



UNITED STATES
NUCLEAR REGULATORY COMMISSION
ADVISORY COMMITTEE ON REACTOR SAFEGUARDS
WASHINGTON, D. C. 20555

November 17, 1981

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

SUBJECT: REPORT ON COMANCHE PEAK STEAM ELECTRIC STATION UNITS 1 AND 2

Dear Dr. Palladino:

During its 259th meeting, November 12-14, 1981, the Advisory Committee on Reactor Safeguards reviewed the application of the Texas Utilities Generating Company (TUGCO), Dallas Power and Light Company, Texas Electric Service Company, Texas Power and Light Company, Texas Municipal Power Agency, Brazos Electric Power Cooperative, Inc. and Tex-La Electric Cooperative for a license to operate the Comanche Peak Steam Electric Station Units 1 and 2. The Units are to be operated by the Texas Utilities Generating Company. A Subcommittee meeting was held in the Dallas/Fort Worth area on June 29, 1981 to consider this project. A tour of the facility was made by Subcommittee members on June 29, 1981. An additional Subcommittee meeting was held in Washington, D.C. on November 11, 1981. During its review, the Committee had the benefit of discussions with representatives of the Applicant and the NRC Staff. The Committee also had the benefit of the documents listed. The Committee commented on the construction permit application for this station in its report dated October 18, 1974 to AEC Chairman Dixie Lee Ray.

The Comanche Peak Station is located in Somerville County in North Central Texas about 40 miles southwest of Fort Worth, Texas, the nearest city having a population in excess of 25,000 persons.

Each Comanche Peak Unit is equipped with a Westinghouse pressurized water reactor having a rated power level of 3425 MWt. Each unit is housed in a steel-lined, reinforced concrete, dry containment building with a design pressure of 50 psig.

The Reactor Protection System will use N-16 gamma radiation detectors to provide a signal for reactor trip. Because this system has not been proven in commercial applications, we recommend that the NRC Staff closely follow its implementation and operation. The Committee wishes to be kept informed.

This is the first commercial nuclear power plant to be operated by TUGCO and the first in the state of Texas. The Committee's review included consideration of the management organization and capability and the operator training

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program. The training program is well planned and comprehensive, and includes simulator training at other facilities. We were favorably impressed with the training program, general competence, and responsive attitude of the utility's operating organization. Nevertheless, there is a significant lack of hands-on experience with large commercial nuclear power plants that will only be corrected by the operation of the Comanche Peak Plant. The NRC Staff is requiring the utility to strengthen its own organization with on-shift personnel having experience with large commercial PWR operations until suitable experience has been developed by the operating staff. We endorse the NRC Staff requirement but recommend that attainment of 100% rated power should not be the only consideration in determining that operational proficiency has been achieved.

The Committee also recommends that the operating organization establish a list of technological matters which may have to be faced in future operation of the nuclear plant and identify sources of skilled personnel and expertise that ought to be available to address these matters when needed. The Committee wishes to be kept informed.

The Station Operations Review Committee, the Independent Safety Engineering Group, and the Operations Review Group should include personnel from outside the operating organization who are experienced in the operational management of large PWRs and related technology as well as other independent advisors with mature judgment about public safety matters.

TUGCO should expand its studies on systems interaction and probabilistic assessment so that it will have a better understanding of the Comanche Peak nuclear systems.

Other issues have been identified as Outstanding Issues, License Conditions, and Confirmatory Issues in the Staff's Safety Evaluation report supplement dated October 1981. The ACRS is satisfied with the progress on these topics and believes that they should be resolved in a manner satisfactory to the NRC Staff.

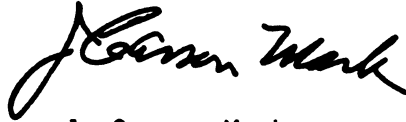
TUGCO is evaluating potential methods of providing instrumentation for detection of inadequate core cooling as discussed in the ACRS letter to the Executive Director for Operations dated June 9, 1981. The Committee believes that this equipment should not be installed until it is well established that the instruments will provide reliable information of significant value beyond that provided by the instrumentation which is already installed.

We believe that if due consideration is given to the recommendations above, and subject to satisfactory completion of construction, staffing and pre-operational testing, there is reasonable assurance that Comanche Peak Steam

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Electric Station Units 1 and 2 can be operated at power levels up to 3425 MWt without undue risk to the health and safety of the public.

Sincerely yours,,

A handwritten signature in black ink, appearing to read "J. Carson Mark". The signature is fluid and cursive, with the first name "J." and last name "Mark" being more distinct than the middle name "Carson".

J. Carson Mark
Chairman

References:

1. "Final Safety Analysis Report for the Comanche Peak Steam Electric Station Units 1 and 2," including Amendments 1 through 23.
2. U.S. Nuclear Regulatory Commission "Safety Evaluation Report related to the Operation of Comanche Peak Steam Electric Station, Units 1 and 2," USNRC Report NUREG-0797, dated July 1981 and Supplement No. 1 dated October 1981.
3. Letter from Citizens for Fair Utility Regulation To S. Duraiswamy, ACRS, regarding the licensing of Comanche Peak, dated July 18, 1981