



Tennessee Valley Authority, Post Office Box 2000, Spring City, Tennessee 37381-2000

John A. Scalice
Site Vice President, Watts Bar Nuclear Plant

AUG 28 1996

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

Gentlemen:

In the Matter of) Docket No. 50-390
Tennessee Valley Authority)

WATTS BAR NUCLEAR PLANT (WBN) - SECOND PERFORMANCE OF LARGE LOAD
REDUCTION TEST - PLANNED TESTING

The purpose of this letter is to provide TVA's plans for performing a second large load reduction test (50 percent load reduction) which demonstrates that WBN Final Safety Analysis Report (FSAR) test acceptance criteria are satisfied. This issue was discussed with NRC Region II and NRR Staff in a telephone call on August 22, 1996.

TVA originally performed this test on May 12, 1996, under the Power Ascension Test Program described in WBN FSAR Chapter 14. During the May 12, 1996 test, the plant experienced a two-step load decrease instead of one step (as specified in the FSAR) due to the fast response of the main turbine control system. After review and analysis of the test results, TVA and Westinghouse Electric Corporation determined the purpose of the test had been accomplished and that the dynamic response of the plant was in accordance with design for a large load reduction. A detailed discussion of our evaluation of this test performance was provided

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in TVA's letter to NRC dated June 7, 1996, which included a change to the FSAR Chapter 14 test summary (Table 14.2-2, Sheet 35), to describe the actual testing performed.

The NRC's review of TVA's evaluation has been ongoing and indicates that additional justification for the test results would be necessary in order for the staff to conclude its review. Alternatively, the staff would expect TVA to perform the subject testing again. TVA has now decided that a large load reduction test may be performed in conjunction with our upcoming mid-cycle outage activities, currently scheduled for late September 1996. WBN intends to perform the test prior to the outage. In the event this is impractical, TVA will perform the test within approximately two weeks after return to power following the mid-cycle outage. The test will be performed from approximately 100 percent power (i.e., not less than 95 percent power).

The test will demonstrate the following FSAR Chapter 14 acceptance criteria are satisfied:

- Reactor and turbine do not trip.
- Safety injection is not initiated.
- Pressurizer and steam generator safety valves do not lift.
- Monitored plant parameters stabilize without manual intervention.

The test will be performed by the WBN Technical Support Staff in accordance with the established WBN test program and administrative procedures. A special test procedure will be prepared for this test subject to test program controls including personnel qualifications, test review/concurrence, evaluation under 10 CFR 50.59, and Plant Operations Review Committee (PORC) approval.

The "Test Prerequisites" and "Test Method" described in the FSAR test summary (Table 14.2-2, Sheet 35) will be addressed by the proposed test with one exception. It will not be necessary to connect recorders in order to adequately monitor plant parameters (example parameters listed in FSAR test summary) during the transient because:

- The acceptance criteria will be verified using permanent plant instrumentation.
- Other parameters not associated with acceptance criteria can be adequately monitored with permanent plant instrumentation (e.g., main control room recorders, indicators, P2500 computer, and ERFDS).

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TVA will make the approved test procedure available to the NRC resident staff prior to performance of the test. The documentation and results for this test will become a QA record and will be available for review by the NRC residents.

WBN will add a note to the FSAR test summary (Sheet 35) to reference this letter.

The enclosure summarizes the commitments for this submittal.

If you should have any questions, please contact P. L. Pace at (423) 365-1824.

Sincerely,



J. A. Scalice

cc (Enclosure):

NRC Resident Inspector
Watts Bar Nuclear Plant
1260 Nuclear Plant Road
Spring City, Tennessee 37381

Mr. Robert E. Martin, Senior Project Manager
U.S. Nuclear Regulatory Commission
One White Flint North
11555 Rockville Pike
Rockville, Maryland 20852

U.S. Nuclear Regulatory Commission
Region II
101 Marietta Street, NW, Suite 2900
Atlanta, Georgia 30323

ENCLOSURE

SUMMARY OF COMMITMENTS

1. WBN will perform a large load reduction test in conjunction with our upcoming mid-cycle outage activities (September 1996) subject to the following:
 - Initiate test from approximately 100 percent power
 - The test will satisfy acceptance criteria listed in FSAR Chapter 14, Table 14.2-2, Sheet 35
 - The test will be performed by the WBN Technical Support Staff in accordance with the established WBN test program and administrative procedures
 - A special test procedure will be prepared subject to WBN test program controls (personnel qualifications, test procedure review and concurrence, 10 CFR 50.59 evaluation, and PORC approval)
 - The "Test Prerequisites" and "Test Method" described in FSAR Chapter 14, Table 14.2-2, Sheet 35, will be addressed except connection of recorders
 - TVA will make the approved test procedure available to the NRC resident staff prior to performance of the test.
 - The documentation and results for this test will become a QA record

2. WBN will add a note to the FSAR test summary (Sheet 35) to reference this letter.



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The test will demonstrate the following FSAR Chapter 14 acceptance criteria are satisfied:

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ENCLOSURE

SUMMARY OF COMMITMENTS

1. WBN will perform a large load reduction test in conjunction with our upcoming mid-cycle outage activities (September 1996) subject to the following:
 - Initiate test from approximately 100 percent power
 - The test will satisfy acceptance criteria listed in FSAR Chapter 14, Table 14.2-2, Sheet 35
 - The test will be performed by the WBN Technical Support Staff in accordance with the established WBN test program and administrative procedures
 - A special test procedure will be prepared subject to WBN test program controls (personnel qualifications, test procedure review and concurrence, 10 CFR 50.59 evaluation, and PORC approval)
 - The "Test Prerequisites" and "Test Method" described in FSAR Chapter 14, Table 14.2-2, Sheet 35, will be addressed except connection of recorders
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