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REVIEW OF OCONEE UNITS 1, 2, & 3 (DOCKET NOS. 50-269, 50-270, AND 50-287)

We have made our preliminary review of the FSAR as submitted by Duke Power Company for their Oconee 1, 2, and 3 Station. In order to continue with our evaluation, we need additional information in the areas of: Crew Size, Emergency Plan, Industrial Security, Review & Audit Functions, and Initial Tests & Operation. Further questions will be dependent upon the response of the applicant.

Crew Size

The organizational chart indicates Duke Power proposes operation of Units 1 and 2 from a common control room with 4 men/shift. As Unit #3 goes into operation, with a separate control room, the crew will be augmented by an additional 4 men/shift giving 8 men/shift for 3 units located at one site. These staffing proposals contrast sharply with the recommended crew sizes of 8 and 13 men/shift respectively, as set forth in OSB Guide #11, Guide for Nuclear Power Plant Shift Staffing.

Since each unit in the complex will be phased into service at approximately yearly intervals, Unit #1 will operate singularly for this initial time period. Accordingly, our evaluation of crew size will be based on single, dual and triple unit operation.

In order to proceed with our evaluation additional information in the following areas is needed.

What will the shift size, composition, and license requirements be for Unit #1 operation? Provide the details of the transition

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to dual and triple unit operation. What procedural and administrative controls will be utilized to prevent interference with the operating units as a new unit is phased into service?

Will any of the operating crew be qualified in Health Physics? We note that only three such technicians are indicated for triple plant operation. Provide the justification for the adequacy of this group.

Organizational charts for single, dual, and triple unit operation should be prepared showing the disposition of their proposed operating crew. In particular any cross licensing requirements between units should be indicated. It should also be pointed out to Duke Power that a sufficient number of licensed senior operators should be present to direct the activities of each unit. Their present organization does not reflect such staffing. Figure 12-4 indicates that the Assistant Plant Superintendent will hold a Senior Operator's license; however, the position description and minimum qualifications indicate otherwise. This point needs clarification.

The proposed shift staffing for dual and triple unit operation is an area of substantial concern. Duke Power should provide the basis for their determination that such a crew size can adequately respond to plant operating requirements during routine and emergency conditions. We would suggest that an analysis be performed for a variety of expected plant conditions, using time and motion techniques, to demonstrate that manpower requirements are sufficient.

Emergency Plan

Information describing Duke Power Company's plans for dealing with emergencies is referenced and an outline submitted; however, it is insufficient for evaluation. Consequently, the applicant should submit their Emergency Plan including: the basis and objectives; the emergency organization including assignments of authority and responsibility; identification of emergency conditions considered; designation of protective measures to be taken when specific predetermined action levels are reached; technical bases for the plan; adequacy of emergency communication networks; notification responsibility and authority of offsite agencies and support groups, including medical arrangements; training requirements; and provision for review and updating. Information presented should be in sufficient depth and detail to permit an evaluation in terms of protection of the health and safety of the public.

Industrial Security

Information describing the extent of perimeter fences, security lighting, guards, control room access, visitor accountability, and other site surveillance methods should be presented. In addition, an analysis should be made to determine that critical plant features are suitably protected from acts of simple sabotage. Provisions to be taken to limit access of construction personnel and to prevent inadvertant operation of equipment during the construction of Units 2 and 3 should be stated.

Review and Audit

Section 12.5 in the Conduct of Operations and Section 15.6.1 (F) of the proposed Technical Specifications were reviewed. For this stage of the licensing process, our comments are directed to the Technical Specification portion only.

Station Review Committee: Provision should be made for recording and forwarding minutes and recommendations of the meetings to the Plant Superintendent and other higher members of management. A statement of the measures to be taken to prevent degradation of the qualifications of the group over the service life of the facility should be included.

General Office Review Committee: The composition and qualifications proposed for this committee are too vague. The applicant should designate the Chairman and members by either position or area of technical specialty. The collective expertise of the total committee should encompass as broad a selection of applicable technical areas as possible. A specified meeting frequency should be stated. For a formal committee such as this, a minimum of quarterly is considered adequate. A statement of the measures to be taken to prevent future degradation of the qualifications of the committee should also be included.

Initial Tests and Operation

Describe the organizational structure and relationship between the applicant and vendor for each phase of operation from preoperational through commercial power generation. Include assignment of responsibility and authority for conduct and approval of tests and procedures, evaluation of results, and resolution of system and equipment anomolies. Indicate by position and organization those personnel expected to possess operator licenses.

Provide the objectives for those tests performed prior to fuel loading. Include those design objectives which will be verified.

Supply a description of the pre-startup checks listed in Section 13.2.2. Include the initial conditions and a brief test outline.

For those tests in Table 13-2 which comprise the Postcriticality Test Program, provide the conditions under which the test will be conducted and the acceptance criteria.

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