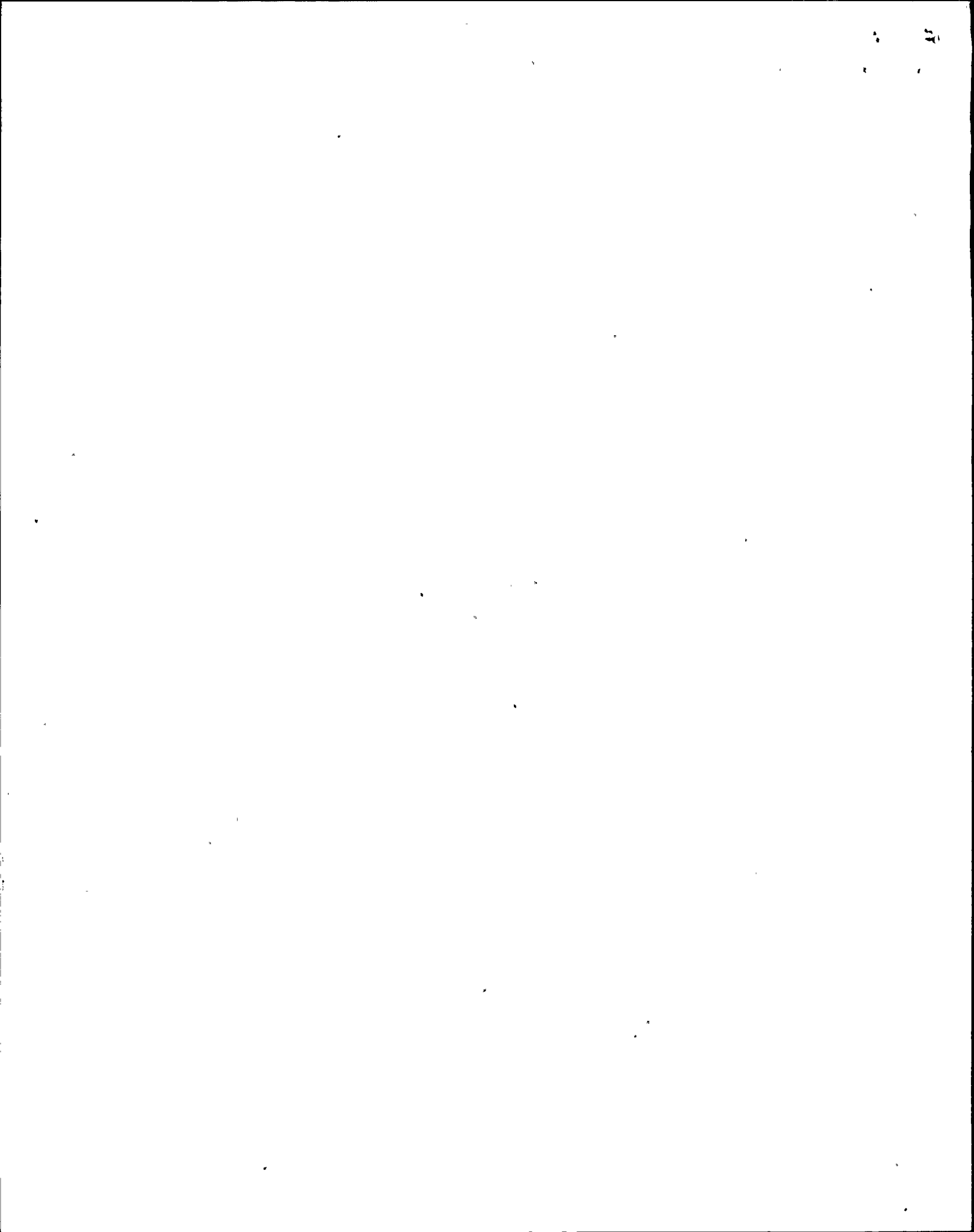


AFFIDAVIT OF JOHN R. SEARS  
AND SUPPORTING DOCUMENTS

DUPE OF

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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

