

ENVIRON

NOV 21 1972

Docket Nos. 50-361 ✓
and 50-362

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Mr. Tony Stadeker
Management Systems Analyst
Office of Management and Budget
Executive Office Building, Room 9026
Washington, D. C. 20503

Dear Mr. Stadeker:

Enclosed for your information are two copies of the summary sheet for the Draft Environmental Statement prepared by the Commission's Regulatory Staff relating to the application submitted by the Southern California Edison Company and San Diego Gas & Electric Company for the San Onofre Nuclear Generating Station, Units 2 and 3.

The Draft Environmental Statement was prepared in accordance with the statement of general policy and procedure on implementation of the National Environmental Policy Act of 1969 as set out in Appendix D of the Commission's regulations 10 CFR Part 50. A notice of availability of the Draft Environmental Statement and the applicant's Environmental Report, and request for comments from interested persons is being sent to the Office of the Federal Register for filing and publication. A request for comments also is being sent to appropriate Federal, State and local agencies.

Sincerely,

Original signed by B. J. Youngblood *for*

Daniel R. Muller, Assistant Director
for Environmental Projects
Directorate of Licensing

Enclosure:
Summary Sheet for Draft
Environmental Statement (2)

Cress#01 OFFICE ▶	L:EP-3 <i>GW</i>	L:EP-3 <i>inf</i>	L:EP-3	L:ADEP <i>DRM</i>	
Mc# 221780	GWilliams	db RFroelich	JYoungblood	DRMuller	
10/31/72 SURNAME ▶	<i>10/17/72</i>	10/15/72	10/15/72	10/16/72	
DATE ▶	<i>11/6/72</i>				

DRAFT ENVIRONMENTAL STATEMENT
by the
DIRECTORATE OF LICENSING
UNITED STATES ATOMIC ENERGY COMMISSION

Related to the Proposed

SAN ONOFRE NUCLEAR GENERATING STATION, UNITS 2 AND 3

SOUTHERN CALIFORNIA EDISON COMPANY

and

SAN DIEGO GAS & ELECTRIC COMPANY

Docket Nos. 50-361 and 50-362

Issued: November 1972

SUMMARY AND CONCLUSIONS

This Draft Environmental Statement was prepared by the U.S. Atomic Energy Commission, Directorate of Licensing.

1. This action is administrative.
2. The proposed action is the issuance of construction permits jointly to the Southern California Edison Company (SCE) and the San Diego Gas & Electric Company (SDG&E) (the applicants) for the construction of Units 2 and 3 of the San Onofre Nuclear Generating Station. The construction site, adjacent to San Onofre Unit 1, is located on the Pacific coast in the State of California, County of San Diego (Docket Nos. 50-361 and 362).

Both units will employ pressurized water reactors to produce up to 3410 thermal megawatts (MWt) each, to provide a net power output of 1140 electrical megawatts (MWe) each. The reactors will be cooled by once-through flow of water pumped from the Pacific Ocean and returned to it through a diffuser-type system.

3. Summary of environmental impact including beneficial and adverse effects follows:
 - a. Cooling water heated to about 20F° above inlet temperature will be discharged from each unit to the Pacific Ocean at a rate of 830,000 gpm (Sect. 3.3.4). The heated water will result in changes in the species composition in the vicinity of the outfall; but no general ecological changes are expected (Sect. 5.3.2).
 - b. An impact on aquatic resources may occur in the cooling-water intake structure through entrainment of plankton and fish. Fish losses may range from 39,000 to 85,000 lb/yr (Sect. 13.2.4). This is not expected to have a significant impact on the overall fish population in the area (Sect. 5.3.2).
 - c. Chemical effluents from Units 2 and 3 should cause only minimal impact on the Pacific Ocean. The total residual chlorine concentration will be less than 0.1 mg/liter in the immediate vicinity of each of the discharges and no significant impact on the aquatic biota in the Pacific Ocean is expected (Sect. 5.3.2).

- d. The program for construction and maintenance of transmission lines has been designed to reduce environmental impact. Existing transmission lines and towers will be used where possible. About 10 acres will be occupied by new towers, access roads, and switchyards. No new rights-of-way are required (Sect. 3.7).
 - e. About 85 acres of the sea floor will be temporarily disturbed by installation of buried pipes which carry seawater to and from the reactor. This will destroy or displace bottom-dwelling organisms, but a rapid resettlement by biota is expected (Sect. 4.3.2).
 - f. About 33 acres of coastal land which could otherwise have been used primarily for recreation or maintained as wild-life habitat will be occupied by Units 2 and 3 (Sect. 4.2.2). The beach at and near the site will be improved by the addition of sand excavated during construction (Sect. 4.2.1).
 - g. No significant environmental impacts are anticipated from normal operational releases of radioactive materials (Sect. 5.4).
 - h. A very low risk of accidental radiation to the population will be created (Sect. 7.1).
 - i. Nothing of known local historic or archeological interest will be disturbed by the construction of Units 2 and 3 (Sect. 2.3).
4. Principal alternatives considered:
- a. Purchase of power from outside sources (Sect. 12.1).
 - b. Use of fossil fuels or hydroelectric sources (Sect. 12.2).
 - c. Use of geothermal energy sources (Sects. 12.3.3).
 - d. Construction of an equivalent plant at some other site (Sect. 12.3.4).
 - e. Use of alternative cooling systems (Sect. 12.4.1).
 - f. Use of alternative modes of cooling-system operation (Sect. 12.4.1).

- g. Use of biocides other than chlorine in the cooling system (Sect. 12.4.3).
 - h. Use of alternative sanitary waste systems (Sect. 12.4.4).
 - i. Use of alternative transmission lines (Sect. 12.4.5).
5. Comments on this Draft Environmental Statement will be requested from the agencies and organizations listed below.

Department of Agriculture
Department of Army (Corps of Engineers)
Department of Commerce
Environmental Protection Agency
Federal Power Commission
Department of Interior
Department of Health, Education, and Welfare
Department of Housing and Urban Development
Department of Transportation
Advisory Council on Historic Preservation
California Department of Health (Water Pollution
Control Commission, Air Pollution Control Commission,
Occupational Health Office)
California Department of Natural Resources
California Department of Parks and Recreation

6. This statement was made available to the public, to the Council on Environmental Quality, and to the other specified agencies in November 1972.
7. On the basis of the analysis and evaluation set forth in this statement, after weighing the environmental, economic, technical, and other benefits of Units 2 and 3 of the San Onofre Nuclear Generating Station against the environmental costs and considering available alternatives, it is concluded from an environmental standpoint that the action called for is the issuance of construction permits subject to the following conditions for protection of the environment:

a. Plant design shall be such that;

- (1) The temperature increase of seawater at the ocean surface (beyond 1000 ft from the discharge system for at least 50% of any complete tidal cycle), at the seafloor, and at the shoreline will be limited to 4F° (Sect. 3.3).

- (2) The total residual concentration of chlorine and other halogens in the immediate vicinity of the discharge from each unit will be limited to less than 0.1 mg/liter for no more than three 15-minute periods each day (Sect. 5.2).
- b. The applicants will expand their current environmental monitoring program (chemical, biological and thermal) to establish an adequate preoperational baseline by which the operational effects of Units 2 and 3 may be judged (Sect. 6).