

1 RICHARD J. WHARTON  
 2 Attorney at Law  
 3 4655 Cass St., Suite 304  
 4 San Diego, CA 92109  
 5 (714) 488-2828

6 Attorney for Intervenors

7 UNITED STATES OF AMERICA

8 NUCLEAR REGULATORY COMMISSION

9 BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

11 In the Matter of	)	Docket Nos. 50-361 OL
	)	50-362 OL
12 SOUTHERN CALIFORNIA	)	
13 EDISON COMPANY, <u>et al.</u> ,	)	COMMENTS ON DRAFT ENVIRONMENTAL
14 (San Onofre Nuclear Generating	)	STATEMENT - SAN ONOFRE NUCLEAR
15 Station, Units 2 and 3)	)	GENERATING STATION, UNITS 2
	)	AND 3

16 We have carefully reviewed the above draft environmental  
 17 statement in relation to the requirements imposed by Section  
 18 102(2)(c) of the National Environmental Policy Act (NEPA) and  
 19 10 CFR Part 51 of the NRC Regulations, and have set forth below  
 20 intervenors' comments on the proposed action and on this draft  
 21 statement pursuant to 10 CFR Part 51.25. Intervenors find this  
 22 draft statement inadequate in a) the discussion and assessment of  
 23 environmental effects, both beneficial and adverse, associated  
 24 with the operation of the San Onofre Nuclear Generating Station,  
 25 Units 2 and 3, and b) the discussion and consideration of avail-  
 26 able alternatives to the proposed action. Intervenors specifically  
 27 identify the following deficiencies:

28 1. The evaluation of cooling water discharge impacts is

1 inaccurate and misleading. The heated water will very likely  
2 result in the destruction of at least a portion of the San Onofre  
3 kelp bed during the summer months, the long-term thermal impacts  
4 are likely to be severe, and violations of the state standards  
5 will occur. On page 5-7 of the DES it is stated: "The staff  
6 concludes that although there exists a remote possibility that  
7 state thermal standards could be violated by the operation of  
8 Units 2 and 3, violations would, at worst, be infrequent and for  
9 short periods. There is no evidence in available drift data to  
10 indicate that such an occurrence would take place during the summer  
11 when thermal impacts would be most severe." This conclusion was  
12 apparently based on applicants' "worst case" modeling theory;  
13 however, in light of recent findings as a result of studies pre-  
14 sently being performed by the Marine Review Committee (MRC) at the  
15 request of the California Coastal Commission, it has been determined  
16 that the state thermal standards will not be met. The following  
17 excerpts from the "Supplemental Staff Report And Recommendations -  
18 Review of Thermal Requirements For San Onofre Nuclear Generating  
19 Station, Units 2 and 3" prepared by the California State Water  
20 Quality Control Board staff are appropriate: "The Report of the  
21 MRC confirms the previous prediction that, under normal operating  
22 conditions, the proposed discharge will violate the 20 degree F  
23 temperature differential in the "receiving waters" i.e., waters  
24 at the location and depth of the diffusers of Units 2 and 3. This  
25 Report notes: '...if the "receiving" waters are defined as in  
26 this paragraph, the standards of the State Thermal Plan will  
27 probably be exceeded by the operation of Units 2 and 3.' Although  
28 the Report indicates that the discharge will "likely" or "probably"

1 or "may" violate the temperature differential, there really is no  
2 question that such violations will occur." (pp. 4-5)

3 In a hearing for the purpose of interpreting the term "re-  
4 ceiving waters" held on December 21, 1978, the California State  
5 Water Quality Control Board held that "...the temperature at the  
6 intake point does not represent conditions at the receiving  
7 waters," (p. 3 of Opinion of Chairman Bryson and Board Member  
8 Mitchell) contrary to applicants' requested interpretation. The  
9 net result of this ruling is that the state thermal discharge  
10 limitation will be exceeded by operation of SONGS Units 2 and 3.

