

Docket Nos. 50-361
and 50-362

DEC 28 1978

Southern California Edison Company
ATTN: Mr. James H. Drake
Vice President
2244 Walnut Grove Avenue
P. O. Box 800
Rosemead, California 91770

San Diego Gas and Electric Company
ATTN: Mr. Bill W. Colston
Vice President - Project
Management Division
101 Ash Street
P. O. Box 1831
San Diego, California 92112

Gentlemen:

SUBJECT: ORDER EXTENDING CONSTRUCTION COMPLETION DATES
(San Onofre Nuclear Generating Station, Units 2 and 3)

In response to your request of March 31, 1978, the Nuclear Regulatory Commission has issued an Order extending the construction completion dates for the San Onofre Nuclear Generating Station, Units 2 and 3. The referenced Order extends the construction completion dates specified in CPPR-97 to June 1, 1980 and CPPR-98 to June 1, 1981.

A copy of the Order, the staff safety evaluation, negative declaration and environmental impact appraisal are enclosed for your information. The Order and the negative declaration have been transmitted to the Office of the Federal Register for publication.

Sincerely,

Original signed by

Roger S. Boyd, Director
Division of Project Management
Office of Nuclear Reactor Regulation

Enclosures:
As stated

cc w/encs:
See page 2

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ELD
McGinnis
10/28/78
concurrent based on comments noted above

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OFFICE	DPM:LWR #2	DPM:LWR #2	DPM:LWR #2	DPM-AD/LWR	DD:DPM	DPM
SURNAME	JL Lee:mt	HRood	RL Baer	DBVassallo	RCDeYoung	RSBoyd
DATE	10/5/78	10/5/78	10/5/78	10/29/78	8/1/78	10/28/78

SOUTHERN CALIFORNIA EDISON COMPANY AND
SAN DIEGO GAS AND ELECTRIC COMPANY
SAN ONOFRE NUCLEAR GENERATING STATION, UNITS 2 AND 3
DOCKET NOS. 50-361 AND 50-362
ORDER EXTENDING CONSTRUCTION COMPLETION DATES

Southern California Edison Company and San Diego Gas and Electric Company are the holders of Construction Permit Nos. CPPR-97 and CPPR-98 issued by the Atomic Energy Commission* on October 18, 1973 for the San Onofre Nuclear Generating Station. These facilities are presently under construction at the applicants' site at Camp Pendleton, San Diego County, California. By letter dated March 31, 1978, Southern California Edison Company filed a request for an extension of the latest construction completion dates for the facilities from January 1, 1979 to June 1, 1980 for Unit 2 and from January 1, 1980 to June 1, 1981 for Unit 3. The extension was requested because construction has been delayed due to (1) unanticipated review effort incurred prior to issuance of the Construction Permits; (2) delays in obtaining approval from the California Coastal Zone Conservation Commission for the facilities; (3) delays due to a labor strike and (4) greater than anticipated time required for erection of walls and dome of the containment.

*Effective January 20, 1975, the Atomic Energy Commission became the Nuclear Regulatory Commission and permits in effect on that day continued under the authority of the Nuclear Regulatory Commission.

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This action involves no significant hazards consideration, good cause has been shown for the delay, and the requested extension is for a reasonable period, the bases for which are set forth in the staff evaluation dated December 28, 1978. The preparation of an environmental impact statement for this particular action is not warranted because there will be no significant environmental impact attributable to the Order other than that which has already been predicted and described in the Commission's Draft Environmental Statement for the San Onofre Nuclear Generating Station, Units 2 and 3, published in November 1972 and the Final Environmental Statement published in March 1973. A Negative Declaration and an Environmental Impact Appraisal have been prepared and are available, as are the above stated documents, for public inspection at the Commission's Public Document Room, 1717 H Street, N. W., Washington, D. C. 20555 and at the local public document room established for the San Onofre Nuclear Generating Station, Units 2 and 3 at the Mission Viejo Branch Library, 24851 Chrisanta Drive, Mission Viejo, California 92676.

It is HEREBY ORDERED THAT the latest completion date for CPPR-97 be extended from January 1, 1979 to June 1, 1980 and the latest date for CPPR-98 be extended from January 1, 1980 to June 1, 1981.

