U.S. NUCLEAR REGULATORY COMMISSION
REGION I

Report No. 50-423/85-16

Docket No. 50-423

License No. CPPR-113 Category B

Licensee Northeast Nuclear Energy Company

Facility: Millstone Nuclear Power Station, Waterford, Connecticut

Inspection at: Millstone Unit 3

When: April 23 - May 27, 1985

Inspectors: Elise McCabe, for — 6/5/85
T. Rebelowski, Senior Resident Inspector — date

Elise McCabe, for — 6/7/85
D. Lipinski, Resident Inspector — date

W. Baunack — 6/10/85
W. Baunack, Project Inspector — date

Elise McCabe, for — 6/7/85
P. Swetland, Senior Resident Inspector, Haddam Neck — date

Approved by: Elise McCabe — 6/12/85
E. McCabe, Chief, Reactor Projects Section 3B, DRP — date

Summary: Routine resident (161 hours) and region-based (107 hours) inspection. The following were observed: a limited scale emergency exercise; areas that experienced minor flooding in the Control Building and their cleanup; flushing of the auxiliary feedwater pump, field welding, the extent of service water pipe leakage in the component coolant water area; ultrasonic testing of the low pressure safety injection system; and eddy current testing of a steam generator. NRC Circulars and Information Notices were reviewed.

A violation for inappropriate control of maintenance activities was found incident to inspection of minor flooding in part of the Control Building. Otherwise, no unacceptable conditions were found.

DETAILS

1. Persons Contacted

Numerous members of Northeast Utilities and Stone and Webster (S&W) Corporation including engineers, technicians, craftsmen, and members of staff management were contacted.

2. Licensee Action On Previous Inspection Findings

(Closed) Inspector Follow Item (423/84-06-05), Foreign material and debris in carbon dioxide system piping. The licensee has conducted pneumatic testing downstream of the selector valves. Following pneumatic tests, each piping system was blown down with nitrogen. The discharge from the selector valve piping to the nozzle was monitored. The inspector verified cleanliness of a typical flush path by examining the flush cloth and finding it acceptable. This item is closed.

(Closed) Inspector Follow Item (423/84-10-03), Review of licensee's commitment list based on review of FSAR changes. Inspector reviews of the PORC minutes and commitment lists determined that the present listing does reflect FSAR changes which require changes to procedures, tests, etc. This item is closed.

(Closed) Inspector Follow Item (423/84-20-03), Polar crane brake drum fire. The cause of the fire was determined to be excessive greasing of crane motor bearings (No. 2 main hoist). The licensee found grease in the brushes and brush rigging. Further brake drum examination indicated wear. A new brake drum was installed and revised lubrication requirements were promulgated. This item is closed.

3. Licensee Reports of Potential Significant Deficiencies

a. Items Where Licensee Action Remains Outstanding

(1) Core Exit Thermocouple Inaccuracies (SD-82) 85-00-15

(Open) On May 9, 1985, the applicant reported a potentially significant deficiency involving core exit thermocouples supplied by Westinghouse. Westinghouse notified NUSCO that measured thermocouple accuracies were not consistent with accuracies assumed in the safety analysis for the plant. Westinghouse is to provide generic information.

(2) Core Thermocouple Installation Deficiency (SD-83) 85-00-16

(Open) On May 22, 1985, the applicant reported a potentially significant deficiency involving the improper installation of core thermocouples. The thermocouple fittings were installed such that they could loosen, causing primary system leakage and potentially rendering the thermocouples inoperable. The applicant attributes

the deficiency to inadequate vendor installation procedures. This item will remain open pending completion of corrective actions.

