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

Perry Nuclear Power Plant
Docket No. 50-440
LER 94-020

Gentlemen:

Enclosed is Licensee Event Report 94-020 concerning Failure to Recognize Diesel Generator Inoperability Results in Technical Specification Violation.

If you have questions or require additional information, please contact Mr. James D. Kloosterman, Manager - Regulatory Affairs at (216) 280-5833.

Very truly yours,

RAS:DHL:sc

Enclosure: LER 94-020

cc: NRC Project Manager
NRC Resident Inspector Office
NRC Region III

Operating Companies
Cleveland Electric Illuminating
Toledo Edison

IE22
1/1

NRC FORM 366 (5-92) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB NO. 3150-0104
EXPIRES 5/31/95

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNBB 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Perry Nuclear Power Plant, Unit 1	05000-440	1 OF 5

TITLE (4) Failure to Recognize Diesel Generator Inoperability Results in Technical Specification Violation

EVENT DATE (5)			LER NUMBER (6)			REPORT NUMBER (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
									N/A	05000
08	31	94	94	-- 020 --	00	09	29	94	FACILITY NAME: N/A	DOCKET NUMBER: 05000

OPERATING MODE (9)	1
POWER LEVEL (10)	100

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)

20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
20.405(a)(1)(ii)	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)	(Specify in Abstract below and in Text, NRC Form 366A)
20.405(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	
20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER (Include Area Code)
David H. Lockwood, Compliance Engineer	(216) 280-7539

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS

SUPPLEMENTAL REPORT EXPECTED (14)		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE)	X NO				

ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)

At 1146 on August 31, 1994, Control Room Operators identified that the Division III diesel generator was inoperable as of 0918 due to a calibration being performed on the diesel tachometer. The one hour action required by Technical Specifications (TS) to verify the availability of off-site power sources was not completed by 1018. This action was completed at 1212. Other required actions were completed within the required times.

The cause of this event is personnel error; failure to identify that the calibration of the tachometer would place the Division III diesel generator in an inoperable condition.

Immediate corrective actions were to complete Technical Specification required actions and restore the Division III diesel generator to operable status.

I. Introduction

At 1146 on August 31, 1994, Control Room Operators identified that the Division III diesel generator [EK] was inoperable at 0918 due to a calibration being performed on the diesel tachometer. The one hour action required by Technical Specification (TS) 3.8.1.1.d to verify the availability of off-site power sources was not completed by 1018. This action was completed at 1212. Other actions required by TS 3.8.1.1.d were completed within the required times. This event is being reported in accordance with 10 CFR 50.73 (a) (2) (i) (B). At the time of this event the plant was in Operational Condition 1 at 100% power with reactor vessel pressure of 1046 PSIA.

II. Description

On August 31, 1994, the monthly Division III Diesel Generator Start and Load surveillance was scheduled to be performed. The midnight shift Control Room Unit Supervisor signed in the surveillance and authorized prerequisite conditions to be verified.

During the performance of the prerequisites, it was determined that one of the Emergency Response Information System (ERIS) [ID] points used to record data for Diesel Generator speed during the surveillance was late on its calibration.

Two options were available: verify the calibration of the ERIS point, or use a permanently installed chart recorder which was designed to be used to gather data during diesel engine operation. Historically, the chart recorder has proven unreliable. There was risk that the chart recorder would not capture necessary data during the diesel generator start. This would have resulted in the need to reperform the diesel generator surveillance. The decision was made to perform the calibration of the ERIS point.

At 0710 on August 31, 1994 an Instrument and Controls (I&C) technician reported to the Control Room to obtain authorization to perform the calibration on the tachometer. The midnight shift Unit Supervisor reviewed the task card, and discussed with the technician what was involved. No discussion of the effect on the operable status of the Diesel Generator occurred.

The I&C technician stated that a simulated signal was to be inserted into the circuit, and the ERIS point would be verified to respond properly to the given input. In addition, two relays would have their actuation prevented, which would prevent the auto-starts of the Division III Emergency Service Water System (ESW) [BI] and the Diesel Generator Building Ventilation System (DGBVS) [VJ]. This was indicated on the task card. The midnight shift Unit Supervisor authorized

performance of the task.

The midnight shift Unit Supervisor turned over to the day shift Unit Supervisor that the calibration of the ERIS point was in progress. However, no field work was performed on the midnight shift.

The day shift I&C technician notified the day shift Unit Supervisor that the task for calibration of the ERIS point was going to start. The day shift Unit Supervisor reviewed the task card and discussed the evolution with the I&C technician. Again, no discussion of the impact on the operable status of the Diesel Generator occurred. The day shift Unit Supervisor authorized performance of the task.