FOR THE NUCLEAR REGULATORY COMMISSION

Order Signed by

Roger S. Boyd, Director
 Division of Project Management
 Office of Nuclear Reactor Regulation

December 28, 1978
 Date of Issuance:

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 McGurren
 10/28/78*

*SEE PREVIOUS YELLOW FOR CONCURRENCE

OFFICE	DPM:LWR #2	DPM:LWR #2	DPM:LWR #2	DPM:AD/LWR	DD:DPM	DPM
SURNAME	<i>Boyd</i>	HRood	RLBaer	<i>Boyd</i>	DFRoss	RSBoyd
DATE	12/28/78	10/5/78	10/5/78	12/28/78	12/ /78	12/28/78

EVALUATION OF REQUEST FOR EXTENSION OF
CONSTRUCTION PERMIT NOS. CPPR-97 AND CPPR-98

FOR THE SAN ONOFRE NUCLEAR GENERATING STATION, UNITS 2 AND 3

DOCKET NOS. 50-361 AND 50-362

INTRODUCTION

Construction Permits CPPR-97 and CPPR-98 were issued on October 18, 1973 to Southern California Edison Company and San Diego Gas and Electric Company authorizing construction of the San Onofre Nuclear Generating Station, Units 2 and 3. The latest dates for completion of the construction of these facilities, as stated in the permits, is January 1, 1979 and January 1, 1980, respectively. On March 31, 1978, Southern California Edison filed a request for extension of the construction completion dates to June 1, 1980 and June 1, 1981, respectively.

EVALUATION

In its application for extension of construction completion dates, Southern California Edison Company indicated that the factors contributing to the delay in completion of construction activities were related to unanticipated review procedures which delayed issuance of the construction permits, delays in obtaining construction approval from the California Coastal Zone Conservation Commission, delays due to a labor strike and necessary extensions on zero-float construction activities. The following is a discussion of these principal causes for delay.

The permittees anticipated receiving approval from the Commission in January 1973 to begin construction. Due to the time spent on environmental and seismological review matters, the permits were granted 10 months later than the applicants had anticipated. This time increment was not initially added to the previously estimated latest date for completion of construction because it was within the one year contingency allowance. Subsequently, however, permittees experienced a number of unquantifiable delays resulting from changing licensing requirements (e.g., fire protection, pipe break criteria, industrial security, etc.) which have themselves protracted construction approximately 12 months thus absorbing the contingency allowance previously allotted to the extended CP licensing process. Accordingly, the 10 month extension sought for this item appears reasonable.

Secondly, the applicants had obtained authorization from the San Diego Coast Regional Commission to begin construction on September 3, 1973. However,

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several appeals were filed with the California Coastal Zone Commission. Final approval to begin construction was granted on February 20, 1974, resulting in a four-month delay in the construction schedule.

A two-month delay was due to a strike by the pipe fitters. The strike began August 8, 1974 and ended October 3, 1974.

Another month of delay is attributable to unanticipated complexities in erecting the walls and dome of the containment, a critical-path activity. This delay occurred because the schedule for erecting the walls and dome of the containment was finalized before the design of the containment liner plate was complete. The liner plate, as finally designed, required additional time for construction than previously expected.

CONCLUSION

We have reviewed the information provided in Southern California Edison Company's submittal and we conclude that the factors discussed above are reasonable and constitute good cause for delay. Further, the staff has evaluated each factor contributing to the construction delay and concurs with the permittees as to the reasonableness of time of each delay. Thus, the requested extension of Construction Permits CPPR-97 and CPPR-98 to June 1, 1980 and June 1, 1981, respectively is justified. As a result of our review of the Final Safety Analysis Report to date, and considering the nature of the delays, we have identified no areas of significant safety consideration in connection with the extension of the construction completion dates for the San Onofre Nuclear Generating Station, Units 2 and 3.

The staff finds that because the request is solely for more time to complete work already reviewed and approved, no significant hazards consideration is involved in granting the request and thus prior public notice of this action is not required. We also find that good cause exists for the issuance of an Order extending the construction completion dates. Accordingly, issuance of an Order extending the latest construction completion dates for the San Onofre Nuclear Generating Station as set forth in CPPR-97 to June 1, 1980 for Unit 2 and June 1, 1981 for Unit 3, is reasonable and should be authorized.