(3) Possible Mis-Operation of Westinghouse DS-416 Reactor Trip Switchgear (SD-37) 83-00-04 (Update)

(Open) The applicant had reported several deficiencies with the trip devices in Westinghouse DS-416 scram breakers. To correct these deficiencies, Engineering and Design Coordination Report (E&DCR) T-C-00950 was issued to change the undervoltage trip assembly and to add an auto-shunt trip. The work has been completed per Automated Work Order (AWO) M38412663. Both the E&DCR and AWO with attachments were reviewed by the inspectors. This item will remain open pending satisfactory completion of switchgear testing.

b. Closed Items

Cable Tray Offset Reducers (SD-30) 82-00-12

(Closed) The applicant reported a potentially significant deficiency involving cable tray design and fabrication. On certain trays, side-rails had been notched to allow inward bending to narrow the tray width where necessary during installation. The notches should have been joined with seam welds. Those welds were omitted. The applicant determined that this item is not actually reportable per 10 CFR 50.55(e) based on calculations performed by Stone and Webster and withdrew his report in a letter dated June 7, 1984. The inspector reviewed the calculations (12179-SEO-SE 34.286) upon which the withdrawal was based. The calculational method involved a static analysis equivalent to conditions present under the Operating Basis Earthquake and the Safe Shutdown Earthquake. The inspector noted that the critical moments of inertia (I) and cross-sectional areas (A) had been adjusted downward to reflect the worst-case unwelded notches/cracks found. The calculations did indicate that the affected trays are acceptable as-is. This item is closed.

4. Observation of Field Welding

The inspector observed welding of manual valve 3FWS*V916 to its associated piping, Field Weld FW-19 shown on S&W Drawing 12179-CI-FWS-18, Sheet 1 of 3. The work was controlled according to the Production Maintenance Management System (PMMS) using Construction Work Permit (CWP) M3-85-03779. Approved welding procedures for the weld were at hand at the job site. Welding filler rods were clean and stored in a leather pouch prior to use. No unacceptable conditions were found.

5. Flushing

The inspector observed flushing of the forced flow lubricating oil system of the "A" Auxiliary Feedwater pump. Activities observed included flush rig connection and operation, attainment of procedural prerequisites, and evalu-

ation of flush screens. Flushing was accomplished per T3322-F03, Revision 0, with Change 4, "FWA-P1A Pump Bearing Oil Flush." Interviews with the cognizant flushing engineer and assigned pipefitters indicated that the test personnel were knowledgeable of the flushing methods and practices involved. No unacceptable conditions were found.

6. Phase I Valve Testing - Low Pressure Safety Injection to High Pressure Safety Injection Suction Cross-Over Valve (3SIH*MV8807B)

The inspector observed several Phase I motor-operated-valve tests on the "B" low pressure safety injection to high pressure safety injection suction cross-over valve (3SIH*MV8807B). Testing was accomplished per T3308-1M03. The inspector observed indication and control relay verification (red-lining) which validated segments of logic shown on S&W Drawing 2179-ESK-6MQ. Circuit verification was documented on "Annunciator/Computer Data Sheets (PU522)." The inspector noted that the valve under test was isolated from the balance of the system; that test personnel were stationed at the Motor Control Center (MCC) for the motor operator, at the valve, at the valve position indication junction box, and in the control room, and were in communication via telephone headsets; and that test personnel were knowledgeable of test methods and practices. The inspector also observed testing of the motor operator and motor controller for the valve. These results were documented on "Megger Data Sheet (PU531)" and "Motor/Controller and MOV Test Record (PU524)." No unacceptable conditions or practices were noted.

7. Minor Flooding in Control Building - April 3, 1985

a. Overview

At approximately 1435 on April 3, 1985, a minor flooding incident occurred in the control building. As manual valve 3SWP*V744 was being disassembled for troubleshooting and maintenance, residual water from the service water system issued forth. The 4 foot, 6 inch elevation of the control building cable-switchgear vault was flooded to a depth of about 3/4 inch.

