



UNITED STATES  
ATOMIC ENERGY COMMISSION  
WASHINGTON, D.C. 20545

July 29, 1968

P. A. Morris, Director, DRL  
THRU: R. S. Boyd, Asst Dir, Reactor Projects, DRL

FOLLOW-UP MEETING WITH DUKE POWER COMPANY ON POST-CONSTRUCTION PERMIT  
ITEMS, DOCKETS 50-269/270/287

The following items were specified in our Construction Permit review of the Oconee Units 1, 2 and 3 as requiring further discussion or examination with Duke Power Company and are items which I feel should not be left until the Operating License review stage for resolution.

1. Underwater Weir Design - We stated that we would examine the final design of the weir and it will shortly be covered by water.
2. Detailed Design of ECCS - The ACRS recommended that the staff examine the design as soon as it is available.
3. Core Barrel Check Valves - The number and size of these valves was not available at the time of the CP review, and we should review the design basis and margin in capacity arrived at by the applicant.
4. Preoperational Environmental Monitoring Program - We should review the details of the proposed preoperational surveys before the Operating License review.
5. Thermal Shock - We should review with the applicant the current status of their thermal shock studies.

In addition to the above "continuing review" subjects I think we should bring to the applicant's attention the following new requirements (since the Duke review) being imposed at the CP stage which may affect the Oconee Unit at the operating license stage. It should be pointed out to the applicant that while complete backfitting may not be required on Unit 1, the second and third units should evidence a high degree of compliance with the following items.

1. Tornado design of the fuel pool should insure minimal fission product release.
2. Extended operation in the recirculation mode should be possible with the high pressure injection pumps after an accident.

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3. The ECCS including the service water system should have the capability to withstand a passive failure on a long-term basis.
4. Design basis earthquake and accident loads should be combined in the design of the primary system.

In discussing a followup meeting with Mr. W. S. Lee, of Duke Power, he requested that the meeting be held August 29, 1968, if possible, and that the following subjects also be considered for resolution at this time rather than waiting until the Operating License review. These subjects are:

1. Final calculation of blowdown forces on the core internals
2. Diversity of signals for the ECCS
3. Independence of the power supplies for each unit
4. Completion of steam generator Research and Development
5. Arrangement of the control rod drive scram bus.

Mr. Lee also stated that he would be prepared to give a status report on the following items, perhaps in a separate meeting with the DRL staff.

1. Local fuel melting studies
2. Quality assurance
3. Positive moderator coefficient
4. End-of-life transients on the fuel
5. Xenon stability including in-core instrumentation
6. Control rod drive testing
7. Flow distribution studies
8. Nonuniform axial burnout tests
9. The possibility of core bypass of accumulator injection flow.

The Duke application for operating licenses will be submitted about July 1969, with a tentative fuel loading date of December 1970. Duke feels that the early (18 months lead time) submittal is desirable to cover the possibility that they might beat their December 1970 target date.

*B. K. Grimes*  
B. K. Grimes  
Reactor Projects Branch No. 3, DRL