BEFORE THE UNITED STATES NUCLEAR REGULATORY COMMISSION

Application of SOUTHERN CALIFORNIA EDISON) COMPANY and SAN DIEGO GAS & ELECTRIC COMPANY) for a Class 104(b) License to Acquire,) Possess, and Use a Utilization Facility as) Part of Unit No. 1 of the San Onofre Nuclear) Generating Station)

DOCKET NO. 50-206 Amendment No. 81

SOUTHERN CALIFORNIA EDISON COMPANY and SAN DIEGO GAS & ELECTRIC COMPANY, pursuant to 10 CFR 50.90, hereby submit Amendment No. 81.

This amendment consists of Proposed Change No. 82 to the Technical Specifications incorporated in Provisional Operating License No. DPR-13 as Appendices A and B. Proposed Change No. 82 is a request to modify the existing Technical Specifications at San Onofre Unit 1 to allow simultaneous chlorination of both halves of the condenser in order to perform fish impingement studies in accordance with Section 316(b) of the Federal Water Pollution Control Act.

In the event of conflict, the information in this Amendment No. 81 supersedes the information previously submitted.

In our opinion, the proposed change does not result in a condition which significantly alters the impact of San Onofre Unit 1 on the environment, and there is reasonable assurance that the health and safety of the public will not be endangered by the proposed change.

7908030186

Pursuant to 10 CFR §170.22, Proposed Change No. 82, submitted as Amendment No. 81, is determined to be a Class III change. The basis for this determination is that the Change involves a single environmental issue and is required in accordance with Section 316(b) of the Federal Water Pollution Control Act (the California Regional Water Quality Control Board has approved performance of the fish impingement studies).

Accordingly, the fee of \$4,000.00 corresponding to this determination is remitted herewith as required by 10 CFR §170.22.

Subscribed on this 19^{th} day of $_{uly}$. 1979

Respectfully submitted, SOUTHERN CALIFORNIA EDISON COMPANY

By Drake Vice President

By

Subscribed and sworn to before me this

day of

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

Agnes Crabtree

My Commission expires <u>27th</u> day of <u>lugust</u>, 1982.

OFFICIAL SEAL AGNES CRABTREE NOTARY PUBLIC - CALIFORNIA PRINCIPAL OFFICE IN LOS ANGELES COUNTY COMMISSION EXD. AUG. 27, 1982

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

James A. Beoletto

Subscribed on this ___24th day of ____July 1979

Respectfully submitted,

SAN DIEGO GAS & ELECTRIC

By

Jack E. Thomas Vice President Electric Division

David R. Pigott Samuel B. Casey Chickering & Gregory Attorneys for San Diego Gas & Electric Company

By

David R. Pigott

Subscribed and sworn to before me this

My Commission expires the ____25th day

of July, 1981

Notary Public in and for the County of San Diego, State of California Angela B. Snyder



UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

In the Matter of SOUTHERN) CALIFORNIA EDISON COMPANY) and SAN DIEGO GAS & ELECTRIC) COMPANY (San Onofre Nuclear) Generating Station Unit No. 1)

Docket No. 50-206

CERTIFICATE OF SERVICE

I hereby certify that a copy of Amendment No. 81 was served on the following by deposit in the United States Mail, postage prepaid, on the <u>31st</u> day of <u>July</u>, 1979.

Henry J. McGurren, Esq. Staff Counsel U. S. Nuclear Regulatory Commission Washington, D.C. 20545

David R. Pigott, Esq. Samuel B. Casey, Esq. Chickering & Gregory Three Embarcadero Center San Francisco, California 94111

I. R. Caraco Bechtel Corporation P. O. Box 60860, Terminal Annex Los Angeles, California 90060

Michael L. Mellor, Esq. Thelen, Marrin, Johnson & Bridges Two Embarcadero Center San Francisco, California 94111

Huey Johnson Secretary for Resources State of California 1416 Ninth Street Sacramento, California 95814

Janice E. Kerr, General Counsel California Public Utilities Commission 5066 State Building San Francisco, California 94102 J. Rengel Atomic Power Division Westinghouse Electric Corporation Box 355 Pittsburgh, Pennsylvania 15230

A. E. Gaede P. O. Box 373 San Clemente, California 92672

Frederick E. John, Executive Director California Public Utilities Commission 5050 State Building San Francisco, California 94102

Docketing and Service Section Office of the Secretary U. S. Nuclear Regulatory Commission Washington, D. C. 20555

James A. Beoletto Assistant Counsel Southern California Edison Company

DESCRIPTION OF PROPOSED CHANGE AND ENVIRONMENTAL AND SAFETY ANALYSES PROPOSED CHANGE NO. 82 TO THE TECHNICAL SPECIFICATIONS PROVISIONAL OPERATING LICENSE DPR-13

This is a request to revise Environmental Technical Specification 2.2.1 (Biocides) of Appendix B of Provisional Operating License DPR-13.

Reason for Change

Section C, item 12 of the NPDES permit for San Onofre Unit 1 specifies that "The Discharger shall comply with any standards which may be established by the Environmental Protection Agency pursuant to Section 316(b) of the Federal Water Pollution Control Act." This section of the Act requires demonstrations to be made which show that the design, construction, capacity and location of cooling water intake structures reflect the "best technology available" for minimizing adverse environmental impact.