b. Background, Event Description, and Inspectors' Observations

Valve 3SWP*V744 is a 3 inch manual "plug valve" located in the service water supply line to several Air Conditioning Units (ACUs) in the Control Building. Piping and Instrument Diagrams (P&IDs) 12179-EM-133B-2A and 12179-EM-151E-2B show that 3SWP*V744 is not isolable from the "A" Service Water header except by securing the pumps (3SWP*P1A and 3SWP*V744) and shutting the pump discharge valves (3SWP*MOV102A and 3SWP*MOV102C). The P&IDs show that valve 3SWP*V744 may be isolated from the balance of the piping serving the ACUs by valve 3SWP*V745. A low-point drain is provided in a "U-trap" in the piping located on the ACU side of valves 3SWP*V744 and 3SWP*V745 and depicted on the P&IDs. Physical inspection showed that valve 3SWP*V745 is located adjacent to and about 1½ feet above 3SWP*V744. The low-point drain of the U-trap is located about 1

foot above 3SWP*V744 and below 3SWP*V745. An "A" train header drain, 3SWP*V991, on the service water pump side of 3SWP*V744 is also depicted on the P&IDs.

In the course of startup testing, the Startup Department identified seat leakage in valve 3SWP*V744. Automated Work Order (AWO) M-385-03317 was generated on February 11, 1985 to troubleshoot and correct this problem. Maintenance was deferred until several jobs developed which could be accomplished during a single system outage. On March 29, 1985, tagout 2240-85 was prepared in accordance with Procedure ACP 2.06A, Revision 8, "Station Tagging," to secure and isolate sections of the service water system for maintenance. Tagout 2240-85 isolated 3SWP*V744 from the sea but did not isolate 3SWP*V744 from the significant volume of piping above 3SWP*V744. Procedure OP 3250, Revision 1, "Removing Equipment from Service for Maintenance," instructs operators to vent and drain piping in high pressure (greater than 500 psi) and high temperature (greater than 200 degrees) systems prior to opening. No specific isolation requirements are levied on systems such as service water. As disassembly of valve 3SWP*V744 began on April 3, a large volume of water drained from the piping supplying the air conditioning units above 3SWP*V744, flooding the floor of the 4 foot 6 inch level of the control building to a depth of about 3/4 inch. The affected area houses safety-related electrical buses and switchgear. Due to the shallow depth of the flooding, no equipment damage occurred.

c. Individual Listing of Potential Problem Aspects

-- Isolation and safety tagging for AWO M385 03317 was made in accordance with ACP 2.06A, "Station Tagging," Revision 8, and OP 3250, "Removing Equipment from Service for Maintenance," Revision 1. Troubleshooting and repair of valve 3SWP*V744 was conducted in accordance with Automated Work Order M-385-03317. A specific procedure was not prepared; the work was judged to be within "the skills of the trade."

-- Isolation for valve 3SWP*V744 was established from the sea side only as described in tagout 2240-85. The component side isolation valve, 3SWP*V745 was not tagged shut for isolation. The low-point drains, 3SWP*V874 and 3SWP*V991, were not tagged open for leakoff protection. (3SWP*V991 was later tagged open for recovery work on April 5.)

-- A significant time elapsed between the preparation of the service water system for maintenance on March 29 and the beginning of maintenance on April 3. During such an interval, systems conditions could change. For example, a drained system could refill due to valve leakage.

-- There are no installed provisions to drain and dewater the below grade, 4 foot 6 inch elevation of the control building, which houses safety-related electrical buses and switchgear.

d. Relationship to a Previous Event

On March 20, 1985, portions of the Engineered Safety Features (ESF) building were flooded as a result of an event in which a portion of a fluid system was not isolated while it was opened. This was due to interaction between flushing and testing activities. There was insufficient control over the interacting evolutions. In the more recent (April 3) event, a portion of the control building was flooded because of a fluid system was not adequately isolated and drained prior to opening. Both events involved flooding due to inadequate lineup controls.

e. Conclusion

The "Northeast Utilities Quality Assurance Program Topical Report," Revision 6, Section 5 requires that activities affecting quality be conducted in accordance with appropriate procedures. On April 3, 1985, isolation was effected and maintenance was begun on valve 3SWP*V744 in such a way as to cause limited but uncontrolled flooding. The controlling procedures were adhered to and were therefore inappropriate. This is a violation (423/85-16-01).

