UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

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| Application of SOUTHERN CALIFORNIA EDISON COMPANY, ET AL. 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 | ) ) ) ) ) ) | Docket No. 50-361<br><br>Amendment Application No. 55 |

SOUTHERN CALIFORNIA EDISON COMPANY, ET AL. pursuant to 10 CFR 50.90, hereby submit Amendment Application No. 55.

This amendment application consists of Proposed Technical Specification Change No. NPF-10-260 to Facility Operating License No. NPF-10. Proposed Technical Specification Change No. NPF-10-260 is a request to revise Technical Specifications 3/4.7.1.2, "Auxiliary Feedwater System;" 3/4.7.3, "Component Cooling Water System;" 3/4.7.4, "Salt Water Cooling System;" and 3/4.7.10, "Emergency Chilled Water System." The proposed change would increase the 18 month surveillance 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 20th day of January, 1989.

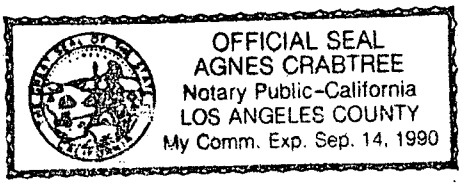
Respectfully submitted,

SOUTHERN CALIFORNIA EDISON COMPANY

By: Kenneth P Bruhi

Subscribed and sworn to before me this 20th day of January 1989.

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

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| Application of SOUTHERN CALIFORNIA EDISON COMPANY, ET AL. 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<br><br>Amendment Application No. 41 |

SOUTHERN CALIFORNIA EDISON COMPANY, ET AL. pursuant to 10 CFR 50.90, hereby submit Amendment Application No. 41.

This amendment application consists of Proposed Technical Specification Change No. NPF-15-260 to Facility Operating License No. NPF-15. Proposed Technical Specification Change No. NPF-15-260 is a request to revise Technical Specifications 3/4.7.1.2, "Auxiliary Feedwater System;" 3/4.7.3, "Component Cooling Water System;" 3/4.7.4, "Salt Water Cooling System;" and 3/4.7.10, "Emergency Chilled Water System." The proposed change would increase the 18 month surveillance 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 20th day of January, 1989.

Respectfully submitted,

SOUTHERN CALIFORNIA EDISON COMPANY

By: Kenneth P Baskin

Subscribed and sworn to before me this 20th day of January 1989.

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

OFFICIAL SEAL
AGNES CRABTREE
Notary Public-California
LOS ANGELES COUNTY
My Comm. Exp. Sep. 14, 1990

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Attorneys for Southern
California Edison Company

By: James A Beoletto

DESCRIPTION AND SAFETY ANALYSIS
OF PROPOSED CHANGE NPF-10/15-260

This is a request to revise Technical Specifications 3/4.7.1.2, "Auxiliary Feedwater System," 3/4.7.3, "Component Cooling Water System," 3/4.7.4, "Salt Water Cooling System," and 3/4.7.10, "Emergency Chilled Water System."

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

The proposed change would revise Technical Specification (TS) 3/4.7.1.2, "Auxiliary Feedwater System," TS 3/4.7.3, "Component Cooling Water System," TS 3/4.7.4, "Salt Water Cooling System," and TS 3/4.7.10, "Emergency Chilled Water System." TS 3/4.7.1.2 defines the required number of operable Auxiliary Feedwater System flow paths and pumps. The operability of the auxiliary feedwater (AFW) system ensures that the reactor coolant system can be cooled down to less than 350 degrees Fahrenheit from normal operating conditions in the event of a total loss of offsite power. TS 3/4.7.3 defines the required number of operable Component Cooling Water (CCW) loops. The operability of the CCW System ensures that sufficient cooling capacity is available for continued operation of safety related equipment during normal and accident conditions. TS 3/4.7.4 defines the required number of operable Salt Water Cooling (SWC) loops. The operability of the Saltwater Cooling System ensures that sufficient cooling capacity is available for continued operation of equipment during normal and accident conditions. TS 3/4.7.10 defines the required number of operable Emergency Chilled Water Systems. The operability of the Emergency Chilled Water System ensures that space cooling capacity is available for continued operation of safety related equipment during accident conditions. Each of these technical specifications also define periodic surveillance tests, and action to be taken if the minimum operability requirements are not met. The proposed change will revise the 18 month surveillance requirements associated with these specifications to increase the interval for surveillance tests, which are currently performed every 18 months, to each refueling interval, nominally 24 months.

