VERMONT YANKEE NUCLEAR POWER CORPORATION



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January 17, 1992

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 91-16

Dear Sirs:

As defined by 10 CFR 50.73, and stated in Reportable Occurrence No. LSR 91-16, we are reporting the attached Reportable Occurrence as LER 91-16.

Very truly yours,

VERMONT YANKEE NUCLEAR POWER CORPORATION

Donald A. Reid

Plant Manager

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

> U.S.N.R.C. Resident Inspector (VYNPS) U.S.N.R.C. Project Manager (VYNPS)

NEC FORE 366 U.B. NUCLEAR REGULATORY COMMISSION (6-89) LICENSEE EVENT REPORT (LER)	APPROVED DMS "0. 3150-6104 EXPIRES & '30/92 ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ECTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3160-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20603.									
PACILITY NAME (1)	DOCKET NO. (2) FAGE (3)									
VERMONT YANKEE NUCLEAR POWER STATION	0 5 0 0 0 2 7 1 0 1 0 0 3									
TITLE (4) FAILURE TO PERFORM CORRECT DAILY INSTRUMENT CHECKS	DUE TO TECH SPEC HUMAN PACTORS WEAKNESS									
EVENT DATE (5) LER NUMBER (6) REPORT D	ATE (7) OTHER FACILITIES INVOLVED (8)									
MONTH DAY YEAR YEAR SEQ # REV# MONTH DA	Y YEAR FACILITY NAMES DOCKET NO. (5)									
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	TO REQ'MIS OF 10 CFR &: CHECK ONE OR MORE (11)									
MODE (9) N 20.402(b) 20.405(c)	50.73(a)(2)(iv) 73.71(b)									
POWER 20.405(a)(1)(i) 50.36(c)(1) 50.73(A,(^)(V) 73.71(c)									
LEVEL (10) 1 0 0 20.405(8)(1)(11) 50.36(c)(2	50,73(a)(2)(Vii) OTHER:									
20.405(a)(1)(iii) X 50.73(a)(2)(i) 50.73(a)(2)(Viii)(A)									
20.405(a)(1)(iv) 50.73(a)(2	1(ii) 50.72(#)(2)(viii)(B)									
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LICENSEE CONTAC	T FOR THIS LER (12)									
NAME	TELEPHONE NO.									
DONALD A, MEID, PLANT MANAGER	ARKA CODE 8 0 2 2 5 7 - 7 7 1 1									
COMPLETE ONE LINE FOR EACH COMPONENT FA	ILURE DESCRIBED IN THIE REPORT (13)									
	CAUSE SYST COMPONENT MFR REPORTABLE TO NERDS									
1.51.1										
SUPPLEMENTAL REPORT EXPECTED (14)	EXPECTED MO DAY YR SUBMISSION									
YES (If yes, complete EXPECTED SUBMISSION DATE)	X NO DATE (15)									

ABSTRACT (Limit to 1400 spaces, i.e., approx. fifteen single-space typewritten lines) (16)

On December 20, 1991 it was determined that Daily Instrument Checks for 3 of the 15 Post Accident Parameters (EIIS=IP) were performed on instruments different than listed in the applicable Technical Specification (TS) Table. For each parameter the instrument check was being performed on another control room indication of the parameter which originated from the same sensor instrumentation. Therefore, a valid indication of parameter availability and equipment operability, was determined daily, however the specific instrument in TS was not being checked and logged on the Control Room Operators rounds sheet.

The cause of the event was determined to be a human factors weakness in the content and arrangement of two TS tables.

Immediate corrective actions consisted of revision of the Control Room Operators Rounds Sheet and reviewing all Daily instrument checks to verify that no similar conditions existed. A revision to the procedure governing Operator rounds will be completed to reference applicable TS requirements.

NEC FOIR 366A U.S. NUCLEAR REGULATORY COMMISSION .(6-89) LICENSEE EVENT EMPORT (LER) TEXT CONTINUATION		APPROVED OMS NO. 3150-0104 EXPIRES 4/30/92 ESTIMATED BUADEN FER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (F-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3160-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20603.										
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TEXT (If more space is required, use additional NRC Form 366A) (17)

DESCRIPTION OF EVENT

On December 20, 1991 it was determined that Daily Instrument Checks, in accordance with Vermont Yankee Technical Specification (TS) Table 4.2.6, for 3 of the 15 Post Accident Parameters (ElIS=IP) were being performed on instruments different from those specified in TS Table 3.2.6. TS Table 3.2.6 lists the Post Accident Parameters and type of indication and specific equipment number required for operability. TS Table 4.2.6 contains the requirement that each Parameter undergo an instrument check daily. It was determed that for the parameters of Torus Pressure, Containment Hydrogen/Oxygen and Containment High-Range Radiation that the daily ins ament check was not being performed on the specific instrument listed in TS Table 3.2.6. For each parameter the instrument check was being performed on another control room indication of the parameter which originated from the same sensor instrumentation. Therefore, a valid indication of parameter availability and equipment operability was determined daily, however the specific instrument in TS Table 3.2.6 was not being checked and logged on the Control Room Operators rounds sheet.

