

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

6/21/76

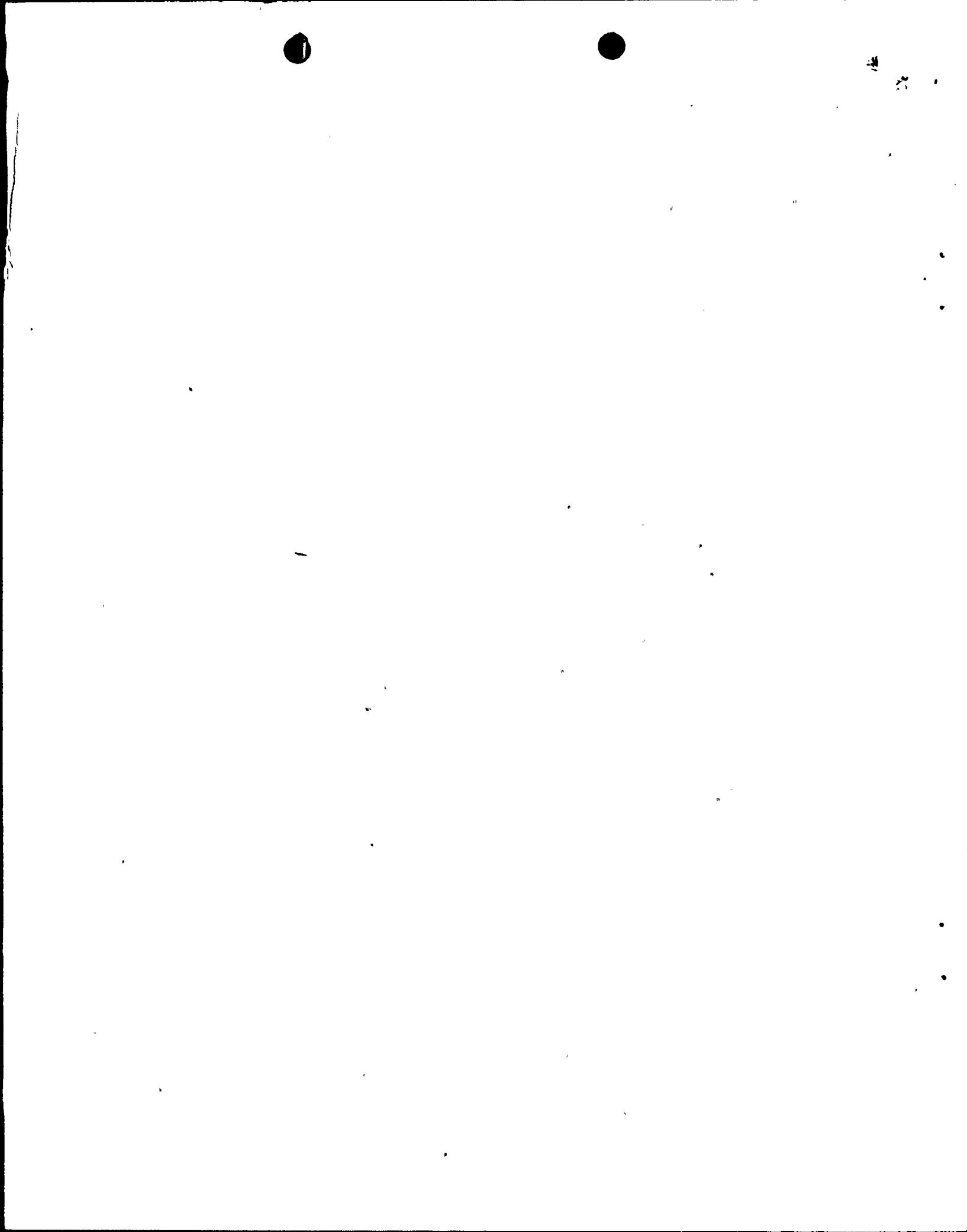
Before the Atomic Safety and Licensing Board

In the Matter of)
TENNESSEE VALLEY AUTHORITY) Docket Nos. 50-259
(Browns Ferry Nuclear Plant,) 50-260
Units 1 and 2))

LICENSEE'S MOTION FOR AN ORDER
AUTHORIZING CONTROL ROD
DRIVE SYSTEM AND FULL
CORE SHUTDOWN MARGIN
TESTS

Licensee Tennessee Valley Authority moves that this Atomic Safety and Licensing Board authorize the Licensee to conduct Control Rod Drive System tests and Full Core Shutdown Margin tests, on the grounds 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.