Surveillance Requirement (SR) 4.7.1.2.1.b requires that at least once per 18 months, each automatic valve in the AFW flow path, and each AFW pump, be verified to actuate to its desired position upon an Emergency Feedwater Actuation Signal (EFAS) test signal. Surveillance Requirement 4.7.3.b, for the CCW System, requires that the CCW loops be demonstrated operable by verifying at least once per 18 months during shutdown, that all automatic valves servicing safety related equipment actuate to their correct position, and that the CCW pumps start upon a Safety Injection Actuation Signal (SIAS) test signal. Surveillance Requirement 4.7.4.b requires that at

least two SWC Pumps be verified operable at least once per 18 months during shutdown, by verifying that each automatic valve servicing safety related equipment, actuates to its correct position, and each SWC Pump starts upon an SIAS test signal. SR 4.7.10.b requires that at least once per 18 months each of the Emergency Chilled Water Systems be demonstrated operable by verifying that each Emergency Chilled Water Pump, and each power operated or automatic valve servicing safety related equipment actuate to its correct position upon any of the following test signals: SIAS, Toxic Gas Isolation (TGIS), Control Room Isolation (CRIS), or Fuel Handling Isolation (FHIS) with irradiated fuel in the storage pool.

These surveillances are accomplished by testing all of the Engineered Safety Features Actuation System (ESFAS) relays in an actuation sub-system as a total unit. This method is performed on an 18 month cycle during shutdown and cannot be performed at power because it actuates all of the ESFAS actuation sub-system relays at the same time.

Surveillance Requirement 4.3.2.1, Table 4-3.2, Note (4), requires semi-annual functional testing of Engineered Safety Features (ESF) components be conducted on those components which can be actuated during plant operation. All of the components covered by TS 3/4.7.1.2, 3/4.7.3, 3/4.7.4 and 3/4.7.10 can be tested with the units at power. 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 components. The active logic components in the ESFAS actuation path are the 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 these systems are operational.

The FHIS, CRIS, and TGIS actuated components are each tested using a separate surveillance test. These are performed on each of the three different actuation systems on a monthly basis with the plant in any mode.

In addition to the semi-annual subgroup actuation testing, TS 4.0.5 requires that inservice testing of all ASME Class 1, 2 and 3 pumps and 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.

SONGS Units 2 and 3 have both entered their first nominal 24 month fuel cycle. A plant shutdown is required to perform portions of the above 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 a "refueling interval," nominally 24 months.

Since the proposed changes 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 Specification 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 these technical specifications 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. Inservice testing of ASME pumps and valves provides additional assurance of proper operation. Increasing the interval from 18 months to once each refueling will not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. 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, this 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 sub-system 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. Therefore, the proposed change will not result in 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.

ATTACHMENT A

(Existing Specification)

PLANT SYSTEMS

AUXILIARY FEEDWATER SYSTEM

LIMITING CONDITION FOR OPERATION

3.7.1.2 At least three independent steam generator auxiliary feedwater pumps and associated flow paths shall be OPERABLE with:

a. Two motor-driven auxiliary feedwater pumps, each capable of being powered from separate emergency busses, and

b. One steam turbine-driven auxiliary feedwater pump capable of being powered from an OPERABLE steam supply system.

APPLICABILITY: MODES 1, 2 and 3.

ACTION:

a. With one auxiliary feedwater pump inoperable, restore the required auxiliary feedwater pumps to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours.

b. With two auxiliary pumps inoperable, be in at least HOT STANDBY within 6 hours and in HOT SHUTDOWN within the following 6 hours.

c. With three auxiliary feedwater pumps inoperable, immediately initiate corrective action to restore at least one auxiliary feedwater pump to OPERABLE status as soon as possible.