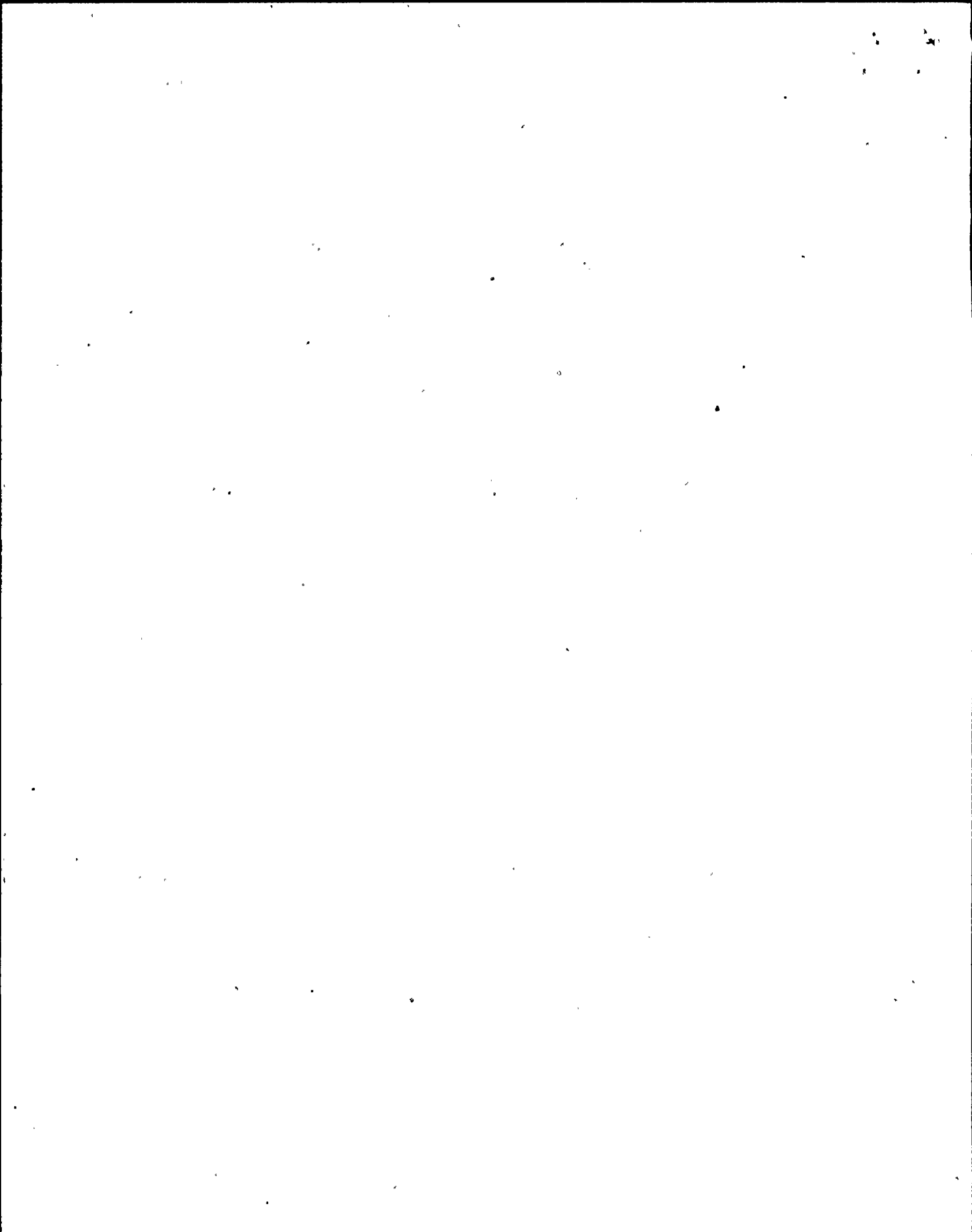
In the Matter of )  
PACIFIC GAS AND ELECTRIC CO. ) Docket Nos. 50-275 - 0L  
(Diablo Canyon Nuclear Power ) 50-323 - 0L  
Plant, Unit Nos. 1 and 2 )

AFFIDAVIT OF JOHN R. SEARS ON  
CONTENTIONS 4 AND 5 AND SUBJECT 3

I, John R. Sears, being duly sworn, state as follows:

1. I am employed by the U.S. Nuclear Regulatory Commission as a Senior Reactor Safety Engineer, Emergency Preparedness Licensing Branch, Division of Emergency Preparedness, Office of Inspection and Enforcement, U.S. Nuclear Regulatory Commission.
2. I am responsible for review and evaluation of the Emergency Plan for the Diablo Canyon reactors.
3. Contentions 4 and 5 and Subject 3.

