

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of )  
)  
)

PACIFIC GAS AND ELECTRIC COMPANY )

Docket Nos. 50-275 O.L.  
50-323 O.L.

(Diablo Canyon Nuclear Power Plant, )  
Units 1 and 2) )  
)

Affidavit of Robert E. Paulus

I, Robert E. Paulus, being duly sworn, state under oath the following:

- (1) I am Deputy Director of the California Department of Forestry (CDF) for Fire Protection and Technical Services. I am responsible to the Director of the Department with respect to all matters bearing upon fire control operations, training, manpower and supply for CDF's statewide fire control operations and all other emergency response operations. I have been employed by CDF in fire control and fire training positions for 27 years. I reside at 4528 Onyx Way, Carmichael, California.
- (2) The Department of Forestry is a statewide wildland and rural fire protection organization which also engages, pursuant to contracts with local governments, in fire protection of structures, industrial facilities, and airports at various locations throughout the state. CDF maintains its own forces and supervises a large number of volunteer fire companies. CDF's own forces consist of approximately 3,000 permanent employees, nearly 2,000 seasonal fire fighters, 354 fire engines (augmented by 371 engines owned by local governments and operated by CDF), 55 bulldozers, approximately 600 other miscellaneous vehicles, and 17 air tankers.
- (3) On April 16, 1981 I toured PG&E's Diablo Canyon nuclear facility in the company of the plant manager and certain of his staff, the Director of the Department of Forestry, the Chief of the San Luis Obispo City Fire Department, CDF's Regional Chief for the South Coast Region, the Director of the California Office of Emergency Services and his Chief Deputy, along with certain other staff persons of the Department of Forestry. The tour included

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an extensive meeting with the plant manager concerning the degree of planning, training and equipping of CDF personnel who may be called to respond at the plant, pursuant to the letter of understanding, referred to in paragraph 4 below. The tour was preceded by a visit to the CDF administered fire stations at the San Luis Obispo Airport and the Nipomo Forest Fire Station, including interviews with the personnel stationed at these facilities.

- (4) I have reviewed the Emergency Plan (revision 2) dated February 1980 for the Diablo Canyon nuclear power plant units 1 and 2 prepared by Pacific Gas and Electric Company; I am also familiar with the letter of understanding dated February 13, 1979 from T. J. Waddell, CDF Ranger-in-Charge of the San Luis Obispo Ranger Unit, addressed to the late Mr. R. D. Ramsay, Plant Superintendent, which letter is appended to the aforementioned emergency plan. A true copy of the letter of understanding is attached hereto as Exhibit "A."
- (5) I am familiar with the facilities, manpower and equipment at various CDF stations throughout San Luis Obispo County that may be called upon to respond to emergencies at the Diablo Canyon nuclear power plant pursuant to the aforementioned emergency plan and letter of understanding.
- (6) I can state of my own knowledge that (contrary to the assertion in paragraph 8.1.2.2(d) of the aforementioned emergency plan) that "refresher training and radiation protection practices and procedures is..." not included as part of an annual tour of the Diablo Canyon facility and its fire suppression equipment by Department of Forestry personnel. I can further state of my own knowledge that the pattern of twice-yearly fire drills and annual walk-through tours for CDF personnel, provided for in said plan, has not occurred in any regular way but has been sporadic and has failed to include significant numbers of CDF personnel who may be called upon to respond to in-plant emergencies.
- (7) CDF personnel in San Luis Obispo County have received no detailed training on necessary techniques in or equipment for responding to an in-plant fire or emergency medical incident at Diablo Canyon, nor have they received training concerning fire fighting in an emergency which potentially includes radiation hazards. Because of this lack of training, the Department, contrary to the letter agreement, could not utilize the most effective fire suppression methods which might otherwise be available.



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- (8) The stations administered by the Department of Forestry which are most likely to be called upon to respond to emergencies at the Diablo Canyon nuclear power plant pursuant to the aforementioned letter of agreement are located at the San Luis Obispo County Airport and at the Nipomo Forest Fire Station in the town of Nipomo. In major emergencies certain other facilities throughout the county may also be called upon to respond. In addition, certain volunteer companies who are under the command of the Department of Forestry may be called upon to respond to emergencies at the plant. The three most likely facilities and the equipment available to them, along with response times are as follows:
- (a) Avila Beach Station at a distance of 12 miles with a 15-minute response time; this is an entirely volunteer fire company equipped to respond with a 500 gallon per minute pumper.
  - (b) Nipomo Station at a distance of 26 miles from the plant with a 40-minute response time. There is one full-time CDF Captain on duty at all times, augmented by a volunteer fire company equipped to respond with a 750 gallon per minute pumper.
  - (c) Edna Valley/Airport Station 18 miles from the plant with a 30-minute response time. There is one full-time CDF Captain on duty at all times, augmented by a volunteer fire company equipped to respond with a 750 gallon per minute pumper.
- (9) While the fire fighters in CDF's system responsible for operating the aforementioned stations are aware that they may be called upon to respond to emergencies at the plant, all of those with whom the matter was discussed on April 16 agreed that they had not received any significant training to prepare them for fire suppression responsibilities in the event of simultaneous radiation exposure or risk thereof at the plant.
- (10) On April 14, 1981 Ranger-in-Charge T. J. Waddell solicited attendance by other chiefs of fire departments within San Luis Obispo County to attend a meeting scheduled for May 14, 1981 to discuss possible approaches to a training and equipment plan connected with any response to emergencies at the Diablo Canyon nuclear power plant. I am not able at this time to estimate how much time must elapse before CDF personnel are adequately trained and equipped to respond to in-plant emergencies.



