



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

FEB 15 1985

Docket No.: 50-206
LS05-85-02-013

Mr. Kenneth P. Baskin, Vice President
Nuclear Engineering
Safety and Licensing Department
Southern California Edison Company
2244 Walnut Grove Avenue
Post Office Box 800
Rosemead, California 91770

Dear Mr. Baskin:

SUBJECT: SAN ONOFRE NUCLEAR GENERATING STATION UNIT 1 - SEISMIC ANALYSES

As you know, the NRC is conducting an investigation regarding SCE's conduct in the preparation and reporting of the Balance of Plant Mechanical Equipment and Piping (BOPMEP) evaluation, which was submitted on April 30, 1982, in the context of the overall SEP seismic reevaluation effort. In order to complete this investigation, certain technical information is necessary which requires your assistance.

We request that you make available the original design analyses identified in Tables 1-4 of the enclosure to the letter from J. T. Head (SCE) to R. H. Engelken (NRC Region V), dated September 9, 1979, for our review: if necessary, we would then request that you arrange to have your contractor, the Bechtel Power Corporation, perform the analyses described in the enclosures. Enclosure 1 identifies the initial scope of possible analyses. Enclosure 2 describes the general methods and criteria for these analyses, which would be performed consistent with the original licensing basis (0.25g ground motion, equivalent static analysis, B31.1 criteria) and the plant configuration which existed at the time the BOPMEP review was in progress.

Based on a preliminary review of the original design analyses, we will determine whether that information is sufficiently comparable to the BOPMEP analyses. If not, we request that Bechtel perform the specified analyses under the direction and supervision of the Franklin Research Center (FRC) who is the NRC staff's technical consultant in this matter. If our preliminary evaluation indicates a need for additional or different analyses, we will request such analyses in separate correspondence.

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PDR ADOCK 05000206
P PDR


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Mr. Kenneth P. Baskin

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If requested, we would expect you to undertake these analyses voluntarily to provide an expeditious resolution of this issue. Otherwise, it will be necessary for us to take appropriate action, in accordance with Section 161c of the Atomic Energy Act, to obtain the technical information necessary to complete this investigation. Please contact Mr. Philip Joukoff, Investigator-Region V (415-943-3725) to arrange a meeting to review the original design analyses and discuss the arrangements that would be required to perform the specified analyses, should we conclude they are necessary. If you have any questions concerning technical issues relating to this evaluation, please contact Mr. Christopher Grimes (301-492-7464), who is the project officer for the FRC contract.

Sincerely


Dennis M. Crutchfield, Assistant Director
for Safety Assessment
Division of Licensing

Enclosures:
As stated

cc w/enclosures:
See next page

Mr. Kenneth P. Baskin

cc

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San Clemente, California 92672

Chairman
Board of Supervisors
County of San Diego
San Diego, California 92101

Director
Energy Facilities Siting Division
Energy Resources Conservation &
Development Commission
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Sacramento, California 95814

U.S. Environmental Protection Agency
Region IX Office
ATTN: Regional Radiation Representative
215 Fremont Street
San Francisco, California 94105

John B. Martin, Regional Administrator
Nuclear Regulatory Commission, Region V
1450 Maria Lane
Walnut Creek, California 94596

ANALYSES TO BE PERFORMED

The following cases, selected from the BOPMEP report, should be analyzed.

PIPING

<u>Line No.</u>	<u>BOPMEP Table No.</u>	<u>Isometric</u>	<u>System</u>
811-8"-KN	5.3-1	--	Circulating Water
2071-2"-601	5.5-1	334476-3	Chemical and Volume Control
721-14"-HP	5.6-1	334762-0	Feedwater and Condensate
342-2"-EG	5.6-3	334429-1	Feedwater and Condensate

SUPPORTS

<u>Support No. or Data Point</u>	<u>Line No.</u>	<u>BOPMEP Table No./Page No.</u>	<u>System</u>
8-PS-19	3048-8"-152N	5.1-2/2	Auxiliary Coolant
8-PS-10	3086-6"-151R	5.1-2/6	Auxiliary Coolant
140	454-10"-KP	5.3-2/1	Circulating Water
PS-57	728-8"-HP	5.7-2/1	Miscellaneous Water
1-737-UG-002	737-8"-HP	5.7-2/3	Miscellaneous Water
14-PS-4	6003-16"-151R	5.8-2/3	Safety Injection

EQUIPMENT

<u>Component No.</u>	<u>BOPMEP Table No.</u>	<u>Identification</u>
E-20A/B	5.1-4	Component Cooling Water Heat Exchanger
E-34	5.5-2	Seal Water Heat Exchanger

ANALYSIS METHODOLOGY AND CRITERIA

1. For analysis purposes, the selected components should be reconstructed to the same conditions that existed during the conduct of the BOPMEP effort.
2. An equivalent static analysis should be performed using the original damping factors and design ground response spectra scaled to 0.25g with no factors applied to account for dynamic effects.
3. The ADLPIPE (or an equivalent) computer program with lumped mass finite element models may be used for the stress analysis.
4. Different loading cases and stress combinations due to the seismic analysis of the horizontal and vertical directions should be considered according to the original FSAR design criteria.
5. Results will be evaluated based on the original design code allowables of the plant, i.e., the 1955 ANSI B31.1 code.

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- 2 -

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*SEE PREVIOUS CONCURRENCES

**TELEPHONE CONCURRENCE FROM P. JOUKOFF ON 2/1/85, WITH CORRECTION

SEPB:DL	SEPB:DL	ORB#5:C	AD:SA:DL	OI:RV
*EMcKenna:mn	*CGrimes	*JZwolinski	GDCrutchfield	**PJoukoff
1/31/85	1/31/85	1/31/85	2/ /85	2/1/85

OI:DIR
**OShackleton
2/1/85

*Discussed with B. Hayes & D. Eisenhut
who agreed with approach on 2/1/85
DME
2/15/85*

*SE01
DSU USE 08*

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- 2 -

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Crutchfield

~~Ben Hayes, Director
Office of Investigation~~

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*EMcKenna:dk
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~~ADP:DL~~
DCrutchfield
2/5/85

D:DL
~~DEisenhut~~
1/85

OI:RV
**PJoukoff
2/1/85

OI:DIR
**OShackleton
2/1/85

~~OI:DIR~~
BHayes

*not required because OI/RV
concurred - telcon 2/14/85*

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** telephone concurrence from P. Joukoff
on 2/1/85, with correction

DEiszakut

EMM SEPB:DL EMcKenna:dk 1/31/85	SEPB:DL (G) CGrimes 1/31/85	X ORB#5:C JZwolinski 1/31/85	AD:SA:DL DCrutchfield / /85	D:DL EMiraglia / /85	OI:RV ** PJoukoff 2/1/85
OI:RV ** OShackleton 2/1/85	OI:DIR BHayes / /85				