Contention 4. Numerous studies arising out of the accident of TMI recognized the necessity of upgrading emergency response planning. Based upon these studies, the Commission has promulgated revised emergency planning regulations effective November 3, 1980. The Applicant has failed to demonstrate that the combined Applicant, State and local emergency response plans for Diablo Canyon comply with those revised regulations



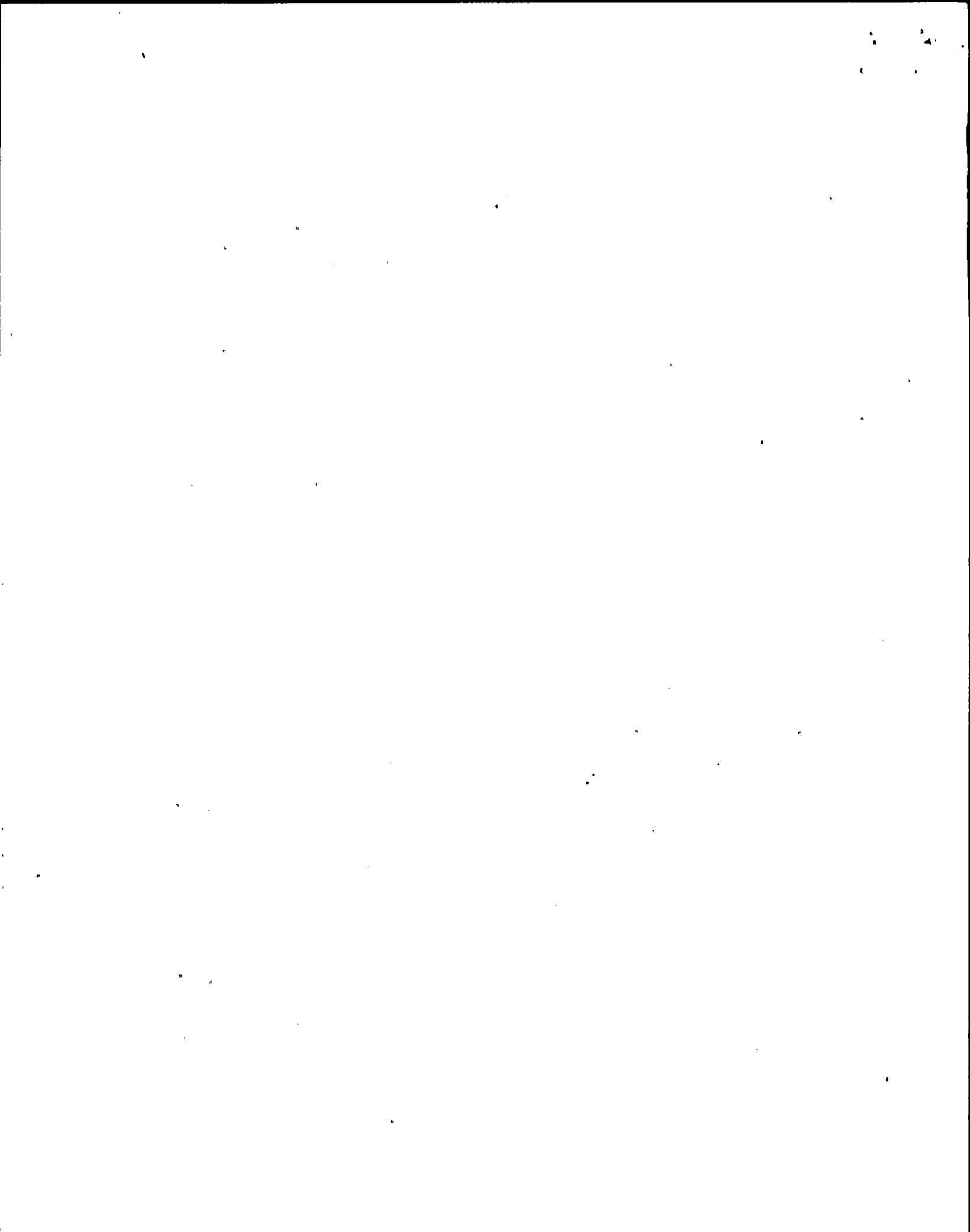
("Final Regulations on Emergency Planning," 45 Fed. Reg. 55402 (August 19, 1980)).

