

Westinghouse  
Electric Corporation

Water Reactor  
Divisions

Electro Mechanical Division

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May 20, 1980

Mr. Uldis Potapovs, Chief  
Vendor Inspection Branch  
United States Regulatory Commission  
Region IV  
611 Ryan Plaza Drive, Suite 1000  
Arlington, Texas 76012

Dear Sir:

Reference: Letter to F. R. Bakos from Uldis Potapovs  
dated 23 April 1980 Docket No. 99900033/80-01

Westinghouse Electro-Mechanical Division has reviewed Inspection Report No. 99900033/80-01 and has determined that it does not contain proprietary information.

Response to the Notice of Deviation section of the inspection report is provided in the attachment. To facilitate ease of reading, the requirement and the observed deviation are repeated, followed by the Westinghouse Electro-Mechanical Division corrective actions.

Sincerely,

WESTINGHOUSE ELECTRIC CORPORATION  
ELECTRO-MECHANICAL DIVISION



F. R. Bakos  
General Manager

Attachment

8008140197

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RESPONSE to NOTICE of DEVIATION  
NRC INSPECTION REPORT No. 99900033/80-01  
INSPECTION CONDUCTED APRIL 7-11, 1980

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Deviation A

"Quality Assurance Engineering Instruction Manual, EIM #37, Revision 2, Inspection Control card (IC card), requires that all operations and inspections be logged, the lot quantity accurately entered and all nonconformances logged on the IC card.

Contrary to the above, on Control Rod Drive Mechanism components one lot (S.O. 1X068-02) of latch housings was found without operation 0075 logged on its IC card, one lot (S.O. 1M424-A1) of stationary latch support tubes was found without an accurate lot quantity on its IC card and several lots; i.e., (1M424-02) lock plungers, and (1M424-01) stationary latches were found without all the nonconformances logged on their IC cards. (See Details, paragraph B)"

Response

*The first two conditions cited (operation not logged and lot quantity error) were caused by oversights on the part of cognizant personnel. To confirm that the conditions were, in fact, isolated, a sample of 20 I.C. Cards was reviewed for the indicated discrepancy and none was noted.*

*As stated in the NRC Inspection Report, immediate actions were taken to correct the I.C. Cards in question. As additional corrective action to prevent recurrence, the conditions were reviewed with the personnel involved during the time of the audit.*

*The third condition (nonconformances not logged on I.C. Card) resulted because nonconformances identified by machine operators were not brought to the attention of Inspection personnel as required by internal procedures. As a result, the deviation was identified on the part, but the MRR/ECT was not issued in a timely manner.*

*To prevent recurrence, the procedure for reporting nonconformances was reviewed with Manufacturing personnel during work place meetings held in April.*

*As further action to prevent recurrence, the noted conditions will be discussed with Inspection personnel during work place meetings scheduled for the week of May 19, 1980.*

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Deviation B

"WCAP 8370, section 17.1.9, states in part:

'Each of the appropriate Water Reactor Divisions has established measures and procedures or set requirements which maintain control over special processes. These means include the qualification of processes and personnel for welding . . . and other processes . . . .'

'Special processes, such as welding, . . . cleaning and painting are prescribed by means of documented procedures.'

Contrary to the WCAP 8370, cleaning is not addressed as a special process in the QA Manual. Qualification of the process and personnel is not documented."

Response

We draw your attention to the following, excerpted from WCAP 8370:

"17.1.9 CONTROL OF SPECIAL PROCESSES

Each of the appropriate Water Reactor Divisions has established measures and procedures or set requirements which maintain control over special processes. These means include the qualification of processes and personnel for welding and inspection in accordance with ASME requirements, non-destructive examination per SNT-TC-1A standards, and other processes as may be necessary for adequate control. Qualifications records files are maintained and are reviewed periodically for currency.

