

2000 Second Avenue Detroit, Michigan 48226 on all 227 anno

> February 14, 1983 EF2 - 60,717

Director of Nuclear Reactor Regulation Attention: Mr. B. J. Youngblood, Chief Licensing Branch No. 1 Division of Licensing U. S. Nuclear Regulatory Commission Washington, D. C. 20555

Dear Mr. Youngblood:

References: (1) Enrico Fermi Atomic Power Plant, Unit 2 NRC Docket No. 50-341

(2) Letter W. F. Colbert to L. L. Kintner, EF2-53430, dated June 3, 1982, "Simulated Loss of AC Power Test"

Subject: Simulated Loss of AC Power Special Test

In the referenced letter Detroit Edison committed to perform a test which simulated a loss of AC power as did other NTOL BWR plants. These tests were intended to satisfy the augmented training requirements of Item I.G.1 of NUREG-0737. Subsequently, Pennsylvania Power & Light Company (PP&L) has performed a detailed evaluation of a station blackout event and submitted it to the NRC. The conclusion reached is that such a test unnecessarily jeopardizes the plant and the public and involves unnecessary costs since the potential exists for equipment to be exposed to environmental conditions close to qualification limits. This would require reanalysis and/or replacement.

PP&L therefore proposed to collect data obtained during the performance of alternative tests. A meeting was held on October 5, 1982 between PP&L and the NRC with representatives from several NTOLs, including Detroit Edison, in attendance. Additional clarification of PP&L's proposed tests and NRC's guidance was achieved.



Mr. B. J. Youngblood February 14, 1983 EF2 - 60,717 Page 2

Detroit Edison agrees with the conclusions of the PP&L evaluation and believes they generally apply to the Fermi 2 plant as well as Susquehanna. We therefore propose to conduct the tests as described in the attachment in lieu of the test we described in Reference 2.

Sincerely,

Attachment

cc: Mr. B. Little Mr. M. D. Lynch

## PROPOSED STATION BLACKOUT TEST SERIES

The intent of the special tests outlined below is to provide additional data to determine plant response to a station blackout.

The testing consists of the following:

- 1. Drywell cooling a test series will be conducted as a function of the number of drywell coolers in service. A stable temperature will be reached with all drywell cooling units operating. Half of the units will be shut off, such that an even distribution of cooling still exists. The transient response of the drywell will be measured, and a stabilized temperature will be recorded. The intent of this test is to measure drywell response to a change in cooling so that drywell response to a complete loss of cooling, such as would occur during a station blackout, can be more accurately predicted. Reactor temperature and pressure and other plant conditions that could influence the drywell response will be set up to achieve that goal.
- 2. Suppression Pool temperature response the response of the suppression pool to a depressurization that would occur in a station blackout will be measured as part of an MSIV closure test.
- 3. HPCI and RCIC temperature responses. A test will be done where all HVAC to these rooms is shut off and the temperature rise measured.
- 4. Additional information will be gathered relative to reactor water level instrumentation accuracy at lower than operating temperatures. Note that this does not cover level instrumentation used for LOCA monitoring.
- 5. A determination will be made as to what instrumentation will be lost during a station blackout.

Attachment A EF2-60,717 Page 2

- 6. Measure control room air temperature rise as a function of a loss of all HVAC. Two sets of measurements will be taken; one with normal controls and instruments operating, and the other with one division of instrumentation shut down. The goal is to obtain sufficient data to more accurately predict control room temperature rise for a station blackout event.
- 7. Measure temperatures in or near the remote shutdown panel in a manner similar to (6) above.
- 8. A test will be done prior to fuel load to check the emergency lighting in the control room.