of the San Onofre 2 and 3 FSAR. The limiting response times specified in the FSAR and the revised technical specification are 42.7 seconds during the loss of normal feedwater event and 52.7 seconds during the loss of normal A/C power event.

The revised limits restrict the response time of active AFW system components to values that do not exceed the values assumed in the FSAR accident analyses. The changes also require that the system remain filled to eliminate fluid transport time in order to ensure that overall auxiliary feedwater system response time is within the limits of existing safety analyses. In summary, we find the changes to be acceptable because they do not exceed the values assumed in the FSAR safety analyses which were previously reviewed and found to be acceptable, as described in the staff's Safety Evaluation Report on San Onofre 2 and 3 (NUREG-0712).

B. Temporary Suspension of Technical Specification 3.0.4 (PCN-56)

The amendment changes Technical Specification 3.4.2 by the addition of a statement which allows the provisions of Technical Specification 3.0.4 to be temporarily suspended for up to 18 hours under certain operating conditions. As previously worded, Technical Specification 3.4.2 requires that all pressurizer code safety valves be operable with a lift setting of 2500 PSIA \pm 1% when the plant is in Operating Modes 1, 2 and 3. The Technical Specification also requires that the lift setting pressure shall correspond to ambient conditions of the valves at nominal operating temperature and pressure. Further, Technical Specification 3.0.4 requires that the conditions of 3.4.2 for Modes 1, 2 and 3 must be met before entry into those modes. Thus, as previously worded, Technical Specifications 3.4.2 and 3.0.4 required the pressurizer code safety valves to be set at nominal operating temperatures of approximately 550°F, but do not allow the temperature to exceed 350°F (the upper limit of Mode 4) if the valve

lift setting is not correct. However, if the plant is in Modes 4, 5, or 6, and the pressurizer code safety valve lift setting is not correct for any reason (such as repair or replacement), the Technical Specifications as previously written would prevent the plant from ever entering Mode 3 or above. To allow plant operation in this event the licensees have proposed that Technical Specification 3.4.2 be amended to allow the provisions of Technical Specification 3.0.4 to be suspended for up to 18 hours to allow the pressurizer code safety valves to be set under hot conditions, provided that a preliminary cold setting has been made prior to heatup. This amendment makes the requested change.

The above change is already in effect in the San Onofre Unit 3 Technical Specifications.

We find that the proposed temporary relief from the requirements of Technical Specification 3.0.4 is acceptable, because of the limited time involved (18 hours), and because setting the lift setpoint in the cold condition will approximate the hot setting. The change meets current staff criteria as included in the latest revision of the Standard Technical Specifications. Also, such relief has been approved by the NRC for other operating plants such as San Onofre Unit 3. Based on the above, we find the proposed change to be acceptable.

C. Fire Protection Equipment (PCN-72)

The proposed amendment would change Technical Specifications 3/4.3.3.7 FIRE DETECTION INSTRUMENTATION, and 3/4.7.8.2 SPRAY/AND/OR SPRINKLER SYSTEMS to reflect the installation of additional fire protection equipment in the plant: namely, (1) fire detectors to fire zones 11, 28, 45, 62, 72 and the Technical Support Center and (2) a deluge water spray system to the Auxiliary Feedwater Pump Room. These changes were implemented in accordance with commitments made as a result of License condition 2.C.(14)c of the San Onofre Nuclear Generating Station, Unit 2 Operating License.

The fire protection equipment covered by the proposed technical specification meets the staff's fire protection criteria and enhances the fire protection capability of the plant. The revised Technical Specifications represent an additional limitation, restriction or control on the facility. Therefore, the staff finds the proposed change to be acceptable.

D. Onsite Review Committee Review (PCN-79)

The proposed amendments would revise Technical Specifications 6.9.1.10, 6.13, 6.14 and 6.15 to correct an error relating to the review of revisions and modifications to the Monthly Operating Report (6.9.1.10), Offsite Dose Calculation Manual (6.14), Process Control Program (6.13) and Major Changes to Radioactive Waste Treatment Systems (6.15) by the Onsite Review Committee (OSRC). Specifically, references in these

sections to review by the OSRC are replaced by references to review in accordance with Technical Specification 6.5.2. Technical review and control of activities at San Onofre 2 and 3 is normally implemented in accordance with Technical Specification 6.5.2. Reference to OSRC review is inconsistent with the provisions of Technical Specification 6.5.2 and was an administrative oversight in the initial issue of Technical Specification Administrative Controls. Reviews of changes to Technical Specifications 6.9.1.10, 6.13, 6.14 and 6.15 are performed by qualified individuals/organizations in accordance with Technical Specification 6.5.2.9 and are not a responsibility of the OSRC. In this instance, the proposed changes make the Technical Specifications more consistent throughout. Accordingly, we find the proposed changes to be acceptable.

Contact With State Official

The NRC staff has advised the Chief of the Radiological Health Branch, State Department of Health Services, State of California, of the proposed determinations of no significant hazards consideration. No comments were received.

Environmental Consideration

These amendments involve changes in the installation or use of facility components located within the restricted area. The staff has determined that the amendments involve no significant increase in the amounts of any effluents that may be released offsite and that there is no significant increase in individual or cumulative occupation radiation exposure. The Commission has previously issued proposed findings that the amendments involve no significant hazards consideration and there has been no public comment on such findings. Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR Sec. 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 these amendments.

Conclusion

Based upon our evaluation of the proposed changes to the San Onofre Units 2 and 3 Technical Specifications, we have concluded that: there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public. We, therefore, conclude that the proposed changes are acceptable.

Dated: September 21, 1984

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9/11/84

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ISSUANCE OF AMENDMENT NO. 25 TO FACILITY OPERATING LICENSE NPF-10
AND AMENDMENT NO. 14 TO FACILITY OPERATING LICENSE NPF-15
SAN ONOFRE NUCLEAR GENERATING STATION, UNITS 2 AND 3

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