8. Service Water Leak

On May 17, 1985, a hole developed in the service water inlet elbow to the "B" Component Cooling Water (CCW) heat exchanger, fitting 3SWP-23-3-2-3. The fitting is a nominal 24-inch carbon steel pipe clad internally with Copper-Nickel alloy (90/10). The system was drained and the affected elbow was removed for further inspection and repair. Destructive examination revealed a flaw in the cladding. Cavernous pitting of the underlying base metal was attributed to galvanic action between the dissimilar metals immersed in the service water (an electrolyte). It is conjectured that the clad flaw developed during fabrication of the elbows. The external shape of the hole was round and approximately 3/8 inch in diameter. The internal shape was elongated approximately 1/8 inch by 1-3/4 inches, oriented longitudinally. Two other similar elbows have received extensive ultrasonic examination to determine if similar problems exist. No defects or thinning of the similar pipes' walls were identified. Repair methods for the elbow are being evaluated (IFI 423/85-16-02).

9. Observations of Emergency Exercise

On May 15, 1985, the licensee conducted an emergency drill for Millstone 3. Participation in this drill was limited to utility personnel. The inspectors observed the implementation of selected aspects of the licensee's emergency response including operator response, technical support activities, event classification and reporting, and coordination of emergency response activi-

ties. The inspectors noted that coordination of emergency repair activities between the technical support (TSC) and operational support (OSC) centers could be improved, and that the facilities in the OSC for planning, documenting, and implementing emergency repair (ERT) activities were crowded by onsite radiation monitoring and communications activities. Event status briefings of operational personnel in the control room were infrequent. This latter deficiency would be more significant during actual emergencies due to the separation of operators at their actual watch stations. That was not simulated during this drill. Following the licensee critique of this drill, the inspectors met with licensee management to discuss NRC observations during the exercise and to discuss scheduling of the NRC Emergency Plan Appraisal. Licensee implementation of corrective actions related to the critique of this exercise will be reviewed during that appraisal. The inspector had no further questions at this time.

10. Southwest Fabricating-Radiographic Film Review

The licensee has performed, through an independent consultant, a review of 253 welds documented on 1265 radiographic films of ASME Code Class I joints.

One potential rejectable indication per ASME III requirements was identified: weld #3, 3-SIL-507-2-1-1. The licensee further examined the area of concern with ultrasonic techniques. The inspector observed the UT of the area of concern. Although the indication was not rejectable, it was removed under N&D 13,038. The inspector has no further questions on the licensee's program for review of Southwest Fabricating Company radiographic film or on the review results.

11. Eddy Current Inspection - Non-Ferromagnetic Heat Exchanger Tubes

Observations were made of licensee's preparations and implementation of MIZ-18, Multi-frequency/Multi-parameter base line data for steam generators.

Zetec Procedure PSP301-18, Revision 2 was reviewed and found to contain elements of Regulatory Guide 1.83, Revision 1, Inservice Inspection of Pressurized Water Reactor Steam Generator Tubes, and various sections of the ASME Boiler and Pressure Vessel Codes. The full use of this procedure as a basis for acceptance is under review by NRR.

The inspector observed testing for Steam Generators A and D. Personnel monitored the operation by use of CRT's with a phase vector display that was recorded on magnetic 16-track digital tape. Initial findings indicated some anomalies in the tubes that were tested. This item will be reviewed by a regional specialist inspector (IFI 423/85-16-03).

12. IE Circular, Bulletin, and Information Notice Followup

The inspector reviewed a number of IE Circulars and Information Notices and the applicable licensee actions on these matters. Details of this review are in Attachments A and B to this report.

14. Management Meetings

At periodic intervals during the course of this inspection, meetings were held with senior plant management to discuss the scope and findings of this inspection. During those meetings, no proprietary information was identified as being in this report.

