

U. S. NUCLEAR REGULATORY COMMISSION
REGION I

Report No. 50-271/91-05
Docket No. 50-271
License No. DPR-28
Licensee: Vermont Yankee Nuclear Power Corporation
RD 5, Box 169
Brattleboro, Vermont 05301
Facility Name: Vermont Yankee Nuclear Power Station
Inspection At: Vernon, Vermont
Inspection Conducted: March 11 - 14, 1991

Inspectors: A. Finkel April 4, 1991
A. Finkel, Senior Reactor Engineer Date

Approved by: N. Blumberg 4/5/91
N. Blumberg, Chief Date
Performance Programs Section
Operations Branch, DRS

Inspection Summary: Inspection on March 11 - 14, 1991
(Report No. 50-271/91-05)

Areas Inspected: Routine announced inspection by one region-based inspector of licensee's activities in the areas of surveillance programs, procedures and testing.

Results: During the inspection, management was observed to be controlling both the updating of the surveillance program plan and the review and issuance of the updated site procedures. Program controls are operating to preclude missing technical specification surveillances. No violations or deviations were identified.

Details

1.0 Persons Contacted

Vermont Yankee Nuclear Power Station

- * D. A. Dyer, Quality Assurance Engineer
- * D. C. Girroir, Quality Assurance Engineer
- * S. J. Jefferson, Assistant to Plant Manager
- * D. L. Phillips, Acting Engineering Support Supervisor
- * D. A. Reid, Plant Manager
- * E. J. Taintor, Quality Assurance Coordinator
- * R. J. Wanczyk, Operations Superintendent

United States Nuclear Regulatory Commission

- * H. Eichenholz, Senior Resident Inspector
- * T. Hiltz, Resident Inspector

*Denotes those present at the exit interview

The inspector also held discussions with managers and supervisors and other licensed employees during the course of the inspection, including operations, technical, administrative, and maintenance personnel.

2.0 Previously Identified Inspection Findings

(Closed) Unresolved Item (89-17-02) Failure to perform the LPCI crosstie monitor daily instrument check, to perform the IST program leak rate test of RHR-18, and to conduct battery surveillances in accordance with technical specification (TS) - section 4.10.2.A were identified as three examples of TS requirement violations by the licensee. Action to ensure comprehensive procedural reviews for TS was unresolved.

To ensure that the required TS surveillances have been identified and performed for systems as specified in the TS, the following actions have been or are being completed:

- A new section has been added to each surveillance procedure that states which TS requirements are addressed by that procedure.
- A final condition section has been added to the procedure that requires the supervisor to review the results of the surveillance test to ensure that TS conditions are satisfied. If there is a problem with the test data a potential reportable occurrence (PRO) form is issued.

The inspector reviewed approximately 25 procedures which have been upgraded to include the above revised procedure writer's guide requirements. The licensee has revised and completed approximately 244 procedures to reflect the upgraded procedure writer's guide requirements.

The inspector also verified that the operations, technical services, and the engineering superintendents reviewed on a weekly basis the surveillances under their responsibility.

Based on the new programs implemented and the weekly reviews performed by the superintendents and their staff with the surveillance test coordinator (STC), the inspector closed the item.

3.0 Surveillance Program

3.1 Administrative Procedures Program and Training

Administrative procedure AP4000 provides the guidance and instructions for the implementation of the licensee's surveillance program. The inspector selected the following four documents to evaluate the effectiveness of the TS surveillance program.

- The Master Test List
- The Annual Schedule Matrix
- The Monthly Schedule
- The TS Surveillance List

In addition to reviewing these four core documents the inspector reviewed the TS audit programs; the weekly surveillance status reports; the writer's guide manual and program, and the results of the program identified by the licensee as corrective action for previous unresolved item 50-271/88-06-01 which was closed in Inspection Report No. 50-271/89-22. This unresolved item had discussed a need to ensure that TS surveillance requirements were properly implemented in the surveillance program. The inspector verified that, in addition to the issuance of new procedures and guidance pertaining to the surveillance program, the licensee has given training sessions to the personnel within the operations, technical services and engineering organizations. In addition to the above, the Surveillance Test Coordinator (STC) updates and issues a weekly surveillance program status report for each of the responsible organizations.

