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

SOUTHERN CALIFORNIA EDISON COMPANY

SAN DIEGO GAS AND ELECTRIC COMPANY

DOCKET NO. 50-206

SAN ONOFRE NUCLEAR GENERATING STATION, UNIT NO. 1

FACILITY OPERATING LICENSE

Amendment No. 144
License No. DPR-13

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

   A. The application for a license filed by the Southern California Edison Company and the San Diego Gas and Electric Company (the licensee) complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and applicable portions of the Commission's regulations set forth in 10 CFR Chapter I, and all required notifications to other agencies or bodies have been duly made;

   B. Construction of San Onofre Nuclear Generating Station, Unit 1 (the facility) has been completed in conformity with Construction Permit No. CPPR-13 and the application, as amended, the provisions of the Act, and the regulations of the Commission, and has been operating under a provisional license since March 27, 1967;

   C. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the applicable rules and regulations of the Commission;

   D. There is reasonable assurance: (i) that the activities authorized by this operating license can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with applicable portions of the Commission's regulations set forth in 10 CFR Chapter I;

   E. The licensee is technically qualified to engage in the activities authorized by this license in accordance with the Commission's regulations set forth in applicable portions of 10 CFR Chapter I;

   F. The licensee has satisfied the applicable provisions of 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements," of the Commission's regulations;

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G. The issuance of this license will not be inimical to the common defense and security or to the health and safety of the public;

H. The issuance of this license is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied; and

I. The receipt, possession, and use of source, byproduct, and special nuclear material as authorized by this license will be in accordance with the Commission's regulations in 10 CFR Parts 30, 40, and 70.

2. Provisional Operating License No. DPR-13, dated March 27, 1967, as amended, is superseded in its entirety by Facility Operating License No. DPR-13 hereby issued to the licensee to read as follows:

A. This license applies to the San Onofre Nuclear Generating Station, Unit 1, a pressurized water reactor and associated equipment (the facility). The facility is located on the site of Southern California Edison Company and San Diego Gas and Electric Company near the northern boundary of Camp Pendleton in San Diego County, California, and is described in the licensee's Updated Final Safety Analysis Report, as supplemented and amended, and in the licensee's Environmental Report, as supplemented and amended.

B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses Southern California Edison (SCE) and San Diego Gas and Electric (SDG&E), with SCE acting for itself and as agent for SDG&E:

(1) Pursuant to Section 104b of the Act and 10 CFR Part 50, to possess, use, and operate the facility at the designated location in San Diego County, California, in accordance with the procedures and limitations set forth in this license;

(2) Pursuant to the Act and 10 CFR Part 70, to receive, possess, and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Updated Final Safety Analysis Report, as supplemented and amended;

(3) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use at any time any byproduct, source, and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation, and radiation monitoring equipment calibration, and as fission detectors in amounts as required;

(4) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use in amounts as required any byproduct, source, or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and

(5) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.

C. This license shall be deemed to contain and is subject to the conditions specified in the Act and the applicable provisions of the Commission's regulations set forth in 10 CFR Chapter I and is subject to all applicable provisions of the the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

The licensee is authorized to operate the facility at reactor core power levels not in excess of 1347 megawatts thermal (100 percent rated power) in accordance with the conditions specified herein.

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 144 is hereby incorporated in the license. Southern California Edison Company shall operate the facility in accordance with the Technical Specifications.

(3) Spent Fuel Transshipment

The licensee is authorized to transship spent fuel from the Unit 1 spent fuel pool to the Unit 2 and 3 spent fuel pools in accordance with licensee's application for amendment dated April 28, 1988, as supplemented April 25, June 10, September 23, October 18, November 10, and December 1, 1988.

This authorization is limited to those activities needed for transshipment only. The matter of heavy load handling using the turbine gantry crane for purposes other than transshipment is being reviewed separately.

The licensee may make changes to the transshipment methods referenced above without prior NRC approval only if the change does not involve an unreviewed safety question as defined in 10 CFR 50.59.

(4) Physical Protection

SCE shall fully implement and maintain in effect all provisions of the Commission-approved physical security, guard training and qualification, and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The plans, which contain Safeguards Information protected under 10 CFR 73.21, are entitled: "San Onofre Nuclear Generating Station, Units 1, 2, and 3 Physical Security Plan," with revisions submitted through April 22, 1988; "San Onofre Nuclear Generating Station, Units 1, 2, and 3 Security Force Training and Qualification Plan," with revisions submitted through October 22, 1986; and "San Onofre Nuclear Generating Station, Units 1, 2, and 3, Safeguards Contingency Plan," with revisions submitted through December 29, 1987. Changes made in accordance with 10 CFR 73.55 shall be implemented in accordance with the schedule set forth therein.

