

7/20/76

In the Matter of

Docket Nos. 50-259
~~50-260~~

(Browns Ferry Nuclear Plant,
Units 1 and 2)

- (1) Granting the motion will not affect the Intervenor's rights in this proceeding;
- (2) It is in the public interest to authorize the requested tests; and

- (3) There is reasonable assurance that conducting the tests under the conditions set out in TVA's affidavit will not endanger the health and safety of the public.

Respectfully submitted,

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Chattanooga, Tennessee
July 20, 1976

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

Before the Atomic Safety and Licensing Board

In the Matter of)	
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TENNESSEE VALLEY AUTHORITY)	Docket Nos. 50-259
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LICENSEE'S BRIEF IN SUPPORT OF MOTION
TO CONDUCT CONTROL ROD DRIVE
SYSTEM TESTS

STATEMENT

This proceeding concerns the proposed issuance of amendments to facility operating Licenses Nos. DPR-33 and DPR-52 for Browns Ferry Nuclear Plant units 1 and 2, as set forth in 40 Fed. Reg. 46365 (1975). In its Order of May 21, 1976, regarding fuel loading, the Board determined that "[i]f the Intervenor's contentions are relevant to the activity asked to be authorized, the Board must make findings in the form of an initial decision on each matter specified in § 50.57(a) which is in controversy with respect to the amendment and for which a hearing has been requested" (at 4).

TVA is requesting the Board to authorize Control Rod Drive System tests from the startup retest program. Several significant points should be emphasized concerning these tests. The tests are subcritical testing, and no power operation is involved; all control rods except the one being tested will be fully inserted, valved out, and electrically disarmed; none of the systems necessary to conduct the tests on unit 2 were damaged or modified as a result of the fire; while some of the systems necessary for the tests on unit 1 were fire-affected and have been restored, no credit is taken for such systems in the worst-case accident analysis; and the worst accident that could happen, i.e., failure of the one operational control rod in the fully withdrawn position, will have no adverse consequences and the reactors will remain subcritical.

Intervenor's contentions do not relate to the tests on unit 2. Contention 1 has been withdrawn by the Intervenor. Contention 2 alleges that TVA personnel are not technically qualified or competent to satisfactorily complete fire-related modifications. Contention 3 alleges that NRC's inspection program is insufficient in regard to fire-related modifications. Since the tests on unit 2 require no systems damaged or modified as a result of the fire, and no operation is involved, it is not necessary for the Board to make the findings in section 50.57.

Systems needed to conduct the tests are the Source Range Monitoring System, Control Rod Drive Hydraulic System, and the Reactor

Manual Control System. All of these systems have been preoperationally tested and shown to be functioning properly. For the unit 2 tests, none of these systems were damaged or modified as a result of the fire. For unit 1, no credit is taken for these systems in the accident analysis. The worst accident that could happen would result in failure of the one operational control rod in the fully withdrawn position. Under these conditions, the reactor will remain subcritical, and the shutdown margin required by the technical specifications would not be reduced. Under these circumstances, Intervenor's contentions are not relevant to the actions requested. In any event, the Board can readily find on the basis of the attached affidavit of Jack R. Calhoun, that there is reasonable assurance that conducting the Control Rod Drive System tests will not endanger the health and safety of the public.

It is TVA's position that, under these circumstances, (1) granting the motion will not affect the Intervenor's rights in this proceeding, (2) the public interest requires that this much progress be made at the present time without waiting until completion of the forthcoming evidentiary proceeding, and (3) there is reasonable assurance that conducting the tests as set forth under the conditions specified by Jack R. Calhoun will not endanger the health and safety of the public.



ARGUMENT

I

Granting the Motion Will Not Affect
Intervenor's Rights in This
Proceeding.

Contentions 2 and 3 allege that TVA personnel are not competent to satisfactorily complete the fire-related modifications necessary to provide adequate protection against the loss of redundant components of engineered safeguards equipment from fire, and that NRC's inspection and surveillance program is insufficient to assure that TVA satisfactorily completes the fire-related work necessary to provide adequate protection against the loss of redundant components of engineered safeguards equipment from fire. Contention 1 has been withdrawn by the Intervenor.