Contention 5. The Applicant has failed to demonstrate that the combined Applicant, State and local emergency response plans for Diablo Canyon comply with the requirements of Sections III.A.1.1 and III.A.1.2 of NUREG-0694.

Subject 3. Whether the emergency plans of PG&E, the State, and the local jurisdiction are satisfactory for issuance of the requested licenses.

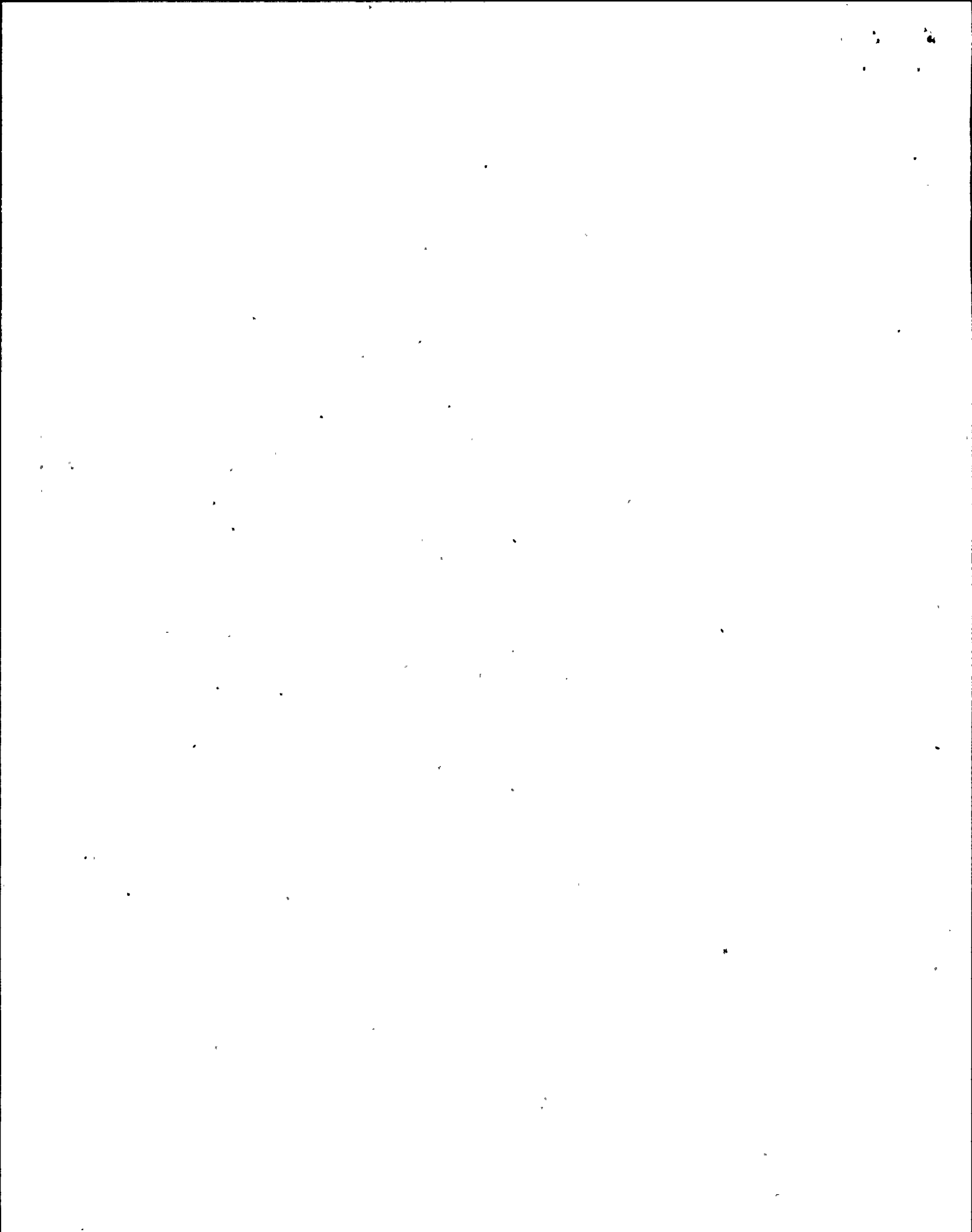
A. Whether further steps, including those set forth in the NRC's Final Rule on Emergency Planning, 45 Fed. Reg. 55402 (August 19, 1980), must be accomplished before the licenses may be issued.