Respectfully submitted

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Chattanooga, Tennessee
June 21, 1976

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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
REGARDING CONTROL ROD DRIVE
SYSTEM AND FULL CORE
SHUTDOWN MARGIN
TESTS

STATEMENT

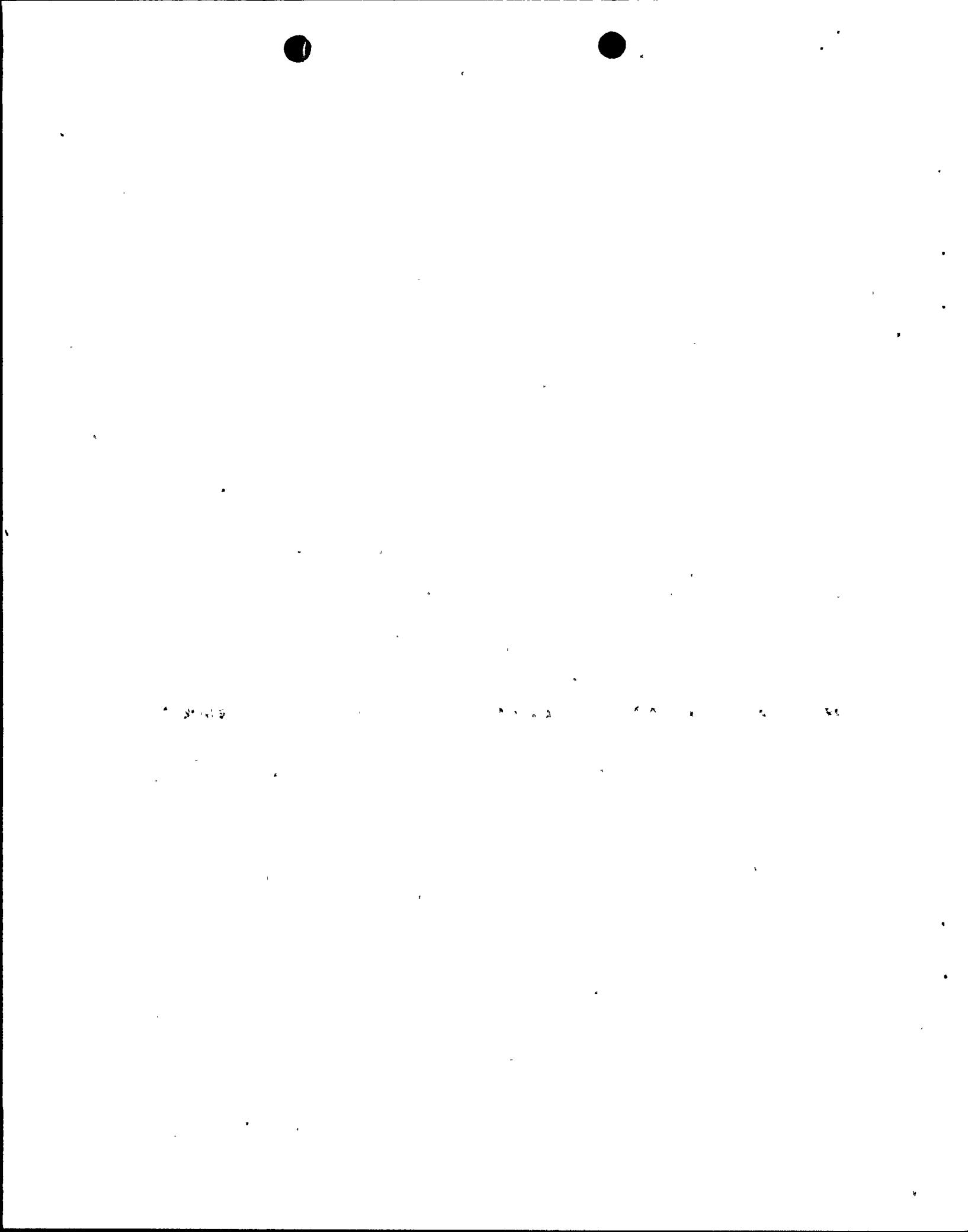
This proceeding concerns the proposed issuance of amendments to facility operating Licenses Nos. DPR-33 and DPR-52 for Browns Ferry Nuclear Plant units 1 and 2, as set forth in 40 Fed. Reg. 46365 (1975). In its Order of May 21, 1976, regarding fuel loading, the Board determined that "[i]f the Intervenor's 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 two tests from the restart testing program--Control Rod Drive System tests and Full Core Shutdown Margin tests. Several significant points should be emphasized concerning these tests. Both tests are subcritical testing, thus neither test involves any power operation; no fire-affected electrical circuits or mechanical equipment will be involved on unit 2; fire-affected electrical circuits involved on unit 1 have been successfully preoperationally tested and work properly; and the worst accident that could happen, i.e., all operational control rods in the fully withdrawn position, will have no adverse consequences and the reactors will remain within the technical specification shutdown margins.

