

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

Application of SOUTHERN CALIFORNIA)	
EDISON COMPANY, <u>ET AL.</u> 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. 65
Generating Station)	

SOUTHERN CALIFORNIA EDISON COMPANY, ET AL. pursuant to 10 CFR 50.90, hereby submit Amendment Application No. 65.

This amendment application consists of Proposed Technical Specification Change No. NPF-10-267 to Facility Operating License No. NPF-10. Proposed Technical Specification Change No. NPF-10-267 is a request to revise Technical Specification 3/4.3.3.1, "Radiation Monitoring Instrumentation." 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.

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Subscribed on this 19th day of December, 1988.

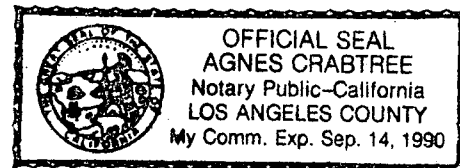
Respectfully submitted,

SOUTHERN CALIFORNIA EDISON COMPANY

By: *Wm. P. Bush*

Subscribed and sworn to before me this
19th day of December 1988.

Agnes Crabtree
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: *James A. Beoletto*

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EDISON COMPANY, <u>ET AL.</u> 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. 51
Generating Station)	

SOUTHERN CALIFORNIA EDISON COMPANY, ET AL. pursuant to 10 CFR 50.90, hereby submit Amendment Application No. 51.

This amendment application consists of Proposed Technical Specification Change No. NPF-15-267 to Facility Operating License No. NPF-15. Proposed Technical Specification Change No. NPF-15-267 is a request to revise Technical Specification 3/4.3.3.1, "Radiation Monitoring Instrumentation." 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 19th day of December, 1988.

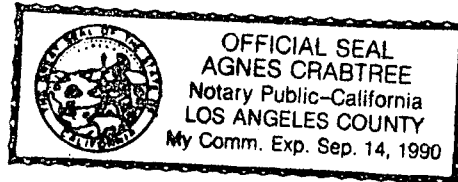
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Attorneys for Southern
California Edison Company

By: James A. Beoletto

DESCRIPTION OF PROPOSED CHANGE NPF-10/15-267
AND SAFETY ANALYSIS

This is a request to revise Technical Specification 3/4.3.3.1, "Radiation Monitoring Instrumentation."

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 3/4.3.3.1, "Radiation Monitoring Instrumentation." This specification provides alarm/trip setpoints for certain radiation monitoring instrumentation channels. The operability of these radiation monitoring alarm channels ensures that 1) the radiation levels are continuously measured in the areas served by the individual channels; 2) the alarm or automatic action is initiated when the radiation level trip setpoint is exceeded; and 3) sufficient information is available on selected plant parameters to monitor and assess these variables following an accident. Radiation monitoring instrumentation Loops 7820-1 and 7820-2 provide two trains of high range continuous monitoring, recording, and indication of containment area radiation levels. The systems also provide for alarm annunciation whenever technical specification limits for area radiation are approached or exceeded. During accident conditions, the high range in-containment monitors would provide for long-term post-accident monitoring of radiation conditions inside containment. The two independent trains consist of the following monitors Units 2 and 3: 2RI-7820-1, 3RI-7820-1, 2RI-7820-2, and 3RI-7820-2.

Surveillance Requirement 4.3.3.1, Instrument 1.a states that each containment high range channel shall be demonstrated operable by the performance of a Channel Calibration at (R) frequency which is currently defined by Technical Specification Table 1.2 as "at least once per 18 months." The proposed change would revise this requirement from the current 18 month interval to an interval at least once per refueling (nominally 24 months).

The channel calibration currently performed every 18 months repeats the tests that are performed every 31 days for the required channel functional test. The primary difference between the calibration and functional test is the additional Isotopic calibration of the containment ion chamber detector that is performed during the channel calibration. The calibration also provides for calibration of individual loop components as required.

A detailed maintenance history review was conducted for the In-Containment High Range Monitoring System from the period August 5, 1983 to March 1, 1988. This review covered the period from the time the plants went into commercial operation to the date of the maintenance history review. The results of this review indicate only 14 failure deficiencies between calibration intervals for the four monitors of Units 2 and 3. All of the deficiencies were discovered during either daily and monthly surveillance testing or by alarm indications upon failure. Also, of the four monitors for Units 2 and 3, fifteen 18 month channel calibration procedures were reviewed in detail for "As Found" calibration data failures. Of the calibrations reviewed, only two show "As Found" calibration failures. One failure which occurred on Monitor 3RI-7820-1 (18 Month Surveillance 85103732) was a TP-3 voltage output out-of-tolerance indication obtained during the electronic calibration of the control room ratemeter module. The electronic calibration simulates DC milliamp test currents into the module and records specified outputs such as TP-3 VDC. This channel calibration failure is not significant due to the fact that the 31 day channel functional test duplicates this same test and would have also identified this discrepancy. The other 18-month calibration failure occurred during SV# 84100330 on 2RI-7820-1. The failure was an out of tolerance high voltage setting for the detector. This failure is also insignificant since either the "loss of signal" or "low high voltage" channel failure trips and alarms would have occurred if the high voltage had continued to degrade. Most failures are detectable through either the daily and 31 day surveillance tests, or by resultant alarm indications should the monitor fail high or low. Each channel, by design, has circuitry which detects the loss of detector signals and failures of either the high voltage or low voltage power supplies. The detected failures are then processed as a "fail alarm" to alert the unit operators of a problem. Therefore, should the system fail between calibrations, the monitor will process annunciator alarms to alert operating personnel of the failure.

