

ATOMIC ENERGY COMMISSION WASHINGTON, D.C. 20545

Docket Bo. 269

JUN 2 1 1972

#5

R. C. DeYoung, Assistant Director, FWRs, L THRU: A. Schwencer, Chief, PWR Branch No. 4, L

MEETING WITH DUKE POWER COMPANY AND BABCOCK & WILCOX CONCERNING REVIEW OF THE OCONEE UNIT 1 TECHNICAL SPECIFICATIONS - DOCKET NO. 50-269

Enclosed is a summary of the meeting hald on June 15, 1972 with Duke Power Company and Babcock & Wilcox. An attendance list is also enclosed.

I. A. Peltier, Project Leader PWR Branch No. 4 Directorate of Licensing

Enclosures: Meeting Summary Attendance List

cc: R. S. Boyd

R. C. DeYoung

D. Skovholt

D. Knuth

R. Maccary

R. Tadesco

H. Denton

PWR Branch Chisfs

R. W. Klecker

M. Rosen

RO (3)

I. A. Paltier

Licensing Assistant

C. B. Murphy

R. Pollard

R. Van Niel

ENCLOSURE I

MEETING WITH DUKE POWER COMPANY

AND BABCOCK & WILCOX ON OCONEE

UNIT 1 TECHNICAL SPECIFICATIONS

- I. Electrical Specifications: The following comments, rasied during the Oconee 2/3 review, which appeared to be significant with regard to the Unit 1 Technical Specifications, (see memo dated May 28. 1972) were considered.
 - 1. Specification 2.3 (Page 2.3-1 and Item 3 of Table 2.3-1) and Specification 3.1.8.3 conflict with regard to the trip setting limi for the pump monitor during the single loop operation. This inconsistency should be resolved.
 - Resolution: The difference in the limits specified in these two specifications was intentional at the time of the writing. Duke will clarify by adding footnote 6 to item 3 and 7 in Table 2.3-1.
 - 2. Specification 2.3 (Item 7 of Table 2.3-1) and Specification 3.1.8.4 conflict with regard to the reactor coolant temperature trip setting limit during single loop operation. This inconsistency should be resolved.

Resolution: Same as item 1 above.

3. Specification 3.1.9.2 requires that "Startup rate rod withdrawal hold shall be in effect at all times." Revision 19 to the Technical Specification added the following to the bases for that specification: "Technical Specification 3.1.9.2 will apply to both the source and intermediate ranges." Since the bases are not part of the specification, this latter sentence should appear in the specification rather than in the bases.

Resolution: The present wording is implied in Specification 3.1.9.2, however, Unit 2/3 Technical Specifications will be revised to improve clarity.

4. Specification 3.3.1b (4) states that "Two core flood tank pressure instrument channels shall be operable." Each core flooding tank has two pressure instrument channels and two level instrument channels.

In addition, both pressure and level are addressed in Specification 3.3.1b (1). Therefore Specification 3.3.1b. (4) should, as a minimum, require that one pressure instrument and one level instrument be operable for each core flooding tank.

Resolution: Duke agreed with this change and will revise the Unit 1 Technical Specifications.

5. Specification 3.3 is written in terms of the requirements that must be met before the reactor is made critical. Since the systems addressed by this specification are required for safety whenever the reactor is not in a cold shutdown condition (regardless of whether the reactor is critical or not), the specification should be written in terms of the requirements that must be met before the reactor is heated above a specified temperature.

Resolution: A good point has been raised by this question. lowever, resolution was postponed until Unit 2/3 Technical Specifications.

6. Footnote (e) can be removed from Item 15 of Table 3.5.1-1. When the "Turbine Stop Valves Closure" instruments are not operable and the reactor is in a hot shutdown condition, there is no need to require a cold shutdown only on the basis that those instruments are inoperable.

Resolution: This is not a critical concern and therefore resolution was postponed until Unit 2/3 Technical Specifications.

