

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

Application of SOUTHERN CALIFORNIA EDISON	)	
COMPANY, <u>ET AL.</u> for a Class 103 License to	)	Docket No. 50-361
Acquire, Possess, and Use a Utilization	)	
Facility as Part of Unit No. 2 of the	)	Amendment Application
San Onofre Nuclear Generating Station	)	No. 29

SOUTHERN CALIFORNIA EDISON COMPANY, ET AL. pursuant to 10 CFR 50.90, hereby submit Amendment Application No. 29.

This amendment application consists of the following proposed changes to Facility Operating License NPF-10:

Proposed Change NPF-10-148 is a request to revise Technical Specification 2.2.2, CORE PROTECTION CALCULATOR ADDRESSABLE CONSTANTS, by adding to Table 2.2-2, CORE PROTECTION CALCULATOR ADDRESSABLE CONSTANTS, Type I addressable constant PCALIB, the calorimetric power. This proposed change is required in order to reflect the addition of addressable constant PCALIB to the Core Protection Calculator core power bias algorithm for Unit 2 Cycle 2. This proposed change is also applicable to Unit 3 Cycle 2.

Proposed Change NPF-10-150 is a request to revise Technical Specification 3.2.7, POWER DISTRIBUTION LIMITS - AXIAL SHAPE INDEX, to reestablish Axial Shape Index boundaries in accordance with the ground rules assumed for the Unit 2 Cycle 2 safety analysis. This proposed change is also applicable to Unit 3 Cycle 2.

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Proposed Change NPF-10-151 is a request to revise Technical Specification 3.1.3.6, REACTIVITY CONTROL SYSTEMS - REGULATING CEA INSERTION LIMITS, to reestablish, in accordance with the ground rules assumed for the Unit 2 Cycle 2 safety analysis, the Transient Insertion Limit and the Short Term Steady State Insertion Limit specified by Figure 3.1-2, CEA INSERTION LIMITS VS FRACTION OF ALLOWABLE THERMAL POWER. This proposed change is also applicable to Unit 3 Cycle 2.

Proposed Change NPF-10-152 is a request to revise Technical Specification 2.2.2, CORE PROTECTION CALCULATOR ADDRESSABLE CONSTANTS, by adding to Table 2.2-2, CORE PROTECTION CALCULATOR ADDRESSABLE CONSTANTS, Type II addressable constant RPCLIM, the reactor power cutback time limit. Although neither Unit 2 nor Unit 3 has a reactor power cutback system, addressable constant RPCLIM is included in the standard Combustion Engineering Core Protection Calculator software package which will be installed for Unit 2 Cycle 2. This proposed change is also applicable to Unit 3 Cycle 2.

Proposed Change NPF-10-153 is a request to revise Technical Specification 3.1.1.3, REACTIVITY CONTROL SYSTEMS - MODERATOR TEMPERATURE COEFFICIENT, to establish power dependent Moderator Temperature Coefficient limits in accordance with the ground rules assumed for the Unit 2 Cycle 2 safety analysis. This proposed change is also applicable to Unit 3 Cycle 2.

Proposed Change NPF-10-160 is a request to revise Technical Specifications (TS) 2.1.1.1, SAFETY LIMITS - REACTOR CORE - DNBR, and 2.2.1, LIMITING SAFETY SYSTEM SETTINGS - REACTOR TRIP SETPOINTS, and TS Bases 2.2.1, REACTOR TRIP SETPOINTS, and 3/4.4.1, REACTOR COOLANT LOOPS AND COOLANT CIRCULATION, to reflect an increase in the minimum Departure from Nucleate Boiling Ratio from 1.20 to 1.31 resulting from revised Core Protection Calculator methodology and core design for Unit 2 Cycle 2. This proposed change is also applicable to Unit 3 Cycle 2.

Proposed Change NPF-10-162 is a request to revise Table 2.2-2, CORE PROTECTION CALCULATOR ADDRESSABLE CONSTANTS, of Technical Specification 2.2.2, CORE PROTECTION CALCULATOR ADDRESSABLE CONSTANTS, by redefining Type II addressable constant CORRI, the temperature shadowing correction factor multiplier, as Type I addressable constant TCREF, the reference cold leg temperature, to reflect that the Core Protection Calculator Temperature Shadowing Factor algorithm has been modified for Unit 2 Cycle 2. This proposed change is also applicable to Unit 3 Cycle 2.

