

**ADVISORY COMMITTEE ON REACTOR SAFEGUARDS**  
**UNITED STATES ATOMIC ENERGY COMMISSION**  
**WASHINGTON 25, D. C.**

April 4, 1962

Honorable Glenn T. Seaborg  
Chairman  
U. S. Atomic Energy Commission  
Washington, D. C.

SUBJECT: REPORT ON LARGE POWER REACTOR SITES PROPOSED BY THE  
CITY OF LOS ANGELES

Dear Dr. Seaborg:

At its fortieth meeting on March 29-31, 1962, the Advisory Committee on Reactor Safeguards reviewed the suitability of two new sites proposed by the City of Los Angeles Department of Water and Power for a large power reactor complex. The Committee also heard presentations of two reactor concepts by representatives of the Westinghouse Electric Corporation and the General Electric Company. The sites were proposed for ultimate installation of two or more reactors whose individual power levels would be 1600 megawatts thermal. On March 14 and 15 in California, a subcommittee of the ACRS reviewed the sites and reactor concepts proposed. The Committee had the benefit of staff analysis and advice from earthquake and meteorological consultants from the City of Los Angeles Department of Water and Power.

On previous occasions, the ACRS has reviewed several proposed power reactor locations in Southern California including sites proposed by the City of Los Angeles. (See letters referenced below.) Our most recent letter, dated September 11, 1961, approved three inland areas within Los Angeles County for large power reactors with suitable containment.

In its most recent proposal, the City of Los Angeles presented two coastal sites which its representative stated present appreciable economic advantages over the presently accepted sites. These two sites are a southern site now owned by the City, and a western site which could be obtained.

April 4, 1962

In regard to the two new sites proposed for reactors of the general concepts presented, the Committee has the following comments: Neither of the locations can meet the site criteria guidelines proposed in 10CFR-100 for the power level requested. Both sites are within areas of high and increasing population. In this connection, it should be noted that power reactors of the size proposed have not yet been built and proved. Such reactors would contain larger fission product inventories than any licensed power reactor now operating or under construction.

If the sites proposed are to be considered acceptable, then reliance must be placed on proved engineering safeguards as a means of preventing exposure of significant numbers of people to possible radiation injury. The Committee believes that it is possible with present engineering technology to overcome the potential danger from serious consequences of a major earthquake.

The Committee has the following comment concerning the two reactor concepts proposed, and their respective containments: neither proposal provides proved assurance of satisfactory containment of an accident, such as a serious nuclear excursion, which releases radioactivity simultaneously with the release of pressure. The possibility of such an accident cannot be excluded on the basis of present knowledge.

Of the two coastal sites, the western site is in an area of lower population density and is further removed from large centers of population. Neither site is suitable for either of the proposed reactor facilities. The proposed plant designs might more readily be modified to a form suitable for the western site.

Sincerely yours,

/s/

F. A. Gifford, Jr.  
Chairman

References attached

References:

1. Letter dated Oct. 26, 1961, from Los Angeles Department of Water & Power Proposing Two Sites Along Pacific Coast in Vicinity of Los Angeles for Nuclear Power Station.
2. Preliminary Report - Proposed Nuclear Power Plant Ocean Site, dated October 1961.
3. Report - Safety & Site Considerations of 300 Mwe Closed Cycle Water Reactor Power Plant for City of Los Angeles - Revised Nov. 8, 1961.
4. Preliminary Report - Safety Features of the Reactor and Its Containment for a Single Cycle, Forced Circulation Boiling Water Reactor, dated Jan. 10, 1962.
5. Preliminary Report to Department of Water & Power of the City of Los Angeles on "Earthquake Hazards at Site of Proposed Haynes Beach Nuclear Power Generating Plant," dated Feb. 19, 1962.
6. Report - "Foundation Investigation - Units No. 5 and No. 6 Haynes Steam Plant," dated Feb. 13, 1962.
7. Letter from ACRS to AEC, dated March 6, 1960, Subject: Nuclear Power Plants in California.
8. Letter from ACRS to AEC, dated Sept. 11, 1961, Subject: Report on Sites for Reactors for City of Los Angeles Department of Water and Power.
9. Letter from ACRS to AEC, dated June 8, 1960, Subject: Improved Cycle Boiling Water Reactor (ICBWR) - Department of Water and Power of the City of Los Angeles.
10. Letter from ACRS to AEC, dated June 27, 1960, Subject: Improved Cycle Boiling Water Reactor (ICBWR) Department of Water and Power of the City of Los Angeles.
11. Letter from ACRS to AEC, dated July 25, 1960, Subject: Improved Cycle Boiling Water Reactor.
12. Letter from ACRS to AEC, dated Jan. 14, 1961, Subject: Improved Cycle Boiling Water Reactor.