UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

Application of SOUTHERN CALIFORNIA EDISON COMPANY, <u>ET AL</u>. for a Class 103 License to Acquire, Possess, and Use a Utilization Facility as Part of Unit No. 2 of the San Onofre Nuclear Generating Station

8811020126 881024 PDR ADOCK 05000361 Docket No. 50-361

Amendment Application No. 53

SOUTHERN CALIFORNIA EDISON COMPANY, <u>ET AL</u>. pursuant to 10 CFR 50.90, hereby submit Amendment Application No. 53.

This amendment application consists of Proposed Technical Specification Change No. NPF-10-258 to Facility Operating License No. NPF-10. Proposed Technical Specification Change No. NPF-10-258 is a request to revise Technical Specification 3/4.6.3, "Containment Isolation Valves." The proposed change would increase the 18 month surveillance test intervals to "refueling interval" to support nominal 24 month fuel cycle operation.

Pursuant to 10 CFR 170.12, the required amendment application fee of \$150 is enclosed.

Subscribed on this <u>24th</u> day of <u>October</u>, 1988.

Respectfully submitted,

SOUTHERN CALIFORNIA EDISON COMPANY

By: Runath & Buchi-

Subscribed and sworn to before me this _____ day of _____ Clehen, 1988.

C. Sall Sebs Notary Public in and for the County of Los Angeles, State of California



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

By:

UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

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Application of SOUTHERN CALIFORNIA EDISON COMPANY, <u>ET AL</u>. for a Class 103 License to Acquire, Possess, and Use a Utilization Facility as Part of Unit No. 3 of the San Onofre Nuclear Generating Station

Docket No. 50-362

Amendment Application No. 39

SOUTHERN CALIFORNIA EDISON COMPANY, <u>ET AL</u>. pursuant to 10 CFR 50.90, hereby submit Amendment Application No. 39.

This amendment application consists of Proposed Technical Specification Change No. NPF-15-258 to Facility Operating License No. NPF-15. Proposed Technical Specification Change No. NPF-15-258 is a request to revise Technical Specification 3/4.6.3, "Containment Isolation Valves." The proposed change would increase the 18 month surveillance test intervals to "refueling interval" to support nominal 24 month fuel cycle operation.

Pursuant to 10 CFR 170.12, the required amendment application fee of \$150 is enclosed.

Subscribed on this <u>24th</u> day of <u>October</u>, 1988.

Respectfully submitted, SOUTHERN CALIFORNIA EDISON COMPANY

By: Runeth P Banker

Subscribed and sworn to before me this 24^{44} day of <u>October</u>, 1988.

C. Sally Sebs Notary Public in and for the County of Los Angeles, State of California

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

By:

DESCRIPTION AND SAFETY ANALYSIS OF PROPOSED CHANGE NPF-10/15-258

This is a request to revise Technical Specification 3/4.6.3, "Containment Isolation Valves."

Existing Specifications:

Unit 2: See Attachment "A"

Unit 3: See Attachment "C"

Proposed Specifications:

Unit 2: See Attachment "B"

Unit 3: See Attachment "D"

Description

This proposed change would revise Technical Specification (TS) 3/4.6.3, "Containment Isolation Valves." TS 3/4.6.3 lists the containment isolation valves and specifies their required response time for closure. Operability of the containment isolation valves ensures that the containment atmosphere will be isolated from the outside environment in the event of a release of radioactive material to the containment atmosphere. Containment isolation within the time limits specified ensures that the release of radioactive material to the environment will be consistent with the assumptions used in the accident analyses. TS 3/4.6.3 also defines the periodic surveillance tests, and action to be taken if the minimum operability requirements are not met. The proposed change would revise TS 3/4.6.3 to increase the interval for surveillance tests, which are currently performed every 18 months, to a refueling interval, nominally 24 months. Surveillance Requirement (SR) 4.6.3.2, requires that each isolation valve (except check valves) specified in Section A and B of Table 3.6-1, "Containment Isolation Valves," of this specification, be demonstrated operable during the cold shutdown or refueling mode at least once per 18 months by verifying that on an engineered safety features actuation system (ESFAS) test signal, each isolation valve actuates to its isolation position. With the exception of the Containment Purge Isolation System (CPIS) valves, this surveillance requirement is accomplished by testing all of the ESFAS relays in an actuation sub-system (i.e., CIAS) as a total unit.