Proposed Change NPF-10-164 is a request to revise Table 2.2-2, CORE PROTECTION CALCULATOR ADDRESSABLE CONSTANTS, of Technical Specification 2.2.2, CORE PROTECTION CALCULATOR ADDRESSABLE CONSTANTS, to reflect a decrease in the minimum allowable value of Type I addressable constant TR, the azimuthal tilt allowance, from 1.02 to 1.00 resulting from Core Operating Limit Supervisory System azimuthal tilt algorithm modifications for Unit 2 Cycle 2. This proposed change is also applicable to Unit 3 Cycle 2.

Proposed Change NPF-10-168 is a request to revise Technical Specification (TS) 3/4.10.4, SPECIAL TEST EXCEPTIONS - CENTER CEA MISALIGNMENT, and TS Bases 3/4.10.4, SPECIAL TEST EXCEPTIONS - CENTER CEA MISALIGNMENT, to change the title to SPECIAL TEST EXCEPTIONS - CENTER CEA MISALIGNMENT AND REGULATING CEA INSERTION LIMITS; to allow Regulating Group #6 insertion beyond the Transient Insertion Limit during physics tests to determine the isothermal temperature coefficient, moderator temperature coefficient, and power coefficient; and to require that the Departure from Nucleate Boiling Ratio margin be continuously determined to be within the limits specified by TS 3.2.4, POWER DISTRIBUTION LIMITS - DNBR MARGIN. This proposed change results from slight physics test modifications for Unit 2 Cycle 2. The proposed change is also applicable to Unit 3 Cycle 2.

Proposed Change NPF-10-169 is a request to revise Technical Specification 5.3.1, DESIGN FEATURES - REACTOR CORE - FUEL ASSEMBLIES, to increase the maximum total weight of uranium in each fuel rod from 1807 grams to 1900 grams to allow possible as-built variations or fuel density changes in the fuel rods used for future cycles for both Units 2 and 3.

Pursuant to 10 CFR 170.12, an amendment application fee of \$150.00 is required for each license amendment request. The above described Proposed Changes, none of which have been previously submitted, are considered with the corresponding Proposed Changes to Unit 3 Facility Operating License NPF-15, as specified by Unit 3 Amendment Application No. 15, to collectively constitute a license amendment request. Therefore, the required \$150.00 amendment application fee is hereby remitted.

Subscribed on this 1st day of October 1984.

Respectfully submitted,

SOUTHERN CALIFORNIA EDISON COMPANY

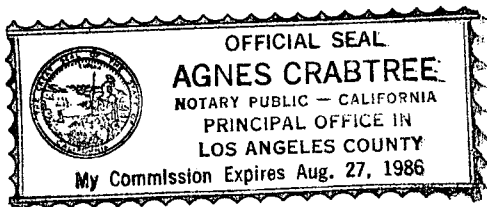
By Weneth P. Barker

Subscribed and sworn to before me this

1st. day of October 1984.

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  
Attorney for Southern  
California Edison Company

By

James A. Beoletto

SAN DIEGO GAS & ELECTRIC COMPANY

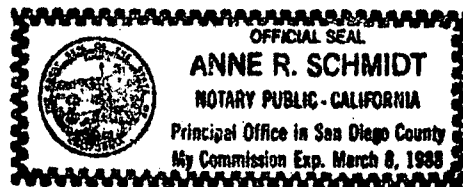
By: J. A. Holcomb

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

By: David R. Pigott

Subscribed and sworn to before me this  
25 day of Sept. 1984.

Anne R. Schmidt  
Notary Public in and for the County of  
San Diego, State of California



THE CITY OF ANAHEIM

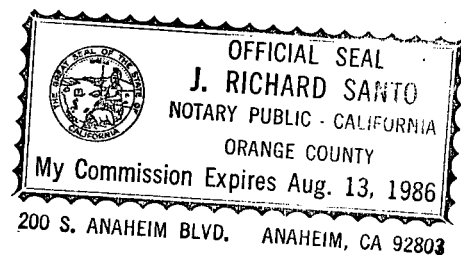
By: Dale L Pohlman

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

By: Alan R. Watts

Subscribed and sworn to before me this  
25 day of SEPT 1984.

