



EDISON DRIVE
AUGUSTA, MAINE 04336
(207) 623-3521

March 11, 1983
MN-83-48

JHG-83-55

Region I
United States Nuclear Regulatory Commission
Office of Inspection and Enforcement
631 Park Avenue
King of Prussia, Pennsylvania 19406

Attention: Mr. Ronald C. Haynes, Regional Administrator

References: (a) License No. DPR-36 (Docket No. 50-309)
(b) USRNC Letter to MYAPCo dated January 31, 1983, Inspection
No. 82-19

Subject: Response to Inspection 82-19, Quality Assurance Weld Inspection

Dear Sir:

This letter transmits Maine Yankee Atomic Power Company's response to Inspection Report No. 82-19. This response addresses the specific violations identified, and provides corrective actions completed and planned to reduce the probability of recurrences.

Item A - Appendix A

Contrary to Maine Yankee Quality Assurance Procedure 0-07-3, Maintenance Requests, when on October 29, 1982, the low pressure safety injection pumps were removed from service and subsequently returned to operation on October 30, November 4 and November 9 to meet the requirements of TS 3.8; no stipulation of how long these pumps could be out of service was documented on the maintenance requests nor did the PSS certify the functional acceptability of these systems for return to operation until November 12, 1982.

Response

Maine Yankee Quality Assurance Procedure 0-07-3 requires an "on-duty" Senior Reactor Operator (SRO) to stipulate on the maintenance request form any restrictions which are necessary to assure that maintenance is performed in such a manner that Technical Specification limitations are not exceeded. The maintenance request form, however, does not have a section dedicated for these restrictions.

This violation was the result of the SRO not following the procedure step-by-step as he completed the maintenance request form.

8304140343 830411
PDR ADOCK 05000309
Q PDR

0661L - SEN

United States Nuclear Regulatory Commission
Attention: Mr. Ronald C. Haynes, Regional Administrator

March 11, 1983
Page Two
MN-83-48

Response - Item A (Cont'd)

The Operations Department Head issued a memorandum on November 17, 1982 to all Senior Licensed Operators requiring a documented review of the maintenance request procedure (O-07-3) including the requirement for documenting Technical Specification limitations on the maintenance request.

As stated in your report, approval to return equipment to service was granted verbally. Written approval was subsequently obtained.

A major revision of the maintenance control procedure is underway and will provide controls for documenting Technical Specification limitations and for documenting functional acceptability when equipment is returned to service.

1. The new maintenance control procedure is expected to be complete by July 1, 1983.

In the interim, the memorandum discussed above will remain in effect, and Maine Yankee Quality Assurance will perform random surveillance checks of compliance with this memorandum.

Item B - Appendix A

Contrary to surveillance Procedure 3.17.2, on October 16, 1982, during functional testing of snubber RC-HSS-102, test personnel did not shim the pivoting bearings on the test stand.

Response

The test personnel involved with the shock suppressor testing program did not possess the correct size shim for the snubber which they were testing and therefore skipped that step of the procedure. The personnel involved were reprimanded for skipping the shimming step and were instructed that all steps must be followed.

2. The shock suppressor test procedure will be rewritten by June 1, 1983 to emphasize the importance of shimming.

Item C - Appendix A

Contrary to the Maine Yankee Quality Assurance Program, as of November 1, 1982, work conducted on the plant modifications specified by EDCR 81-47 and PDCR 4-81 was in variance with the governing design control requirements in the standard minimum fillet weld sizes had been incorrectly translated into certain drawing details (eg: NPS-SKE-EDCR-81-47-103); the appropriate AWS quality standards for structural welds (eg: conduit supports) were neither specified, nor in use; and a field change to a structural angle affected by the PDCR 4-81 modification was accomplished without proper approval.

United States Nuclear Regulatory Commission
 Attention: Mr. Ronald C. Haynes, Regional Administrator

March 11, 1983
 Page Three
 MN-83-48

Response - Item C

At the time the engineering evaluation for the modification cited was performed, the design engineers did not know what structure the support which they were designing was to be welded to. They, therefore, sized the welds to stress requirements only. Later, maintenance engineers transferred the weld sizes to installation instructions not knowing that the size of the support structure was not factored into the weld sizing.

The as-built weld was inspected and was found to be adequately sized.

NPS and Maine Yankee reviewed other work packages on a random basis to verify proper translation of standard minimum fillet weld sizes into installation instruction details. No other deviations were found. Further, NPS and Maine Yankee engineers were instructed in the requirements of standard minimum fillet weld sizes.

3. The requirements of standard minimum fillet weld sizes will be included in the Plant Engineering Manual currently being refined. A final controlled manual will be available for use by January 1, 1984.

The Maine Yankee General Specifications require weld procedures for hangers and supports to comply with ASME Section IX. Further, hangers and supports welded to a pressure boundary are required to be examined per ASME Section III, Subsection NF. Other hanger and support welds are examined per the following:

Safety Class 1	Liquid penetrant examination per YA-PE-1
Safety Class 2	Visual examination per ANSI B31.1 Power Piping
Safety Class 3	Visual examination per ANSI B31.1 Power Piping
Non-Nuclear Safety	Visual examination per ANSI B31.1 Power Piping

Unless stated otherwise in YA-GEN-1 or another governing document, all welds shall receive, as a minimum, a visual examination to the criteria of ANSI B31.1.

Therefore, the use of ASME/ANSI B31.1 is correct, and AWS quality standards are not applicable. No further action is planned.

