JUL 15 1970

Peter A. Morris, Director
Division of Reactor Licensing

DUKE POWER COMPANY, OCONEE NUCLEAR STATION, DOCKET NOS. 50-269, -270, AND -287; SAFETY EVALUATION

The enclosed safety evaluation was prepared by the Electrical Systems Branch, DRS, for inclusion in the DRL report to the ACRS concerning the Oconee Nuclear Station. The evaluation covers the protection systems and the auxiliary electrical power systems, but the review by DRS of several items within these systems is not complete.

The evaluation identifies two "unresolved" items: (1) the lack of a diverse reactor trip signal, which is required to ensure effective ECCS action, and (2) the use of automatic transfer functions in the auxiliary [illegible] power systems. The DRL position on the first item was forwarded to the applicant in your letter of February 13, 1970, and our report reflects that position. The second item was discussed in my memorandum, ESB-26, of May 15, 1970, and our report reflects the position recommended in that memorandum.

Enclosure 2 is a copy of the memo to files, ESB-52, dated June 29, 1970, in which the ESB identified those questions for which acceptable answers have not been received. We recognize that FSAR Revision 6 may contain some of the additional information which we require, but we have not completed our review of this amendment. If adequate information is not received or if our review of the information discloses additional problems, we will be prepared to report orally to the ACRS.

In order that the scope of our review be fully understood, we wish to make the following points clear. We have not reviewed the circuitry associated with those functions which the applicant claims are not required in order to meet reactor safety criteria, and we have not attempted to verify the accuracy of these claims. However, we note that the applicant's safety analysis and the technical specifications discuss several of these functions, including the following:

1. Operation of the turbine bypass valves;

2. Detection of an inoperable control rod and the subsequent reduction of unit load demand;

3. Rod group sequence interlocks;

4. Boron dilution interlocks; and

5. Isolation of reactor building purge lines upon detection of high stack radiation.

For functions that DRL determines are required for safety, the ESB will, if requested, assist in determining that the systems which perform these functions are designed in accordance with protection system standards.

Original signed by
E. G. Case
Edson G. Case, Director
Division of Reactor Standards

ESB-56
DRS:ESB:RDP

Enclosures:
1. Safety Evaluation
2. ESB-52, Memo to Files Dated June 29, 1970

cc w/encl:
R. C. DeYoung, DRL
R. S. Boyd, DRL
D. J. Skovholt, DRL
C. G. Long, DRL
A. Schwencer, DRL

Distribution:
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DR Reading
DRS Reading
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bcc: E. G. Case
V. Moore
R. Pollard

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