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LaSalle Generating Station
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February 7, 1997

United States Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555

Licensee Event Report #97-001-00, Docket #050-373 is being submitted to your office in accordance with 10 CFR 50.73(a)(2)(i).

Respectfully,

A handwritten signature in dark ink, appearing to read "D. J. Ray", is written over the printed name.

D. J. Ray
Station Manager
LaSalle County Station

Enclosure

cc: A. B. Beach, NRC Region III Administrator
M. P. Huber, NRC Senior Resident Inspector - LaSalle
C. H. Mathews, IDNS Resident Inspector - LaSalle
F. Niziolek, IDNS Senior Reactor Analyst
INPO - Records Center

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LICENSEE EVENT REPORT (LER)

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.

FACILITY NAME (I): LaSalle County Station Unit One

DOCKET NUMBER (2) 05000373

PAGE (3)
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TITLE (4)	Special Report Not Written as Required by Technical Specifications When the Loose Parts Monitoring System was Inoperable During Power Operations
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EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
									LaSalle County Station Unit Two	05000373
01	08	97	97	001	00	02	07	97	FACILITY NAME	DOCKET NUMBER

OPERATING MODE (8)	4	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)
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POWER LEVEL (10)	000
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<input type="checkbox"/> 20.2201(b)	<input type="checkbox"/> 20.2203(a)(3)(i)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 73.71(b)
<input type="checkbox"/> 20.2203(a)(1)	<input type="checkbox"/> 20.2003(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(iv)	<input type="checkbox"/> 73.71(c)
<input type="checkbox"/> 20.2203(a)(2)(i)	<input type="checkbox"/> 20.2003(a)(4)	<input type="checkbox"/> 50.73(a)(2)(v)	<input type="checkbox"/> OTHER
<input type="checkbox"/> 20.2203(a)(2)(ii)	<input type="checkbox"/> 50.36(c)(1)	<input type="checkbox"/> 50.73(a)(2)(vii)	(Specify in Abstract below and in Text, NRC Form 366A)
<input type="checkbox"/> 20.2203(a)(2)(iii)	<input type="checkbox"/> 50.36(c)(2)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)	
<input type="checkbox"/> 20.2203(a)(2)(iv)	<input checked="" type="checkbox"/> 50.73(a)(2)(i)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)	
<input type="checkbox"/> 20.2003(a)(2)(v)	<input type="checkbox"/> 50.73(a)(2)(ii)	<input type="checkbox"/> 50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME _____

Steve Latimer, System Engineer

TELEPHONE NUMBER (Include Area Code)

(815) 357-6761 Extension 2463

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

[illegible]

SUPPLEMENTAL REPORT EXPECTED (14)

<input type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE)	<input checked="" type="checkbox"/> NO
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EXPECTED
SUBMISSION
DATE (15)

MONTH	DAY	YEAR
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ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines 16)

The Loose Parts Monitoring System (LPMS) was designed with an automatic tape recorder. In 1985, upon failure of the automatic recorder, it was removed. This is not in conformance with the response to Question Q221.14 of the FSAR or the SER for the FSAR which states that the recorder is installed.

This design conformance discrepancy with the FSAR was documented with a Problem Identification Form (PIF) on November 5, 1996. During the subsequent detailed operability determination completed on January 8, 1997, it was identified that the system design also was not as described in Section 4.4.1 of the Safety Evaluation Report (SER). The design basis states that there is an automatic tape recorder that initiates on a loose part alarm. The system was declared inoperable on January 8, 1997, since no automatic recording function was available. It has been determined that the LPMS had been inoperable during power operations from 1985 to 1996 and no Special Report was prepared as required by Technical Specification Section 4.3.7.12. An automatic recording function will be installed to comply with the description in the FSAR, SER, and the UFSAR will be updated to describe the corrected configuration of the LPMS prior to the start up of either unit.

The LPMS provides information only and is not considered in any design basis accident or transient analysis. The loss of this instrument is a non-significant risk contributor to core damage frequency and offsite release.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

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

PLANT AND SYSTEM IDENTIFICATION

General Electric - Boiling Water Reactor

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

A. CONDITION PRIOR TO EVENT

Unit(s): 1/2	Event Date: 1/08/97	Event Time: 1700 Hours
Reactor Mode(s): 4/N	Mode(s) Name: Cold Shutdown/ Defueled	Power Level(s): 0%/0%

B. DESCRIPTION OF EVENT

The current Loose Parts Monitoring System (LPMS) as installed consists of 12 accelerometers with two located on the reactor level instrument lines, two on the feedwater lines, two on the reactor recirculation suction piping, two on the reactor recirculation pump and four on the Control Rod Drive housings under the reactor vessel. Each signal from the accelerometers goes to a preamplifier located in the drywell where the signal is converted to a voltage. From there each voltage signal is sent to its respective amplifier card located in the Loose Parts Monitor (LPM) panel in the Auxiliary Electric Room. The voltage signals are monitored and if a signal of 0.5 ft-lb (approximately 4 to 7 volts) is detected, an alarm in the Control Room and at the LPM panel is annunciated. The signal is also sent to a speaker on the LPM panel so that sounds can be monitored.