11 The DES states at p. 5-27 "The greatest threat of SONGS to  
12 the long-term survival of the San Onofre kelp bed is the  
13 possibility of injury to the basal tissues from which the canopy  
14 is regenerated each year...under extreme worst case conditions  
15 (e.g., several days with high ambient temperatures and slack  
16 currents, and with all the plants operating continuously),  
17 destruction of the basal regenerative tissues might result." The  
18 DES further states: "...the community (kelp bed), if destroyed  
19 frequently, could never achieve a stable state characteristic of  
20 other kelp beds in the area. Furthermore, constant temperature  
21 increases coupled with added turbidity would be inimical to  
22 interim reestablishment...The perennial occurrence of worst case  
23 conditions seems highly unlikely and the staff thus concludes that  
24 the long-term thermal impacts from normal station operation are  
25 not likely to be severe." (p. 5-27) It is clear that since the  
26 state thermal discharge limitation will be exceeded during normal  
27 operation of SONGS 2 and 3, the staff's conclusion was based on  
28 a faulty premise. Dischargers' normal plant operation will result

1 in continuous high temperature discharge approximating the worst  
2 case conditions and resulting in both short and long-term thermal  
3 impacts on the San Onofre kelp beds. The DES states at p. 5-27  
4 "It has been rather well established that temperatures above  
5 18-20 degrees C. (64-68 degrees F) cause deterioration of kelp,  
6 and the degree of degradation is directly related to the duration  
7 of the exposure to these temperatures."

8 2. The DES is inadequate in its discussion of the 316(a)  
9 exception process as related to thermal pollution caused by the  
10 proposed action. Section 6.4.1 of the DES discusses the "thermal  
11 exception studies" as related only to periodic "heat treatment" to  
12 control fouling organisms. The DES fails to consider the 316(a)  
13 exception required for continuous high ambient temperature  
14 discharges during the normal operations of Units 2 and 3. It is  
15 highly likely that a 316(a) exception request will be forthcoming  
16 from applicants in light of the recent denial by the California  
17 State Water Quality Control Board of applicants' requested  
18 interpretation of the term "receiving waters" as used in the  
19 State Thermal Plan. Had applicants' interpretation been approved,  
20 it would have obviated applicants' need for a 316(a) exception to  
21 the requirements of the FWPCA. Because a 316(a) exception is  
22 necessary for the operation of Units 2 and 3 in their present  
23 design mode, the DES is inadequate for failure to consider the  
24 implications, both short and long-term, on the aquatic environment  
25 if such an exception is granted. With respect to the maximum  
26 temperature of thermal waste discharges, and contrary to the  
27 requirements of 10 CFR Part 51.23(c), due consideration was not  
28 given to "...compliance of the facility construction or operation

1 and alternative construction and operation with environmental  
2 quality standards and requirements which have been imposed by  
3 Federal, State, regional, and local agencies having responsibility  
4 for environmental protection, including applicable zoning and  
5 landuse regulations and water pollution limitations or requirements  
6 promulgated or imposed pursuant to the Federal Water Pollution  
7 Control Act."

8         3. The DES is inadequate in its evaluation and analysis of  
9 the social and economic impact of operating SONGS 2 and 3.

10         A. With respect to the environmental impact of SONGS  
11 on recreational resources, the DES recognizes the failure of  
12 applicants to comply with the terms and conditions of the  
13 construction permit: "The current plan to restrict the use of  
14 approximately 25% of the 3 1/2 mile San Onofre Beach for the 30-  
15 year operating life of the plant is a significant loss of valuable  
16 recreational and scenic space and represents a substantial change  
17 in action between issuance of the FES-CP and application for an  
18 operating license." (Section 5.6.5) Staff reiterates previous  
19 statements made in the FES-CP that "the beach...is considered to  
20 be a unique and scarce recreational resource," (FES-CP, p. 2-11)  
21 and "that closure even for a brief period is objectionable"  
22 (FES-CP, p. 8-11). Despite the re-affirmation of these  
23 judgments, staff concludes that the social and economic impact of  
24 operating SONGS 2 and 3 - with the significant exception of  
25 restricting public use of the beach - will be only "moderate".  
26 The overall impact will be more severe than "moderate" if the  
27 beach access restriction is factored into the balancing process.  
28 Staff's treatment of this issue is misleading and inconsistent



1 with the purpose and intent of NEPA, section 102(2)(c), which  
2 calls for preparation of a detailed statement on, among other  
3 things, any irreversible and irretrievable commitments of  
4 resources which would be involved in the proposed action should  
5 it be implemented. Restriction of the public's use of this beach  
6 is such an irreversible and irretrievable commitment of resources.

7           B. With respect to the economic impact of SONGS 2 and 3,  
8 the DES provides no analysis of the effects of the Jarvis-Gann  
9 Amendment (Proposition 13). The DES states that "The applicant  
10 should reassess the potential tax benefits accruing to these  
11 jurisdictions and districts in light of Proposition 13."