 Specification 4.6.6c should be changed to require that the battery discharged test be performed during each refueling shutdown rather than the proposed five-year intervals.

Resolution: Duke agreed to this change and will add words to specify a discharge test under maximum anticipated emergency battery loads for one hour. It will not be necessary to show whether or not the batteries have been degraded in terms of capacity beyond this requirement.

8. The 230 KV transmission lines for the Oconee Station and installed in pairs on double circuit towers. Therefore, Specification 3.7.1a. should not allow operation with only two transmission lines in service if those two lines are on the same towers because this would violate General Design Criterion 17.

Resolution: Duke stated that this comment implies no change in what it had planned to do and that it would add words to the specification stating that the two 230 kV lines would be on separate towers as an additional Technical Specification restriction.

9. Specification 3.7.1b. should be changed to: "Startup transformers No. CT1 and No. CT2 shall be operable and capable of supplying power to the Unit 1 4160 V Main Feeder Buses No. 1 and No. 2." The proposed "CT1 or CT2" violates GDC-17 and the proposed "connected" does not accurately describe the intended mode of operation, i.e., the main feeder buses are connected to transformer No. 1T. Recognizing that even if both CT1 and CT2 are operable, the design will not meet GDC-17 until after Unit 2 begins operation, it should be acceptable to allow either CT1 or CT2 to be out of service for a relactively long time.

Resolution: Duke agreed with this comment and will make the above change in the Unit 1 Technical Specification.

10. Specification 3.7.1c should include the words at the end of the last sentence "____ once the reactor has been brought critical."

Note: Duke does not agree with our position that the gas turbine at the Lee Station cannot be used as a qualified on site power source. Duke has committed this gas turbine to Oconee and put in the 100 kV line from Lee for this purpose. Duke is willing to commit all three gas turbines at Lee Station to Oconee. If a turbine is lost, Duke would abort the Oconee 1 start-up.

Resolution: Unresolved.

11. It is questioned whether the reference to Figure 8-5 of the FSAR in Specification 3.7.1h. is acceptable because that FSAR figure does not actually show the equipment in Unit 2 that must be operable for safe operation of Unit 1.

Resolution: Duke agreed with this comment and will re-write the specification to state what equipment from Unit 2 must be operable for Unit 1 operation.

or be restarted if one hydro unit or the underground feeder is not operable. We do not concur that this is acceptable. Our evaluation of the Oconee design was that the Lae Steam Station combustion turbines could serve as an alternate power source to the station Standby Power Buses only after a review of the results of full load rejection tests on the Oconee units. It was not concluded that the combustion turbine could serve as a substitute for a failed hydro unit. This position was previously expressed to the applicant in a letter from P. A. Morris, dated June 14, 1971.

Note: This comment does not accurately state our previous

position and so it was restated to read that the
"underground feeder circuit" should be deleted as
"underground feeder circuit" should be connected to the
the operable hydro unit should be connected to the
underground feeder while the Lee Station gas turbine is
underground feeder while that Lee Station gas turbine is
(not connected to the standby bus). The words "or the
(not connected to the standby bus). The words "or the
underground feeder" should be deleted from specification
3.7.2-c.

Resolution: This item is unresolved but Du'e has agreed to write a new specification for the degraded condition when the underground feeder is out of service.

13. The proposed Specification 3.7.3 allows Unit 1 to remain critical or be restarted in the event "all 230 kV transmission lines are lost."

We do not believe that startup should be allowed unless at least two physically independent circuits are available to supply offsite power in accordance with GDC-17. With respect to continued operation in accordance with GDC-17. With respect to continued operation following loss of all 230 kV lines. Specification 3.7.3a should be following loss of all 230 kV lines. Specification 3.7.3a should be rewritten to require that both hydro units be started and run on standby rewritten to require that both hydro units be started and run on standby rewritten to require that both hydro units be started, the other connected with one connected to the Standby Power Buses and the other connected to the 230 kV switch yard to either transformer CT1 or CT2. Through the 230 kV switch yard to either transformer CT1 or CT2. Through the 230 kV switch yard to either transformer CT1 or CT2. Through the 230 kV switch yard to either transformer CT2 energized. Transmission line separated from the network, and transformer CT5 energized. The combustion turbine should not be connected to the Standby Power Buses The combustion turbine should not be connected to the Standby Power Buses are considered to the Standby Power Buses.

