UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

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Mr. John McConnell
Assistant Associate Director
for Population Preparedness
Federal Emergency Management Agency
Washington, D.C. 20472

Dear Mr. McConnell:

Thank you for your letter of February 11, 1980, concerning the recommendation of the NRC staff that low power testing be authorized for the Sequoyah nuclear power plant.

As we are both aware, our respective scaffs have recently jointly prepared a comprehensive set of criteria for the preparation and evaluation of radiological emergency response plans and preparedness in support of nuclear power plants, (NUREG-0654/FEMA-REP-1). The NRC staff intends that these criteria should be used in the evaluation of licensee, State and local government emergency plans prior to a nuclear power plant receiving a full power operating license. To this end, the NRC staff will use these criteria in evaluating the licensee's plan prior to issuance of a full power operating license. We understand that the State of Tennessee has developed a schedule for revising its current emergency plan and the plans of its local governments to meet the comprehensive set of criteria by June, 1980.

All NRC licensed nuclear power plants are required to carry out a series of tests prior to full power operation. Some of these tests need to be conducted at zero power and some at low power (i.e., approximately 5% of design power). These tests are required prior to allowing the plant to proceed to full power under the provisions of a full power operating license. During this period of low power testing the risk of an accident that could result in any significant offsite consequences is extremely low. Assuming such an accident does occur, the fact that maximum power would be limited to approximately 5%, and the fact that the plant's operating history would consist of only a short time at such power, the fission product inventory would be much less than 5% of that available during full power operation. Release from the reactor core of this fission product inventory conservatively would be estimated to result in offsite doses much less than 10 rem to the thyroid in a two-hour period at the site boundary (i.e., less than 5% of the reference siting dose set forth for full power operation in 10 CFR Part 100). Given these potential consequences, the NRC staff believes that the existing level of emergency planning and preparedness both on the part of the Sequoyah licensee and the Tennessee State and local governments will provide for an adequate onsite and offsite response should an accident occur during this low power testing period.

As a related matter there are other licensees which might apply for authorization of low power testing. We agree that our respective staffs should meet to discuss the need for specific criteria for low power testing. It is my suggestion that the need for such criteria be addressed by the NRC/FEMA steering committee.

In summary the NRC staff agrees that the criteria contained in NUREG-0654/FEMA-REP-1 are the criteria to be used in evaluating the licensee, State and local governments emergency plans prior to issuance of a full power operating license. In view of: (1) the limited offsite potential consequences, (2) the fact that significant emergency plans and preparedness currently exist in Tennessee, (3) the State of Tennessee's commitment to revise its current emergency plan to meet the NUREG-0654/FEMA-REP-1 criteria by June, 1980, and (4) the NRC staff's efforts to assure that evaluation of the licensee's emergency plan is consistent with these criteria, the NRC staff expects to recommend authorizing the Sequoyah facility to perform certain tests at thermal power levels of 5% or less.

Recognizing the unusual circumstances and timing of this Sequoyah licensing action, we would appreciate your comments on these matters and the approach as soon as possible.

Sincerely,

Harold R. Denton, Director
Office of Nuclear Reactor
Regulation