



UNITED STATES
ATOMIC ENERGY COMMISSION
DIRECTORATE OF REGULATORY OPERATIONS
REGION I
970 BROAD STREET
NEWARK, NEW JERSEY 07102

RD: HQ

FEB 7 1973

J. G. Keppler, Chief, Reactor Testing & Operations Br.
Directorate of Regulatory Operations, HQ

RO INSPECTION REPORT NO. 50-289/73-01
METROPOLITAN EDISON COMPANY
THREE MILE ISLAND UNIT 1

The subject inspection report is forwarded for action.

The Core Flood Tank Flow Test presently proposed by the licensee does not appear to provide any basis for a quantitative determination of the coolant delivery capability of the system. The test originally proposed by the licensee in the FSAR required that CF system time/discharge capability be demonstrated to be in accordance with design calculations. In order to accomplish that objective, the test required that CF tank level, pressure, and isolation valve position be continuously recorded, relative to a common elapsed time, while discharging the contents of each tank into the open reactor vessel with water level established in the fuel transfer canal. In Amendment 32 to the FSAR, dated October 24, 1972, the licensee revised the description of the test to eliminate any requirements for monitoring of tank pressure, level, and valve position during the test, which precludes any quantitative analysis of flow delivery capability. As presently described in the FSAR, it merely requires that the CF tank isolation valves be opened and the tank contents allowed to discharge into the reactor vessel. Based on the present test description in the FSAR, the licensee has prepared a Core Flood Tank Flow Test procedure. While this test procedure improves upon the present FSAR commitments, in that it does require a check of elapsed times for a specified tank level change during discharge, and comparison of this time on one tank to the other to detect any significant difference, it still does not provide the basis for any comparison of the flow delivery capability of the system, as installed at Three Mile Island, with the flow delivery capability assumed for the LOCA analysis. It should be noted that the licensee has stated, in the FSAR, that the reason for the abbreviated test is that the verification of the calculation methods used to predict the CF system flow under accident conditions was successfully completed at Oconee and need not be repeated at Three Mile Island. We do not question the validity of the calculational model. Our concern is that the system, as installed at Three Mile Island, be demonstrated to perform as predicted by the previously proved calculational model.

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It is our position that the licensee should be required to perform a test of the system which will provide data that demonstrates that the system installed at Three Mile Island will provide the flow delivery capability assumed in the LOCA analysis.

E. J. Brunner For

E. J. Brunner, Chief
Facility Test & Startup Branch

Enclosure:

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cc: RO Chief, Reactor Testing & Operations Br. (21)
RO Chief, Reactor Construction Br.
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