Original Signed by,

Harry Rood, Project Manager
Light Water Reactors Branch No. 2
Division of Project Management

Original Signed by,

Robert L. Baer, Chief
Light Water Reactors Branch No. 2
Division of Project Management

Date: December 28, 1978

OFFICE	DPM:LWR #2	DPM:LWR #2	OELD	DPM:LWR #2		
SURNAME	JLee:ab	H Rood	McBurnett	RLBaer		
DATE	12/1/78	12/25/78	12/28/78	12/28/78		

NEGATIVE DECLARATIONSUPPORTING: EXTENSION OF CONSTRUCTIONPERMIT NOS. CPPR-97 AND 98 EXPIRATION DATES FORSOUTHERN CALIFORNIA EDISON COMPANY ANDSAN DIEGO GAS AND ELECTRIC COMPANYSAN ONOFRE NUCLEAR GENERATING STATION, UNIT NOS. 2 & 3DOCKET NOS. 50-361 AND 50-362

The U. S. Nuclear Regulatory Commission (the Commission) has reviewed the Southern California Edison Company and San Diego Gas and Electric Company (permittees) request to extend the expiration date of the construction permit for the San Onofre Nuclear Generating Station, Unit Nos. 2 and 3 (CPPR-97 and CPPR-98) which are located in San Diego County in the State of California. The permittees requested an eighteen month extension to the permits through June 1, 1980 for CPPR-97 and through June 1, 1981 for CPPR-98, to allow for completion of construction of the facilities.

The Commission's Division of Site Safety and Environmental Analysis has prepared an environmental impact appraisal relative to these changes to CPPR-97 and CPPR-98. Based on this appraisal, the Commission has concluded that an environmental impact statement for this particular action is not warranted because there will be no significant environmental impact attributable to the proposed action other than that which has already been described in the Commission's Final Environmental Statement-Construction Permit stage or evaluated in the environmental impact appraisal.

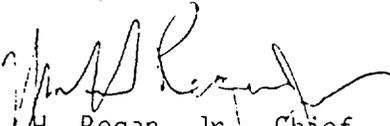
The environmental impact appraisal is available for public inspection at the Commission's Public Document Room, 1717 H Street, N. W.,

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Washington, D. C. and at the Mission Viejo Branch Library, 24851 Chrisanta Drive, Mission Viejo, California.

Dated at Bethesda, Maryland, this 28thday of December 1978.

FOR THE NUCLEAR REGULATORY COMMISSION



Wm. H. Regan, Jr., Chief
Environmental Projects Branch 2
Division of Site Safety and
Environmental Analysis

ENVIRONMENTAL IMPACT APPRAISAL BY THE DIVISION OF
SITE SAFETY AND ENVIRONMENTAL ANALYSIS
SUPPORTING EXTENSION OF CONSTRUCTION PERMITS
No. CPPR-97 AND CPPR-98
SAN ONOFRE NUCLEAR GENERATING STATION,
UNIT NOS. 2 AND 3

ENVIRONMENTAL IMPACT APPRAISAL

Description of Proposed Action

By letter of March 31, 1978 the applicants, Southern California Edison Company (SCE) and the San Diego Gas and Electric Company (SDG&E), filed a request with the Nuclear Regulatory Commission (NRC) to extend the completion dates specified in Construction Permits No. CPPR-97 and CPPR-98 for the San Onofre Nuclear Generating Station, Unit Nos. 2 and 3 (SONGS 2 & 3). The action proposed is the issuance of an order providing for an extension of the latest completion dates of the construction permits from January 1, 1979 to and including June 1, 1980 for Unit 2 and from January 1, 1980 to June 1, 1981 for Unit 3. The NRC staff has reviewed the application and found that good cause has been shown for the requested extension of the completion dates specified in Construction Permits CPPR-97 and CPPR-98 for SONGS 2 & 3 (see attached Safety Evaluation by the NRC staff).

Environmental Impact of the Proposed Action

A. Need for the Facility

The SONGS 2 & 3 are now scheduled to begin commercial operation in October 1, 1980 for Unit 2 and January 1, 1982 for Unit 3. As part of the operating licensing review of these plants the staff has closely followed the applicants' need for generating capacity. Examination of the most recent information regarding loads and resources indicates that the conclusion reached in the Final Environmental Statement, Construction Permit Stage (FES-CP), published in March 1973 regarding need for this plant is still valid.

The overall staff's conclusion that the plant should be constructed is unaffected by the extension of the construction permit.

- B. The FES-CP for SONGS 2 & 3 includes an assessment of potential environmental, economic, and community impacts due to site preparation and plant construction. In addition, (1) the staff's review of the inspection reports prepared by the Office of Inspection and Enforcement as a result of periodic inspection visits to the SONGS 2 & 3 site, and (2) staff's discussions with individuals and local and state officials

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held at the time of operating licensing review of the units did not identify any adverse impacts on the environment or the surrounding community which were not anticipated and adequately discussed in the FES-CP or which were significantly greater than those discussed in the FES-CP.

C. Impact on Terrestrial Environment

Land Use.

