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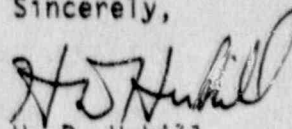
U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D.C. 20555

Dear Sirs:

Three Mile Island Nuclear Station, Unit 1 (TMI-1)
Operating License No. DPR-50
Docket No. 50-289
Generic Letter 89-10 Initial Response

Generic Letter 89-10 required a six month response to advise if the schedule and recommendations of the Generic Letter will be met. The attachment to this letter provides this response.

Sincerely,

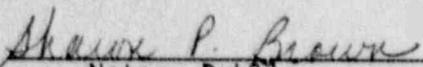


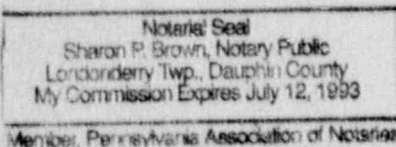
H. D. Hukill
Vice President & Director, TMI-1

HDH/DVH/spb:2117

cc: R. Hernan
F. Young
W. Russell

Sworn and subscribed to
before me this 28th day
of December, 1989.


Notary Public



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Generic Letter 89-10
Initial Response

A) Recommendations

Generic Letter 89-10 recommends that the licensee develop a program to coordinate the design basis review, baseline testing and periodic retesting of motor operated valves (MOVs) within safety-related systems. The letter also recommends that design basis flow and differential pressure testing be performed on as many MOVs as practicable. Full compliance with the recommendations of the Generic Letter involves establishing a program which encompasses several major sections.

Prior to issuance of IEB 85-03 TMI-1 implemented a program which encompasses most of the requirements of action items a, b, c and d of IEB 85-03. The attributes of GPUN's program include:

1. Investigation of the actual design basis of the torque switch settings;
2. Determination of the appropriate torque switch setpoints;
3. Resetting the torque switches on all applicable valves as required; and,
4. Issuance of a Maintenance Procedure to control torque switch settings on all applicable valves.

The scope of the program included most of the safety related systems. For the systems in the program scope the program included those valves which are required to be tested for operational readiness in accordance with 10CFR50.55a(g) and those valves which perform a containment isolation and/or safety-related function.

GPUN will use the existing TMI-1 program as the basis for improving a program to address the recommendations of Generic Letter 89-10 except as noted below:

Scope - The scope of the existing program will be expanded to include MOVs in safety-related piping systems (as defined in GL 89-10) not blocked from inadvertent operation using our currently accepted practices for prevention of inadvertent operation.

Design Basis Review - Only those events within the approved TMI-1 design basis as documented in the FSAR will be considered.

Determining Correct Switch Settings - GPUN currently uses analytical methods to determine thrust requirements at design basis conditions. Several of the factors used in the calculations are currently the subject of NRC and industry group evaluations. These factors include, but are not limited to, valve factor, hydraulic effects caused by piping configurations, stem lubrication allowances and rate of loading of spring packs. Any of these items could potentially require a revision to the methodology employed by GPUN. If this should occur, these items will be incorporated into the GPUN program as appropriate.

Verification of Switch Settings - The Generic Letter recommends methods to initially verify by testing and to periodically reverify that the switches of each MOV are properly set thereby ensuring that the MOV can meet its design basis function. The existing TMI-1 MOV testing program employs dynamic testing apparatus at static plant conditions to verify proper switch settings. Revision to the existing test methodology will be made as appropriate when the industry developed data bases indicate that different methodology will yield more accurate results. The TMI-1 MOV program also encompasses defined criteria for when valves needed to be retested. GPUN intends to continue this program and retest when appropriate.

The Generic Letter also recommends that full flow differential pressure testing be performed for all MOVs in the program. Where full flow in-situ testing cannot be performed due to plant constraints, the Generic Letter recommends full flow differential pressure testing be performed on prototype MOVs with documentation sufficient to validate repeatability with the in-situ MOVs. As interim measures, the Generic Letter allows analytical methods employing conservative extrapolation from lower than full flow differential pressure testing to be considered until prototype testing is completed. GPUN does not agree that implementation of full flow differential pressure testing is prudent at the present time for the following reasons:

- a) In-situ testing of each MOV under full flow differential pressure conditions is impractical from a plant safety viewpoint. Configuring plant systems to worst case design basis conditions for proving operability and collection of data is in conflict with existing programs to reduce unnecessary challenges to operators and engineered safeguards equipment. GPUN does not routinely subject the plant to design basis conditions without utilizing proven techniques accepted by both industry and nuclear standards committees.
- b) The alternative methods of full flow differential pressure testing allowed by the Generic Letter will require the formulation of testing criteria, systems and databases not currently developed within the industry.
- c) The methodology for establishing valve similarity in order to provide adequate justification for not differential pressure testing is not currently developed within the industry. Defining similarity is key for being able to provide adequate justification based on test results from other valves, whether in-plant or prototype.

- d) The orderly formulation of programs or the research required to allow extrapolation of the full flow differential pressure testing values with low pressure test criteria may take longer than envisioned by the NRC and thus may not support a 5 year time frame for completion of the program.

Existing margins which conservatively bound valve actuator factors are considered acceptable justification for not performing full flow differential pressure testing unless data indicates that individual testing is necessary.

For the reasons stated above, GPUN proposes to perform in-situ full flow differential pressure tests only on those MOVs where this is possible without violating Technical Specifications or placing the plant systems in an unsafe configuration. Other MOVs which cannot meet such testing limitations will be in-situ tested under the interim measures described in the Generic Letter. This program will be implemented to allow sufficient time for the industry to formulate accurate, repeatable and uniformly acceptable testing methods. This will result in a significantly better program which is representative of actual system configuration during accident conditions. The intent of the TMI-1 Program will be to integrate sound engineering determinations with test results to ensure MOV operability.

B) Schedule - The Generic Letter stated the refueling outages that start within six months of the date of the Generic Letter need not be counted in establishing the schedule. The Generic Letter was issued June 28, 1989 and received at TMI-1 on July 13, 1989. The TMI-1 8R Outage is scheduled to begin January 5, 1990. The timing of the issuance of this Generic Letter is at the six month timeframe before the 8R Outage. This timing was discussed with Ron Hernan, NRC TMI-1 Project Manager. The Generic Letter requires all actions to be complete by the end of the third refueling outage or 5 years, whichever is later. Based on the receipt date of the Generic Letter and the TMI-1 License Condition 2.C.9, GPUN does not intend to include 8R as the first TMI-1 outage in the Generic Letter scheduling. However, it is GPUN's desire to resolve these issues as soon as practical.

The Generic Letter recommends completion of scheduling and program information within one year of June 28, 1989 and that all baseline testing be complete within five years or three refueling outages from June 28, 1989. GPUN will implement the schedule for completing the recommendations within three refueling outages for TMI-1 with the exceptions as discussed above. The exceptions are not including 8R and the in-situ-testing.

However, industry findings and developments that alter the program approach will necessarily cause affected program elements to extend beyond the specified time period. Therefore, if the critical valve variables necessary to define valve similarity and the extrapolation methods for testing at non-design basis conditions are delayed in development, certain program elements will extend beyond the specified time period.