12 (p . 5-44) This is a wholly inadequate treatment of the economic  
13 impact of SONGS 2 and 3, inasmuch as the revenue from the plant  
14 and its allocation within communities will be "significantly  
15 different from what was assumed" - to use the staff's own words -  
16 in this economic impact analysis. (p . 5-44, section 5.6.4)

17           4. The DES inadequately evaluates the environmental impact  
18 of postulated accidents in that Class 9 occurrences were omitted  
19 from consideration. (Section 7-1) The DES states on p. 7-2 with  
20 respect to Class 9 occurrences that "Their consequences could be  
21 severe." The DES fails to discuss the probability of Class 9  
22 occurrences in a complete and comprehensive manner. In view of  
23 the recent earthquake fault discoveries near the San Onofre site  
24 and the existence of the dewatering-well cavities found beneath  
25 the site, a full discussion of failures more severe than those  
26 required for consideration in the design bases of protective  
27 systems and engineered safety features (Class 9) is warranted.  
28 Further, the estimated dose of 1400.00 man-rem to population in

1 the 50-mile radius for a large-break loss of coolant accident  
2 (Table 7.2, p. 7-3, Class 8.1) is substantial and inadequately  
3 discussed, if at all, in the text.

4 5. The DES is inadequate in that it fails to discuss the  
5 environmental impacts to the region in the event of an accidental  
6 release of radiation requiring evacuation. No discussion is  
7 contained in the DES as to the adaptability of the San Onofre site  
8 to adequate evacuation processes including evacuation of the  
9 nearby beach areas during times of peak use; no discussion is  
10 contained in the DES as to the suitability of existing evacuation  
11 plans; no discussion is contained in the DES as to the effects  
12 which adoption of the NRC/EPA Task Force Report on Emergency  
13 Planning (NUREG-0396) will have on evacuation within the new and  
14 expanded Emergency Planning Zone as distinct from the presently  
15 designated Low Population Zone (NRC Regulations 10 CFR Part 100).

16 6. The DES is inadequate in that it fails to reassess the  
17 seismic design basis for SONGS 2 and 3 in light of a) the  
18 dewatering-well cavities and b) the recent earthquakes and faults  
19 discovered since the current design basis was established.

20 7. The DES is inadequate in that the cost/benefit analysis  
21 fails to provide consideration for the greatest possible  
22 escalation of uranium prices, based on recent occurrences, for  
23 SONGS 2 and 3 over the operating life of the plant. The projected  
24 fuel costs identified as \$87,900,000/yr for 1981 (Table 10.1,  
25 p. 10-2), will possibly escalate to a prohibitively high level  
26 since long-term uranium contracts are generally tied to market  
27 price at delivery or 7\$ per year escalation, whichever is greater.  
28 Staff admits (section 10.3) that since the issuance of the FES-CP

1 the fuel, operating, and maintenance costs of nuclear plant  
2 operation have escalated more rapidly than anticipated. The DES  
3 does not discuss adequately the possibility of additional future  
4 escalation of costs with respect to the fuel requirements of San  
5 Onofre, and does not utilize a "worst possible case" approach to  
6 determine total fuel costs over the operating life of the plant.  
7 The cost/benefit analysis contained in the DES is therefore  
8 invalid.

9       8. The DES is inadequate in that it fails to discuss the  
10 possibility that decommissioning costs may escalate to  
11 prohibitively high levels by the end of the operating life of the  
12 plant, at which time the applicant is required to prepare a  
13 proposed decommissioning plan for review by the NRC. (Section 9.4)  
14 Although NRC regulations do not require the applicant to have  
15 developed a decommissioning plan at the time an operating license  
16 is obtained, the discussion of alternative decommissioning methods  
17 and their associated costs found in the DES is misleading and does  
18 not present an accurate projection of what the actual decommission-  
19 ing costs for SONGS will be. Staff calculations for determining  
20 decommissioning costs per unit of electricity generated do not  
21 utilize a start-up date of 1981 or an escalation rate based on the  
22 current rate of inflation. Staff's projection that "For the  
23 SONGS Units 2 and 3 the decommissioning costs would be about  
24 double that indicated for all of the decommissioning one-unit  
25 alternatives" (p. 9-17) is wholly inadequate for purposes of  
26 making an informed cost/benefit judgment. As a consequence, the  
27 cost/benefit analysis for SONGS 2 and 3 is invalid.

28       9. The DES is inadequate in that it fails to comprehensively



1 discuss the temporary storage of nuclear waste materials,  
2 including the interim storage of spent fuel, on site.

