

Docket No. 50-346

License No. NPF-3

Serial No. 1139

March 29, 1985



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

Director of Nuclear Reactor Regulation  
Attention: Mr. John F. Stolz  
Operating Reactor Branch No. 4  
Division of Licensing  
United States Nuclear Regulatory Commission  
Washington, D.C. 20555

Dear Mr. Stolz:

On May 18, 1984, the NRC issued a Safety Evaluation (Log No. 1521) related to Toledo Edison's letter of May 15, 1980 (Serial No. 616) submitting a revised Inservice Inspection (and Testing) Program, including requests for relief from certain testing requirements. Item II.B.2.1 of the Safety Evaluation concerned the individual closure testing of Valves HP-48, HP-49, HP-50, HP-51, HP-56, HP-57, HP-58, and HP-59. The requested relief from individual closure testing of these valves was found unacceptable and interim relief was granted. Toledo Edison was requested to submit an acceptable alternative.

In our letter of October 18, 1984 (Serial No. 1084), Toledo Edison committed to leak testing the back-to-back High Pressure Injection (HPI) check valves, HP-2A, B, C, D, HP-22 and 23, and MU-169, 196 and 197 during the 1984 Refueling Outage. Results of the testing identified virtually no leakage, less than the Technical Specification 1.0 GPM unidentified leakage limit.

In our October 18, 1984 letter, Toledo Edison committed to leak test valves HP-2A, B, C, D, HP-22 and 23, and MU-169, 196, and 197 at each cold shutdown (Mode 5) lasting more than 72 hours but not more frequently than once every three (3) months. Based upon the results of the testing conducted during the 1984 Refueling Outage, Toledo Edison is revising its commitment to leak test valves HP-59 and HP-57, HP-58 and HP-56, HP-48 and HP-50, HP-49 and HP-51, MU-169, HP-22 and 23 at each cold shutdown (Mode 5) lasting more than 72 hours but not more frequently than once every three months. This revised testing eliminates leak testing the motor operated valves HP-2A, B, C, D and the Makeup Pump Discharge Check Valves (MU-196 and MU-197).

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Toledo Edison's intent is to still test two pressure isolation boundaries formed by valves capable of automatic closure. This revised testing is more appropriate than testing committed to in our October 18, 1984 letter, based upon the following:

1. The revised testing will leak test the back-to-back HPI check valves which are the valves at issue in the May 18, 1984 Safety Evaluation.
2. The motor operated valves, HP-2A, B, C, and D, are not required to be administratively controlled in the closed position, thereby not encountering a pressure boundary.
3. MU-196 and MU-197, Makeup Pump Discharge Check Valves are not in a "Q" system, and, therefore, should not be taken credit for in testing.

Attachment I provides the proposed solution to meet the long term inservice testing requirements for the HPI system. Toledo Edison will conduct the previously described testing until the proposed modification is implemented.

Until this modification is prioritized as a project, conceptual engineering completed, and the required resources are evaluated against the existing schedular commitments, the completion date for this activity is questionable. Preliminary evaluation of this activity's relative importance, however, indicates that this project could be completed by the end of the 1987 refueling outage.

Very truly yours,

*R P Crouse*

RPC:SGW:JDE:dmt/nlf  
encl.

cc: DB-1 NRC Resident Inspector  
Pete Wohld, NRC Region III

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PLANNED MODIFICATION TO THE  
HIGH PRESSURE INJECTION SYSTEM

INTRODUCTION:

Toledo Edison Company hereto defines a system change for improved maintenance and alternative testing which is submitted as complying with your requirements. Relief Request No. 28, previously reviewed in the Safety Evaluation from your office dated May 18, 1984 (Log No. 1521), will be revised to an alternative test when the system modification is implemented. This system change description is accompanied by the attached sketch for clarification.

SYSTEM CHANGE:

The system change includes adding a separate swing check valve upstream of the present back-to-back check valves with its own drain point available for leak monitoring. This configuration offers the following advantages to Toledo Edison:

1. Allows leak testing to be completed for the back-to-back check valves and the swing check valve on each line. The back-to-back check valves are presently considered one valve.
2. Maintains two valves in Class 1 piping as the reactor coolant system boundary.
3. Places the swing check valve up stream of the stop check valves (HP-48, 49, 56, 57), thereby separating the swing check valve from the reactor coolant system when the stop check valve is locked closed and a drain valve is opened. This will provide Station personnel the capability of maintaining the swing check valve without removing the reactor core and inserting reactor coolant system cold leg plugs during an outage.
4. Moves the swing check valve from adjacent to the reactor coolant system and cold legs, thereby changing radiation exposure to ALARA.

FUNCTIONAL DESCRIPTION AND TEST REQUIREMENTS:

Component and Function: High Pressure Injection (HPI) normally closed check valves forming the ASME Class 1 to Class 2 boundary.