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



THE CITY OF RIVERSIDE

By: Robert G. Montano

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

By: Alan R. Watts

Subscribed and sworn to before me this  
25th day of September, 1984.

Margaret I. Allen  
Notary Public in and for the County of  
Riverside, State of California



UNITED STATES OF AMERICA  
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. 15

SOUTHERN CALIFORNIA EDISON COMPANY, ET AL. pursuant to 10 CFR 50.90,  
hereby submit Amendment Application No. 15.

This amendment application consists of the following proposed  
changes to Facility Operating License NPF-15:

Proposed Change NPF-15-148 is a request to revise Technical  
Specification 2.2.2, CORE PROTECTION CALCULATOR ADDRESSABLE CONSTANTS, by  
adding to Table 2.2-2, CORE PROTECTION CALCULATOR ADDRESSABLE CONSTANTS,  
Type I addressable constant PCALIB, the calorimetric power. This proposed  
change is required in order to reflect the addition of addressable constant  
PCALIB to the Core Protection Calculator core power bias algorithm for Unit 2  
Cycle 2. This proposed change is also applicable to Unit 3 Cycle 2.

Proposed Change NPF-15-150 is a request to revise Technical  
Specification 3.2.7, POWER DISTRIBUTION LIMITS - AXIAL SHAPE INDEX, to  
reestablish Axial Shape Index boundaries in accordance with the ground rules  
assumed for the Unit 2 Cycle 2 safety analysis. This proposed change is also  
applicable to Unit 3 Cycle 2.

Proposed Change NPF-15-151 is a request to revise Technical Specification 3.1.3.6, REACTIVITY CONTROL SYSTEMS - REGULATING CEA INSERTION LIMITS, to reestablish, in accordance with the ground rules assumed for the Unit 2 Cycle 2 safety analysis, the Transient Insertion Limit and the Short Term Steady State Insertion Limit specified by Figure 3.1-2, CEA INSERTION LIMITS VS FRACTION OF ALLOWABLE THERMAL POWER. This proposed change is also applicable to Unit 3 Cycle 2.

Proposed Change NPF-15-152 is a request to revise Technical Specification 2.2.2, CORE PROTECTION CALCULATOR ADDRESSABLE CONSTANTS, by adding to Table 2.2-2, CORE PROTECTION CALCULATOR ADDRESSABLE CONSTANTS, Type II addressable constant RPCLIM, the reactor power cutback time limit. Although neither Unit 2 nor Unit 3 has a reactor power cutback system, addressable constant RPCLIM is included in the standard Combustion Engineering Core Protection Calculator software package which will be installed for Unit 2 Cycle 2. This proposed change is also applicable to Unit 3 Cycle 2.

Proposed Change NPF-15-153 is a request to revise Technical Specification 3.1.1.3, REACTIVITY CONTROL SYSTEMS - MODERATOR TEMPERATURE COEFFICIENT, to establish power dependent Moderator Temperature Coefficient limits in accordance with the ground rules assumed for the Unit 2 Cycle 2 safety analysis. This proposed change is also applicable to Unit 3 Cycle 2.

Proposed Change NPF-15-160 is a request to revise Technical Specifications (TS) 2.1.1.1, SAFETY LIMITS - REACTOR CORE - DNBR, and 2.2.1, LIMITING SAFETY SYSTEM SETTINGS - REACTOR TRIP SETPOINTS, and TS Bases 2.2.1, REACTOR TRIP SETPOINTS, and 3/4.4.1, REACTOR COOLANT LOOPS AND COOLANT CIRCULATION, to reflect an increase in the minimum Departure from Nucleate Boiling Ratio from 1.20 to 1.31 resulting from revised Core Protection Calculator methodology and core design for Unit 2 Cycle 2. This proposed change is also applicable to Unit 3 Cycle 2.

