

#### UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20555

## SOUTHERN CALIFORNIA EDISON COMPANY AND

## SAN DIEGO GAS AND ELECTRIC COMPANY

### DOCKET NO. 50-206

## SAN ONOFRE NUCLEAR GENERATING STATION, UNIT 1

### AMENDMENT TO PROVISIONAL OPERATING LICENSE

Amendment No.45 ( License No. DPR-13

1. The Nuclear Regulatory Commission (the Commission) has found that:

- A. The application for amendment by Southern California Edison Company and San Diego Gas and Electric Company (the licensees) dated July 31, 1979, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
- B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
- C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
- D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
- E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

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2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 3.B of Provisional Operating License No. DPR-13 is hereby amended to read as follows:

## B. <u>Technical</u> Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 45, are hereby incorporated in the license. Southern California Edison Company shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Original signed by Dennis L. Ziemann

Dennis L. Ziemann, Chief Operating Reactors Branch #2 Division of Operating Reactors

Attachment: Changes to the Technical Specifications

Date of Issuance: AUG 16 1979

ATTACHMENT TO LICENSE AMENDMENT NO.45

## PROVISIONAL OPERATING LICENSE NO. DPR-13

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Revise Appendix B Technical Specifications by removing page 2-5 and inserting the enclosed page. The revised page is identified by the captioned amendment number and contains vertical lines indicating the area of change.

During special fill impingement studies conducted 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.

#### Monitoring Requirements

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. 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 the sample was taken. Records shall be maintained at the station. Timers on the automatic injection system shall be checked once per week. If the injecting 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 repaired or replaced. The sampling and analysis are done manually. This permits the process to be repeated if required. Therefore, no independent backup method is necessary.

#### Bases

Sodium hypochlorite is used to chlorinate the cooling water. When injected, the chlorine is diluted by the cooling water and consumed in the process of controlling slime. To be sure that enough chlorine is injected to control the slime, the residual chlorine concentration must be approximately 1 ppm at the condenser outlet. This concentration corresponds to a concentration in the immediate vicinity of the discharge of less than 0.1 ppm. Sodium hypochlorite is injected for the period which is required to control slime, which may be as high as 30 minutes, 3 times per condenser half per 24-hour period. The condenser halves are chlorinated, one immediately after the other, at approximately 8-hour intervals.

The injection system is automatic and, therefore, injects a consistent quantity at regular intervals. Because of this, the measured concentrations will vary slightly and slowly because of cooling water flow variations and the amount of slime in the condenser. Monitoring once per week is adequate to check the influence of these variations and any equipment malfunction.

The amperometric method is a standard for measuring total residual chlorine. Total residual chlorine is measured because both free evailable and combined evailable chlorine may be discharged to the environment.

Amendment No. 26 45