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Discussion of the Role of State of California in Environmental
Radiological Health Pertaining to the Bodega Bay Atomic
Park based upon a meeting held on April 17, 1963

This report was prepared at the request of the Chief, Nuclear Facilities
Environmental Analysis Section, Technical Operations Branch, Division of
Radiological Health, USPHS and is submitted to the Section for review
and is to be considered as only a portion of the over-all review being
conducted by the Section.

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Date Submitted: June 20, 1963

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DISCUSSION OF THE ROLE OF STATE OF CALIFORNIA IN ENVIRONMENTAL
RADIOLOGICAL HEALTH PERTAINING TO THE BODEGA BAY ATOMIC PARK

On April 17, 1963, the California Coordinator of Atomic Energy Development and Radiation Protection, representatives of the California Department of Public Health and representatives of the U. S. Public Health Service met at the Department of Public Health and discussed the role of the State relating to the Bodega Bay Reactor.

Attendees

State of California: Alexander Grendon, Coordinator of Atomic Energy
Development & Radiation Protection

Frank Stead, Chief, Division of Environmental Health,
Department of Public Health

Amasa Cornish, Associate Health Physicist
Bureau of Radiological Health, Division of
Environmental Health, Department of Public
Health

U. S. Public Health Service:

James G. Terrill, Jr., Deputy Chief of Division
of Radiological Health

Ernest D. Harward, Radiological Health Consultant,
Region IX, Division of Radiological Health

Jay S. Silhanek, Sanitary Engineer, Division of
Radiological Health

Michael E. Meccas, Sanitary Engineer, Division
of Radiological Health

The principal California laws and regulations pertaining to radiation protection are found in certain excerpts from the California Health and Safety Code, California Penal Code, and California Administrative Code which were assembled in an information pamphlet (Appendix A). The legal responsibilities of the State Department of Public Health and of the Coordinator of Atomic Energy

Development & Radiation Protection regarding environmental radiological health are found in this Appendix. Other State agencies, such as the Department of Agriculture, Department of Fish and Game, Department of Water Resources, and Water Pollution Control Boards, have their several legal responsibilities related to this matter.

Activities of the Coordinator of Atomic Energy Development and Radiation

Protection: The State policy of encouraging atomic energy development while assuring radiation protection to the public requires the Coordinator to recommend a balance between "the benefits and hazards of such development and uses", to keep the interested State departments and agencies informed of private and public activities affecting the peaceful uses of atomic energy, and to disseminate to the public factual data and information and interpretations thereof concerning atomic energy development.

The great public interest in the Bodega project has necessitated frequent participation by the Coordinator in public discussions of the matter. In a letter to the California Public Utilities Commission, he outlined the role of the State of California in the radiological aspects of nuclear power plants in California. This is shown on the third page of Appendix B. In the case of the Bodega plant, the Coordinator has consulted with representatives of the Division of Mines and Geology in the Department of Conservation and representatives of the Division of Architecture in the Department of Public Works, regarding the adequacy of the site in terms of seismology. He has also met with many other public agencies that are involved in consideration of the project.

The Coordinator circulates the Hazards Summary Reports to interested State agencies for comment and includes their comments with his own review in

discussion of safety considerations with the reactor license applicant and the AEC. He routinely intervenes on behalf of the State in all hearings on reactor construction permits and licenses in California or likely to affect California (e.g., the N.S. Savannah).

Environmental Surveillance:

The State of California has an extensive environmental radiation program. Its results are reported periodically, as illustrated in the January 1963 issue of their quarterly Radiological Health News (Appendix C), which also describes the type of program established in the vicinity of nuclear reactors. The Bureau of Radiological Health, Division of Environmental Sanitation, Department of Public Health, reviewed the Pacific Gas and Electric Company's preoperational radiological survey for the Humboldt Bay plant and approved the survey program. Both their approval and the PG&E program are given as Appendix D. In the case of Bodega, the Bureau of Radiological Health, has engaged in preliminary discussions with PG&E regarding the establishment of an environmental monitoring program.

Due to the possibility of high I^{131} levels in milk from fall-out, an emergency plan of action has been established so that upon implementation, human exposure from contaminated milk would tend to be reduced. The Department of Agriculture is the controlling agency for milk and unprocessed food products in the State of California. The Bureau of Radiological Health would recognize from its routine surveillance if the iodine level warranted action and would notify the Department of Agriculture to initiate their plan of action. This plan and agreement between the milk producers and processors and the Department of Agriculture is shown in Appendix E.