ATTACHMENT A

NRC CIRCULARS

IE No.	Discussion
76-01	This circular requested information relating to modifications to the hoist control on installed cranes similar to those at Dresden. The licensee replied that no circuit modification or equipment similar to that described will be used at Millstone 3. This circular is closed.
76-02	This circular described certain malfunctions which were experienced with Westinghouse BFD and BF relays. The circular requested the licensee to describe the proposed actions to be taken relative to this matter. The licensee responded, stating that no Westinghouse BFD or BF relays will be used on Millstone 3 safety-related systems. This circular is closed.
76-04	This circular described defective Neutron Monitoring bypass switches identified by General Electric during fabrication of control panels which were designated for shipment to BWRs. This circular is not applicable to Millstone 3 and is closed.
76-05	This circular described certain problems experienced with some models of ITT Grinnell snubbers. The licensee's response stated that no ITT Grinnell Hydraulic shock and sway suppressors of the type described will be used on Millstone 3 safety-related systems. This circular is closed.
76-07	This circular described certain instances of inadequate performance by reactor operating and support staff members. Only facilities with an operating license were required to respond. The present training for and NRC evaluation of operator performance incident to the issuance of NRC licenses to plant operators is considered adequate to address these matters. This circular is closed.
77-02	This circular informed licensees about National Weather Service predictions that heavy Spring flooding in certain areas. Licensee review concluded that this concern is adequately addressed because Millstone 3 is located near the coast, no major river is near the site, the facility is in the area of lowest flood potential in the Northeast, and the FSAR addresses flood protection and ice impact and blockage. This circular is closed.
77-07	This circular described two instances of short period scrams at BWRs. The circular recommended that BWR operators review their startup procedures. This is not applicable to Millstone 3 and is closed.

IE No.	Discussion
77-08	This circular described two failures of feedwater sample probes. The sample probes were schedule 120 stainless steel, 1 inch OD, and about 14 inches in length with 3 holes spaced to serve as sample entry ports. The licensee reviewed this circular and concluded the problem does not exist at Millstone 3 because (1) the probe material is schedule 160 rather than 120, (2) the pipe is not weakened by sample ports (Millstone 3 design uses a 45 degree entry cut), (3) Millstone 3 uses fillet weld to socket weld coupling so the heat affected zone is not exposed to the fluid environment. This circular is closed.
77-09	This circular described improper fuse coordination in BWR standby liquid control system control circuits and is only applicable to BWR facilities. It is therefore closed.
77-10	This circular described two instances in which vacuums resulted in damage to liquid process tanks. The circular recommended that licensees examine systems that contain low pressure process or holdup tanks to assure that adequate measures have been taken to protect against vacuums. All tanks at Millstone 3 not designed for full vacuum are equipped with a vent to the reactor plant aerated vents. The licensee's response to Bulletin 80-05 further describes measures taken to protect against vacuums in tanks. This circular is closed.
77-12	This circular described a number of events involving dropped fuel assemblies at operating BWRs. The circular does not apply to Millstone 3 and is therefore closed.
78-01	This circular was issued to well logging source licensees, does not apply to Millstone 3, and is closed.
78-10	This circular was issued to institutional medical licensees, is not applicable to Millstone 3, and is closed.
78-11	This circular, "Recirculation M-G Set Overspeed Stops," was applicable only to BWRs and is closed.
78-12	This circular, "HPCI Turbine Control Valve Rod Bending," was applicable only to BWRs and is closed.
78-14	This circular, "HPCI Turbine Reversing Chamber Hold Down Bolting," was applicable only to BWRs and is closed.
78-17	This circular informed licensees about cases of inadequate guard training/qualification and falsified training records and informed them that their program to preclude similar situations will be evaluated by NRR during licensing re-review of their guard qualification and training plan. The licensee has submitted their plan to NRR and it is currently under review. This circular is closed.