11/11/11

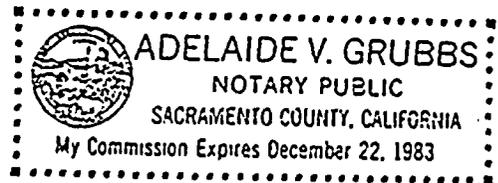
- (11) As a result of the tour on April 16th and the information developed at that time, Ranger Waddell has notified PG&E that the letter of understanding dated February 13, 1979 has been abrogated and is no longer in effect. A true copy of the letter transmitting such notice is attached hereto as Appendix "B."
- (12) Ranger Waddell's notice also informed PG&E's plant manager of CDF's wish to proceed as expeditiously as circumstances will permit to develop and carry out planning and training which will permit CDF personnel to safely respond to in-plant emergencies.

Robert E. Paulus  
Robert E. Paulus

Subscribed and sworn to before me this 17 day of April, 1981.

Adelaide V. Grubbs  
Notary Public

My commission expires: 12-22-83







## DEPARTMENT OF FORESTRY

P.O. Box 151, Hwy 1, N.  
San Luis Obispo, CA. 93406  
805-543-4244

February 13, 1979

7100 COOPERATIVE FIRE PROTECTION  
7150 Mutual Aid  
Diablo Canyon Power Plant (PG&E)

Pacific Gas & Electric Company  
Diablo Canyon Power Plant  
P.O. Box 56  
Avila Beach, California 93424

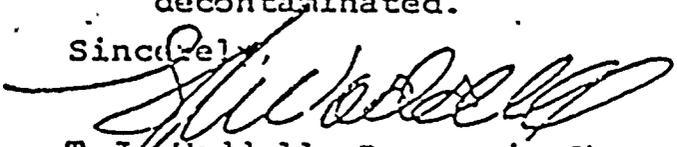
Attention: Mr. R.D. Ramsay, Plant Superintendent