Resolution: We agreed to let the specification stand as written provided a "3.7.3-c Tavg shall be above 50009" is added to the specification.

The plant has been physically designed and built for the mode of operation specified in Specification 3.7.3 and therefore a loss of the Lee gas turbine in this condition would trigger the same emergency hydro action as a loss of off-site power in the unrestricted case.

14. Specification 3.7.4, as presently worded, appears to give permission for operation without regard to the condition of the electrical systems. Unless the applicant desires to identify specific degradations and to propose appropriate technical specifications for those conditions, this specification should be reworded to include the following:

"In the event of any degradation beyond Specification 3.7.1, 3.7.2, or 3.7.3 above, the reactor shall be placed in a hot shutdown condition within 12 hours. If the requirements of Specification 3.7.1 are not met within an additional 12 hours, the reactor shall be placed in a cold shutdown condition within 24 hours."

Resolution: This item was postponed until 2/3 Technical Specifications because the staff does not have a well thought out position with regard to additional degraded conditions. The Unit 1 Technical Specifications will remain as is for the time being but will not remain so for the life of the plant. We are developing guidance in this area.

15. Specification 3.7 is written with regard to the conditions necessary prior to bringing the reactor critical. Since electrical power is necessary to maintain the plant in a safe condition even if the reactor is subcritical, the specification should reflect that need. The introductory sentence to Specification 3.7.1 could be changed as follows to accomplish this:

"The reactor shall not be heated or maintained at temperatures above OF unless the following conditions are met."

Resolution: This is the same point raised with respect to specification 3.3 above (Item 5). Resolution was postponed until Unit 2/3 Technical Specifications.

- Administrative Controls: The following comments were raised during the Oconee 2/3 review and appeared to be significant with regard to the Unit 1 II. Technical Specifications.
 - 1. Specification 6.1.1.5 and 6.1.1.6 can be updated to reflect the current status of the ANS standard.

Resolution: Duke agreed.

2. 6.1.1.7 - This specification should state that at least one member of each shift is familiar (in a qualified sense) with the station's radiation protection procedures and meets the requirements of a health physics technician.

Resolution: Duke will consider and include the appropriate words in the Technical Specifications. Duke was receptive to a commitment of this

3. Delete the asterisk on Figure 6.1-1 and Table 6.1-1. A waiver of the requirement that the Assistant Control Operator be AEC licensed for initial operation can be issued by letter at the time of licensing provided that, in addition to the minimum operating shift requirements shown on Table 6.1-1, one or more senior staff members from either the Plant Staff, qualified memebers of the General Office Staff, or Nuclear Steam Supply System vendor's staff or consultants, (who by virtue of their training and experience can provide competent technical support for the startup and power ascension program) is present.

Resolution: Duke has ten men going for a cold license (9SRO and 1RO); five men for shift SROs and one man for shift RO. Duke feels it is too late to go back and get mora licensed operators. Duke is not willing to commit a B&W startup engineer full-time but is willing to do so for cold startup and during transient and special tests. This item was shelved until we can get a reading from Operating License Branch regarding the cold license exam for the Assistant Control Operator.

4. There was considerable discussion with regard to RO and OR concerns over the Oconee Unit 1 Technical Specifications and how well they meet the intent of ANS 3.2 and Safety Guide 16.

Resolution: It was agreed that Duke would assure us that the specifications meet the intent of ANS 3.2 and Safety Guide 16 and would revise the specifications to be more specific in some areas. For example:

- a) Specification 6.1.2.2 would be compared to ANS 3.2 to make sure the General Office Review Committee conforms.
- b) The definition of "abnormal occurrence" in section 1.8 of the specification will apply to specification 6.2.1 but reference to this definition will be deleted from specification 6.6 and those things that will be reported will be listed in 6.6.