The condition existed for the Torus Pressure parameter from 6/22/89, which was the effective date of TS ammendment # 113, which changed the instrument from a single recorder to two redundant qualified indicators. The condition existed for the Containment Hydrogen/Oxygen and Containment High-Range Radiation parameters from 8/11/86, which was the effective date of TS ammendment 96, which added the two parameters to the TS.

The condition was identified as a result of a review of the Control Room Operators Rounds Sheet and comparison to TS Table 3.2.6. This review was prompted by an investigation resulting from removal from service and repair of one of the TS instruments for Containment Hydrogen/Oxygen monitoring (SR-VG-6A). This instrument was removed from service on 12/13/91, repaired and returned to service on 12/20/91.

CAUSE OF EVENT

The cause of this event was determined to be a human factors weakness in the content and arrangement of TS Tables 3.2.6 and 4.2.6. TS table 3.2.6 contains specific instrument numbers yet TS table 4.2.6, which contains the daily instrument check requirement, is located 11 pages later and does not list specific instrument numbers. A review of all of the past revisions of these TS tables and of the specific ammendments which made changes to these 3 parameters was performed. This information along with information from review of recent TS surveillance program and tracking system enhancements shows that TS table 4.2.6 has been reviewed and compared to the Control Room Operators Rounds Sheet on multiple occasions to confirm appropriate implementation of the TS requirements. The conclusion from this information is that during each of these reviews there was a failure to correlate the specific instrument listed in TS table 3.2.6 with the general statement of the parameter in Table 4.2.6. The repetitive occurrence of the same failure leads to the conclusion that the human factors aspects of the Tables contents and locations caused the events.

A contributing cause to the event is that Procedure OF 0150, "Responsibilities and Authorities of Operations Department Personnel", does not indicate the specific TS reference associated with a particular Operator action. The actions are highlighted with a footnote which indicates that it is a TS required item, but does not provide a specific reference. If a reference was available to TS Tables 3.2.6 and 4.2.6, the condition may have been detected

NRC FORM 366A U.S. NUCLEAR REGULATORY COMMISSION (6-89) LICENSEE EVENT REPORT (LER) TEXT CONTINUATION		APPROVED OMS NO. 3150-0104 EXPIRES 4/30/92 ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 ARE. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEME BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3160-0104), OFF OF MANAGEMENT AND BUDGET, WASHINGTON, DC 206					
FACILITY NAME (1)	DOCKET	NO (2)	LER NUMBER (6) PAGE (3)				
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TEXT (If more space is required, use additional NRC Form 366A) (17)

during previous review and surveillance program enhancement efforts.

ANALYSIS OF EVENT

Although the daily instrument checks for the identified parameters have not been performed on the specific instruments listed in TS Table 3.2.6, there is no adverse safety or operational significance. The daily instrument checks were being performed on other control room indications, with equivalent qualifications, originating from the same sensor instrumentation. Therefore, valid indications of parameter availability and equipment operability were confirmed on a daily basis.

Strict compliance with the TS requirements is a high priority and has been the focus of significant effort in recent years. The TS surveillance and tracking program and the process of review and issuance of TS changes have been chanced and improved. These actions were taken as a result of several previously identified missed surveillances. Previously specified corrective actions relative to missed surveillances and the surveillance program are continuing. The Vermont Yankee Procedure Writers Guide was revised in 1990 to include the requirement that surveillance procedures clearly state which specific TS requirements are addressed in the procedure. Procedure AP 0150 has not been reviewed/revised under the new requirement because it has not come due for biennial review since issuance of the revised Writers Guide. Enhancement of AP 0150 in accordance with this requirement is scheduled for completion in 1992.

CORRECTIVE ACTIONS

IMMEDIATE CORRECTIVE ACTIONS

- 1. On 12/20/91 the Control Room Operators Rounds Sheet (Form VYAPF 0150.03) was revised to include the specific instruments for the three parameters as listed in TS Table 3.2.6. The Operators were advised of the change and instructed to check the TS Table 3.2.6 instrumentation via "Night Orders" issued on 12/20/91.
- 2. On 1/3/92 the Operations Department completed a review of all Operations Department Daily TS instrument checks to verify that the specific instruments identified in TS are the instruments actually being checked by the Operators. No other similar conditions were found to exist.

LONG TERM CORRECTIVE ACTIONS

Procedure OP 0150, "Responsibilities and Authorities of Operations Department Personnel", will be revised to include or reference applicable governing TS sections (Completion forecast for 9/1/92).

ADDITIONAL INFORMATION

There have been no events with similar root causes reported to the Commission within five years.