IE No.	Discussion
79-01	This circular was issued to medical licensees and radiopharmaceutical suppliers, is not applicable to Millstone 3, and is closed.
79-06	This circular was issued to medical licensees and concerns the use of radiation shields for syringes and bottles for nuclear medicine. It is not applicable to Millstone 3 and is closed.
79-07	This circular, "Unexpected Speed Increase of Reactor Recirculation MG Set Resulted in Reactor Power Increase," was applicable only to BWRs. It is therefore closed for Millstone 3.
79-08	This circular describes the theft of two 5 gallon cans of low enriched uranium with the intention of extorting money for return. No specific action was requested of the licensee. The licensee has submitted a security plan which is currently under review by the NRC. This circular is closed.
79-09	This circular describes occurrences of split or punctured regulator diaphragms in certain self-contained breathing apparatus. The licensee reviewed this circular and has incorporated a diaphragm check for Scott Air Packs into their 908 series procedures. This circular is closed.
79-14	This circular, "Unauthorized Procurement and Distribution of Xenon-133," was issued to medical licensees and radiopharmaceutical suppliers, is not applicable to Millstone 3, and is closed.
79-15	This circular described the bursting of high pressure hoses and malfunction of relief valves and "O" Rings in SurvivAir Mark I self-contained breathing apparatus. The licensee determined that Millstone 3 does not use the SurvivAir Mark I self-contained breathing apparatus. This circular is therefore closed.
80-03	This circular, "Protection From Toxic Gas Hazards," recommends that licensees evaluate the plant against Section 6.4 and applicable parts of Section 2.2.1-2.2.2 and 2.3.3 of the Standard Review Plan with respect to toxic gas hazards. The Millstone 3 design incorporates Chlorine detectors which isolate the control room from the outside environment. Also, FSAR Section 6.4 has been prepared using applicable parts of Sections 6.4, 2.2.1-2.2.2, and 2.2.3 of the SRP with respect to toxic gas hazards. Incident to the process for issuance of an operating license, protection against toxic gas at Millstone 3 has received NRC review subsequent to issue of Circular 80-03. This circular is closed.
80-06	This circular, "Control and Accountability Systems for Implant Therapy Sources," was issued to medical licensees, is not applicable to Millstone 3, and is closed.

IE No.	Discussion
80-08	This circular, "BWR Technical Specification Inconsistency - RPS Response Time," is applicable to BWRs, not to Millstone 3, and is closed.
80-09	This circular described problems with internal communications systems and recommended licensees determine the source of power for plant internal communications systems and determine whether any plant electronic equipment may be adversely affected by portable radiotransmissions. The licensee determined that Millstone 3 internal communications (page/party system and maintenance jack system) are powered by a reliable source (vital power) using an inverter and a backup battery. The licensee's control of portable radio transmissions is being tracked as IFI 84-25-07. This circular is closed.
80-13	This circular describes fuel assembly grid strap mechanical damage which was identified at several facilities. The circular recommended that licensees inspect grid straps for damage and review Westinghouse fuel handling precautions and adopt the applicable recommendations. The licensee has incorporated applicable portions of Westinghouse "Instructions, Precautions, and Limitations for Handling New and Partially Spent Fuel Assemblies," dated October 23, 1981, into facility fuel handling procedures. This circular is closed.
80-16	This circular describes potential misapplication of Rosemount Inc. Models 1151 and 1152 Pressure Transmitters with either "A" or "D" output codes. The licensee has reviewed this circular and determined that no such transmitters are used in safety-related equipment at Millstone 3. This circular is closed.
80-19	This circular, "Noncompliance with Licensee Requirements for Medical Licensees," was issued to medical licensees, is not applicable to Millstone 3, and is closed.
80-20	This circular, "Changes in Safe-Slab Tank Dimensions," was issued to fuel facility licensees, is not applicable to Millstone 3, and is closed.
80-24	This circular, "AECL Teletherapy Unit Malfunctions," was issued to fuel facility licensees, is not applicable to Millstone 3, and is closed.
81-04	This circular provided clarification with regard to the role of the Shift Technical Advisor and importance of reporting operational events. Millstone 3 does not plan to have Shift Technical Advisors. The reporting of operational events is specified in various ACP-QA procedures. This circular is closed.
81-11	This circular, "Inadequate Decay Heat Removal During Reactor Shutdown," recommended certain actions for licensees of BWRs with an operating license, is not applicable to Millstone 3, and is closed.