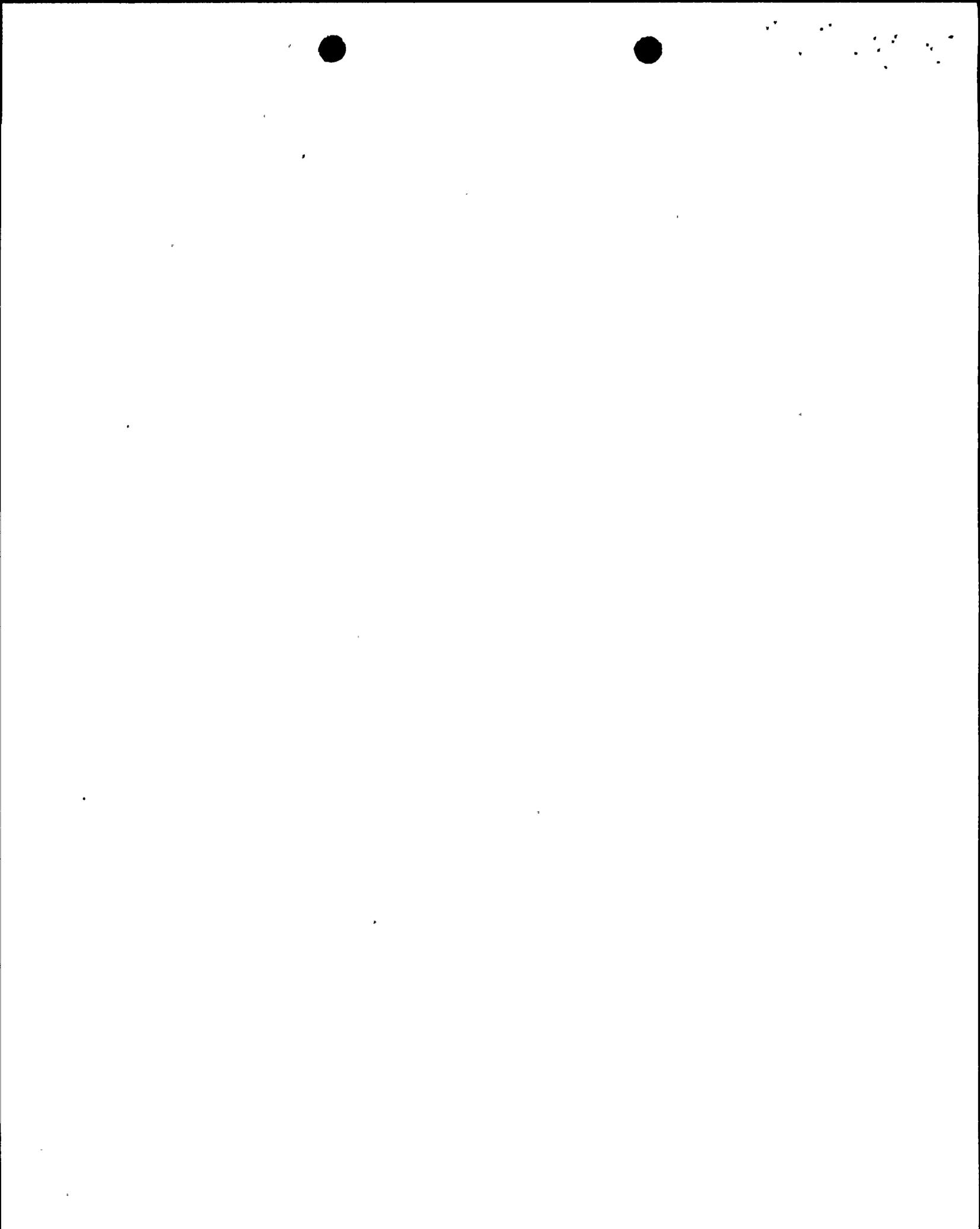
Dear Mr. Ramsay:

This letter of understanding supercedes our letter of February 1, 1978. As discussed with your representative, this Department approves of and agrees to the following procedures.

1. To provide fire suppression support for grassland fires and/or in plant fires and emergency medical incidents at Diablo Canyon.
2. To participate in a fire drill on a semi-annual basis.
3. To make designated members of the Department available for basic training in radiation protection to be presented by P.G. & E. personnel.
4. That Department personnel, when called to assist in fire suppression, have the authority and responsibility to determine and utilize the most effective fire suppression methods, providing, that these methods do not adversely affect nuclear safety or the possible health and safety of the public.
5. That PG&E will, when asking for assistance, advise the Department if the potential for radiation exposure and/or contamination exists.
6. That, when the potential for radiation exposure and/or contamination exists, PG&E will provide dosimeters for Department personnel and will provide a trained monitor to accompany Department personnel to advise and insure that Forestry personnel are not unnecessarily exposed.
7. That PG&E will, at the conclusion of any fire suppression activity, monitor Department personnel and equipment for contamination and perform any decontamination work required.
8. That PG&E will replace any equipment that cannot be satisfactorily decontaminated.

Sincerely,

  
T.J. Waddell, Ranger-in-Charge/County Fire Chief



DEPARTMENT OF FORESTRY

P.O. Box 151, Hwy 1, North  
San Luis Obispo, CA 93406  
805-543-4344

EXHIBIT B  
PAGE 1 OF 2



April 20, 1981

1980 COOPERATIVE FIRE PROTECTION  
7150 Mutual Aid  
Diablo Canyon Power Plant  
P.G. & E.

Mr. Robert Thornbery  
Plant Superintendent  
Pacific Gas & Electric Company  
Diablo Canyon Power Plant  
P.O. Box 56  
Avila Beach, CA 93424

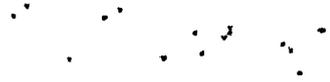
Dear Mr. Thornbery:

Thank you for the courtesies extended to me, to other California Department of Forestry representatives, and to representatives of other interested emergency service organizations on the tour of the Diablo Canyon Plant on 16-April.

My superiors have requested that I cancel the letter-of-understanding dated 13-February, 1979, which I had directed to your predecessor. The CDF and other interested fire service representatives are prepared to meet with P.G. & E. to develop an adequate and comprehensive plan for CDF's response to any on-site emergencies. You will recall that we have initiated participation from the other fire service representatives by my letter of 13-April, directed to all County Fire Chiefs, inviting them to a tour of the Diablo Canyon Plant on 14-May. This was coordinated by P.G. & E. representative, Chuck Richmond.