(5) Integrated Implementation Schedule

Southern California Edison Company shall implement a plan for scheduling all capital modifications based on the Integrated Implementation Schedule Program Plan (the "Plan") issued in License Amendment No. 98 on April 20, 1987.

(a) The Plan shall be followed by the licensee from and after the effective date of Amendment 98.

(b) Changes to completion dates for items identified in Schedules B and C do not require a license amendment. Dates specified in Schedule A shall be changed only in accordance with applicable NRC procedures.

(6) Cycle 11 Thermal Shield Monitoring Program

The neutron noise/loose-parts detection system shall be used to monitor the condition of the reactor vessel thermal shield throughout Cycle 11. Periodic monitoring of both neutron noise and loose-parts vibrations confirms that no long-term unacceptable trend of degradation is occurring. The details of this program are described below.

(a) Acceptance criteria for neutron noise/loose-parts monitoring will be established by performing baseline evaluations for 60 days at greater than or equal to 85% power following return to service for Cycle 11 operation. The base line data will be established by recording a minimum of 16 segments of data information, each of

20 minute duration at greater than or equal to 85% power. Adjustments to the acceptance criteria will be made for cycle burnup and boron concentration changes throughout the cycle.

(b) The neutron noise/loose-parts monitoring system shall be OPERABLE in MODE 1 with:

(i) at least two horizontal loose-parts detectors monitored for at least 5 minutes two times per day; and,

(ii) at least three (3) neutron noise inputs monitored for at least 20 minutes once a week, and be analyzed for cross power spectral density, including phase and coherence.

(c) The data provided by the loose-parts/neutron noise monitor shall be analyzed once per week and compared with the established criteria. If the data exceeds the acceptance criteria:

(i) within 1 day the NRC will be informed;

(ii) within 14 days the conditions will be evaluated and a report provided to the NRC documenting future plans and actions.

(d) Each channel of the loose-part detection system shall be demonstrated OPERABLE in MODE 1 by performance of a:

(i) CHANNEL CHECK at least once per 24 hours

(ii) CHANNEL TEST at least once per 31 days

The surveillance requirements for neutron noise monitor are covered by the Appendix A Technical Specification 4.1.1 for the Power Range Neutron Flux.

(e) With the neutron noise/loose-parts detection instrumentation inoperable for more than 7 days, licensee shall submit a Special Report to the Commission pursuant to Appendix A Technical Specification 6.9.2 within the next 3 days outlining the cause of the malfunction and the plans for restoring the system to operable status.

(f) The provisions of Appendix A Technical Specification 3.0.4 are not applicable to this license condition.

(7) Plant Modification to Eliminate Single Failure Susceptibility of Vital Bus Automatic Transfer Function

Southern California Edison Company shall modify the electrical distribution system to ensure that the availability of a power source for vital buses 1, 2, 3, and 3A is not subject to a single failure susceptibility. The plant modification shall satisfy the design requirements of the safety-related portions of the existing electrical distribution system and shall be operable prior to restart from the Cycle 12 refueling outage.

(8) Confirmatory Order dated January 2, 1990

The licensee shall comply with commitments documented in the NRC confirmatory order issued on January 2, 1990, as amended. The confirmatory order contains a list of required plant modifications and evaluations with associated implementation schedules.

D. Except as otherwise provided in the Technical Specifications or Environmental Protection Plan, the licensee shall report any violations of the requirements contained in Section 2.C of this license in the following manner: initial notification shall be made within 24 hours to the NRC Operations Center via the Emergency Notification System with written follow-up within 30 days in accordance with the procedures described in 10 CFR 50.73(b), (c), and (e).

E. The licensee shall have and maintain financial protection of such type and in such amounts as the Commission shall require in accordance with Section 170 of the Atomic Energy Act of 1954, as amended, to cover public liability claims.

F. This license is effective as of the date of issuance and shall expire at midnight on March 2, 2004.

FOR THE NUCLEAR REGULATORY COMMISSION

Thomas E. Murley

Thomas E. Murley, Director
Office of Nuclear Reactor Regulation

Attachment:
Appendix A - Technical Specifications

Date of Issuance: September 26, 1991