Class and Test Requirements: ASME Class 1, Category C; 10 CFR 50.55A(g) (6)(iii) augmented test requirements to be individually verified for closure capability per the Safety Evaluation (Log No. 1521) and the SER requirement to test per ASME Section XI IWV-3420.

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BASIS FOR ALTERNATIVE TESTING:

Reverse flow cycling during normal operation and cold shutdown is precluded by system design for individual check valves.

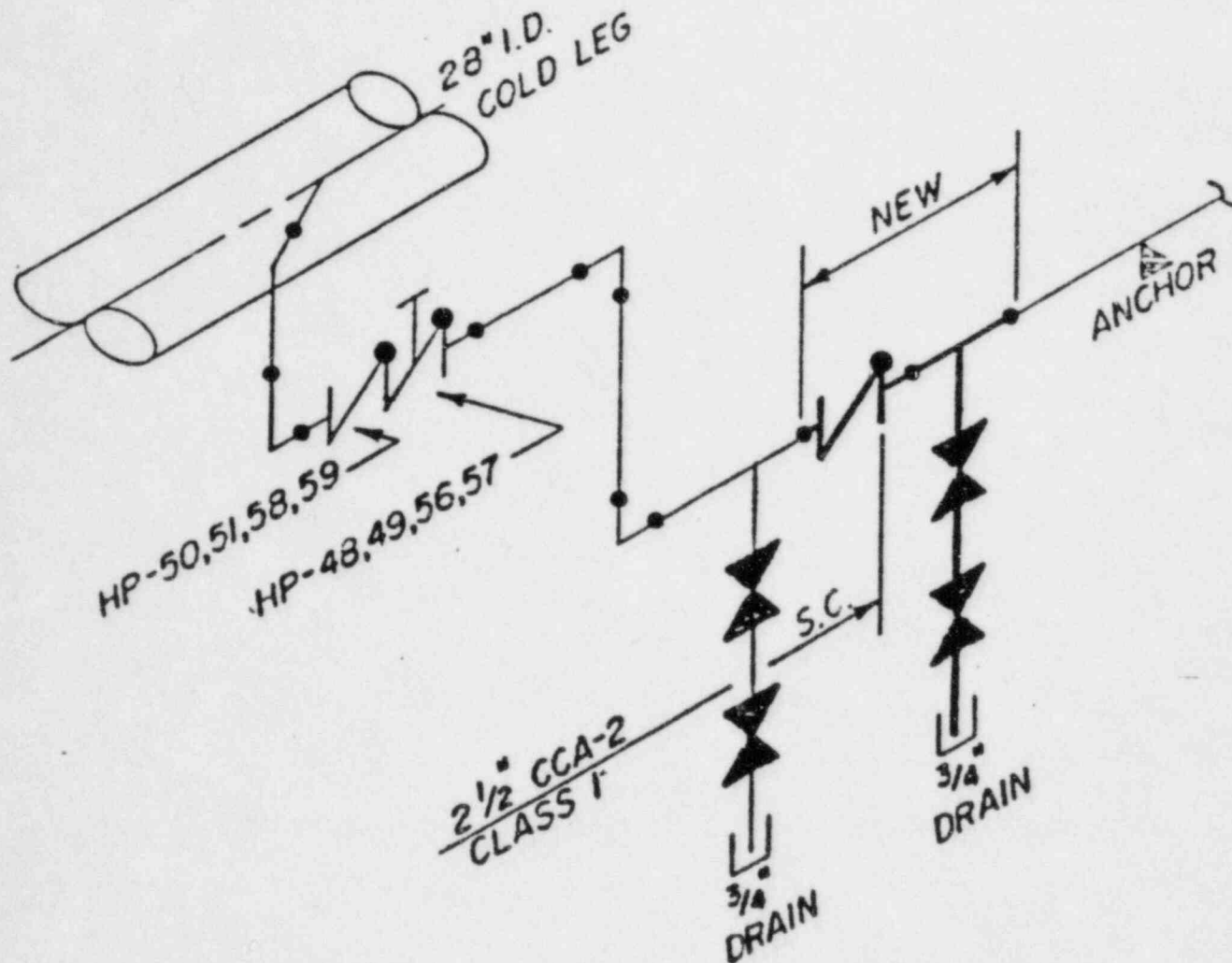
Upstream of the swing check valves (outside of containment) are motor operated normally closed valves which are designed and analyzed as Seismic Class I. The High Pressure Injection Piping System normal operating pressure is continually monitored in the Control Room by a high pressure alarm set at 375 psig. The system design provides safe high pressure piping back to the HPI pump discharge check valves outside of containment. The check valves at the HPI pump discharge are verified for closure capability at any cold shutdown (Mode 5) lasting more than 72 hours but not more frequently than once every three months.

ALTERNATIVE TESTING:

On a refueling outage frequency the valves will be tested for closure capability using leak detection methods to determine closure capability in accordance with Technical Specification 3.4.6.2.

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PLANNED CONFIGURATION FOR HPI PIPING INSIDE CONTAINMENT