1. The Pacific Gas and Electric Company (PG&E) filed with the Nuclear Regulatory Commission (NRC) a revision to the Diablo Canyon Power Plant Units 1 and 2 Emergency Plan, dated February 1980.
2. The Commission's Staff conducted a review of the Emergency Plan. The Plan was reviewed against the specific criteria of the sixteen Planning Standards in Part II of the "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," NUREG-0654, Rev. 1, November 1980. The same sixteen standards are listed as requirements of 10 C.F.R. § 50.47, Final Regulations on Emergency Planning, August 18, 1980.
3. In addition, the Staff has requested all California nuclear plant licensees and applicants to provide analyses on the effects of earthquake on their emergency plans, specifically in terms of the utilities' capabilities to insure availability of personnel and equipment to the sites. (Letter, R. Tedesco to M. Furbush, dated December 16, 1980.)
4. The NRC Staff has prepared an Emergency Preparedness Evaluation Report which lists each of the sixteen standards listed in 10 C.F.R. § 50.47 in order, followed by a summary of applicable portions of the Emergency Plan as they apply to the Standard. The final section of the report provides the NRC Staff's results and conclusions.
5. The report is scheduled for publication no later than April 15, 1981. (When a copy of the report is available, it will be sent to the Atomic Safety and Licensing Board.)
6. I have reviewed the licensee's plan and the NRC Evaluation Report and I concur in the report's conclusions.
7. At a later date, a supplement will be issued setting forth the findings and determinations of the Federal Emergency Management




Agency (FEMA) as to whether State and local emergency response plans are adequate and capable of being implemented for full power operation.

8. Based on my review of the Applicant's Emergency Plan against the criteria in NUREG-0654, Rev. 1, November 1980, I conclude that the Diablo Canyon emergency plan, when revised in accordance with the commitments made, provides an adequate planning basis for an acceptable state of emergency preparedness and will meet the requirements of 10 C.F.R. Part 50 and Appendix E thereto.
9. Commitments had been made in upgrading the meteorological program, in an alert and notification system and in a public information program.
10. PG&E submitted an upgraded meteorological program in documents submitted January 13, 1981, February 25, 1981 and March 20, 1981. The methods, systems and equipment meet the milestones 1, 2, and 3 of NUREG-0737, III.A.2 and NUREG-0654, Appendix 2, Revision 1 criteria.
11. I have been informed by PG&E that installation of the alert and notification system of sirens is expected to commence in May 1981, following resolution of installation permits.
12. I have been informed by PG&E that a public information document is in final draft form. It is planned to be hand-delivered to residences within 10 miles of the site by June 1981, and a condensed version will be inserted into the utility's mailing of bills. Final arrangements for a page of emergency instructions in the local phone book are being made for a new edition of the phone book which will be distributed in October 1981.
13. I have been informed by PG&E that a contractor, Stone and Webster, has been employed to study the impact of earthquakes on the emergency plans of the utility and of offsite authorities, and that Stone and Webster's report is due mid-May 1981. Emergency plans will be revised to include their recommendations.
14. PG&E's progress in upgrading emergency support facilities (III.A.1.2) has been reported upon in Supplement 10, August 1980 and in Supplement 12, March 1981 to the Safety Evaluation Report. I have been informed by PG&E that the permanent Technical Support Center is 99% complete, and that the temporary Emergency Operations Facility is operational. I conclude that the applicant is satisfactorily responding to the criteria of NUREG-0737, III.A.1.2.
15. I have reviewed the San Luis Obispo County Nuclear Power Plant Emergency Evacuation Plan, approved by the County Board of Supervisors December 22, 1976. The plan was written for a 6 mile radius around the plant and also covers the Los Osos-Baywood area,