Testing of the CPIS valves is performed on an 18 month interval with the unit in either cold shutdown or refueling. The surveillance tests the CPIS both manually and automatically by simulating high area radiation, high iodine, high particulate, or high gaseous activity levels. This test cannot be performed at power because TS 3/4.6.1.7 requires the 42 inch containment purge valves be sealed closed when not in a cold shutdown mode.

As required by SR 4.3.2.1, Table 4.3-2, Note (4), semi-annual functional testing of Engineereed Safety Features (ESF) components is conducted on those components which can be actuated during plant operation. The combination of the Plant Protection System (PPS) Monthly Test and the ESF Semi-annual Functional Test completely tests the ESF actuation logic from the input to the PPS through the actuation of the tested devices. FSAR Section 7.3.1.1.1.9 describes testing of the ESFAS components. The active logic components in the ESFAS actuation path are the Plant PPS bistables, PPS matrix relays, PPS initiation relays, ESFAS subgroup relays, ESF motor controllers, and the ESF actuated devices. The PPS Monthly Test checks the PPS bistables, matrix relays and the initiation relays. The ESF Semi-Annual Functional Test checks the ESFAS subgroup relays, motor controllers, and actuates the device. The major difference between the combination of the two tests and the 18 month test is that the 18 month test tests all of the logic and actuated devices for a particular function all at once. The combination of the monthly test of the PPS logic and the semi-annual testing of the subgroup relays on an individual basis provides a high level of assurance that the ESFAS and the Emergency Core Cooling System are operational.

To further enhance the assurance that safeguards components will properly operate if needed, TS 4.0.5 requires inservice testing of all ASME Class 1, 2, and 3 valves be performed in accordance with Section XI of the ASME Boiler and Pressure Vessel Code. This testing provides yet another degree of assurance that these components are capable of performing their design function.

Components which cannot be tested during plant operation are tested during the first cold shutdown longer than 24 hours, if they have not been tested in the last 6 months. Depending upon the performance of the units, there may be occasions when a cold shutdown longer than 24 hours does not occur during a fuel cycle. Components which cannot be actuated during plant operation might not be tested except at refuelings. The test history of those components which cannot be tested at power was carefully reviewed to determine the suitability of increasing the refueling surveillance interval from 18 months to 24 months for these components. Table 3.6-1 list a total of 51 valves (not including check valves) that must be tested as required by SR 4.6.3.2. The following 13 valves cannot be tested during plant operation:

Valve	Actuation		Actuation
	<u>Signal</u>	Valve	<u>Signal</u>
HV-5388	CIAS/SIAS	HV-9218	CIAS/SIAS
HV-6211	CIAS/SIAS	TV-9267	CIAS/SIAS
HV-6216	CIAS/SIAS	HV-9948	CPIS
HV-6223	CIAS/SIAS	HV-9949	CPIS
HV-6336	CIAS/SIAS	HV-9950	CPIS
HV-9205	CIAS/SIAS	HV-9951	CPIS
HV-9217	CIAS/SIAS		

During each of the past refueling outages for SONGS Units 2 and 3, these values have passed their surveillance tests without any deficiencies. In addition, each value has successfully passed two mid-cycle, semiannual tests.

In addition to the review of the surveillance test history, the maintenance history for the components that cannot be tested in all modes was reviewed. This history demonstrates that most problems have been detected by operators during routine evolutions and on-line surveillance testing, not as a result of 18 month surveillance testing. The following briefly disusses the corrective maintenance that has been required for the above 13 valves.