The FES-CP (Sect. 4.2) discussion on the impact that construction of SONGS 2 & 3 will have on the terrestrial environment is still valid. However, several transmission line route modifications have been made or proposed since issuance of the construction permits that were not evaluated by the staff in the Final Environmental Statement, Construction Permit stage. The environmental impacts associated with the transmission line route modifications are evaluated below.

The impacts of site preparation on land use are associated almost exclusively with the excavation of the San Onofre Bluff. About 16.4 ha (40.5 acres) of the San Onofre Bluffs have been excavated, and no further excavation is anticipated. Much of this excavated material was deposited at Japanese Mesa, on Camp Pendleton Marine Base north and across from SONGS. Thirty-four hectares (84 acres) of the 50.6-ha (125-acre) mesa is being used for equipment storage, fabrication shops, and as a contractor's lay down area. Some of the excavated soil was deposited as a mound along the western edge of the mesa to reduce the visual impact of the area as seen from highway I-5.

Visual inspections of the plant site boundary and the bluffs adjacent to the site are conducted biweekly. Two instances of erosion were encountered, and appropriate corrective action was implemented to reduce these impacts.

To date, construction of the plant has had no significant impact on offsite land use. Land use changes that occurred offsite consist primarily of an increase in housing developments. In a few cases, developments were built nearly adjacent to the transmission line corridors (ER, Sect. 3.9.1.2).*

The greatest impact on the transportation facilities at San Onofre due to construction-related activities is the increased congestion on highway I-5 during shift changes. Little or no congestion occurs during morning shift changes in both incoming and outgoing traffic, but a 20- to 30-min. delay occurs for outgoing traffic during evening

* Environmental Report, Operating License Stage, San Onofre Nuclear Generating Station, Units 2 and 3.

changes (ER, Suppl. 2, Item 27). Movement of heavy equipment from the Del Mar Boat Basin to the station site creates a temporary adverse impact to people using San Onofre State Park because the park is temporarily closed during these equipment moves. To minimize this impact, all equipment moves occur during off-peak months (ER, Suppl. 2, Item 27).

Section 3.9 of the Applicant's Environmental Report-Operating License Stage, describes the modifications associated with the transmission lines. Construction of the proposed Talega Substation and the proposed transmission lines is not expected to create any significant adverse impacts. The Talega Substation will be constructed on a 2-ha (5-acre) site that will require 4 ha (10 acres) to be graded. Therefore, small amounts of natural wildlife habitat will be temporarily or permanently destroyed. About 35.4 km (22 miles) of new transmission lines will be constructed, and an additional 196.3 km (122 miles) will be retrofitted to operate at either 220 or 230 kV. No new rights-of-way will be required. Construction of additional towers and access road extensions, however, will require a total of 5.2 ha (12.8 acres) of land. The new lines proposed by SCE will cross about 0.5 km (0.3 mile) of prime and unique farmlands (those areas with land use capabilities of class I or class II). Exact placement of the towers has not been indicated, but with an average of 3 towers per kilometer (4.8 towers per mile) and about 93 m² (1000 ft²) per tower base, only 0.014 ha (0.034 acre) of prime and unique farmlands will be taken out of production by tower bases. These towers will be placed in existing rights-of-way bounded on each side by other existing transmission lines; therefore, a minimal amount of additional land for access roads will be required. The new transmission line proposed by SDG&E (from SONGS to Talega Substation) is located entirely on Camp Pendleton Marine Base and will require 0.76 ha (1.88 acres) of land for tower bases and access road extensions.

Terrestrial ecology

Terrestrial ecological impacts on the SONGS 2 & 3 site and vicinity have not been more serious than predicted in the FES-CP. A relatively small amount of wildlife habitat was lost due to excavation of the bluffs. Similar habitat is adjacent to the site, so it is possible that most of the animal populations emigrated to these areas. Impacts on the terrestrial ecology along the transmission line corridors will be primarily short-term. The relatively small amount of land 5.2 ha (12.8 acres) required for tower bases and access road extensions makes it unlikely that any significant long-term adverse impact will occur to the terrestrial ecological characteristics of the area. Construction of additional towers could lead to an increase in the number of raptors along the transmission line corridors because these birds often use the towers for nesting platforms and as perches for hunting. This increase is unlikely to occur, however, because the applicant presently discourages nesting by periodically removing the nests.