3 10. The DES is inadequate in that it fails to discuss the  
4 issue of plant security and provide assurances that all nuclear  
5 materials will remain accounted for and protected from the risk  
6 of terrorist or criminal activity or sabotage.

7 Because due consideration was not given to compliance with  
8 the requirements of 10 CFR Part 51.23(c), and because this DES  
9 fails to consider all environmental impacts of the proposed action  
10 and alternatives to the proposed action as required by Section  
11 102(2)(c) of NEPA, staff's conclusion that the action called for  
12 is the issuance of operating licenses for Units 2 and 3 of SONGS  
13 is premature and founded on insufficient and inaccurate data.

14 For the foregoing reasons, intervenors request that the NRC  
15 either a) adequately address the issues raised above in the final  
16 environmental statement for SONGS 2 and 3, or b) deny applicants'  
17 request for licenses to operate SONGS 2 and 3.

18 Dated: Jan 30, 1979

Respectfully submitted,

19  
20 Richard J. Wharton  
21 RICHARD J. WHARTON  
22 Attorney for Intervenors  
23  
24  
25  
26  
27  
28

1 UNITED STATES OF AMERICA  
2 NUCLEAR REGULATORY COMMISSION

3 BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

4 In the Matter of )

5 SOUTHERN CALIFORNIA EDISON )  
6 COMPANY, et al )

7 (San Onofre Nuclear Generating )  
8 Station, Units 2 and 3) )

9 Docket Nos. 50-361 OL  
10 50-362 OL

11 CERTIFICATE OF SERVICE

12 I hereby certify that copies of "COMMENTS ON DRAFT ENVIRONMENTAL  
13 STATEMENT - SAN ONOFRE NUCLEAR GENERATING STATION, UNITS 2 and 3"  
14 have been served on the following by deposit in the United States  
15 mail, first class, this 31<sup>st</sup> day of January, 1979:

16 Mr. James H. Drake  
17 Vice President  
18 Southern California Edison Co.  
19 2244 Walnut Grove Ave.  
20 P.O. Box 800  
21 Rosemead, CA 91770

Mr. B. W. Gilman  
Senior Vice President-Operations  
San Diego Gas & Electric Company  
101 Ash Street  
P.O. Box 1831  
San Diego, CA 92112

22 Charles R. Kocher, Esq.  
23 James A. Beoletto, Esq.  
24 Southern California Edison Co.  
25 2244 Walnut Gove Avenue  
26 P.O. Box 800  
27 Rosemead, CA 91770

Alan R. Watts, Esq.  
Rourke & Woodruff  
1055 North Main St., Suite 1020  
Santa Ana, CA 92701

28 Chickering & Gregory  
Attn: David R. Pigott, Esq.  
Counsel for San Diego Gas &  
Electric Co. and Southern  
California Edison Co.  
Three Embarcadero Center  
23rd Floor  
San Francisco, CA 94112

Lawrence Q. Garcia, Esq.  
Calif. Public Utilities Com.  
5066 State Building  
San Francisco, CA 94102

Mr. R. W. DeVane, Jr.  
Combustion Engineering, Inc.  
1000 Prospect Hill Rd.  
Windsor, Connecticut 06095

Mr. Kenneth E. Carr  
City Manager  
City of San Clemente  
100 Avenida Presidio  
San Clemente, CA 92672

Mr. P. Dragolovich  
Bechtel Power Corporation  
P.O. Box 60860, Terminal Annex  
Los Angeles, CA 90060

Mr. Mark Medford  
Southern Calif. Edison Company  
2244 Walnut Grove Avenue  
P.O. Box 800  
Rosemead, CA 91770

.....

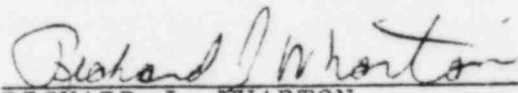
1 Henry Peters  
2 San Diego Gas & Electric Co.  
3 Post Office Box 1831  
4 San Diego, CA 92112

5 Ms. Lyn Harris Hicks  
6 Advocate for GUARD  
7 3908 Calle Ariana  
8 San Clemente, CA 92672

9 Phyllis M. Gallagher, Esq.  
10 615 Civic Center Drive West  
11 Suite 220  
12 Santa Ana, CA 92701

Mr. Robert J. Pate  
U.S. Nuclear Regulatory Commission  
P.O. Box 4167  
San Clemente, CA 92672

Lawrence J. Chandler  
Office of the Executive Legal Dir.  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

  
RICHARD J. WHARTON  
Attorney for Intervenors