TOLEDO EDISON

RICHARD P. CROUSE
Vice President
Nuclear
(419) 259-5221

Docket No. 50-346

License No. NPF-3

Serial No. 1067

August 14, 1984

Director of Nuclear Reactor Regulations
Attention: Mr. John F. Stolz
Operating Reactor Branch No. 4
Division of Operating Reactors
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Dear Mr. Stolz:

Recently Toledo Edison received a Safety Evaluation Report (SER), (Log No. 1521) dated May 18, 1984, on our revised Inservice Inspection and Testing Program which was revised in accordance with the ASME Boiler and Pressure Vessel Code Section XI of the 1977 Edition through the Summer 1978 Addenda. A request for relief from quarterly reverse flow testing various Service Water check valves, due to the difficulty in testing them, was denied and a justification for Service Water operability was asked to be submitted.

Service Water check valves SW329, SW82, SW335, SW44, and SW57 are currently being tested successfully in the reverse flow direction. A safety evaluation was written in Facility Change Request (FCR) 83-107 to enable operation without the internals of SW43 provided operator action is taken as needed. The proper action required to be taken is currently available to the operators.

Service Water check valves SW83, SW85, SW91, SW93, SW99, SW101, SW107, SW109, SW115, SW117, SW370, SW372, SW380, and SW382 could not be tested due to system design. FCR 84-115 was written on July 2, 1984, to lock closed various gate valves in the Service Water System to delete the reverse flow function of these check valves. The original safety function of the check valves in series with each Service Water valve listed above was to provide isolation between the two Service Water trains. The safety function of the locked closed gate valves identified in the proposed change is to isolate the two Service Water trains.

After the gate valves identified in the change are locked closed, the safety function of check valves to isolate the trains will be provided by the locked closed gate valves. Therefore, eliminating the requirements for the reverse flow testing of the check valves will not degrade the

A047
1/1

Service Water System's redundancy to meet the single failure criteria. As a result, no unreviewed safety questions are involved. A 10CFR50.59 review was performed as part of this FCR to justify adequate cooling capacity for the ECCS pump room and hydrogen dilution system blowers with these changes (see attached Safety Evaluation). The gate valves mentioned above are currently being administratively controlled to ensure operability of the Service Water System.

Very truly yours,

RPC:ECC:ljk

cc: DB-1 NRC Resident Inspector

SAFETY EVALUATION

This Safety Evaluation is written to justify that adequate cooling capacity exists for the Emergency Core Cooling System (ECCS) pump room, decay heat cooler from and H_2 dilution system blowers with the valves SW-86, SW-94, SW-102, SW-108, SW-116, SW-371 and SW-381 locked closed (see Fig. 9.1.-1 attached).

The original safety function of the check valves in series with each SW valve listed above was to provide isolation between the two service water trains. The safety function of the locked close gate valves identified in the proposed change is to isolate the two service water trains. The safety function of the coolers in the ECCS pump and decay heat cooler rooms is to maintain the room design temperature in normal and accident conditions.

After the gate valves identified in the proposed change are locked close, the safety function of check valves to isolate the trains will be provided by the locked close gate valves. Therefore, the reverse flow testing of the check valves will not be required.

ECCS pump room coolers 1-1 and 1-2 are located in room 115 (ECCS pump room 2), coolers 1-4 and 1-5 are in room 105 (ECCS pump room 1) and the cooler 1-3 is located in room 113 (DH cooler room) (see Fig. 1 attached). There are at present two trains of service water that supply water to each of the above coolers. However, only one train of service water is required to serve each of these coolers.

If train 1 of service water which provides flow to ECCS pump room coolers 1-4 and 1-5 in room 105 fails, the redundant train 2 will provide flow to the ECCS pump room coolers 1-1 and 1-2 in room 115 and the decay heat cooler room cooler 1-3 in room 113. The operable train 2 of SW will provide adequate cooling capacity in ECCS pump room 115 and decay heat cooler room 113, and, as a result, train 2 ECCS pumps will remain operable.

