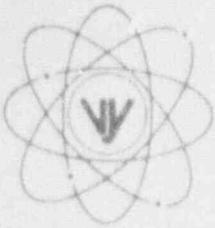


VERMONT YANKEE NUCLEAR POWER CORPORATION



Ferry Road, Brattleboro, VT 05301-7002

REPLY TO
ENGINEERING OFFICE
580 MAIN STREET
BOLTON, MA 01740
(508) 779-6711

December 9, 1992
BVY 92-138

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

References: a) License No. DPR-28 (Docket No. 50-271)
b) Letter, USNRC to VYNPC, Inspection Report 92-21 (NVY 92-202),
dated 11/13/92

Dear Sir:

Subject: Reply to a Notice of Violation; Inspection Report 92-21

This letter is written in response to Reference b), which indicates that one of our activities was not conducted in full compliance with NRC requirements. The apparent violation, classified as a Severity Level IV, was identified during a resident safety inspection conducted from September 20 - October 24, 1992. Our response to the violation is provided below.

VIOLATION

Technical Specification 6.5.A requires, in part, that detailed written procedures shall be prepared for maintenance operations which could have an effect on the safety of the reactor. 10 CFR 50, Appendix B, Criterion V, requires, in part, that activities affecting quality shall be prescribed by documented instructions or procedures of a type appropriate to the circumstances. Appropriate instructions or procedures are required by Section V of the Yankee Atomic Electric Company Operational Quality Assurance Manual, YOQAP-1-A.

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Contrary to the above, during the preventive maintenance overhaul of the "A" emergency diesel generator, which occurred on September 13-18, 1992, Vermont Yankee did not prepare procedures or instructions of a type appropriate to the circumstances to control maintenance involving installation of fasteners on the "A" emergency diesel generator. On September 22, following the return-to-service of the emergency diesel generator, several fasteners were found either loose or missing on the flange for turbo-charger inlet air.

This is a Severity Level IV Violation (Supplement I)

RESPONSE

The mechanical preventative maintenance that was performed on the emergency diesel generators during the time interval cited was done in accordance with procedure OP 5223, Emergency Diesel Generator Maintenance. The discussion section of that procedure indicates that, "...detailed specific instructions for disassembly necessary to perform these inspections and operations as well as the specific acceptance criteria for each inspection is contained in the Diesel Technical Manual." Fairbanks Morse Instruction No. 3486, Service Manual for Model 3800TD8 1/8 Engine Generating Set and Accessories, is listed as a reference in the procedure. With regard to flange restoration activities the vendor manual simply requires the flanges to be tightened. The independent task team that was assigned responsibility for investigating this event concluded that: the flange bolts had been tightened but that they subsequently loosened due to normal engine vibration, and, that the EDG was fully operable at the time the loose bolts existed.

We have reviewed our performance in the areas of supervision, worker skills/training and procedures for the diesel generator bolt issue and have concluded the following:

Supervision: We have found that there was adequate supervision assigned to the job and that the supervisors were knowledgeable. Our investigation did reveal, in general, that assignment of responsibilities for individual tasks were not clearly established.

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Worker Skills/
Training:

We have found that the workers were knowledgeable and properly trained on the vendor guidance and how to "tighten" bolts to normal industry standards. The skills of the worker issue was independently validated by Quality Assurance personnel performing surveillances during the diesel overhaul, as well as by the NRC inspector who witnessed portions of the job.

Procedures:

The referenced vendor manual used for this task did not specifically prescribe flange restoration steps, acceptance criteria or effective means to ensure fastener tightness. Additionally, the post-maintenance test requirements did not specify a post-cooldown bolt inspection.

It is our conclusion, therefore, that the violation occurred due to a failure on our part to recognize the ineffectiveness of our procedure (and referenced vendor manual) regarding flange restoration and acceptance criteria. We acknowledge that we did not fully recognize other recent occurrences of loose bolts and factor those lessons learned into our maintenance plans.

Corrective Actions

A corrective action report (CAR) was developed by an independent task force to investigate the cause for the loose fasteners and to recommend actions to prevent recurrence. The task force concluded that the most probable cause was our failure to recognize the inadequacies of the vendor-supplied guidance for flange restoration (ie, no positive locking features and no acceptance criteria). In summary, the CAR corrective actions and status are as follows:

CAR 92-36

- Adopt EPRI GOOD BOLTING PRACTICES, NP 5067 as guidance for all bolting applications

Status: A plan for implementing the EPRI methodology on the emergency diesel generators will be developed prior to the next scheduled EDG overhaul, currently scheduled for the first quarter of 1993.

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- Implement a routine check of accessible bolts on the emergency diesel generators after each run

Status: Bolt checks will routinely be done for three monthly surveillances or until the improved bolting practices are verified to have solved the problem. The routine checks to date have not identified any additional problems.

- Torque the EDG flange fasteners to an appropriate, specified value.

Status: As immediate corrective action, torque values were identified for the accessible EDG bolts and implemented. Any remaining bolts will be addressed in accordance with implementation of the EPRI program described above.

- Improve record-keeping practices

Status: The need for improvements in log-keeping and documentation practices will be re-emphasized to the appropriate individuals prior to the next scheduled EDG overhaul.

- Improve/clarify responsibility assignments

Status: The expectations for the different job classifications assigned EDG maintenance functions will be reviewed and clarified as necessary to ensure that responsibilities for checks, walkdowns, etc., are clear. This will be accomplished prior to the next scheduled EDG overhaul.

In addition to the independent task force effort that looked at the EDG bolting problems (CAR 92-36), a second task force, assembled to recommend improvements to improve overall EDG reliability, reviewed our EDG maintenance practices in September 1992. Several of their recommendations are pertinent and are summarized below:

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EMERGENCY DIESEL GENERATOR IMPROVEMENT TASK FORCE

- Initiate a phased approach to an RCM program

Status: This item will start in 1993. Included in the initial effort will be a review of other utilities RCM programs, the collection and review of VY-specific data and a mini-PRA review of EDG components.

- Assign cognizant individuals to follow performance of the EDGs. Develop trending program.

Status: A diesel generator performance review group has been established; the intent of this group is to periodically review EDG performance from a predictive/trending standpoint and provide input to management. Also included in their charter is the responsibility for assessing industry/vendor experience, training, design issues and other improvements.

- Upgrade EDG Maintenance Procedure

Status: A recommendation was made to upgrade the maintenance procedure by incorporating additional hold points, checklists or indices of torque values, SIL references and data sheets. This effort is expected to be completed prior to the next EDG overhaul scheduled for the first quarter of 1993.

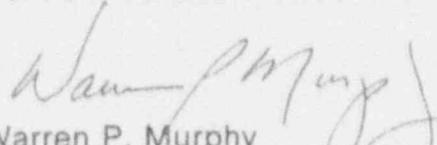
In summary, we acknowledge that it is important to provide the worker with information and resources necessary to correctly perform a task and that in order to have a quality maintenance program there must be a proper balance of worker skills, training, supervision and procedures specific to each task. We consider this to be an essential requirement to which we are committed to meet.

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We believe that the actions proposed are responsive to your concerns; however should additional information or clarification be required, please do not hesitate to contact us.

Very truly yours,

Vermont Yankee Nuclear Power Corporation

A handwritten signature in cursive script, appearing to read "Warren P. Murphy".

Warren P. Murphy
Senior Vice President, Operations

cc: USNRC Regional Administrator, Region I
USNRC Resident Inspector, VYNPC
USNRC Project Manager, VYNPC