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 the 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.

SONGS Units 2 and 3 have both entered their first nominal 24-month fuel cycle. The radiation sensing detectors for the systems are located in containment, so access to the containment is required to conduct the testing. In order to maintain radiation exposure as low as reasonably achievable, the unit would need to be in a shutdown mode to conduct this testing. The current 18 month surveillance interval could necessitate a plant shutdown solely for the purpose of performing 18 month surveillance requirements. The proposed change is

required to avoid the need for an otherwise unnecessary large man-rem exposure or unit shutdown.

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 proposed change will revise the frequency of the channel calibration test to an interval at least once per refueling (nominally 24 months). Most failures of the systems are detected during performance of the daily, monthly, or by alarm indication on failure. Therefore, the proposed change 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 in-containment high range radiation monitors are strictly monitoring, indication, and alarm systems and do not initiate any automatic protective functions. The proposed change extends the surveillance interval (for a test intended to be performed during a refueling outage) to coincide with the refueling outage interval of 24-month fuel cycles. 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 extends the 18 month interval for performing the 18 month channel calibration surveillance to refueling intervals. The actual time interval between surveillances will be a function of the plant capacity factor for the particular fuel cycle. For the equilibrium cycle, the fuel cycle length does not involve a significant reduction in a margin to safety. A review of the maintenance history of the in-containment high range radiation monitoring system revealed that the majority of the problems found by either the daily and monthly surveillance tests, or alarm

indications. The exceptions were the failure of two channels to meet as found acceptance criteria during 18-month surveillances. These failures would have also been found during the next 31 day surveillance or resulted in channel failure alarms. Therefore, the proposed change will not involve a significant decrease 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.

NPF-10/15-267

ATTACHMENT "A"
(Existing Specifications)

INSTRUMENTATION

3/4.3.3 MONITORING INSTRUMENTATION

RADIATION MONITORING INSTRUMENTATION

LIMITING CONDITION FOR OPERATION

3.3.3.1 The radiation monitoring instrumentation channels shown in Table 3.3-6 shall be OPERABLE with their alarm/trip setpoints within the specified limits.

APPLICABILITY: As shown in Table 3.3-6.*

ACTION:

- a. With a radiation monitoring channel alarm/trip setpoint exceeding the value shown in Table 3.3-6, adjust the setpoint to within the limit within 4 hours or declare the channel inoperable.
- b. With one or more radiation monitoring channels inoperable, take the ACTION shown in Table 3.3-6.
- c. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.3.3.1 Each radiation monitoring instrumentation channel shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK, CHANNEL CALIBRATION and CHANNEL FUNCTIONAL TEST operations for the MODES and at the frequencies shown in Table 4.3-3.

*See Special Test Exception 3.10.5.

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TABLE 4.3-3

RADIATION MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>INSTRUMENT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>MODES FOR WHICH SURVEILLANCE IS REQUIRED</u>
1. Area Monitors				
a. Containment - High Range (2RT-7820-1, 2RT-7820-2)	S	R	M	1, 2, 3, 4
b. Containment - Purge Isolation (2RT-7856-1, 2RT-7857-2)	S	R	M	1, 2, 3, 4, 6
c. Main Steam Line (2RT-7874A, 2RT-7875A, 2RT-7874B, 2RT-7875B)	S	R	M	1, 2, 3, 4
2. Process Monitors				
a. Fuel Storage Pool Airborne (2RT-7822-1, 2RT-7823-2)				
i. Gaseous	#	#	#	*
ii. Particulate/Iodine	#	#	#	*
b. Containment Airborne (2RT-7804-1, 2RT-7807-2)				
i. Gaseous	#	#	#	1, 2, 3, 4, 6
ii. Particulate	#	#	#	1, 2, 3, 4, 6
iii. Iodine	#	#	#	6
c. Control Room Airborne (2/3RT-7824-1, 2/3RT-7825-2)				
i. Particulate	#	#	#	All
ii. Gaseous	#	#	#	All

TABLE 4.3-3

RADIATION MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>INSTRUMENT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>MODES FOR WHICH SURVEILLANCE IS REQUIRED</u>
PROCESS MONITORS (Continued)				
3. Noble Gas Monitors				
a. Plant Vent Stack (2RT-7865-1, 3RT-7865-1, 2/3RT-7808)	D	R	Q	1, 2, 3, 4
b. Condenser Evacuation System (2RT-7870-1, 2RT-7818-1)	D	R	Q	1, 2, 3, 4(1)

NOTES:

In accordance with Table 4.3-2 surveillance requirements for these instrument channels.

* With irradiated fuel in the storage pool.

(1) With any main steam isolation valve and/or any main steam isolating valve bypass valve not fully closed.