IE No.	Discussion
81-12	This circular deals with inadequate test procedures for reactor trip breakers. Subsequent to this circular and following the Salem ATWS event, Generic Letter 83-28 was issued. The licensee's actions relative to reactor trip breakers are described in their response to Generic Letter 83-28. This circular is closed.
81-14	This circular describes various failures of main steam isolation valves to close and notes that most failures result from (1) poor quality control air to the pilot valves and (2) binding betweem the valve stems and the valve stems' packing. The circular requested construction permit holders to evaluate control air designs and consider design changes where appropriate. The licensee reviewed this circular and concluded the problem does not exist at Millstone 3 since (1) the valves are not air-operated and (2) due to the enclosed design of the valves, no stem or stem packing exists. This circular is closed.

ATTACHMENT B

NRC INFORMATION NOTICES (IEN'S)

IEN #	Discussion
83-10	This notice provided the licensee with clarification of several aspects relating to use of NRC-Certified transport packages. This notice was reviewed by the licensee for applicability to the whole site. The Radwaste Supervisor reviewed existing HP and ACP-QA procedures and concluded that each of the issues addressed in the notice were adequately addressed. This notice is therefore closed.
83-32	This notice described the rupture of two Americium-241 sources in a well-logging device. The rupture occurred during recovery operations when the device became stuck in a drilled hole. Though this notice was not applicable to Millstone 3, the facility's health physics personnel were made aware of this event by the licensee. This notice is closed.
83-65	This notice describes a low flow condition through a reactor coolant loop resistance temperature detector bypass line. The presence of low flow in this line should be revealed by a low flow alarm. However, no regulatory requirements or vendor recommendations are established regarding periodic surveillance of the flow sensor or alarm. The licensee reviewed this notice and, by memo dated November 1, 1983, documented that the Millstone 3 I&C Department will perform a refueling calibration of the flow sensor and associated alarm circuitry. This notice is closed.
84-23	This notice describes a potentially significant event concerning the failure of two naturally aged automatic switch company (ASCO) solenoid valves. These valves are ASCO Models MP-8316 and MP-8344. An engineering review was conducted by Stone and Webster and it was determined that no ASCO MP-8316 or MP-8344 solenoid valves are utilized in Class 1E applications at Millstone 3. This notice is closed.
84-52	This notice provides information on deficient procurement controls and QA practices and calls attention to possible generic problems in procurement activities. Engineering Procedure EN 31061, Engineering Review of Quality Related Purchase Requisitions, has been prepared to specify the QA documentation requirements on purchase requisitions. This procedure addresses the concerns outlined in the Information Notice as they apply to Millstone 3. Also, document acknowledgement sheets show the notice has been routed to all appropriate personnel. This notice is closed.