Intervenor's contentions do not relate to the tests on unit 2. Contention 2 alleges that TVA personnel are not technically qualified or competent to satisfactorily complete fire-related modifications, and contention 1 alleges that additional fire-related modifications are necessary. Contention 3 alleges that NRC's inspection program is insufficient in regard to fire-related modifications. Since the tests on unit 2 require no fire-related circuits or equipment, and no operation is involved, it is not necessary for the Board to make the findings in § 50.57.

On unit 1, fire-affected electrical circuits necessary for the test have been successfully preoperationally tested. Moreover, the worst accident that could happen would result in two control rods 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 and Full Core Shutdown Margin 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.

The admitted contentions allege that additional fire-related modifications are necessary to provide adequate protection against the



loss of redundant components of engineered safeguards equipment from fire; 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.

As shown by Mr. Calhoun's affidavit, the tests to be conducted on unit 2 do not involve any mechanical equipment or electrical circuits 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 sub-critical 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.

Some electrical circuits damaged by the fire are necessary to conduct the unit 1 tests. These circuits have been preoperationally



tested and shown to work satisfactorily. Even if they did not work, however, the reactor would remain within the technical specification shutdown margins and there would be no adverse consequences. Again, Intervenor's rights would not be affected.

II

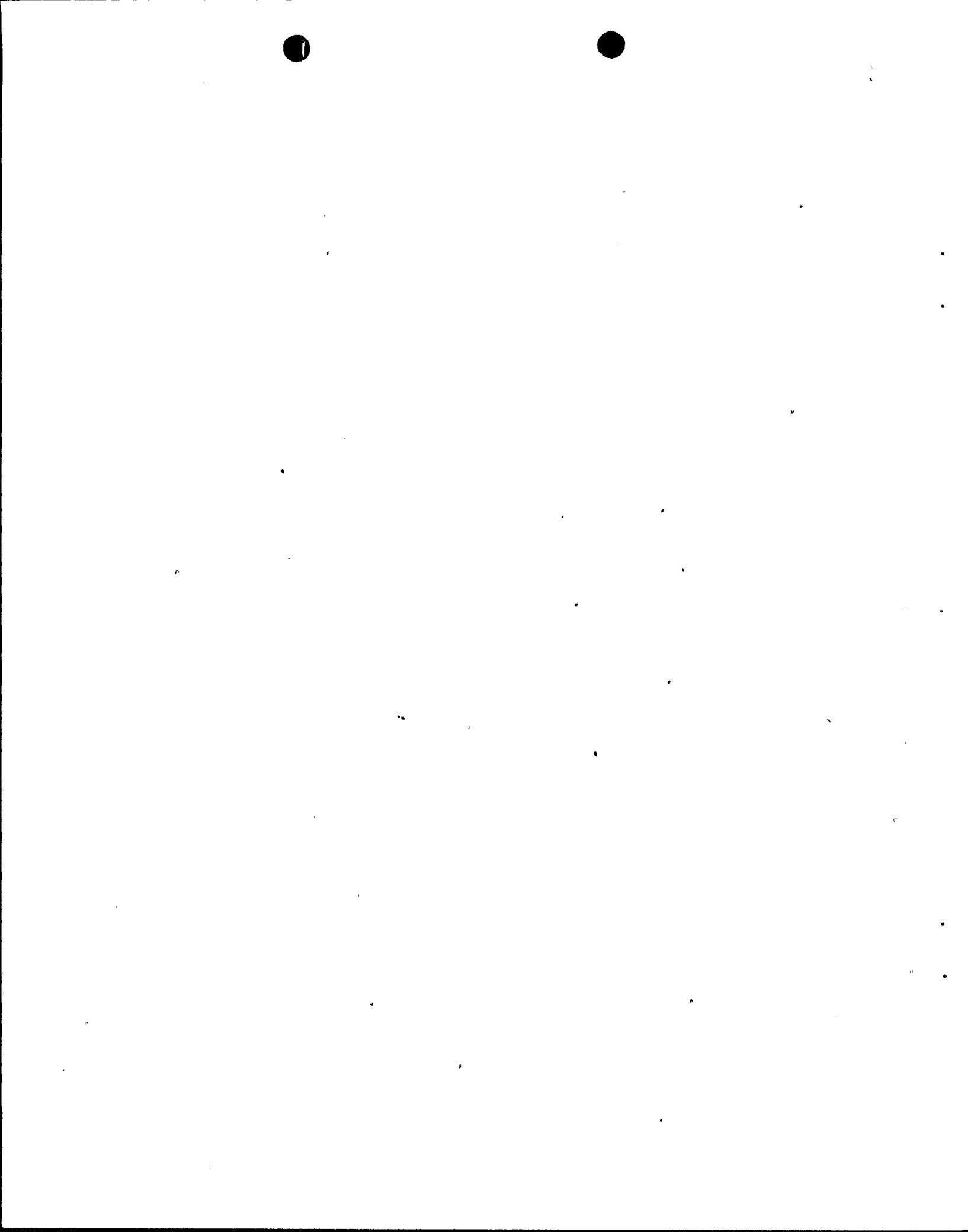
Authorizing These Tests Is In
the Public Interest.

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 this summer's power demands on the TVA system. Mr. Calhoun's affidavit shows that by conducting these tests, the reactor vessel heads 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 to have all operational control



rods in the fully withdrawn position. For unit 1 this would be two rods, and for unit 2 it would be three rods. In both cases, the reactor would remain within the technical specification shutdown margins. 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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Chattanooga, Tennessee
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PROPOSED FORM OF ORDER

By Motion dated June 21, 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 and Full Core Shutdown Margin 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., two fully withdrawn control rods on unit 1 and three rods on unit 2, the reactors will remain within the technical specification shutdown margins; and granting the motion will reduce startup retest time by 10 days.



The affidavit further shows that no fire damaged equipment or electrical circuits, or equipment modified as a result of the fire, will be required to conduct the unit 2 tests; and that the electrical circuits damaged by the fire and necessary for the unit 1 tests have been successfully preoperationally tested.