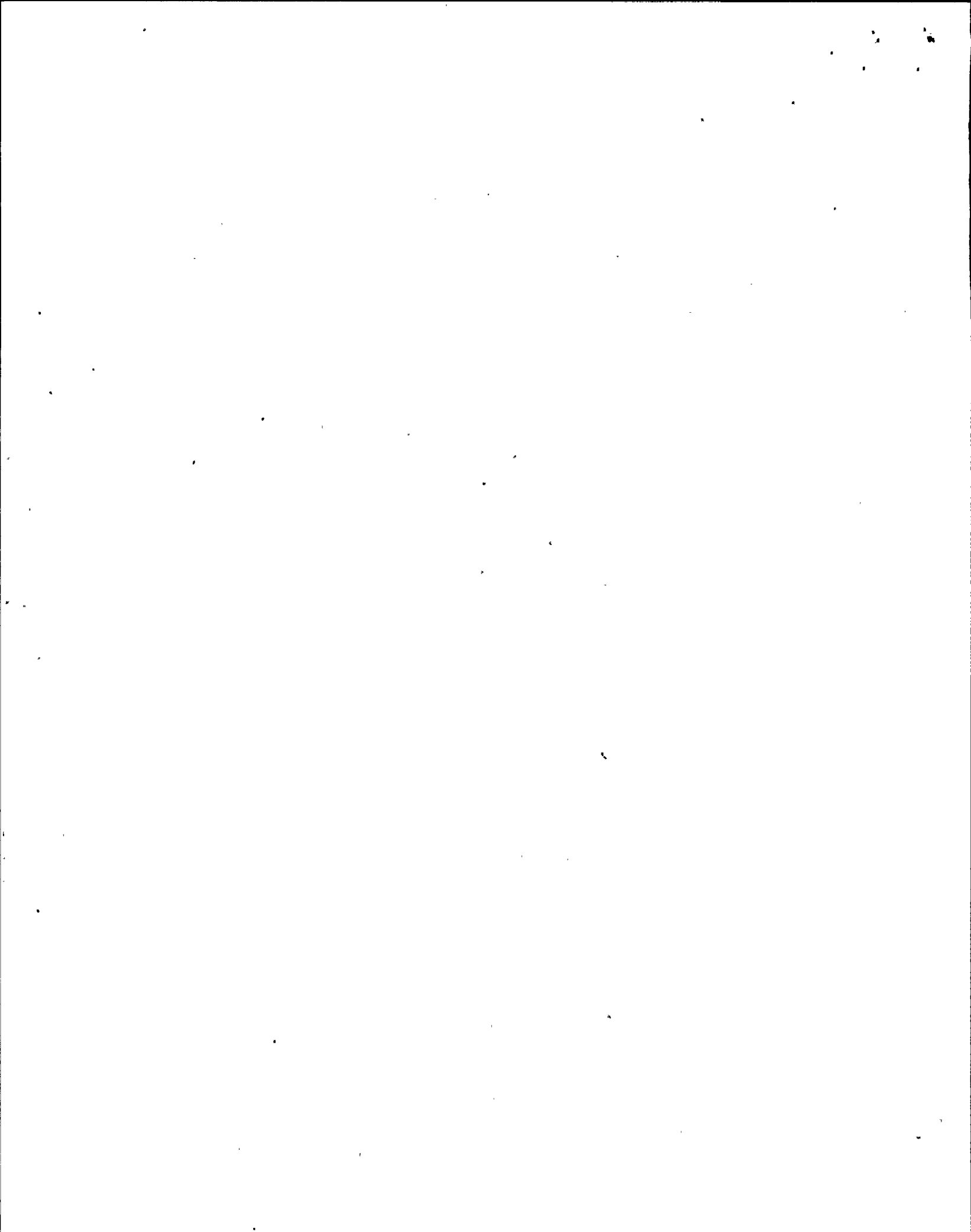
- approximately 7 miles north of the plant, the Avila Beach area approximately 7 miles east-southeast of the plant, and the Edna Valley area, approximately 13 miles east of the plant.
16. Joint Intervenors and Governor Brown have admitted that any accident occurring during low power testing would release a fraction of the existing fission product inventory at the Diablo Canyon Nuclear Facility (DCNF).
  17. Governor Brown has agreed that the licensee's present emergency plan requires prompt notification of the county governments surrounding the DCNF of any releases from that facility.
  18. In a March 12, 1981 letter to the NRC, PG&E has stated that the present state and local emergency plans for the Diablo Canyon plant are still in full force and effect. A copy of the letter is in Attachment 2.
  19. FEMA has made a finding that the present emergency plans at Diablo Canyon adequately protect the public health and safety for the purposes of low power testing. (Memorandum for Harold R. Denton and John W. McConnell from FEMA/NRC Steering Committee, see Attachment 3 and FEMA/NRC Interim Agreement on Criteria for Low Power Testing at New Commercial Nuclear Facilities--Supplement Nos. 10 and 12, see Attachments 4 and 5).
  20. Based upon the above factors, I conclude that, if, during low power operation, an accident were to occur, the combined applicant, State and local emergency response plans will insure that an adequate state of emergency preparedness is in place to minimize the risk of hazard to the health and safety of the public during fuel loading and low power testing.

