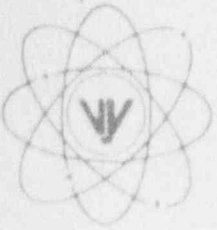


VERMONT YANKEE NUCLEAR POWER CORPORATION



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May 20, 1994

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, D.C. 20555

REFERENCE: Operating License DPR-28
Docket No. 50-271
Reportable Occurrence No. LER 94-007

Dear Sirs:

As defined by 10 CFR 50.73, we are reporting the attached Reportable Occurrence as LER 94-007.

Very truly yours,

VERMONT YANKEE NUCLEAR POWER CORPORATION

Robert J. Wanczyk
Plant Manager

cc: Regional Administrator
USNRC
Region I
475 Allendale Road
King of Prussia, PA 19406

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NRC Form 366A U.S. NUCLEAR REGULATORY COMMISSION (6-89)		APPROVED OMS NO. 3150-0104 EXPIRES 4/30/92					
LICENSEE EVENT REPORT (LER) TEXT CONTINUATION		ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-350), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3160-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20603.					
FACILITY NAME (1)		DOCKET NO (2)		LER NUMBER (6)		PAGE (3)	
VERMONT YANKEE NUCLEAR POWER CORPORATION		05000271		YEAR	SEQ #	REV #	
				9 4	0 0 7	0 0	0 2 OF 0 4

TEXT (If more space is required, use additional NRC Form 366A) (17)

DESCRIPTION OF EVENT

At approximately 1521 hours on 04/20/94, with the reactor operating at approximately 100% power, a Standby Gas Treatment System (SBGTS) (EIS=BH) initiation and Reactor Building Ventilation (EIS=VA) isolation occurred concurrent with a Primary Containment Isolation System (PCIS) (EIS=JM) Group III isolation. These isolations and the initiation of SBGTS were caused by a spike on the "B" Refuel Floor Radiation Monitor (EIS=IL). The monitor was observed to be intermittently spiking high and was bypassed and declared inoperable.

At approximately 1645 hours, after verification of normal area radiation levels, Control Room personnel reset the isolation and returned the ventilation systems to normal operation.

During the following 18 hours, with the radiation monitor still bypassed, 14 additional spikes with a magnitude greater than the monitor's trip setpoint were recorded. Technicians investigated and found the contacts of the radiation monitor's function switch dirty and oxidized. These contacts were cleaned on 04/22/94 and the radiation monitor was left in bypass with its output trended.

At approximately 0815 on 04/25/94, after verification that no spiking had been observed since the switch contacts were cleaned, the radiation monitor was declared operable and returned to service. Work Orders were initiated to clean the associated switch contacts on the other three radiation monitors that initiate a PCIS Group III isolation (ie. the "A" Refuel Floor Radiation Monitor and the "A" and "B" Reactor Building Ventilation Radiation Monitors).

There are two radiation detectors monitoring the Refuel Floor. A signal from either detector will cause the system to trip, isolate Reactor Building Ventilation, generate a PCIS Group III isolation signal, and start the Standby Gas Treatment System.

After the occurrence of the isolation there was some discussion as to whether the event was reportable under 10CFR50.73(a)(2)(iv) as an Engineered Safety Feature (ESF) actuation. In 1992, 10CFR50 parts 72 and 73 were revised to relax reporting requirements for certain ESF actuations which were determined to be of little or no safety significance. The revision relaxed the reporting requirements for invalid actuation of a limited set of ESF's. The Reactor Building Ventilation and Standby Gas Treatment Systems were specifically exempted but, since the Vermont Yankee Group III signal also actuates isolation valves for Primary Containment ventilation, inerting and gaseous sampling systems, interpretation was required to determine if the VY Group III isolation, when initiated by an invalid signal, was reportable. The issue was discussed with the NRC and personnel from other similar plants. On May 04, 1994, the NRC advised that the event should be reported.

In determining the reportability of this event, it was also noted that a previous Group III isolation resulting from an invalid signal occurred on 09/14/93. That event was determined to be not reportable based on the code changes previously described. The event occurred while the plant was shutdown for refueling and was caused by a loss of power to one side of the PCIS logic. All equipment operated as expected.

CAUSE OF EVENT

The cause of the spiking was a discontinuity between the radiation monitor's function switch contacts when selected to "Operate". This discontinuity was attributed to the contacts being dirty and oxidized.

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TEXT (If more space is required, use additional NRC Form 366A) (17)

ANALYSIS OF EVENT

The PCIS, SBGTS, and Reactor Building Ventilation system operated as designed and successfully isolated the Primary and Secondary Containment ventilation. A PCIS Group III isolation, SBGTS initiation, and Reactor Building Ventilation system isolation are the expected results of a trip of one side of the Refuel Floor Radiation Monitoring system.

Although the event did result in actuation of ESF equipment, there was no adverse safety implications to plant equipment or the public because the isolation of the ventilation systems and initiation of SBGTS are conservative system actuations with respect to protection of the public.

No surveillances or unusual activities were in progress at or near the radiation detector nor the panel that houses the radiation monitor electronics.

The radiation monitor and PCIS Group III instrumentation Technical Specification operability requirements were satisfied at all times.

CORRECTIVE ACTIONS

Immediate

- Once radiological conditions were determined to be normal, the isolations were reset and ventilation systems were returned to normal operation.
- The radiation monitor connections were checked and no apparent problems were found. The connections were cleaned and the unit was functionally tested.
- The radiation monitor function switch contacts were cleaned and no further spiking of the radiation monitor was observed.

Short Term

- I&C technicians cleaned the function switch contacts on the other three radiation monitors associated with PCIS Group III isolation logic.
- An evaluation by I&C determined that the subject function switches are also utilized on the plant's 26 non-Tech. Spec. Area Radiation Monitors (ARM)(EIS=IL). I&C will initiate work orders to clean the respective switch contacts during one of the next scheduled ARM surveillances.
- The NRC position that the event was reportable has been documented and the appropriate personnel were made aware of the position.

Long Term

- The I&C Department will evaluate the need to periodically perform switch contact cleaning preventative maintenance (PMs).

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ADDITIONAL INFORMATION

Similar events which resulted in PCIS Group III isolations were reported to the Commission in LER 89-03 and LER 89-26. These events were not attributable to dirty/oxidized function switch contacts but were determined to be similar as they involved spurious radiation monitor spikes.