If train 2 of service water which provides flow to the ECCS pump room coolers 1-1 and 1-2 in room 115 and decay heat cooler 1-3 in room 113 fails, the redundant train 1 will provide flow to ECCS pump room coolers 1-4 and 1-5 in room 105. We have calculated that two coolers in ECCS pump room 105 will have adequate capacity to remove the heat loads in rooms 105 and 113, and will maintain these room design temperatures equal to or less than 122°F in accident condition. Therefore, the operable train 1 of SW will provide adequate cooling capacity in ECCS pump room 105 and decay heat cooler room 113, and, as a result, train 1 ECCS pumps will remain operable.

H_2 dilution system blowers 1-1 and 1-2 are provided with SW train 1 and 2, respectively. If train 1 of SW fails, the redundant train 2 will provide flow of the H_2 system blower 1-2. If train 2 of SW fails, the train 1 will provide flow to the H_2 dilution system blower 1-1.

Pursuant to the above it is concluded that changing the valves' position in the proposed change from locked open to locked close and eliminating the requirements for reverse flow testing of the associated check valves will not degrade the SW system's redundancy to meet the single failure criteria, and the two SW trains will be properly isolated from each other. As a result, there is no unreviewed safety question involved.

rs a/2

Docket No. 50-346
License No. NPF-3
Serial No. 1067
August 14, 1984
Attachment 2

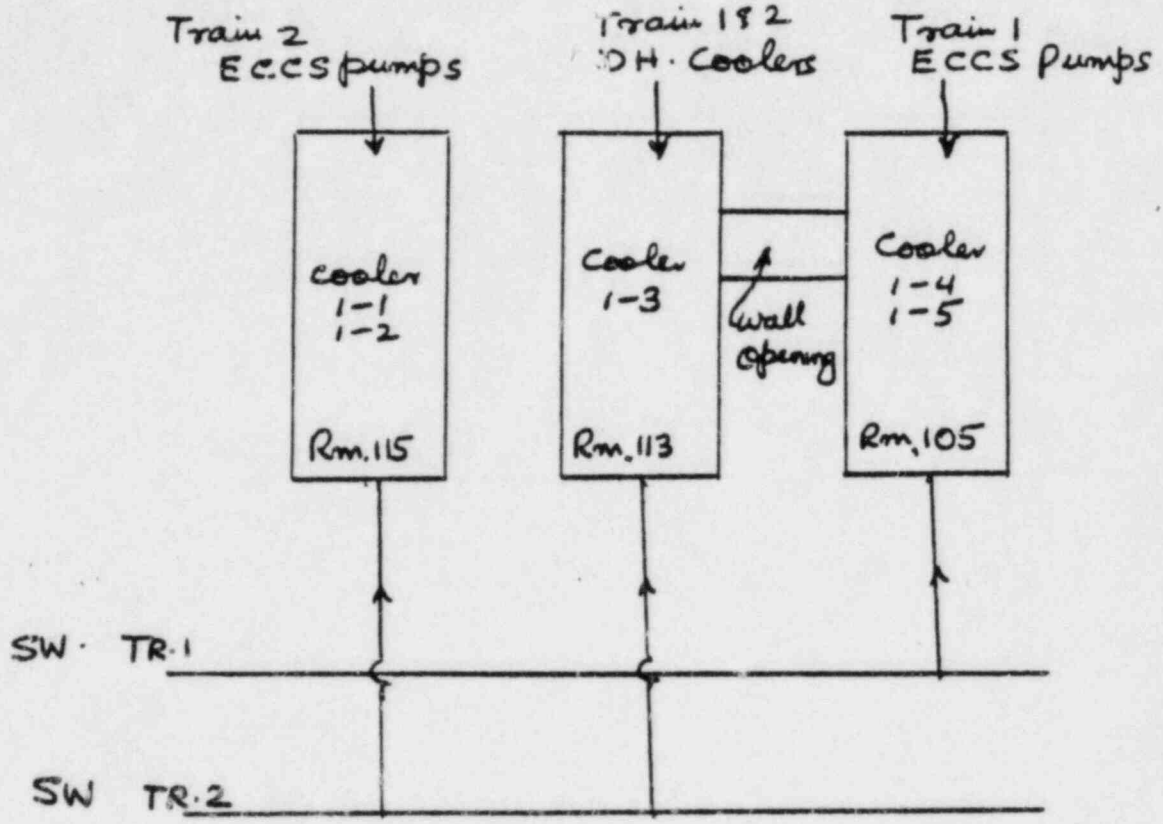

FIG. 1