It was agreed that the essential points of ANS 3.2 and Safety Guide 16 should be and are covered by the Unit 1 Technical Specifications but that improving the format would be postponed until Unit 2/3 Technical Specifications.

- III. Rad Waste Limits: Duke was handed a copy of the Maine Yankee Technical Specifications regarding liquid and gaseous rad waste which are serving as our models for meeting the intent of proposed appendix I. Duke was told that we would expect the Oconee 1 Technical Specifications to be equivalent. Duke will review these models and get back with us for guidance on the final preparation.
- IV. Environmental Tech Specs: Duke was told that the Oconee Unit 1 Technical Specifications may be required to include limits, surveillance and reporting on environmental effects stemming from the Environmental Statement. We were not prepared to offer guidance. Duke does not believe that these matters should be part of a nuclear plant specification especially since they are still undergoing negotiation with EPA. Duke is willing to list the standards it is required to meet for operation of the plant in the technical specification but we told Duke we did not believe this would be adequate and pointed out that Surry has already had environmental matters included in its Technical Specifications. Duke will wait for guidance from us.

- V. Miscellaneous Items: The following is a list of miscellaneous items which will be changed in the Oconee Unit 1 Specifications.
 - 1. Page 1-5 Item d Insert "or reactor protective system."
 - 2. Page 2.1-3 Typo "because" 5th line.
 - 3. Page 3.1-7 Page not numbered.
 - 4. Page 3.1-11 The conditions under which Z is determined (pressure and temperature) will be stated.
 - 5. Page 3.3-2 Section 3.3.3-c Change "only one" to "no more than one."
 - 6. Page 3.6-1 Section 3.6.3 and 3.6.4 Since these are containment specifications they should be written in the positive sense and not as reactor specifications. We are not insisting on this change, however.
 - 7. Pages 4.1-5 and 4.1-6 Items 16, 18 and 20 Change from "B/M" to "M" in Test column.
 - 8. Page 4.1-7a Item 49 Change from "R" to "P" in Test column.
 - 9. Page 4.11-1 Last paragraph under "Bases" add words "and as low as practicable" after "10 CFR 20."
 - 10. Page 4.14-1 Section 4.14 will state the frequency at which the charcoal absorbers used in the radiation monitors for Iodine will be changed.
 - 11. Page 4.412 and 4.4-6 Specification 4.4.1.1.5b will be changed in the 4th line to read "50% of the value permitted in 4.4.1.1.2. The last paragraph of the bases will be changed to state the correct basis for specifying a total leak rate of 6.125% from penetrations and isolation valves.

ENCLOSURE II

OCONEE NUCLEAR STATION MEETING

ATTENDANCE LIST

June 15, 1972

NAME

I. Peltier
A. Schwencer
J. Ed smith
R. .. Straub
Paul H. Barton

K. S. Canady
R. J. Ansell
George W. Cage
Maurice McIntosh
B. M. Rice
A. C. Thies
W. O. Parker

C. E. Murphy C. R. Van Niel

ORGANIZATION

AEC, Licensing AEC, Licensing Duke - Oconee Babcock & Wilcox Duke Power Company

Duke Power Company
Duke Power Company
Duke (ONS)
Duke (ONS)
Duke Power Company
Duke Power Company
Duke Power Company

AEC, RO:II AEC, Licensing

FUNCTIONAL TITLE

Project Leader, PWR-4
Chief, PWR-4
Superintendent
Project Manager
Manager, Technical and Nuclear
Service
System Nuclear Engineer

Assistant Operating Engineer
Operating Engineer
Staff Electrical Engineer
Senior Vice President
Assistant Manager Steam
Production
Principal Reactor Inspector
Reactor Safety Specialist