

Detroit

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May 14, 1981
EF2 - 53,285

Mr. Robert L. Tedesco
Assistant Director for Licensing
Division of Licensing
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555



Dear Mr. Tedesco:

- References:
1. Enrico Fermi Atomic Power Plant, Unit 2
NRC Docket No. 50-341
 2. R. L. Tedesco letter to Dr. W. H. Jens
dated January 18, 1981
 3. D. B. Waters letter to U. S. Nuclear
Regulatory Commission, Att: D. G.
Eisenhut, dated January 31, 1981

Subject: TMI Task Action Item I.G.1, Special Low
Power Test Program for BWRs

The following is submitted in response to your letter of January 14, 1981 to W. H. Jens on the subject of Special Low Power Test Programs for BWRs. This directive involves augmented testing and training beyond that done in the normal Startup Test Program.

Section H.I.G.1 in Appendix H to the Enrico Fermi 2 FSAR (Amendment 33) describes in detail the supplemental training to be provided Operations personnel during the Pre-operational and Startup Test Programs. It is the position of Detroit Edison that this response satisfies the intent of NUREGs 0737 and 0694. However, as requested in your letter, we commit to augment operator training by their

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participation in the preoperational and startup test programs in accordance with the guidelines provided by the BWR Owners Group (Reference 3).

The directive also proposes that we perform a simulated loss of AC power test to familiarize operators with plant response and determine plant limitations in a blackout.

This test falls outside the accepted design bases to an event of very low probability. Furthermore, the amount of information to be gained from the performance of this test is not commensurate with the risk involved. It is our position that the desired information can be obtained by the following special tests which we commit to perform:

1. Startup of the RCIC system after loss of AC power to the system (Appendix A-1).
2. Operation of the RCIC system with a loss of AC power to the system. Start and operate the RCIC system with return to the condensate storage tank and run for 2 hours or until any system limiting parameter is approached (e.g. high RCIC area temperature, low battery voltage, or high suppression pool temperature). (Appendix A-2.)

These tests (Appendix A) are part of the BWR Owners Group recommendations (Reference 3) in response to the requirements of NUREG-0737, Item I.G.1.

It is our position that the performance of these tests is responsive to the intent of your letter and will provide additional information on plant response under conditions simulating a total loss of AC power.

It is the position of Detroit Edison that with the forthcoming update of FSAR Chapter 14 to include the latest testing recommendations from General Electric and the additional low power testing of RCIC (Appendix A), we meet the intent of augmented training and testing requirements of NUREG-0737 Item I.G.1.

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It is our intent to proceed with the planning and execution of the augmented operator training and Special Test Programs based on the above commitments. The detailed test procedures will be submitted at least 90 days prior to performing the special RCIC tests, and the results of the test program will be documented as required by Regulatory Guide 1.68.

Sincerely,

cc: L. L. Kintner
B. Little

APPENDIX A-1

TEST: STARTUP OF THE RCIC SYSTEM AFTER LOSS OF AC POWER TO THE SYSTEM

PURPOSE: Verify the design basis ability of the system to start without the aid of AC power with the exception of the RCIC DC/AC inverters.

INITIAL CONDITIONS:

- Preoperational test has been performed on RCIC system.
- System valves in normal standby lineup (suction from CST)
Note: Flow to be directed back to the condensate storage tank.
- Power to all RCIC components fed by site AC power shall be secured.
- Station batteries shall be fully charged.
- Instrument air shall be available for operation and control of applicable valves.
- Instruments shall be calibrated and setpoints, where applicable, shall be verified.

TEST DESCRIPTION:

Perform a manual initiation of the RCIC system utilizing the manual initiation switch and verify the proper operation of all components required for the RCIC startup transient to rated flow.

Note: Manual manipulation of some valves will be required.

ACCEPTANCE CRITERIA:

Proper operation of all components for the RCIC startup transient until rated flow is obtained.

APPENDIX A-2

TEST: OPERATION OF THE RCIC SYSTEM WITH A LOSS OF AC POWER TO THE SYSTEM

PURPOSE: To verify the operation of RCIC beyond its design basis to evaluate the limits of system operation with extended loss of AC Power to it and support systems, with the exception of the RCIC DC/AC inverters.

INITIAL CONDITIONS:

- Preoperational test has been performed on RCIC system.
- System valves in normal standby lineup (suction from CST).
- Power to all RCIC components fed by site AC power shall be secured, including RCIC area coolers and battery chargers supplying the station battery from which RCIC DC loads are powered.
- RCIC batteries shall be fully charged.
- Instrument air shall be available for operation and control of applicable valves.
- Instruments shall be calibrated and setpoints, where applicable, shall be verified.

TEST DESCRIPTION:

Start and operate the RCIC system with return to the CST and run for 2 hours or until any system limiting parameter is approached (e.g., high RCIC area temp, low battery voltage, or high suppression pool temp) tripping and restarting the RCIC system two (2) additional times during this operating period.

ACCEPTANCE CRITERIA:

None.