No endangered animal species in the vicinity of the site have been or are expected to be affected adversely by the construction activities. The California brown pelican, which was observed several times on the beach adjacent to the construction area, is not easily disturbed by human activity; decline of this species is believed to be caused by pollutants such as DDT. Recent reports indicate that the status of this species is improving in the Pacific states since strict pesticide laws have been enacted.¹ A nesting colony of the California least tern is located on Camp Pendleton Marine Base near the Del Mar Boat Basin, a facility used by the applicant to move heavy equipment. Construction schedules and equipment delivery dates were altered to avoid disturbing the nesting terns in the sanctuary during nesting season. Also, the nesting colony during the breeding season is a restricted area for all nonauthorized personnel.² From a careful review of the habitat requirements for other endangered species whose ranges include Orange and San Diego counties, the staff believes that such species are not likely to be affected by the construction activities. Furthermore, no known onsite habitats are used by endangered species, and no habitats adjacent to or within the transmission line right-of-way have been classified by state or Federal authorities as critical to any endangered species (ER, Suppl. 1, Item 22).

D. Impacts on Aquatic Environment

Effects on water use

The major impact on water use resulting from construction of SONGS 2 & 3 is related to the construction of the offshore conduit system. The presence of the construction trestle will present an obstruction to coastal navigation. However, the shallowness of this region prohibits large vessels from using this area, so this impact will be restricted to small craft and will be only temporary, until the trestle is removed.

The dredging operation for the lay down of the buried conduit systems will enhance the natural turbidity near the ocean bottom. This will produce an occasionally visible brownish discoloration at the surface. This impact is being monitored and recorded by means of weekly aerial photographic surveys.

Effects on aquatic biota

The potential effects on aquatic biota from construction were discussed adequately in the FES-CP. The conclusion remains that no permanent adverse effects are anticipated. This conclusion is based on the soundness of the programs adopted by the applicant to identify impacts and to initiate corrective measures (ER, Sect. 4.5) and on the results of the Environmental Technical Specifications (ETS) monitoring program for Unit 1.

Three primary sources of potential impact to the marine environment could result from SONGS 2 & 3 construction: (1) erosion, (2) dredging,

and (3) dewatering discharge. All of these sources are covered by adequate control programs (ER, Sect. 4.5). The program associated with erosion involves close surveillance of the area of potential influence and corrective action if erosion is discovered. The program associated with dredging is especially extensive and involves (1) recording the volume and location of sand disposed on the beach, both naturally through erosion of the bluffs and that resulting from conduit construction, (2) aerial photography to compare the area of visual turbidity before and after construction, (3) intertidal area mapping before and after construction to determine the amount of inundation and subsequent re-exposure of the rocky substrate from sand disposal and natural conditions, (4) beach and bottom profiling, (5) San Onofre Kelp Bed mapping and diving observations, and (6) intertidal sand and cobble sampling. The program associated with dewatering discharge is in accordance with waste discharge requirements of the California Regional Water Quality Control Board, San Diego Region, as outlined in the NPDES permit (ER, Appendix 12C).

The results of the current data indicate the absence of any significant detrimental impact to the San Onofre marine environment due to construction activities.

E. Radiation Exposure to Construction Workers

During the period between the operation of Unit 1 and the startup of Units 2 and 3, the construction personnel working on Unit 2 will be exposed to sources of radiation from the operation of Unit 1, and the construction personnel working on Unit 3 will be exposed to sources of radiation from the operation of Units 1 and 2. The applicant has estimated the integrated dose to construction personnel to be 6.6 man-rems. Estimated values for other LWRs have ranged from 5 to 500 man-rems.

F. Assessment of Impacts

The only effects possibly resulting from the requested extension would be those due to transposing the impacts in time or extending the total time the local community is subjected to temporary construction impacts. This in the staff's view will not result in any significant additional impact. The staff concludes that environmental impacts associated with construction of the plant described in the FES-CP, are not affected by the proposed extension. Thus, no significant change in impact is expected to result from the extension.

Conclusion and Basis for Negative Declaration

On the basis of the foregoing analysis and the NRC staff evaluation, it is concluded that, with the exception of impacts noted above, which are judged insignificant, the impacts attributable to the proposed action will be confined to those already predicted and described in the Commission's FES-CP issued in 1973. Having made this conclusion, the Commission has further concluded that no environmental impact statement for the proposed action need be prepared, and that a negative declaration to this effect is appropriate.

REFERENCES

- ¹G. Seymour, Brown Pelican Wildlife Leaflet, California Department of Fish and Game, Sacramento, Calif.
- ²San Diego Gas and Electric Company, Nuclear Power Plant Siting, Camp Pendleton Marine Corps Base, San Diego, Calif., April 1977.

Distribution

Docket File ✓
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LWR #2 File
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