As shown by Mr. Calhoun's affidavit, the tests to be conducted on unit 2 do not involve any systems damaged by the fire or modified as a result of the fire. Thus the Intervenor's contentions do not relate to these activities and his rights are not affected. Indeed, it can be argued that in regard to unit 2, the Board has no jurisdiction over any testing that does not involve fire-related matters or operation.

As to unit 1 tests, Mr. Calhoun points out that this is subcritical testing. The Board in its May 21 Order held that

[T]he contentions of Intervenor Garner are relevant to operation of Units 1 and 2, even under partial power. . . [at 6; emphasis added].



Since the tests do not involve even partial operation of the units, the Intervenor's rights will not be affected by granting the motion.

Although systems for conducting the tests on unit 1 were damaged or modified as a result of the fire, for the worst case accident no credit is taken for these systems. Mr. Calhoun's accident analysis shows that under these conditions the reactor remains subcritical. Thus Intervenor's rights are not affected.

II

Authorizing These Tests Is In the Public Interest.

As shown by TVA's motion, brief, and affidavits filed on April 22, 1976, the electrical power from the Browns Ferry units is urgently needed for power demands on the TVA system. Mr. Calhoun's affidavit shows that by conducting these tests, the reactor vessel head and upper internals can be installed and the startup retesting period can thereby be reduced by 10 days when operation is ultimately authorized. Every day that is saved in returning these units to service is essential to system reliability and the cost of power to the public. Accordingly, it is in the public interest to authorize TVA to conduct these tests.

III

There Is Reasonable Assurance That
Conducting the Tests Will Not
Endanger the Health and
Safety of the Public.

The accident analysis set out in Mr. Calhoun's affidavit shows that the worst accident that can happen is the failure of the analytically strongest control rod in the fully withdrawn position. Both units 1 and 2 should remain subcritical for this accident. Thus there would be no adverse consequences whatsoever to the public health and safety should the worst accident happen in regard to these tests.

CONCLUSION

For the foregoing reasons, the Board should grant the motion. The Licensee requests that the Board decide this motion on an expedited basis. A proposed form of order is attached.

Respectfully submitted,

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PROPOSED FORM OF ORDER

By Motion dated July 18, 1976, Tennessee Valley Authority (Licensee or TVA) has moved that this Atomic Safety and Licensing Board (Board) issue an order authorizing Control Rod Drive System tests for Browns Ferry Nuclear Plant units 1 and 2. As shown by the affidavit of Jack R. Calhoun accompanying the motion, the reactors would remain subcritical throughout the tests; the accident analysis demonstrates that in the case of the worst accident that could happen, i.e., failure of the analytically strongest control rod in the fully withdrawn position, the reactors will remain subcritical; and granting the motion will reduce startup retest time by 10 days.

The affidavit further shows that no systems damaged or modified as a result of the fire will be used to conduct the unit 2 tests; and

that no credit is taken in the worst-case accident on unit 1 for systems that were damaged or modified as a result of the fire.

Based on the foregoing, the Board finds that:

- (1) granting the motion will not affect the Intervenor's rights in this proceeding,
- (2) it is in the public interest to authorize the requested tests, and
- (3) there is reasonable assurance that conducting the tests under the conditions set out in TVA's affidavit will not endanger the health and safety of the public.

THE ATOMIC SAFETY AND LICENSING
BOARD

Thomas W. Reilly, Esq., Chairman

Bethesda, Maryland
July ____, 1976

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CERTIFICATE OF SERVICE

I hereby certify that I have served the original and 20 conformed copies of the following document on the Nuclear Regulatory Commission by depositing them in the United States mail, postage pre-paid and addressed to Secretary, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Chief, Docketing and Service Section:

Licensee's Motion for an Order Authorizing Control
Rod Drive System Tests

and that I have served a copy of the above document upon the persons listed below by depositing it in the United States mail, postage pre-paid and addressed:

Thomas W. Reilly, Esq., Chairman
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dr. Hugh C. Paxton
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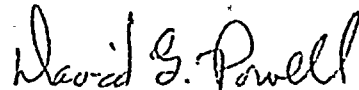
James R. Tourtellotte, Esq.
Lawrence Brenner, Esq.
Office of the Executive Legal Director
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

This ²¹~~22~~ day of July, 1976.

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