



General Electric Company
175 Currier Avenue, San Jose, CA 95125

January 18, 1991
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MFN-009-91

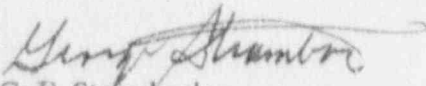
Director of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Mail Station P1-137
Washington, D. C. 20555

Attention: Carl H. Berlinger, Chief
Generic Communications Branch

Subject: **Notification of In Process Evaluation**

Please find the attached memo of my telephone call to Prasad Kadambi of your staff on January 18, 1991. The call provided information about our evaluation progress on the Robertshaw noncompliance with 10 CFR 50 Appendix B on GE orders for spare parts.

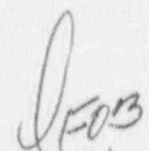
Very truly yours,


G. B. Stramback
Safety Evaluation Programs Manager
M/C 187, (408) 925-1912

Attachment

cc: L. S. Gifford (GE-Rockville)
N. P. Kadambi
P. W. Marriott (GE)
R. C. Mitchell (GE)
G. E. Rosen (Robertshaw)
PRC File

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MEMO OF TELEPHONE CALL

DATE: January 18, 1991
TIME: 11:15 AM
PERSON CALLING: G. B. Stramback & R. C. Mitchell
PERSON CALLED: Prasad Kadambi (NRC-NRR, 301-492-1153)
SUBJECT: **90 Day NRC and Utility Notification PRC Evaluation in Process
Robertshaw Noncompliance with 10 CFR 50 Appendix B**

Prasad Kadambi was called in order to inform the NRC of a PRC evaluation which is still in process; however, the evaluation has proceeded beyond ninety (90) days. GE's procedure for PRC evaluations proceeding beyond 90 days requires notification to the NRC of this in process evaluation.

Background

GE audited Robertshaw's quality assurance program in 1987 to verify implementation of their QA program, specifically as it applied to Safety Related equipment and the handling of spare parts orders. GE Checklist NEBG-34 (5/80) was used as a guide during this audit. Robertshaw has been supplying proper documentation indicating conformance to these requirements on parts during 1988, 1989 and 1990.

In preparation for our 1990 triennial audit, Robertshaw supplied a revised QA Manual indicating a continuing strong program. When contacted for the schedule of the 1990 triennial audit, however, Robertshaw indicated they felt they had been erroneously accepting Safety Related purchase orders. On September 27, 1990 GE Nuclear Energy was formally notified by a Robertshaw letter that Robertshaw had erroneously accepted "Safety-related" purchase orders from GE. Robertshaw, in conjunction with termination of their ASME "N" stamp program, had converted their quality program to one which was not compliant with 10 CFR 50 Appendix B. Robertshaw indicated that they have been, in essence, supplying commercial grade equipment to the nuclear industry since 1985.

Prior to the September, 1990 notification, GE was unaware of the Robertshaw change in compliance to our requirements of 10 CFR 50 Appendix B and 10CFR Part 21. Based on a recent GE audit of the present Robertshaw quality program it appears that application of certain material confirmation steps and retention of records deviate from a 10 CFR 50 Appendix B program. GE did conclude from the recent audit that Robertshaw is an acceptable vendor of commercial grade equipment which GE can dedicate for safety-related use.

After GE discussions with Robertshaw representatives, Robertshaw informed the NRC, on December 18, 1990, of their previous erroneous actions. This GE communication stems from the GE 10 CFR Part 21 investigation mentioned in the Robertshaw letter.

Scram valves and their parts purchased from Robertshaw are applied in the Hydraulic Control Units (HCUs) in the Control Rod Drive (CRD) System which performs the safety function of scrambling the control rods. Pressure indicators purchased from Robertshaw are used in the same HCUs, and as locally mounted pressure indication on high and low pressure safety systems. Some parts are purchased from Robertshaw as non-safety and are identified for use in non-safety applications; these parts are not of concern and are not part of this PRC evaluation.

Safety Basis

GE evaluated Robertshaw scram valve parts which were in GE inventory and determined that most were fully acceptable for their safety-related function. Those pressure indicators already supplied to utilities had Robertshaw certified hydrostatic pressure tests as a GE requirement. However, because there were a few marginally acceptable parts in the GE inventory, GE has concluded that a larger sample of supplied parts is necessary to determine if similar marginal or possibly unacceptable parts may have been supplied to utilities, and if any additional recommended actions are appropriate.

GE considers that there is an adequate justification for continued plant operation at this time. The basis for this position is the following:

- 1) The Robertshaw scram valve is designed with significant margin. Failure of several parts (e.g., nuts or bolts) would not result in catastrophic failure. Valves will typically leak before breaking.
- 2) The design of the CRD system can tolerate multiple random failures. Single failure of an HCU would not adversely affect plant safety.
- 3) A scram problem which is attributable to the HCU pressure indicators or scram valves would be found during CRD scram surveillance testing.
- 4) CRD operational problems caused by moderate leakage through the scram valve would be found during the weekly CRD netching test.
- 5) The pressure indicators are used only for local indication and have no active safety function.
- 6) A problem which is attributable to the pressure indicators should be found during surveillance testing.
- 7) There have been no reported pressure indicator or scram valve failures, attributable to the Robertshaw quality assurance problem, that have adversely affected plant safety.

Corrective Actions and Preventive Measures

- 1) Future GE purchases from Robertshaw will be made on a commercial grade basis, for dedication to safety-related. New GE identification numbers will be applied to the dedicated safety-related parts.
- 2) GE will provide, on request, safety-related replacement parts for all the safety-related Robertshaw piece parts manufactured under the 1985 Robertshaw quality assurance program and supplied by GE.
- 3) GE requests that all affected utilities return all such Robertshaw parts which are still in utility stock. The safety-related parts to be retrieved from stock and returned to GE were identified to the affected utilities.
- 4) GE recommends replacement, at the next planned refueling outage, of all installed Robertshaw parts identified to the affected utilities.
- 5) GE will evaluate a sample of the parts returned from utility stock inventory to provide a basis for closure of this PRC evaluation.

The NRC has already been notified by Robertshaw, and subsequently GE informed the NRC of the status of GE's evaluation. A final communication to the affected utilities and the NRC will be made upon closure of this evaluation, which is expected between July and December 1991.

GE has already initiated improved audit techniques for both safety-related and commercial grade vendors, which includes checks on the validity of subvendor certifications, engineering support during audits, and other actions which should improve GE's ability to detect a similar problem in the future.



GE Nuclear Energy

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