3.2 Surveillance Test Intervals

To ensure that TS test intervals are maintained within the time requirements specified in the TS, the licensee revised procedure AP4000, "Surveillance Testing Control," to specify the interval for weekly, monthly, quarterly, semi-annual and annual testing. Each test can be extended by an additional 25%; however, the extended 25% time is not to be used in performing normal technical specification scheduling. Each department superintendent has informed their respective organization of the intended use of the 25% time. A surveillance status report is issued weekly to each department head. This report identifies tests not completed and required action to correct missed dates. Scheduling problems have

been identified through surveillance audits performed by both the plant's staff and a corporate audit group. A concern identified in the licensee's audit findings had also been identified by the NRC (unresolved item 50-271/88-06-01). The corrective actions taken by the licensee to resolve both their audit findings and the unresolved item 50-271/88-06-01 were a review of their TS surveillance procedures and the development of a program to ensure that TS surveillances will be identified and performed within the required time. These tasks have been completed.

The Maintenance Materials Management System (MMMS), a computer based program, has the ability to provide work orders automatically based on the TS surveillance schedule. In addition to TS surveillance schedules, the MMMS program will provide similar control for preventative maintenance, and inservice inspection/inservice testing (ISI/IST) requirements. The MMMS is scheduled to be in operation by the fourth quarter of 1991. The present surveillance program scheduling is performed manually by the STC.

3.3 Surveillance Master Schedule

To ensure that the Master Surveillance List (MSL) reflects the surveillances listed in the TS, a study was performed by the licensee which verified the MSL listing. This task has been completed and the Technical Services Superintendent's is maintaining the TS surveillance listing. The latest change to the TS that affects the surveillance program was license amendment No. 128, dated March 4, 1991. The inspector verified that the surveillance interval changes of this amendment were incorporated into the MSL and that the technical services superintendent did notify the STC of the required changes to the MSL. The STC also ensures that the time for each surveillance test is listed with the 25% window time listed in AP-4000. The inspector verified that the TS surveillance requirements issued by the STC for the week ending March 17, 1991, complied with the master surveillance schedule and that the referenced TS paragraphs were listed in the referenced operating procedures. Also, eleven line items reviewed by the inspector complied with the MSL requirements.

3.4 Procedure Reviews

The inspector selected 15 Instrument and Control (I&C) Department surveillance procedures that have recently been revised per the requirements described in the Writer's Guide Manual, Revision 2. The inspector verified that the applicable TS section was referenced in the procedure including a requirement for the department supervisor to review the surveillance test results to ensure that TS requirements were satisfied. Discussions with the department supervisor verified that he was familiar with the requirements and was performing the reviews as specified in the procedure.

3.5 Surveillance Test Witnessing

The inspector witnessed the Automatic Depressurization System (ADS) logic test per procedure OP 4343, Revision 18. This surveillance tested the operability of the logic system up to and including one of the final relief valve actuating relays. Each channel subsystem was tested to verify subsystem operation. The I&C technicians were well trained, experienced on the system, and familiar with the details of the surveillance procedure. After the testing of the ADS logic was completed, the I&C technicians were debriefed by their supervisor who also reviewed the test results. The system was declared operational and returned to service.

The inspector also verified that the test equipment equipment used to test the ADS logic was within the accuracy and range required by the test procedure. The calibration sticker dates of the test equipment were noted to be within the dates listed on the master calibration schedule.

3.6 Conclusion

The inspector's review of the surveillance programs, procedures, training and implementation of these documents should ensure that TS surveillances are performed within the TS requirements. The computer based MMMS being developed is expected to be a major improvement in assuring control of the surveillance program.

4.0 Management Meetings

Licensee management was informed of the scope and purpose of the inspection at an entrance meeting conducted on March 11, 1991. The findings of the inspection were periodically discussed with licensee personnel during the course of the inspection. The inspector met with the licensee representatives (denoted in Paragraph 1) at the conclusion of the inspection on March 14, 1991. The inspector summarized the scope and findings of the inspection as described in this report.

At no time during the inspection did the inspector provide written material concerning inspection findings to the licensee nor did the licensee indicate that areas covered by this inspection contained proprietary information.

ATTACHMENT A

Documents Reviewed

Administrative Procedures

AP 4000 - Surveillance Testing Control
AP 0010 - Occurrence Reports/Notifications and Reports Due
AP 0007 - Corrective Action
AP 0310 - Surveillance, Preventative and Corrective Maintenance Program
AP 6010 - In-Plant Audits

Audit Reports

Audit Report No. VY-90-15, "Technical Specifications."
Audit Report No. VY-90-16, "Corrective Action."

General Documentation

Vermont Yankee Writer's Guide, Revision 2
Maintenance Materials Management System, January 4, 1990
Amendment No. 128 to Facility Operating License No. DPR-28 (TAC No. 77221)

Test Procedures

DP4343, ADS System Logic Test