

ADVISORY COMMITTEE ON REACTOR SAFEGUARDS
UNITED STATES ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

March 8, 1972

Honorable James R. Schlesinger
Chairman
U. S. Atomic Energy Commission
Washington, D. C. 20545

Subject: REPORT ON SHEARON HARRIS NUCLEAR POWER PLANT

Dear Dr. Schlesinger:

At its 143rd meeting, March 2-4, 1972, the Advisory Committee on Reactor Safeguards considered the proposal of the Carolina Power and Light Company for a single review of its application to construct four reactors at the Shearon Harris Nuclear Power Plant site. The applicant's request was considered at a Subcommittee meeting on February 23, 1972, in Washington, D. C. During these meetings, the Committee had the benefit of discussions with the applicant and his consultants, and with the AEC Regulatory Staff. The Committee also had the benefit of the documents listed below.

The Carolina Power and Light Company proposes to build the Shearon Harris Units 1, 2, 3, and 4 at a location about 20 miles from Raleigh, North Carolina. Each unit will have a core thermal power output of 2775 MWt. The four pressurized water nuclear units will be similar to the Virgil C. Summer reactor, now under review.

The applicant stated that the four reactors and the associated auxiliary structures and components will be arranged in a compact plan which requires almost simultaneous construction of foundations and sequential, but closely coupled, construction schedules for the four units. It is planned that the four units will go into operation at one-year intervals during the period 1977-1980.

For multiple, sequentially constructed units, such as proposed for the Shearon Harris plant, a considerably longer than normal period exists between issuance of the construction permit and the beginning of operation of the final unit. The Committee reiterates its belief that, at the time of completion of the construction permit review, there should be a minimum number of problems, the proper resolution of which could be affected significantly because construction and

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major component procurement had proceeded too far. In response to the Committee's concern, the applicant has made the following statement with regard to inclusion of new developments affecting plant safety:

"Carolina Power and Light Company recognizes that during the period of the pre and post construction permit there may be developments which further enhance the safety of nuclear power plants. We wish to emphasize that CP&L will incorporate AEC required safety improvements in these units, although we may suffer a schedule penalty in so doing. We will also actively evaluate the feasibility of incorporating other significant improvements which may not be AEC requirements. Furthermore, we wish to strongly emphasize that our 1979 and 1980 units will represent the same quality of safety incorporated in other units which become operational during that time period."

Subject to the above, the Advisory Committee on Reactor Safeguards has no objection to conducting a single review of the application to construct the four units of the Shearon Harris Nuclear Power Plant.

Sincerely yours,



C. P. Siess
Chairman

References:

1. Carolina Power and Light Company letter dated September 7, 1971; License Application dated June 3, 1971, Preliminary Safety Analysis Report, Volumes 1 through 5
2. Carolina Power and Light Company letter dated January 12, 1972; re: Appropriateness of single review proceeding for issuance of CP for four units
3. Carolina Power and Light Company letter dated February 9, 1972; Amendment No. 1 to PSAR dated February 9, 1972
4. Carolina Power and Light Company letter dated February 15, 1972; Providing additional information re: appropriateness of single review proceeding for issuance of CP for four units