

MAY 30 1979

DOCKET NOS. 50-361
AND 50-362

APPLICANTS: SOUTHERN CALIFORNIA EDISON COMPANY
SAN DIEGO GAS AND ELECTRIC COMPANY

FACILITY: SAN ONOFRE NUCLEAR GENERATING STATION, UNITS 2 AND 3

SUBJECT: SUMMARY OF MEETING TO DISCUSS INTERPRETATION OF SEISMIC PROFILES

On May 4, 1979, representatives of the applicants met with members of the NRC staff in Bethesda, Maryland to discuss the above subject. Attendees at the meeting are given in Enclosure 1.

At the meeting, the applicants presented and discussed a number of seismic reflection profiles which they had used as the basis for their response to NRC staff Question 361.34. The applicant's position is that the Offshore "E" fault near the San Onofre site is not a continuous fault but a series of en-echelon anticlines and synclines. At the meeting, the applicants provided the staff with a copy of a letter from one of their consultants which supports their position (see Enclosure 2). The applicants agreed to provide on the docket line drawings interpreting the seismic profiles which form the basis for their position on the Offshore "E" fault.

Original Signed by
Harry Rood

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

Enclosures:

1. Attendance List
2. Letter From Consultant

ccs w/enclosures:
See next pages

m 4
GP

OFFICE >	DPM:LWR #2	DPM:LWR #2				
SURNAME >	HRood:ab	RLBae			79071806	94 Q
DATE >	5/30/79	5/30/79				

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

MAY 3 0 1979

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

cc: Charles R. Kocher, Esq.
James A. Beoletto, Esq.
Southern California Edison Company
2244 Walnut Grove Avenue
P. O. Box 800
Rosemead, California 91770

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

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

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

Lawrence Q. Garcia, Esq.
California Public Utilities Commission
5066 State Building
San Francisco, California 94102

Mr. James H. Drake
Mr. B. W. Gilman

MAY 30 1979

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

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

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

Henry Peters
San Diego Gas & Electric Company
Post Office Box 1831
San Diego, California 92112

Ms. Lyn Harris Hicks
Advocate for GUARD
3908 Calle Ariana
San Clemente, California 92672

Richard J. Wharton, Esq.
4655 Cass Street, Suite 304
San Diego, California 92109

Phyllis M. Gallagher, Esq.
Suite 220
615 Civic Center Drive West
Santa Ana, California 92701

Mr. Robert J. Pate
United States Nuclear Regulatory Commission
P. O. Box 4167
San Clemente, California 92672

ENCLOSURE 1

MAY 30 1979

ATTENDANCE LIST
GEOLOGY DISCUSSION
SAN ONOFRE 2/3
MAY 4, 1979

SCE

M. O. Medford
H. G. Hawkins
D. G. Moore (Consultant)

NRC - STAFF

H. Rood
L. J. Chandler
A. T. Cardone
P. Sobel

ENCLOSURE 2

9440 La Jolla Shores Drive
La Jolla, California 92037

July 7, 1978

RECEIVED
JUL 10 1978

Mr. Gale Hunt
Supervising Engineer
Southern California Edison Company
P. O. Box 800, 2244 Walnut Grove Avenue
Rosemead, California 91770

Dear Gale:

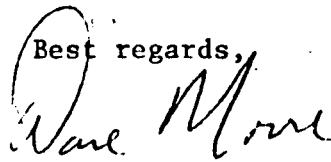
I am enclosing the brief report which Greg and I have prepared covering our evaluation of "Fault E" as based on our interpretation of the most recent sparker and "acousti-pulse" data of the Woodward/Clyde LGN site surveys. The close-spaced lines (800-1500 feet apart) of this new data have allowed a much more actualistic interpretation of this north-northwest trending zone of structural deformation.

Under separate cover, I am also sending our preliminary structural map based on the recent interpretations and combined with the interpretations which I made several years ago from data available at that time. We first worked only with the new close-spaced data and, after mapping from that, combined the results with my earlier interpretations. It is significant, I believe, that the large faulted anticline/syncline combination depicted earlier as, continuous through line S-22 from S-16, now appears to be absent at lines 145 and 147 of the new Woodward/Clyde data. There are now defined two separate anticline/syncline pairs on the outer shelf that are connected by faulting clearly shown on lines 845 and 847 as well as on old line S-8. The structures of this outer shelf zone of deformation off the plant site are beginning to look more like the style of deformation (but not the scale) of the Newport-Inglewood zone in the Los Angeles Basin.

Enclosed also are statements for the time that Greg and I have spent in interpretation and consultation for this study. We would appreciate having two separate checks for this work, one for D. G. Moore and one for G. F. Moore.

I have enjoyed seeing you and working with you and your group again. I hope that our efforts will help clarify the nature of the offshore structure to allow best decisions on your part.

Best regards,



Dave Moore

July 7, 1968

Evaluation of "Fault E"

A north-northwest-trending zone of disturbance approximately five miles in length was recognized by marine advisors and named "Fault E." Based on the original data set, which had line spacings of 2,000 to 7,000 feet, the structure was interpreted to be a continuous fault. New data with line spacings of 800 to 1500 feet clearly indicate that the feature is not a continuous fault but rather is a discontinuous zone of deformation associated with an anticline-syncline pair.

The new data (Woodward/Clyde sparker and "acousti-pulse") supports the original interpretation that the feature dies out to the south. It first appears on line 812 as the faulted limb between an anticline and syncline. On lines 814 and 816 the anticlinal crest is faulted along its seaward margin. On lines 818 - 825 the limb between the anticline and syncline is faulted. This structure is best seen on line 825 which shows a well-developed anticline and syncline between points 123 and 130 with a faulted limb between points 126 and 127. Line 828 shows a broad zone of deformation up to 1500 feet wide. A well-developed anticline and syncline with only minor disturbance of the limb between them is displayed on line 830. On lines 834-845 the synclinal axis is faulted. The faults, anticlines and synclines appear to be en-echelon features.

The faulted anticline-syncline structure is clearly truncated by a Pleistocene erosional surface. The surface is well-displayed on the high resolution "acousti-pulse" records that were obtained simultaneously with the sparker records. The erosional unconformity is overlain by .01-.015 seconds (8-12 meters) of undisturbed post-Pleistocene sediments.

In summary, the feature previously termed "Fault E" is not a continuous fault, but is a series of en-echelon anticlines and synclines with associated discontinuous faults.

D. G. Moore

G. F. Moore

Meeting Summary

Docket File
NRC PDR
Local PDR
TIC
NRR Reading
LWR #2 File
E. Case
D. Bunch
R. S. Boyd
D. F. Ross
D. B. Vassallo
D. Skovholt
W. Gammill
J. Stolz
R. Baer
O. Parr
S. Varga
C. Heltemes
W. Haass
R. Houston
L. Crocker
D. Crutchfield
F. J. Williams
R. J. Mattson
R. DeYoung
Project Manager - H. Rood
Attorney, ELD
J. Lee
IE(3)
ACRS(16)
R. Denise
L. Rubenstein

J. Knight
S. Hanauer
R. Tedesco
R. Bosnak
S. Pawlicki
F. Schauer
K. Kniel
T. Novak
Z. Rosztoczy
W. Butler
V. Benaroya
R. Satterfield
V. Moore
M. Ernst
F. Rosa
R. Denise
EP Branch Chief
G. Chipman
J. Collins
W. Kreger
G. Lear
B. Youngblood
L. Hulman
NRC Participants:
L. J. Chandler
A. T. Cardone
P. Sobel