SURVEILLANCE REQUIREMENTS

4.7.1.2.1 Each auxiliary feedwater pump shall be demonstrated OPERABLE:

a. At least once per 31 days by:

1. Testing the turbine driven pump and both motor driven pumps pursuant to Specification 4.0.5. The provisions of Specification 4.0.4 are not applicable for the turbine driven pump for entry into MODE 3.

2. 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.

3. Verifying that both manual valves in the suction lines from the primary AFW supply tank (condensate storage tank T-121) to each AFW pump, and the manual discharge line valve of each AFW pump are locked in the open position.

SURVEILLANCE REQUIREMENTS (Continued)

4. Verifying that the AFW piping is full of water by venting the accessible discharge piping high points.

b. At least once per 18 months during shutdown by:

1. Verifying that each automatic valve in the flow path actuates to its correct position upon receipt of an EFAS test signal.

2. Verifying that each pump starts automatically upon receipt of an EFAS test signal.

4.7.1.2.2 The auxiliary feedwater system shall be demonstrated OPERABLE prior to entering MODE 2 following each COLD SHUTDOWN by performing a flow test to verify the normal flow path from the primary AFW supply tank (condensate storage tank T-121) through each auxiliary feedwater pump to its associated steam generator.

## 3/4.7.3 COMPONENT COOLING WATER SYSTEM

### LIMITING CONDITION FOR OPERATION

3.7.3 At least two independent component cooling water loops shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With only one component cooling water loop OPERABLE, restore at least two loops to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

### SURVEILLANCE REQUIREMENTS

4.7.3 At least two component cooling water loops shall be demonstrated OPERABLE:

a. At least once per 31 days by verifying that each valve (manual, power operated or automatic) servicing safety related equipment that is not locked, sealed, or otherwise secured in position, is in its correct position.

b. At least once per 18 months during shutdown, by verifying that each automatic valve servicing safety related equipment actuates to its correct position and each component cooling water pump starts automatically on an SIAS test signal.

## 3/4.7.4 SALT WATER COOLING SYSTEM

### LIMITING CONDITION FOR OPERATION

3.7.4 At least two independent salt water cooling loops shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With only one salt water cooling loop OPERABLE, restore at least two loops to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

### SURVEILLANCE REQUIREMENTS

4.7.4 At least two salt water cooling loops shall be demonstrated OPERABLE:

a. At least once per 31 days by verifying that each valve (manual, power operated or automatic) servicing safety related equipment that is not locked, sealed or otherwise secured in position, is in its correct position.

b. At least once per 18 months during shutdown, by verifying that each automatic valve servicing safety related equipment actuates to its correct position and each salt water cooling pump starts automatically on an SIAS test signal.

## 3/4.7.10 EMERGENCY CHILLED WATER SYSTEM

### LIMITING CONDITION FOR OPERATION

3.7.10 Two independent emergency chilled water systems shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

a. With only one emergency chilled water system OPERABLE, restore the inoperable system to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

b. With only one emergency chilled water system OPERABLE:

1. Within 1 hour verify that the normal HVAC system is providing space cooling to the vital power distribution rooms containing emergency battery chargers and inverters that depend on the inoperable emergency chilled water system for space cooling, and

2. Within 8 hours establish OPERABILITY of the safe shutdown systems which do not depend on the inoperable emergency chilled water system (one train each of boration and auxiliary feedwater per Sections 3/4.1.2.2 and 3/4.7.1.2, respectively, and one bank of pressurizer heaters per Section 3/4.4.3) and

3. Within 24 hours establish OPERABILITY of all required systems, subsystems, trains, components and devices that depend on the remaining OPERABLE emergency chilled water system for space cooling.

If these conditions are not satisfied within the specified time, be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

### SURVEILLANCE REQUIREMENTS

4.7.10 Each of the above required emergency chilled water systems shall be demonstrated OPERABLE:

a. At least once per 31 days by verifying that each manual valve servicing safety-related equipment that is not locked, sealed, or otherwise secured in position, is in its correct position and,

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SURVEILLANCE REQUIREMENTS (Continued)

b. At least once per 18 months by verifying that: each power-operated or automatic valve servicing safety-related equipment actuates to its correct position and each chilled water pump starts automatically on a TGIS, CRIS, SIAS and, with irradiated fuel in the storage pool, FHIS.

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