Proposed Change NPF-15-162 is a request to revise Table 2.2-2, CORE PROTECTION CALCULATOR ADDRESSABLE CONSTANTS, of Technical Specification 2.2.2, CORE PROTECTION CALCULATOR ADDRESSABLE CONSTANTS, by redefining Type II addressable constant CORR1, the temperature shadowing correction factor multiplier, as Type I addressable constant TCREF, the reference cold leg temperature, to reflect that the Core Protection Calculator Temperature Shadowing Factor algorithm has been modified for Unit 2 Cycle 2. This proposed change is also applicable to Unit 3 Cycle 2.

Proposed Change NPF-15-164 is a request to revise Table 2.2-2, CORE PROTECTION CALCULATOR ADDRESSABLE CONSTANTS, of Technical Specification 2.2.2, CORE PROTECTION CALCULATOR ADDRESSABLE CONSTANTS, to reflect a decrease in the minimum allowable value of Type I addressable constant TR, the azimuthal tilt allowance, from 1.02 to 1.00 resulting from Core Operating Limit Supervisory System azimuthal tilt algorithm modifications for Unit 2 Cycle 2. This proposed change is also applicable to Unit 3 Cycle 2.

Proposed Change NPF-15-168 is a request to revise Technical Specification (TS) 3/4.10.4, SPECIAL TEST EXCEPTIONS - CENTER CEA MISALIGNMENT, and TS Bases 3/4.10.4, SPECIAL TEST EXCEPTIONS - CENTER CEA MISALIGNMENT, to change the title to SPECIAL TEST EXCEPTIONS - CENTER CEA MISALIGNMENT AND REGULATING CEA INSERTION LIMITS; to allow Regulating Group #6 insertion beyond the Transient Insertion Limit during physics tests to determine the isothermal temperature coefficient, moderator temperature coefficient, and power coefficient; and to require that the Departure from Nucleate Boiling Ratio margin be continuously determined to be within the limits specified by TS 3.2.4, POWER DISTRIBUTION LIMITS - DNBR MARGIN. The proposed change results from slight physics test modifications for Unit 2 Cycle 2. The proposed change is also applicable to Unit 3 Cycle 2.

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Pursuant to 10 CFR 170.12, an amendment application fee of \$150.00 is required for each license amendment request. The above described Proposed Changes, none of which have been previously submitted, are considered with the corresponding Proposed Changes to Unit 2 Facility Operating License NPF-10, as specified by Unit 2 Amendment Application No. 29, to collectively constitute a license amendment request. Therefore, the required \$150.00 fee is remitted with Amendment Application No. 29 to Unit 2 Facility Operating License NPF-10.

Subscribed on this 1st day of October 1984.

Respectfully submitted,

SOUTHERN CALIFORNIA EDISON COMPANY

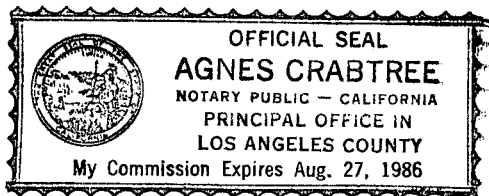
By Wm. P. Bush

Subscribed and sworn to before me this

1st day of October 1984.

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  
Attorney for Southern  
California Edison Company

By James A. Beoletto

SAN DIEGO GAS & ELECTRIC COMPANY

By: \_\_\_\_\_

*J. C. H. Combe*

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

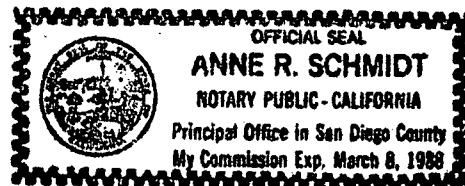
By: \_\_\_\_\_

*David R. Pigott*

Subscribed and sworn to before me this  
25 day of Sept. 1984.

*Anne R. Schmidt*

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



THE CITY OF ANAHEIM

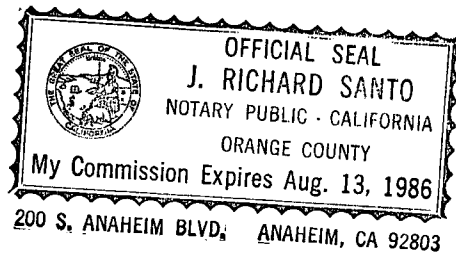
By: Dale L Pohlman

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

By: Alan R. Watts

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Attorneys for the City of Riverside

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