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Honorable Nunzio J. Palladino
Chairman
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Dr. Palladino:

SUBJECT: ACRS REPORT ON SOUTH TEXAS PROJECT, UNITS 1 AND 2

During its 314th meeting, June 5-7, 1986, the Advisory Committee on Reactor Safeguards reviewed the application of Houston Lighting and Power Company (HL&P), the Applicant, acting on behalf of itself and as agent for the City Public Service Board of San Antonio, Central Power and Light Company, and City of Austin for a license to operate the South Texas Project, Units 1 and 2. The ACRS commented on the construction permit application for the South Texas Project, Units 1 and 2 in a report dated September 19, 1975. The ACRS Subcommittee on the South Texas Project toured the facility on May 29, 1986 and met in Bay City, Texas on May 29 and 30, 1986 to discuss the application. During our review, we had the benefit of discussions with representatives and consultants of the Applicant, Westinghouse Electric Corporation, Bechtel Energy Corporation, and the NRC Staff. We also had the benefit of the documents referenced.

The site is located in south-central Matagorda County west of the Colorado River, 8 miles north-northwest of the town of Matagorda and about 89 miles southwest of Houston. The plant is located about 12 miles south-southwest of Bay City. Westinghouse Electric Corporation is the nuclear steam supply system and turbine-generator supplier for South Texas Project, Units 1 and 2. This Project makes use of identical four-loop Westinghouse pressurized water reactors and turbine generators. Unit 2 is similar to Unit 1 and is 600 feet away. This is the only U.S. plant using the RESAR-41 design. Although this design differs in some respects from other Westinghouse four-loop units in this country, it is quite similar to the Paluel plant in France, which is now in operation. Unit 1 is approximately 90 percent complete, and it is scheduled to load fuel in June 1987. Unit 2 is expected to follow about eighteen months later. The Applicant appears to have assembled a capable and experienced staff.

During our meeting, the NRC Staff identified a number of issues that must be resolved prior to the granting of an operating license. The residual heat removal pump is located inside containment. While this offers some advantages, it will be necessary that the pump be qualified for operation in an accident environment before this system can be judged acceptable. We wish to be kept informed.

We heard a report from a representative of the NRC's Region IV Office that construction quality and quality assurance effectiveness at the South Texas Project were satisfactory and that the attention being given by management to all aspects of the plant's readiness was commendable.

However, the results of a recent Construction Appraisal Team inspection which are presently being considered may introduce items requiring attention.

In its report of September 19, 1975 on the construction permit application, the ACRS asked to be kept informed on the resolution of several items, including the location of the storage tanks for the diesel fuel. The diesel fuel storage tanks are located in separate rooms above the diesel generators. With this arrangement, a major concern is that a break in the piping between the storage tanks and the diesel generators will result in an uncontrolled discharge of fuel oil which may cause a fire. The ACRS recommends that the Applicant perform tests and take appropriate corrective measures to prevent failures in fuel oil piping and tubing by induced vibration resulting from extended operation of the diesel generators.

We believe that, subject to the resolution of open items identified by the NRC Staff and the items noted above, there is reasonable assurance that the South Texas Project, Units 1 and 2 can be operated at power levels up to 3800 Mwt without undue risk to the health and safety of the public.

Sincerely,

David A. Ward
Chairman

References:

1. Final Safety Analysis Report for South Texas Project, Units 1 and 2, Volumes 1-16, including Amendments 1-53
2. U.S. Nuclear Regulatory Commission, "Safety Evaluation Report Related to the Operation of South Texas Project, Units 1 and 2," USNRC Report NUREG-0781 dated April 1986

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