Special processes, such as welding, casting, heat treating, non-destructive examination, electromechanical machining, explosive forming, cleaning and painting are prescribed by means of documented procedures. For example, paint applications are detailed in documents known as process specifications. These specifications, similar to the equipment specifications discussed in 17.1.1.3, are process oriented. The special process procedures and credentials of qualified personnel are maintained under document control and records keeping systems. Special processes are performed by qualified personnel and accomplished in accordance with the prescribed procedural controls with recorded evidence of verification maintained."  
(Emphasis added.)

The first paragraph above establishes that, in general, a decision must be made as what is deemed as a "Special Process" by the design/manufacturing organization. This is consistent with NUREG 75/087 Rev. 1 2/79 NRC Standard Review Plan which states,

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"The criteria for determining those processes that are controlled as special processes are described. As complete a listing as possible of special processes, which are generally those processes where direct inspection is impossible or disadvantageous, should be provided. Some examples are welding, heat treating, NDT, and chemical cleaning."

Moreover, the second paragraph of Paragraph 17.1.9 above indicates the necessary control requirements following determination of a special process.

The cleaning methods employed at WEMD are routine in nature, and qualification of the procedures and cleaning personnel is not considered necessary for adequate control as is permitted in WCAP 8370 Section 17.1.9. However, personnel assigned to cleaning operations are considered qualified by virtue of their experience and job classification.

However, cleaning is addressed in Section C13.1, "Handling, Storage, Shipping, and Preservation," of WEMD's QA Manual. This section states that cleaning is accomplished in accordance with detailed instructions prepared by Manufacturing Engineering. All cleaning at WEMD is performed in accordance with written procedures established for each product line (e.g., Process Specification 83311PM - Valves, 595691 - CRDM's, and 595698 - Reactor Coolant Pumps). In this manner, WEMD considers the requirement of WCAP 8370 has been fulfilled.

#### Deviation C

"The Quality Assurance Program Manual, Section C5.1, states in part:

' . . . product quality is maintained by clear and complete work instructions . . . . '

Contrary to the above, a procedure, in valve testing, "Periodic Water Purity Sampling," TP#3, revision F, did not address pH requirements as identified in Process Specification, "Cleaning and Packaging Requirements of Equipment For Use In the Nuclear Steam Supply System," P.S. 292722."

#### Response

In the valve hydro test facility, WEMD will measure, record, and evaluate pH as specified in Process Specification P.S. 292722. This change was implemented by Revision M to TP #3 issued May 8, 1980.

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*As stated in the "Details Section" of the Audit Report, Paragraph D.3.c, pH measurements were being taken for information. The pH values for the purity samples reviewed are within the limits specified in the process specification. To prevent recurrence, this condition was reviewed with the responsible personnel and they were reminded that internal procedures must be in line with customer specifications, or specific approval must be obtained.*

#### Deviation D

"QCAP 8370 table 17-1 and Process Specification, Packaging Nuclear Components and Spare Parts for Shipments, P.S. 85310QA, Revision 5, Section 4.2 commits Westinghouse to comply with ANSI Standard N45.2.2.

Contrary to the above, N45.2.2 was not complied with in that there was no evidence that wrap materials, desiccants, and caps and plugs were nonhalogenated."

#### Response

*Samples of the polyethylene sheet, polyethylene caps and plugs, and desiccant used at WEMD were analyzed and the results show that all items are in compliance with ANSI Standard N45.2.2 and Regulatory Guide 1.38.*

*In the future, WEMD will assure that the requirements of ANSI Standard N45.2.2 are met through verification of certification or analysis.*

#### Unresolved Item

"Testing of Completed Products - Westinghouse will have to perform the necessary calculations as required by NB3226(d) to assure no over-pressurization of Control Rod Drive Mechanisms."

#### Response

*Engineering has completed the stress analysis required by the Code. The CRDM hydrostatic test pressure meets the requirements of NB-6222 and NB-3226. The calculations were based on the same conservative primary membrane and bending stresses used in the preliminary analysis. Therefore, the maximum hydrostatic test pressure is 4193 psi. The formal analysis will be documented in EM 5303 which is scheduled to be issued by July 31, 1980.*