

OCT 12 1972

Docket Nos. 50-269/270/287

Richard C. DeYoung, Assistant Director for Pressurized Water Reactors, L  
DUKE POWER COMPANY, OCONEE NUCLEAR STATION; COMMENTS ON THE PROPOSED  
TECHNICAL SPECIFICATIONS FOR OPERATION OF UNITS 1 & 2 AND UNITS 1, 2, & 3;  
DOCKET NOS. 50-269, 270, and 287

Your memorandum of October 5, 1972, requested identification of technical  
specification items that should be discussed with the applicant at a meet-  
ing scheduled for October 17, 1972. The L:RS Electrical, Instrumentation  
and Control Systems Branch has reviewed the technical specifications  
through Revision 23. The attached list of comments on the specifications  
that pertain to electrical and instrumentation systems can serve as the  
requested list of agenda items for the October 17, 1972, meeting. The list  
includes those comments that remain unresolved from our previous memos  
dated March 16, March 22, and May 26, 1972.

It should be noted that Specification 3.7, Auxiliary Electrical Systems, has  
been evaluated with the assumption that the results of the full-load rejec-  
tion tests will be available for review and found acceptable prior to opera-  
tion of Oconee Unit 2. If this is not the case, all references to "  
adjacent Oconee unit" as a power source should be deleted from the technical  
specifications.

Original Signed by  
Donald F. Knuth

ESB-167  
L:EI&CS:RP

Donald F. Knuth, Assistant Director  
for Reactor Safety  
Directorate of Licensing

Enclosure:  
Comments on Oconee 2/3  
Technical Specifications

cc w/encl:  
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J. Hendrie, L:TR  
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DATE ▶	10/11/72	10/11/72	10/17/72			

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COMMENTS ON THE OCONEE 2/3 TECHNICAL SPECIFICATIONS  
(Revision 23 dated September 15, 1972)

1. Specification 3.3.1 - Change "The reactor shall not be made critical" to "The reactor shall not be heated or maintained above 200°F." The bases for this change are:

a. These safety systems need to be available whenever the reactor is "hot", regardless of whether or not the reactor is critical, and

b. Specification 3.3.2 requires that the reactor be placed in a cold shutdown condition, i.e.,  $T_{avg} < 200^{\circ}\text{F}$ , if the requirements of Specification 3.3.1 cannot be met.

Note, however, that an exception to the above will be necessary for the core flooding tank discharge valves. These valves cannot be opened unless reactor pressure is greater than  $600 \pm 25$  psig, but reactor pressure cannot exceed 550 psig until reactor temperature is greater than 275°F per Specification 3.1.2, Figure 3.1.2-1.

2. Specification 3.3.1a(2) - The proposed "Two out of three high pressure injection pumps shall be operable" is not acceptable. Given the normal valve positions (see FSAR Figure 9-2) and the design of Engineered Safeguards Logic Channels 1 & 2 (see FSAR Table 7-3), failure of ES channel 1 would effectively disable both pumps A and B. Therefore, this Specification should be changed to "High pressure injection pump C and either pump A or B shall be operable."

3. Specification 3.3.1a(3) - Note that low pressure injection pump C cannot be considered as one of the two required pumps. (See FSAR Figure 9-2) Suggest changing this specification to "Engineered safety feature low pressure injection pumps A and B shall be operable."

4. Specification 3.7 - The applicant has apparently made no serious effort to write a meaningful specification or to incorporate our comments which they received during formulation of the Unit 1 technical specifications. The following comments apply specifically to the replacement pages for Unit 1/2 operation; similar comments can be made on the replacement pages for Unit 1/2/3 operation.

a. The bases for the Unit 1 specifications are not appropriate bases for the Unit 1/2 specifications.

b. Specification 3.7.1 - Change "Under normal conditions the reactor shall not be brought critical" to "Except as permitted by Specifications 3.7.2, 3.7.3, 3.7.4, 3.7.5, 3.7.6, 3.7.7, and 3.7.8 below, the reactor shall not be heated or maintained above 200°F." The bases for this change are:

(1) The same as set forth in item 1 above concerning Specification 3.3.1, and

(2) The phrase "under normal conditions" is not defined.

c. Specification 3.7.1b. - Change to "Startup transformers CT1 and CT2 shall be operable and each transformer shall be available to supply power to the 4160V Main Feeder Buses No. 1 and No. 2 of both Unit 1 and Unit 2." Basis for change: GDC-17 requires two physically independent offsite power sources.

d. Specification 3.7.1c. - Delete items (2) and (3). Basis for the deletion: An adjacent Oconee unit and the Lee Station Gas Turbines are not equivalent to a Keowee hydro unit.

e. Specification 3.7.1d - Delete entire sentence. Basis: It is unnecessary and, together with Specification 3.7.2d, might be construed to prohibit two loop/two pump operation for longer than 24 hours.

f. Specification 3.7.2 - It is not clear whether this specification applies to the station or to each Oconee unit. For example, is it intended that CT1 can be inoperable for Unit 1 and, concurrently, one hydro unit be inoperable for Unit 2? What does "one complete string" of 125 VDC equipment include? Why are the Standby Buses not addressed?

g. Specification 3.7.2c. - Add the following: "provided the operable Keowee hydro unit is available and selected to supply power through the underground feeder bus, transformer CT4, and the Standby Buses No. 1 and No. 2."

h. Specification 3.7.4, 3.7.5, and 3.7.6 - Change "500°F" to "525°F" in order to be consistent with Specification 3.1.3.

i. Specification 3.7.7 - Delete all reference to "restart" of a shutdown reactor. Basis: No reactor should be brought critical if there is no onsite power available.

j. Specification 3.7 should reflect some semblance of logical reasoning. For example, as presently written, loss of one motor control center requires the reactor be shutdown, but loss of all six offsite transmission lines or loss of both onsite power sources only requires a report to RO.

5. Specifications 4.6.1a and 4.6.3 need to be reworded for operation of Oconee Units 2 and 3.

6. Specification 4.6.4 - The frequency of these tests should be quarterly rather than each refueling outage. For multi-unit operation, what are the conditions in each Oconee Unit during the tests?
7. Specification 4.6.5 - For multi-unit operation, what does "normal refueling interval" mean when applied as the test frequency for a system shared by all three units?
8. General Comment - Where permanently installed instruments will be used to verify that a technical specification has been met, the specification should be written in terms of the calibration units of the instruments. For example, Specification 3.3.1 requires a core flooding tank level of  $1040 \pm 30 \text{ ft}^3$ . It should be confirmed that the tank level instruments are calibrated in  $\text{ft}^3$  units or the specification should be revised.
9. Miscellaneous
  - a. Specification 2.3a. and 2.3b. - Insert "rated power" following "55%" and "0.0%".
  - b. Specification 3.5.3 and its bases - Change "30 psig" to "10 psig".
  - c. Specification 3.5.i, Table 3.5.1-1, footnote (b) - Change "full" to "rated".
  - d. Specification 3.5.1, Table 3.5.1-1, pages 3.5-4 and 3.5-5 - Delete "Analog" from heading of column A.
  - e. Specification 3.7 - Change "208Y" to "208V".
  - f. Specification 4.1, Table 4.1-1, Page 4.1-7 - The explanatory notes for "T/W", "B/M", and "B/W" may be deleted since they are not used.
  - g. Specification 4.1, Table 4.1-2 - Delete footnote (1) from item 7. Leakage should be evaluated without regard to reactor criticality.