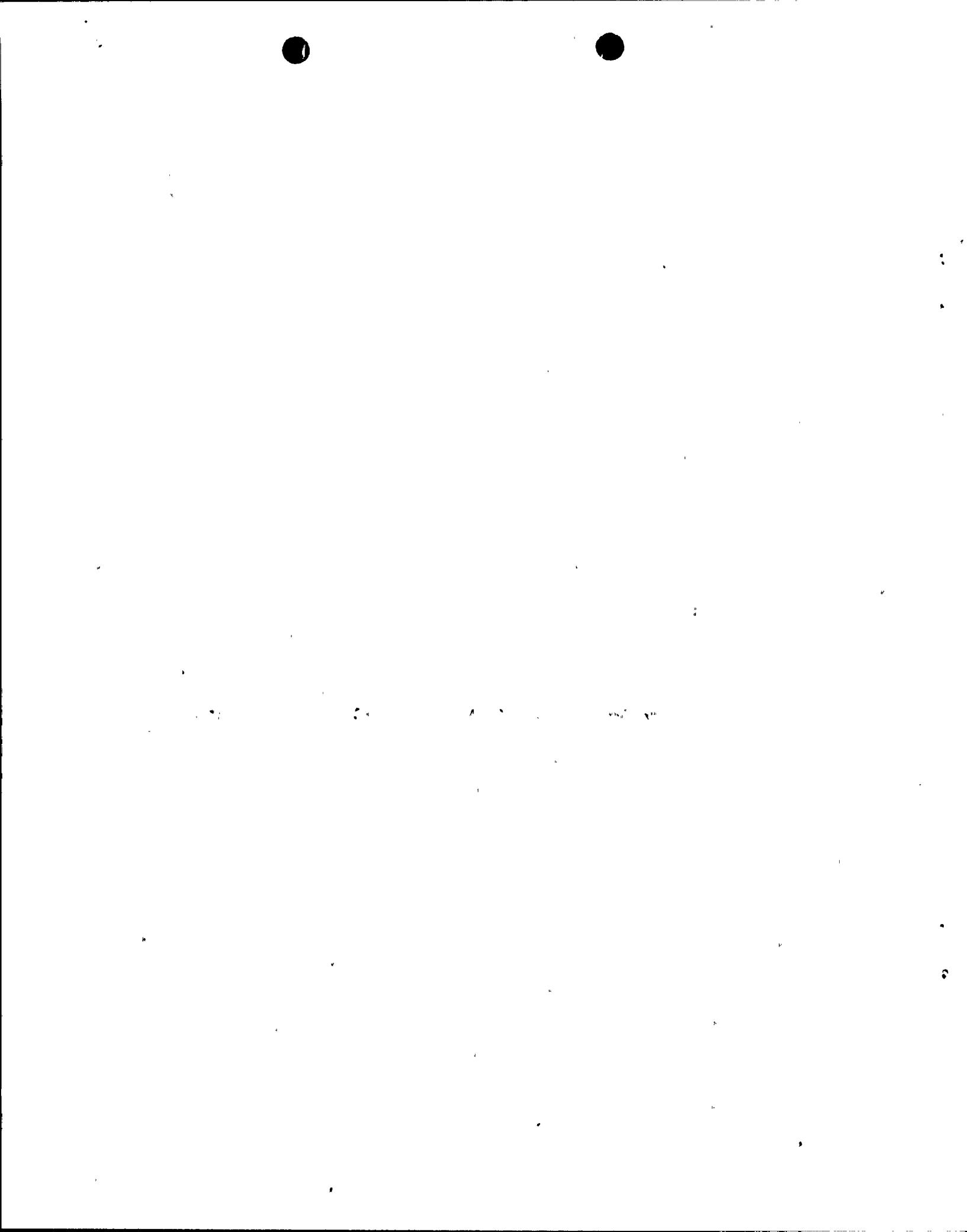
Based on the foregoing, the Board finds that:

- (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
June ___, 1976



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CERTIFICATE OF SERVICE

I hereby certify that I have served the original and 20 conformed copies of the following documents on the Nuclear Regulatory Commission by depositing them in the United States mail, postage prepaid 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 and Full Core Shutdown Margin Tests

Licensee's Brief in Support of Motion Regarding Control Rod Drive System and Full Core Shutdown Margin Tests

and that I have served a copy of each of the above documents upon the persons listed below by depositing them in the United States mail, postage prepaid and addressed:

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U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

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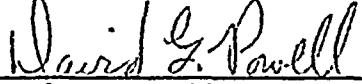
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Atomic Safety and Licensing
Appeal Board
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

This 21 day of June, 1976.


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Tennessee Valley Authority

Chattanooga, Tennessee
June 21, 1976

