J. Abernathy

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

March 17, 1976

Docket No. 50-206

Docket - 50206 - - 524

Southern California Edison Company
ATTN: Mr. Jack B. Moore
Vice President
2244 Walnut Grove Avenue
Post Office Box 800
Rosemead, California 91770

Gentlemen:

The Commission has issued the enclosed Amendment No. 19 to Provisional Operating License No. DPR-13 for the San Onofre Nuclear Generating Station, Unit 1. The amendment consists of changes to the Technical Specifications, and is in response to your request dated February 4, 1976.

The amendment clarifies certain provisions in the Technical Specifications relating to chemical effluents and adds a reporting requirement.

We have evaluated the potential for environmental impact of plant operation in accordance with the enclosed amendment. The amendment changes the language in Section 5.8.3 and the title of the Table 5.8-1 in Appendix B. The changes clarify the intent that the values listed in Table 5.8-1 for chemicals and effluents discharged to the circulating water stream are design concentrations. The amendment also adds a requirement in Section 5.8.3 for reporting in the Annual Operating Report if it is discovered that a design value in Table 5.8-1 is exceeded.

We have determined that the amendment does not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendment involves an action which is insignificant from the standpoint of environmental impact and pursuant to 10 CFR §51.5(d)(4) that an environmental statement, negative declaration, or environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

Since the amendment applies only to administrative details, to clarification of specification language, and to reporting requirements, it does not involve significant new safety information of a type not considered by a previous Commission safety review of the facility. It does not involve a significant increase in the probability or consequences

of an accident, does not involve a significant decrease in a safety margin, and therefore does not involve a significant hazards consideration. We have also concluded that there is reasonable assurance that the health and safety of the public will not be endangered by this action.

A copy of the related Federal Register Notice is also enclosed.

Sincerely,

for Charles M. Trammell
Robert A. Purple, Chief
Operating Reactors Branch #1
Division of Operating Reactors

Enclosures:
1. Amendment No. 19
2. Federal Register Notice

cc w/enclosures:
See next page

cc w/enclosures:
Rollin E. Woodbury, Vice President
and General Counsel
Southern California Edison Company
Post Office Box 800
Rosemead, California 91770

Chickering & Gregory, General
Counsel
ATTN: C. Hayden Ames, Esquire
San Diego Gas and Electric Company
111 Sutter Street
San Francisco, California 94104

San Clemente Public Library
233 Granada Street
San Clemente, California 92672

Chairman, Board of Supervisors
County of San Diego
San Diego, California 92412

Mayor
City of San Clemente
San Clemente, California 92672

cc w/enclosures & incoming:
Mr. Irving Goldberg, Chief
Environmental Radiation Control Unit
Radiologic Health Section
California Department of Health
714 P Street, Room 498
Sacramento, California 95814

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. 19
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 February 4, 1976, 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. An environmental statement or negative declaration need not be prepared in connection with the issuance of this amendment.

2. Accordingly, the license is amended by a change to the Technical Specifications as indicated in the attachment to this license amendment.

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

FOR THE NUCLEAR REGULATORY COMMISSION

for Charles M. Trammell
Robert A. Purple, Chief
Operating Reactors Branch #1
Division of Operating Reactors

Attachment:
Changes to the
Technical Specifications

Date of Issuance: March 17, 1976

ATTACHMENT TO LICENSE AMENDMENT NO. 19

PROVISIONAL OPERATING LICENSE NO. DPR-13

DOCKET NO. 50-206

Revise Appendix B as follows:

Remove pages 5-17 through 5-20 and insert revised pages 5-17 through 5-20

Traveling and bar screens are provided to remove marine growth and debris from the seawater passing through the screenwell. The materials removed from the seawater are marine growth, shells, fish, driftwood, and other debris present in the ocean.

For chlorination, sufficient sodium hypochlorite is injected into the circulating water upstream of the circulating water pumps three times a day for each condenser half to eliminate slime-forming organisms on condenser internal surfaces (see ETS 2.2.1).

The traveling screens and bar screens are placed in series, perpendicular to the flow. The screens are cleaned automatically, with the frequency of cleaning being dependent on the rate of material buildup on the screens. The bar screens are cleaned by a traveling mechanical rake that deposits accumulated debris, by means of a seawater jet spray washing process, into sluiceways for removal. The traveling screens are motor driven, and are capable of rotating as a unit in continuous sequence when activated by pressure differential due to trash buildup. The debris picked up by the traveling screens is also deposited in a sluiceway by means of a seawater jet spray.

5.8.2 Discharge System

Under normal operating conditions, the heated cooling water leaves the condenser and is discharged to the ocean through a 12-ft ID 2,600-ft-long concrete conduit. A single point discharge is effected through a discharge structure located in 24 feet of water. The dimension of the structure is the same as the intake (ETS 3.1) however there is no velocity cap. The top of the discharge structure is about 11.5 feet below mean lower low-water.

A 12-foot ID reinforced concrete conduit is connected horizontally to the shoreward side of the discharge structure. This conduit is buried beneath the ocean bottom, with a minimum of 4 feet of sand cover over its top and 4 feet of rock cover surrounding the discharge structure. All sand and rock cover was placed so as to approximate the local ocean bottom profile.