Four copies of the routine environmental monitoring reports of the Humboldt Reactor are sent to the Atomic Energy Coordinator. He retains one and forwards one to the Department of Fish and Game and two to the Department of Public Health, from where one is forwarded to the local health agency.

In California, the Regional Water Pollution Control Boards have the responsibility for controlling pollution of the waters. Through an agreement with the Atomic Energy Coordinator (Appendix F), the Department of Public Health serves as consultant to all of the Regional Water Pollution Control Boards in regard to the radiological aspects of water pollution.

The general recommendations of the Department of Public Health regarding the Humboldt Bay plant were submitted to the Coordinator for review in November 1960 (Appendix G) and were incorporated in the waste discharge requirements established by the Regional Board. In November 1961, PG&E prepared their detailed suggested sampling program for Humboldt Bay and this was later presented to the Regional Board. The Regional Board received comments on this suggested program from the Bureau of Radiological Health, Department of Public Health. The Department of Fish and Game submitted comments to the Department of Public Health. The comments of both Departments, the suggested program by PG&E, and the Regional Water Pollution Control Board's approval of the program are enclosed as Appendix I.

In regard to the Bodega Bay plant, the Department of Public Health has taken preliminary steps toward the development of a similar program.

Other State Activities:

The Pacific Gas & Electric Co., after discussions with State and local authorities, prepared the Humboldt Bay Power Plant Site Emergency Plan

(Appendix I). The plan includes provision for immediate notification to the State Department of Public Health in the event of an accident that might create a hazard to the public. State and local agencies have developed a plan (Appendix J) which ties in with the company's plan. Such a plan will be formulated for the Bodega Bay Reactor at the plant's operational stage.

The Public Utilities Commission of California has issued a conditional provisional certificate of public convenience and necessity to PG&E for the Bodega Bay plant. The interim opinion issued by the Commission in November 1962 is contained in Appendix K.

Michael E. Macsas

APPENDICES

- Appendix A - Laws and Regulations Relating to Atomic Energy Development and Radiation Protection, Excerpts from California Health and Safety Code, California Penal Code, California Administrative Code - 1962
- Appendix B - Copy of letter from the California Atomic Energy Coordinator to the California Public Utilities Commission dated December 11, 1962, (9 pages)
- Appendix C - State of California Radiological Health News, Vol. 2, No. 1, January 1963
- Appendix D - Copy of letter from the Chief, Bureau of Radiological Health, Division of Environmental Sanitation, Department of Public Health, to the Pacific Gas & Electric Company dated November 15, 1962, together with copy of the Pacific Gas & Electric Company's Pre-Operational Radiological Survey for the Humboldt Bay Unit #3 dated September 20, 1960
- Appendix E - Copy of plan and agreement between the Producers and Processors of Market Milk and the State of California, Department of Agriculture dated Feb. 4, 1963
- Appendix F - Copy of Memorandum of Understanding between the California Regional Water Pollution Control Boards and the Coordinator, Office of Atomic Energy Development and Radiation Protection together with copy of memorandum re the above from the Atomic Energy Coordinator dated January 5, 1961 and copy of the signed Memorandum of Understanding dated February 24, 1961
- Appendix G - Copy of memorandum from the Assistant Chief, Bureau of Radiological Health, Department of Public Health to the Atomic Energy Coordinator, dated November 28, 1960, together with

Recommendations to the North Coast Regional Water Pollution
Control Board for the PG&E Humboldt Bay Reactor

- Appendix H - Copy of letter from the North Coastal Regional Water Pollution Control Board to the Pacific Gas & Electric Company, dated March 13, 1962; copy of letter from the Acting Chief, Bureau of Radiological Health, Department of Public Health, to the North Coastal Regional Water Pollution Control Board, dated February 7, 1962; copy of memorandum from the Department of Fish and Game, to the Acting Chief, Radiological Health Program, Department of Public Health, dated January 15, 1962; copy of consultant's Suggested Sampling Program for Humboldt Bay, 1961-62 Radiological Background Survey, dated November 29, 1961
- Appendix I - The Pacific Gas and Electric Company's Humboldt Bay Power Plant Site Emergency Plan dated May 1, 1962
- Appendix J - Emergency Plan for Nuclear Reactor Humboldt Bay, Coordinated and prepared by California Highway Patrol
- Appendix K - Interim Opinion issued by the Public Utilities Commission of the State of California regarding the Bodega Bay Atomic Park, dated November 9, 1962