It seems to me that the plan should consist of at least three elements, they are:

1. Training needs - focused primarily on radiation protection and suppression efforts involving high voltage electrical fires.
2. An assessment of specialized equipment needs for off-site personnel responding to an incident at Diablo Canyon.
3. A fire pre-plan of the Diablo Canyon Plant, showing in routine schematic form, the inventory and location of firefighting equipment and primary access to the various structures. It should also address the structure of the P.G. & E. fire brigade and CDF liaison.



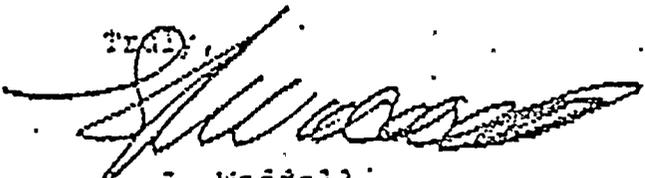
April 20, 1981

EXHIBIT B  
PAGE 2 OF 2

Upon completion of this planning effort we will then prepare a new letter-of-understanding, which will be reviewed by my superiors.

Finally, I must inform you that CDF will not respond to any Diablo Canyon facility on-site emergency where we might be faced with possible radiation hazards until appropriate training of CDF personnel has been completed.

TRM:



E. J. Wadcell  
Ranger-in-Charge/County Fire Chief

psl

cc: John Hastings



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RESUME OF  
ROBERT E. PAULUS

DATE

1/80 to Present

DEPUTY DIRECTOR FOR FIRE PROTECTION AND TECHNICAL SERVICES

Responsible to the Director for all aspects of Department of Forestry's Fire Protection Program.

5/75 to 1/80

STATE FOREST RANGER IV

Ranger-in-Charge of the Butte Ranger Unit. Responsible for the total administration and direction of the unit, which consists of all Department of Forestry activities, including contractual fire protection. Via a contractual arrangement, served as the Chief of the Butte County Fire Department.

7/71 to 5/75

STATE FOREST RANGER III

Ranger-in-Charge of the California Department of Forestry Fire Academy. Responsible for total administration and direction of the Academy training program accomplished through the directing and coordinating of an administrative staff consisting of a State Forest Ranger II and seven State Forest Rangers I.

Effective February 1, 1973, assigned additional program responsibilities as the Department of Forestry In-Service Training Officer. Responsible for the development, coordination, and evaluation of all Department in-service training programs.

11/68 to 7/71

STATE FOREST RANGER II

Under the direction of a State Forest Ranger III assigned as the Director of Training at the Department of Forestry Fire Academy.

Primary duties included the direct supervision of four State Forest Rangers I assigned to the Academy as instructors. Evaluation and adjusting the training program to ensure an accurate and meaningful training program. Evaluated student progress, counseled students, and coordinated with ranger unit supervisors relative to personnel matters with probationary employees. Other duties as assigned.

7/64 to 11/68

STATE FOREST RANGER I

Under the direction of a State Forest Ranger II administered a Ranger District comprised of three forest fire stations, one county fire station, and one forest fire lookout, in a geographical sub-unit which covered 319,000 acres of State responsibility lands and 80,000 acres of local government responsibility area.

7/54 to 7/64

Promoted through various levels of the Department's fire suppression program, including Fire Fighter, Fire Apparatus Engineer, and Fire Captain.

4/22/81



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)

CERTIFICATE OF SERVICE

I hereby certify that copies of the "GOVERNOR EDMUND G. BROWN JR. SUBMISSION OF PREPARED TESTIMONY" in the above-captioned proceeding have been served on the following on May 8, 1981, as follows:

Richard S. Salzman, Esq., Chairman \*\*  
Atomic Safety and Licensing Appeal Board  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

Dr. W. Reed Johnson \*\*  
Atomic Safety and Licensing Appeal Board  
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John F. Wolf, Esq., Chairman \*  
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U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555



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Mr. Glenn O. Bright \*  
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Dr. Jerry R. Kline \*  
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U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

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Edward G. Ketchen, Esq. \*\*  
Lucinda Low Swartz, Esq. \*\*  
Office of Executive Legal Director  
BETH 042  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

Secretary \*\*  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555  
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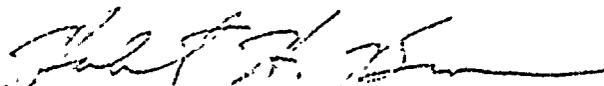
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 San Luis Obispo, CA 93402

Byron S. Georgiou, Esq. \*\*  
 Legal Affairs Secretary  
 Governor's Office - State Capitol  
 Sacramento, CA 95814




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Herbert H. Brown  
 HILL, CHRISTOPHER AND PHILLIPS, P. C.  
 1900 M Street, N. W.  
 Washington, D. C. 20036

May 8, 1981

\* By messenger  
 \*\* By U.S. mail, first-class  
 \*\*\* By express mail