3HV-6211 would not close. The valve required adjustment of bearing clearances (October 1986). The deficiency was found during routine quarterly operator surveillance. 3HV-6223 would not operate. The valve required cleaning of the limit switch contacts (February 1987). The deficiency was found during post maintenance testing. On valve 2HV-6236 a non EQ rotor was replaced (April 1986). The deficiency was found during routine surveillance. 3HV-9217 could not over-ride the CIAS test signal. A missing jumper was replaced (December 1985). The deficiency was found during testing at the conclusion of implementing a design change. 2HV-9950 would not operate. The failure was due to a sheared pinion gear shaft key (March 1986). The deficiency was found during surveillance testing of CPIS. 3HV-9950 would not operate electrically. The valve required packing adjustment (December 1985). The deficiency was found during routine operation.

SONGS Units 2 and 3 have entered their first nominal 24 month fuel cycle. A plant shutdown is required to perform portions of these surveillances. The current 18 month surveillance interval could necessitate a plant shutdown solely for the purpose of performing 18 month surveillance requirements. To avoid the need for an otherwise unnecessary shutdown, the proposed change would increase the surveillance test interval from 18 months to once per refueling interval.

Since the proposed change would increase the surveillance interval from 18 months to "refueling interval" for a nominal 24 month cycle, the actual time interval between surveillances will be a function of the plant capacity factor for that particular fuel cycle. The equilibrium fuel cycle length will be approximately 513 effective full power days (EFPD). Assuming a production factor of 90% and a 75 day refueling outage, the actual cycle length, and surveillance interval would be approximately 21 months. Currently, Specification 4.0.2 allows a 25% extension of surveillance intervals which would accommodate uninterrupted operation for the equilibrium cycle length except that the TS 4.0.2 limitation on the application of a 25% extension, such that three consecutive intervals do not exceed 3.25 times the nominal interval eventually would impact operation. Thus, the proposed change does not represent a radical increase over what is already permitted by technical specifications.

Safety Analysis

The proposed changes discussed above shall be deemed to involve a significant hazards consideration if there is a positive finding in any one of the following areas:

1. Will operation of the facility in accordance with this proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No

The required semi-annual testing of the components included within the scope of this technical specification provides a high level of assurance that the equipment is capable of proper operation. The frequency of the semi-annual testing is not affected by this change. The proposed change only revises the frequency of the surveillance interval. Based on the review of the results of surveillance testing to date, the results have demonstrated reliable equipment performance. Additional assurance of proper operation of ASME pumps and valves is provided by inservice testing. Therefore, the proposed change will not involve a significant increase in the probability or consequences of an accident previously evaluated.

Will operation of the facility in accordance with this proposed change create the possibility of a new or different kind of accident from any accident previously evaluated?

Response:No

The proposed change only affects the frequency of refueling interval testing and does not alter the configuration of the facility or its operation. Therefore, the proposed change will not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Will operation of the facility in accordance with the proposed change involve a significant reduction in a margin of safety?

Response:No

The proposed change only affects the frequency of testing on a subsystem basis (18 months) without affecting the testing frequency that is done on a sub-group basis (semi-annual). The semi-annual test is capable of detecting problems which are most likely to occur. Inservice testing of ASME pumps and valves provides additional assurance of proper operation. This, coupled with reliable equipment performance, makes any potential reduction in safety margin negligible. Therefore, the proposed change will not involve a significant increase in a margin of safety.

Safety and Significant Hazards Determination

Based on the above Safety Analysis it is concluded that: (1) the proposed change does not constitute a significant hazards consideration as defined by 10 CFR 50.92; and (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 on the environment as described in the NRC Final Environmental Statement.

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(Existing Specifications)

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ATTACHMENT A

NPF-10/15-258