  
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John R. Sears

Subscribed and sworn to before me  
this 1<sup>st</sup> day of *April*, 1981

  
\_\_\_\_\_  
Notary Public

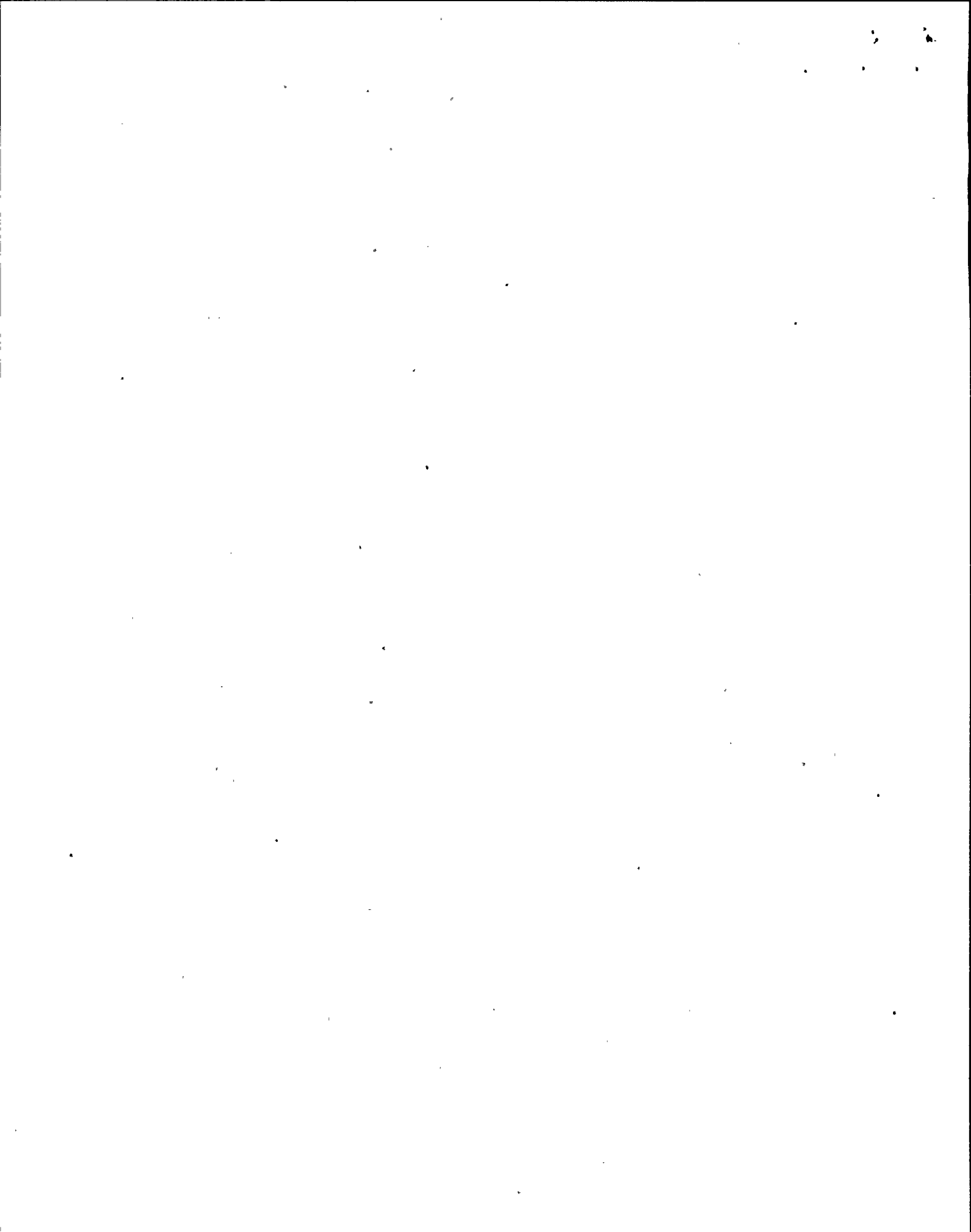
My Commission expires: *July 1, 1982*



JOHN R. SEARSRESUME

Prior to 1952, I was employed in field jobs in various aspects of mechanical engineering. In 1952, I joined Brookhaven National Laboratory as a Reactor Shift Supervisor on the Brookhaven Graphite Reactor. While at Brookhaven, I completed a series of courses given by the Nuclear Engineering Department in nuclear engineering. These courses were patterned on the ORSORT programs. In 1956, I was appointed Project Engineer on the Brookhaven Medical Research Reactor. I was a member of the design group, participated in critical design experiments, wrote specifications, coauthored the hazards report, was responsible for field inspection and contractor liaison, trained operators and loaded and started up the reactor. About three months after start-up, in 1959, following the successful completion of proof tests and demonstration of the reactor in its design operating mode for boron capture therapy of brain cancer, I accepted a position as reactor inspector with the Division of Inspection, U. S. Atomic Energy Commission. In 1960, I transferred, as a reactor inspector, to the newly-formed Division of Compliance. I was responsible for the inspection, for safety and compliance with license requirements, of the licensed reactors and the fuel fabrication and fuel processing plants, which use more than critical amounts of special nuclear material, in the Eastern United States.

In September 1968, I transferred to the Operational Safety Branch, Directorate of Licensing. My responsibility included development of appropriate guides for evaluation of operational aspect of license applications and staff assistance in review of power reactor applicants submittals in the areas of Organization and Management, Personnel Qualifications, Training Programs, Procedures and Administrative Control, Review and Audit, Start-up Testing Programs Industrial Security and Emergency Planning.



The Branch was reorganized as the Industrial Security and Emergency Planning Branch in April 1974 to place increased emphasis and attention upon areas of physical security and emergency planning.

In 1976 I transferred to the Division of Operating Reactors as the sole reviewer responsible for review of emergency planning for all the operating reactors in the United States.

New York City College, 1950 - Mechanical Engineering

Argonne International School of Reactor Technology, 1961 - Reactor Control Course  
GE BWR System Design Course, 1972

Popo-U.S. Army, 1974 - Course in Industrial Defense and Disaster Planning

Instructor at DCPA , 1976, 1977 - Course in Emergency Planning

Director, 1962 - Reactor Program, Atoms for Peace Exhibit, Bangkok, Thailand

Director, 1966 - Atoms for Peace Exhibit, Utrecht, Holland

