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December 28, 1989

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

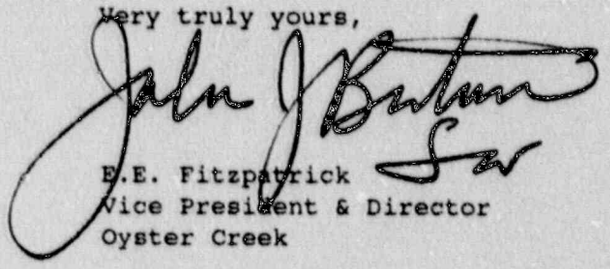
Dear Sir:

Subject: Oyster Creek Nuclear Generating Station
Docket No. 50-219
Response to Generic Letter 89-10

On June 28, 1989, the U.S. Nuclear Regulatory Commission issued Generic Letter 89-10 "Safety Related Motor-Operated Valve Testing and Surveillance", containing a six month reporting requirement. The six month report was to contain each licensee's concurrence or exception to the recommendations and schedules specified in the Generic Letter. Attachment I to this submittal fulfills the six month reporting requirement.

If any further information is required, please contact Mr. John Rogers at 609-971-4893.

Very truly yours,



E.E. Fitzpatrick
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NRC Resident Inspector
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Attachment 1

Response to Generic Letter 89-10

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.

In GPUN's initial response to IEB 85-03 GPUN stated that "in 1984 Oyster Creek 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 safety-related and Containment Isolation Motor Operated Valves."

The scope of the program described in the IEB 85-03 response included most of the safety related systems; the major exception being the system boundary function of the recirculation system. The scope of the program for these systems 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 Oyster Creek program as the basis for improvements 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 all MOV's in safety-related piping systems not blocked from advertent operation using our currently accepted practices for prevention of inadvertent operation.

Design Basis Review:

Only those events within the approved Oyster Creek design basis, as documented in the updated Final Safety Analysis Report, will be considered.

Determining Correct Switch Settings:

GPUN currently uses analytical methods which determine thrust requirements and 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. Revisions to the existing analytical methodology utilized to determine correct switch settings will be made as appropriate when these evaluations are finalized.

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 Oyster Creek MOV testing program employs dynamic testing apparatus at static plant conditions to verify proper switch settings. Revisions to the existing test methodology will be made as appropriate when the industry developed databases indicate that different methodologies will yield more accurate results.

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 these recommendations 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 collecting data by unvalidated techniques is unprecedented. GPUN does not routinely subject the plant to design basis conditions without utilizing techniques accepted by both the nuclear industry and Nuclear Standards Committees. Additionally, the program required to implement this testing is in direct conflict with existing programs to reduce the number of unnecessary challenges to operators and Engineered Safeguard Systems.

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 design margins which conservatively bound valve actuator sizing factors will be considered acceptable justification for not differential pressure testing unless proven otherwise.

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 more representative of actual system configuration during accident conditions. The intent of the Oyster Creek program will be to integrate sound engineering determinations with test results to ensure MOV operability.

B. Schedule

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 Oyster Creek with the exceptions as discussed above.

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.