IEN #	Discussion
84-54	This notice reports that, during some recent Integrated Design Inspections, a common finding was deficiencies in design base documents and calculations supporting design of nuclear power plant structures, systems, and components. Documentation shows this notice was reviewed by both the Millstone 3 Engineering Department and the Stone and Webster Engineering Department. The licensee concluded that the specific problems described in the notice do not exist at Millstone 3. Design policy and governing procedures require that necessary calculations and supporting documentation be retained. Also, to assure that personnel are aware of this potential problem, the notice has been reviewed by all Plant Operations Review Committee members and responsible personnel within the Engineering Department. This notice is closed.
84-55	This notice provided information relating to a potentially generic problem involving reactor coolant leaks from incore probe seals. The leaks have occurred, during maintenance, while the reactor coolant system was at an elevated pressure and temperature. The licensee reviewed this notice and concluded that the concerns expressed are resolved for Millstone 3 for the following reasons: (1) isolation valves have been installed at shield wall penetrations to facilitate isolation; (2) the instrument installation design facilitates isolation; (3) two-valve isolation is required whenever the process is radioactive; (4) Millstone 3 engaged in a two year R&D program with Parker-Hannifin to develop tools which clearly identify that a compression fitting is properly made up. This notice is closed.
84-60	This notice described the failure of a small percentage of Mine Safety Appliance Company (MSA) Ultra Filters manufactured prior to October 1983. Millstone 3 has no filters manufactured prior to October 1983. This notice is closed.
84-62	This notice, "Therapy Misadministrations to Patients Undergoing Cobalt-60 Teletherapy Treatments," was addressed to teletherapy licensees, is not applicable to Millstone 3, and is closed.
84-64	This notice, "BWR High Pressure Coolant Injection (HPCI) Initiation Seal-In and Indication," describes a potential problem in HPCI initiation logic, does not apply to Millstone 3, and is closed.
84-65	This notice, "Underrated Fuses Which May Adversely Affect Operation of Essential Electrical Equipment," identified fuse types FRN and TR-R, manufactured by Bussman and Gould-Shawnut, which did not isolate for certain current ranges. Millstone 3 Engineering performed a review of the DC electrical system and determined: (1) Millstone 3 does not use fuses to isolate vital buses from non-vital loads; and (2) fuses which are used to protect vital buses from a fault on a vital load are of a different class than those mentioned in the notice. This notice is therefore closed.

IEN #	Discussion
84-66	This notice, "Undetected Unavailability of the Turbine-Driven Auxiliary Feedwater Train," described five instances in which turbine-driven auxiliary feedwater pumps were unavailable because the steam supply was isolated (trip and throttle valve was not latched). The licensee reviewed this notice and verified that the turbine-driven auxiliary feedwater pump steam supply trip valve is equipped with a position indicating switch. This switch has an input to a computer point and an alarm in the control room. Also, the plant equipment operator's daily rounds will require visual verification that the steam supply trip valve is latched. This notice is closed.
84-67	This notice, "Recent Snubber Inservice Testing with High Failure Rates," describes failures on various types and manufacture of snubbers. The licensee has reviewed this notice and determined that many of the failures described do not apply to Millstone 3. Millstone 3 uses hydraulic snubbers for reactor coolant pump and steam generator supports only. These were manufactured and tested by Paul-Monroe. Only visual inspections are proposed for these snubbers. This exemption is currently under review by NRR. The mechanical snubbers are Pacific Scientific. All of these are scheduled for surveillance in the proposed Technical Specifications. The proposed surveillance conforms to NRC requirements for inspection intervals, sample and resample sizes, acceptance criteria, etc. Testing will include drag/breakaway test in the as-found condition before the acceleration test, and the acceleration test will be done at rated load. This notice is closed.
84-70	This notice, "Reliance on Water Level Instrumentation with a Common Reference Leg," was reviewed by the licensee. The notice refers to problems involving reliance on instruments which have a common reference leg. At Millstone 3, the four pressurized water level indicators (three hot-calibrated and one cold-calibrated) use three reference legs, with the cold calibrated indicator sharing a leg with one of the three hot-calibrated indicators. All pertinent Millstone Unit 3 Operating Procedures have been reviewed, and precautions and notes have been added to inform the operator of the problem of relying on instruments having a common reference leg. All Operations Department personnel have reviewed this notice. This notice is closed.
84-71	This notice, "Graphitic Corrosion of Cast Iron in Salt Water," has been reviewed by the licensee. The only cast iron used at Millstone 3 are six circulating water pump discharge elbows. These elbows are bolted to "Niresist" spool pieces with stainless bolts. The junction is covered with coal tar epoxy. Design modification requests have been issued and approved for coating both the exterior and interior of those elbows. Periodic inspections of the elbows have been scheduled. This notice is closed.