At 1115 on August 31, 1994 an I&C technician reported to the control room that during the performance of the calibration of the Division III diesel generator tachometer, a wire could not be terminated properly. An in the field review by the Shift Supervisor and the Shift Technical Advisor determined at 1146 that the diesel generator had been inoperable as of 0918 when the calibration of the tachometer began and leads were lifted from the actuation relays.

Control Room operators initiated actions as required by Technical Specification 3.8.1.1.d. This includes verification of the operability of off-site power sources within one hour, demonstration of the operability of the remaining operable diesel generators within 24 hours and restoration of the Division III diesel generator to operable status within 72 hours. Off-site power sources were verified operable at 1212 on August 31, 1994. The remaining operable diesel generators were demonstrated operable by 0800 on September 1, 1994. A work order was initiated to properly terminate the wire on the tachometer, and the Division III diesel generator was restored to operable status at 2140 on August 31, 1994.

III. Cause of Event

The cause of this event is personnel error; failure to identify that the calibration of the tachometer would place the Division III diesel generator in an inoperable condition.

Despite the fact that the task card stated, "Lift leads from relays and monitor contacts with meter. This is to prevent DGBVS and ESW auto start.", the operability of the diesel generator was not questioned. The prevention of inadvertent system actuations was seen as a positive factor for the work being performed. The DGBVS and ESW receive an automatic start signal based on diesel generator speed or a divisional LOCA signal. The LOCA automatic start signal was still operable.

The Unit Supervisors involved were focused on inadvertent system actuations. However, since LOCA start signals for DGBVS and ESW were still operable, and since the DGBVS and ESW systems could be started manually if required, no consideration was given to declaring the diesel generator inoperable during performance of the calibration.

The Unit Supervisors involved did not thoroughly review the paperwork associated with the task and did not ask specific questions about the scope and extent of the work to be performed, particularly its effect on the diesel generator.

Further, there was a perceived urgency to complete the Diesel Generator surveillance test on August 31, 1994 as it was thought to go late after that date. The actual late date was September 1, 1994.

IV. Analysis of Event

The Division III Diesel Generator provides an independent source of AC power to the High Pressure Core Spray system [BG] and the C loop of the Emergency Service Water system in the event that off-site power is not available.

The High Pressure Core Spray system assures that the reactor is adequately cooled in the event of a small break LOCA which does not result in rapid depressurization of the reactor vessel. The Low Pressure Core Spray (LPCS) [BM] and the Low Pressure Coolant Injection (LPCI) [BO] systems are provided to assure that the core is adequately cooled following a LOCA. They provide adequate core cooling capability for analyzed breaks following reactor vessel depressurization. Additionally, the Automatic Depressurization (ADS) system is provided to reduce reactor vessel pressure during a small break LOCA to allow LPCS and LPCI to perform their function.

During this event two off-site AC power sources were verified operable and the Division I and II diesel generators were demonstrated operable as required by Technical Specification 3.8.1.1.d. The LPCS, LPCI and ADS systems were operable during the event. Further, the LOCA and manual starts of the DGBVS and ESW for the Division III diesel generator were available. Therefore, this event is not considered safety significant.

V. Similar Events

LER 93-019 documents an event where control room operators failed to appropriately identify a failed channel check while performing Technical Specification rounds, and take appropriate Technical Specification actions. LER 94-016 documents an event where Technical Specification surveillance requirements

were not completed due to pages missing from the Technical Specification rounds binder. Although personnel error was a factor in the cause of the events, these events are considered dissimilar in that the personnel error concerned review and analysis of completed surveillance requirements.

LER 94-017 documents an event in which work activities under an inadequately planned I&C work order resulted in an isolation of the shutdown cooling suction outboard containment isolation valve. Corrective action for this event included a review of the work order process for I&C work orders to identify areas of improvement and a standardized method of conveying plant impact information within the the work order packages. This corrective action is not completed.

VI. Corrective Actions

Immediate corrective actions were to complete Technical Specification required actions and restore the Division III diesel generator to operable status.

As a result of the Human Performance Enhancement System investigation performed on this event, an evaluation will be completed to enhance the method to communicate the plant effects of work activities to the reviewing and approving parties including the Unit Supervisor. This evaluation will be completed by January 13, 1995.

The task card for calibration of the tachometer was revised to clearly identify that performance of the task will cause the Division III diesel generator to be inoperable.

Disciplinary action was taken against the Control Room Unit Supervisors.

All licensed operators will receive training on this event as part of requalification training including emphasis on the need to fully understand the scope of planned work and its effects on system operability. This training will be completed by January 13, 1995.

Energy Industry Identification System (EIIS) codes are identified in the text as [XX].