A plan for completing 316(b) demonstration for San Onofre Unit 1 has been developed and approved by the California Regional Water Quality Control Board. This plan includes a series of studies designed to evaluate the environmental effects of the existing intake structure. One study, which is designed to assess the effects of impingement of adult fish, will require the use of unique sampling techniques for removing entrapped fish from the cooling water system. The sampling techniques include the use of chlorine (12% sodium hypochlorite solution) in a manner which induces those fish entrapped in the circulating water system to become impinged on the traveling screens. The method of chlorine application requires that both condenser halves be chlorinated at one time. Therefore, Technical Specification 2.2.1, Biocides, which limits chlorination to one condenser half at a time, must be revised in order to permit the conduct of this 316(b) study.

Existing Specification

Paragraphs 2 and 3 of Technical Specification 2.2.1 (Biocides) currently read:

"The total residual chlorine at the condenser outlet of the condenser half being chlorinated shall not exceed 1.0 ppm. If this level is exceeded, adjustments to the injection system shall be made to reduce the concentration at the condenser outlet and each succeeding chlorination period shall be monitored until the concentration is within the specification.

Each condenser half may be chlorinated up to three times per 24-hour period. Condenser halves shall not be chlorinated unless both circulating pumps are operating properly. The 2 halves shall not be chlorinated simultaneously. The time of chlorination shall not normally exceed 15 minutes, 3 times per condenser half per 24-hour period. When inspection of the condenser indicates that 15-minute chlorination is not adequate to control slime, the chlorination time may be increased 30 minutes. Thirty minute chlorination shall not be maintained for more than 4 months and shall be returned to 15 minutes as soon as practicable."

Proposed Specification

Technical Specification 2.2.1 (Biocides) would be revised to read as follows:

1. Add the following paragraph after paragraph 3:

"During special fish impingement studies conducted in accordance with the 316(b) study plan, when sodium hypochlorite is to be used to induce impingement of those fish entrapped in the cooling water system, both condenser halves may be chlorinated simultaneously up to 8 times per 24-hour period. The time of chlorine injection shall not exceed 5 minutes each time and the total residual chlorine concentration at the condenser outlet shall not exceed 0.5 ppm. If this level is exceeded, adjustments to the injection system shall be made to bring subsequent injections within the 0.5 ppm limit."

 The fourth paragraph, <u>Monitoring Requirements</u>, would be revised to read as follows:

"A sample of cooling water will be taken once per week at the outlet of each condenser half being chlorinated, during normal routine chlorination procedures, and at least once per sampling period during the special 316(b) fish impingement studies, and analyzed for total residual chlorine using the amperometric method.

-2-

The samples will be taken during a period of chlorination at approximately two minute intervals until total residual chlorine is no longer detectable. All samples will be logged indicating the time between the beginning of the chlorination and when Records shall be maintained the sample was taken. Timers on the automatic injection at the station. system shall be checked once per week. If the injection system is found to be operating improperly, it shall be repaired or replaced as rapidly as reasonably possible. There shall be no chlorination while the injection system is being reepaired or replaced. The sampling and analysis are done This permits the process to be repeated manually. Therefore, no independent backup if required. method is necessary."

Environmental and Safety Analysis

The use of chlorine in the 316(b) fish impingement study will result in residual chlorine concentrations in the immediate vicinity of the discharge of less than 0.1 ppm for no more than eight 5-minute intervals each 24 hours. Because of the low chlorine levels and the short exposure periods, no adverse environmental effects are expected from the use of sodim hypochlorite in the manner described herein. The use of sodium hypochlorite solution, for inducing fish impingement will not result in any modification to, or atypical operation of the circulating water system. However, the conduct of the 316(b) study will result in the application of chlorine in a manner not in accordance with the current Technical Specification and is the subject of the proposed change discussed.

-Measures will be taken to ensure that all Technical Specifiction parameters impacted by the fish impingement testing will be maintained within required limits. The test procedures will include direction as to coordination with the station to comply with Technical Specifictions regarding testing logistics and sample collection.

There is reasonable assurance that the health and safety of the public will not be endangered as a result of the proposed Environmental Technical Specification change, since the proposed change involves no structural, hydraulic or safety related modifications.

Supporting Benefit-Cost Analysis

Based on the Environmental and Safety Analyses presented above, the use of sodium hypochlorite solution in the manner proposed will not result in a condition which significantly alters the impact of San Onofre Unit 1 on the environment. Only those fish already entrapped in the circulating water system will be exposed to chlorine levels high enough to induce their impingement on the traveling screens. Chlorine will be discharged from the power plant at concentrations below the currently allowable limit of 1.0 ppm (as measured at condenser outlet) and should result in no adverse environmental impact.

Use of the sampling method described above will permit gathering of information necessary for an evaluation of the cooling water intake structure as required by Section C, item 12 of the NPDES permit for San Onofre Unit 1, and Section 316(b) of the Federal Water Pollution Control Act. The costs associated with this evaluation are estimated at \$40,000.