The water travels through the discharge conduit with a design velocity of 6.9 feet per second and exists with a vertical velocity of about 2.5 feet per second. The vertical orientation creates a single orifice jet diffuser which entrains surrounding cooler water and assists in rapid diminution of the discharge temperature. About seven minutes is required for water to travel from the condensers to the end of the discharge.

5.8.3 Chemical Effluents

Under normal operating conditions chemical effluents discharged to the circulating water stream will not exceed the limits given in Table 5.8-1. If it is discovered that a design value is exceeded, it will be reported in the Annual Operating Report.

5.8.4 Land Management

The Station occupies about 16 acres of the 84 acre site. An additional 12.6 acres is used for switchyard and visitor information facilities. The developed portion is landscaped and the undeveloped portion of the site is proposed for future plant expansion.

No use of herbicides is practiced to manage vegetation along the transmission line except in isolated cases to meet property owners' requests or permit stipulations from public agencies. Standard erosion control measures are used to minimize erosion at the Station, at tower sites, and along access roads.

TABLE 5.8-1: MAXIMUM DESIGN CONCENTRATIONS OF CHEMICALS AND ELEMENTS ADDED BY THE STATION TO THE COOLING WATER DISCHARGE DURING NORMAL OPERATION

Chemical or Element	Maximum Added Release (lb/day)	Maximum Added Concentration (ppm) at discharge	Use and Frequency of Discharge
Boron	520	0.75	Discharge from liquid radwaste system at 100 gpm for total of 52,000 gallons with Boron at 1200 ppm (max.). Bleeddown every few days.
Bromide	187	0.045	Included in 120 gpm continuous brine discharge from flash evaporators.*
Calcium	1,150	0.28	Included in 120 gpm continuous brine discharge from flash evaporators.*
Chloride	57,500	13.7	Included in 120 gpm continuous brine discharge from flash evaporators.*
Chlorine (total residual)	26.2-52.4	0.1	15 min. to 30 min. six times per day for marine growth control in condensers. Added as NaOCl.
Chromium	1.25	0.0006	From Potassium Chromate in secondary cooling sytem leakage.
Copper	6.7	0.0016	Constant corrosion of condenser tubes.
Fluoride	4.0	0.001	Included in 120 gpm continuous brine discharge from flash evaporator.*
Hardness, total	17,800	4.25	Included in 120 gpm continuous brine discharge from flash evaporator.*
Iron	24.6	0.006	Continuous corrosion of steel waste plates.
Magnesium	3,650	00.87	Included in 120 gpm continuous brine discharge from flash evaporator.*
Nickel	0.7	0.0002	Constant corrosion of condenser tubes.
Nitrite	0.99	0.00023	Included in 120 gpm continuous brine discharge from flash evaporator.*
Nitrogen, organic	0.29	0.0001	Included in 120 gpm continuous brine discharge from flash evaporator.*
Phosphates, as ortho	84	0.075	Generator bloudown. Maximum of 400 gpm 4 to 12 hours during start-up and several times per month.

TABLE 5.8-1. (Cont'd)

Chemical or Element	Maximum Added Release (lb/day)	Maximum Added Concentration (ppm) at discharge	Use and Frequency of Discharge
Potassium	1,090	0.26	Included in 120 gpm continuous brine discharge from flash evaporator.*
Sodium	30,200	7.2	Included in 120 gpm continuous brine discharge from flash evaporator.*
Sulfate	7,925	1.89	Included in 120 gpm continuous brine discharge from flash evaporator* and includes addition of sulfuric acid used.
Sulfide	0.29	0.001	Included in 120 gpm continuous brine discharge from flash evaporator.*

* This discharge represents concentrated ocean water resulting from a flash evaporation process, thus only concentrating constituents already present in the sea water. This process provides the fresh water supply for the Station.

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-206

SOUTHERN CALIFORNIA EDISON COMPANY

AND

SAN DIEGO GAS AND ELECTRIC COMPANY

SAN ONOFRE NUCLEAR GENERATING STATION, UNIT 1

NOTICE OF ISSUANCE OF AMENDMENT

TO PROVISIONAL OPERATING LICENSE

Notice is hereby given that the U.S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 19 to Provisional Operating License No. DPR-13 issued to Southern California Edison Company and San Diego Gas and Electric Company which revised Technical Specifications for operation of the San Onofre Nuclear Generating Station, Unit 1, located near Camp Pendleton, San Diego County, California. The amendment is effective as of its date of issuance.

The amendment clarifies certain provisions in the Technical Specifications relating to chemical effluents and adds a reporting requirement.

The application for the amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendment. Prior public notice of this amendment is not required since the amendment does not involve a significant hazards consideration.

The Commission has determined that the issuance of this amendment will not result in any significant environmental impact and that pursuant to 10 CFR 51.5(d)(4) an environmental statement, negative declaration, or environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

For further details with respect to this action, see (1) the application dated February 4, 1976, and (2) Amendment No. 19 to License No. DPR-13. Both of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, NW., Washington, D.C. and in the San Clemente Public Library, 233 Granada Street, San Clemente, California.

A copy of Amendment No. 19 may be obtained upon request addressed to the U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Director, Division of Operating Reactors.

Dated at Bethesda, Maryland, this 17th day of March 1976.

FOR THE NUCLEAR REGULATORY COMMISSION

Charles M Trammell

Charles M. Trammell, Acting Chief
Operating Reactors Branch #1
Division of Operating Reactors