The Maine Yankee Engineering Project Manager for the refueling outage issued a memorandum on November 6, 1982 to NPS and Maine Yankee supervision instructing them not to make changes to work instructions until authorized and documented by the Maine Yankee cognizant engineer. Other work packages were reviewed for unauthorized changes and none were found.

Long term corrective actions are provided in the response to Item D.

Item D - Appendix A

Contrary to the Maine Yankee Operational QA Program, Section IX, as of November 3, 1982, the welding processes in use on plant modifications, EDCR 81-11 and PDCR 4-81, were unqualified or otherwise inadequately controlled as evidenced by the following identified items:

United States Nuclear Regulatory Commission
Attention: Mr. Ronald C. Haynes, Regional Administrator

March 11, 1983
Page Four
MN-83-48

Item D - Appendix A (Cont'd)

- ° Unqualified use of Gas Tungsten-Arc Welding (GTAW) without filler metal, violating an essential variable of the ASME B&PV Code, Section IX (EDCR 81-11).
- ° Misuse of a welding procedure to weld a double-vee groove joint, when procedural directions for single-groove joints only were specified (PDCR 4-81).
- ° Inadequate verification of an installation weld joint to its drawing details (NPS sketch SKM-PDCR-4-81-112), resulting in a QA-accepted weld with penetration half as much as was detailed (PDCR 4-81).
- ° Improper documentation of weld data for a joint where the weld history record identified only one of the two types of filler material actually used in the welding process (PDCR 4-81).

Response

° Since removing and rewelding could prove more detrimental to the weld area, the weld procedure specification was requalified without filler metal allowing the welds in question to be accepted as a special case. Further, the welders were instructed that welding without adding filler metal is not allowed at Maine Yankee. Several other work packages were investigated with no deficiencies found.

° In transferring the type and size weld joint from the design drawing to the installation instructions, the single-vee weld joint was incorrectly translated as a double-vee weld joint. The corresponding weld size (1/4") remained the same. Therefore, the installation instructions incorrectly indicated a 1/4" double-vee weld joint applied to 1/4" thick material.

A double-vee joint was installed which is technically equivalent to the 1/4" full penetration weld of the original design.

The QC inspector verified a 1/8" double-vee weld made on the 1/4" material.

The installation instructions were revised to show the installed joint design. Additional work packages were reviewed and no deficiencies were found.

° The QC inspectors were instructed to inspect to the sketch and assure accuracy with the installation instructions. Further, other work packages were reviewed for conformance with the installation instructions and no other deficiencies were found.

° The weld history record was revised to include the other filler metal used in the process. Other work packages were reviewed and one other minor deficiency was found and resolved. Further, QC inspection of in-process welding was increased and additional training in proper documentation of weld history records was given to QC inspectors, supervisory and welding personnel.

United States Nuclear Regulatory Commission
Attention: Mr. Ronald C. Haynes, Regional Administrator

March 11, 1983
Page Five
MN-83-48

RESPONSE - Item D (Cont'd)

A long term corrective action taken to prevent recurrence of these items includes a modification to the refueling outage program.

The refueling outage program is being modified to retain control of those activities associated with development of installation instructions, inspection of installation activities, and final as-built inspections of systems instead of contracting these services.

Maine Yankee is also re-evaluating and revising the engineering procedures to increase and improve the control and thoroughness of these activities.

4. It is expected that these revised procedures will be available by July 1, 1983.

Item E - Appendix A

Contrary to Procedure 9.1.10, Radiation Work Permits, on October 14, 1982, Radiation Work Permit #82-10-688 authorized opening a radioactive system at valve WD 436; and no air sample or respiratory protection was prescribed or implemented. The potential for release of airborne activity had been demonstrated by an unplanned release during similar maintenance on October 12, 1982.

Response

Immediate corrective action was to send a memorandum to all Maintenance supervisors, reinforcing the policy of notifying Radiological Controls Section personnel of any change in radiological work conditions and another memorandum to Operations personnel emphasizing notification of Radiological Controls Section personnel upon identification of abnormal radiological conditions.

A further corrective action instituted was a specific requirement that full radiation protection measures, including air samples and the use of respirators, be used for all the remaining bolt replacement work on valves of the four bolt closure design. This requirement was instituted in recognition of the fact that leakage could occur even though bolt replacement was being done one bolt at a time. No further releases of airborne radioactivity occurred during the bolt replacement work.

This type of bolt replacement work is expected to be a one time effort, however, to preclude any possible future occurrence of this violation, a change will be made to the radiation work permit procedure.

5. By May 1, 1983, Procedure 9.1.10 will be revised to require full radiation protection measures be taken (i.e., air sampling and the use of respirators) for bolt replacement work on systems normally containing radioactive materials.

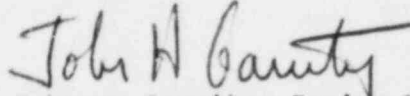
United States Nuclear Regulatory Commission
Attention: Mr. Ronald C. Haynes, Regional Administrator

March 11, 1983
Page Six
MN-83-48

We trust that this response is satisfactory. Should you have any further questions, please feel free to contact us.

Very truly yours,

MAINE YANKEE ATOMIC POWER COMPANY



John H. Garrity, Senior Director
Nuclear Engineering and Licensing

JHG:bjp

cc: Mr. Robert A. Clark
Mr. Paul A. Swetland