There are discrepancies between the in-plant configuration, the FSAR Question and Answers description, and the SER description of the LPMS. The original design had an automatic tape recorder installed, a portable spectrum analyzer and the preamplifiers located inside the drywell. FSAR Question 221.14 states that the LPMS has an automatic tape recorder and spectrum analyzer installed and the preamplifiers are installed outside the drywell. The SER states that the system includes automatic, preprogrammed multiplexer switching of all channels to the tape recorder and in the event of an alarm, the switching preselects the alarmed channel and three adjacent channels and starts the tape recorder. The LPMS is not described in the UFSAR. Currently, the LPMS is installed in accordance with the plant design documents; with the exception that the tape recorder is not installed; hence, required design change control was not implemented.

The tape recorder failed and was removed in 1985 and not repaired or replaced. A review of work history has not revealed the exact date that the tape recorder was removed.

A Problem Identification Form (PIF) was initiated on November 5, 1996 to report that the LPMS is not configured as described in FSAR question Q221.14. The PIF reported that the spectrum analyzer and the automatic tape recorder are not installed and the preamplifiers are installed inside the drywell instead of outside the drywell. During the operability determination it was identified that the system is not as described in Section 4.4.1 of the Safety Evaluation Report (SER).

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Another PIF was initiated on January 8, 1997, declaring the LPMS inoperable because of the missing tape recorder. Since the LPMS was inoperable during power operations from 1985 to 1996 and no Special Report was written as required by Technical Specification Section 4.3.7.12, the requirements of the Technical Specifications were not fulfilled. This is reportable in accordance with 10 CFR 50.73(a)(2)(i)(B). The LPMS is required to be operable in Operating Conditions 1 (Power Operation) and 2 (Startup) per Technical Specification Section 3.3.7.12. With two or more channels inoperable for more than 30 days a Special Report must be sent to the Commission within 10 days outlining the cause of the malfunction and the plans to restore the channels.

C. CAUSE OF EVENT

The Special Report required by the Technical Specifications was not submitted because it was not recognized that the system should have been considered inoperable. It cannot be determined what specific actions occurred in 1985 that resulted in removing the automatic tape recorder and consequently making the LPMS not in conformance with the design basis.

D. ASSESSMENT OF SAFETY CONSEQUENCES

The LPMS provides information only and is not considered in any design basis accident or transient. It does provide information regarding potential loose parts in the reactor vessel. However, the evaluation summarized in NEDO-31466, Technical Specification Screening Criteria Application and Risk Assessment, determined the loss of this instrumentation to be a non-significant risk contributor to core damage frequency and offsite release. The Technical Specification Basis for the LPMS is to detect any loose metallic parts in the primary system and avoid or mitigate damage to primary system components. It is also designed not to interfere with normal plant operation. When a LPMS alarm is received in the control room and in the Auxiliary Electric Equipment Room the operating abnormal procedure has the Shift Manager contact the System Engineer when an unanticipated alarm occurs from normal or abnormal plant operations. The alarmed channels are then monitored with portable spectrum analysis equipment. The spectral data are compared to previous stored data for any abnormalities. The portable spectrum analyzer stores data similar to what the tape recorder would have stored. This same data would be used to evaluate the loose part. Along with the spectral data, plant process signals and operating experience would be used to assess the safety significance of the loose part. Using this additional information, a determination would be made whether or not to shutdown the reactor.

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The number of unanticipated alarms received from the LPMS is minimal (approximately one or two per cycle) and post alarm spectrum analysis has revealed nothing abnormal. Additionally, no damage due to loose parts on primary system components has been identified during reactor vessel inspections, control rod performance testing or core physics testing and trending.

Some parts have been lost in the Unit 1 and Unit 2 reactor vessels. These lost parts have all been evaluated with respect to nuclear safety by General Electric and/or ComEd Nuclear Fuel Services. In all cases no nuclear safety concern exists. Based on the above discussion, operation without an automatic tape recorder is considered to have minimal safety consequences.

E. CORRECTIVE ACTIONS

An automatic recording capability will be installed on each Unit's LPMS prior to startup. The system design basis will be brought into conformance with design basis prior to startup.

To assist in precluding making design changes which do not conform with the design basis, a computer database installed in 1994 allows word searches of licensing basis documents including the original SER. This allows more thorough investigation of operability determinations and safety evaluations. This database is currently being expanded to include all SERs.

F. PREVIOUS OCCURRENCES

LER NUMBER	TITLE
None	

G. COMPONENT FAILURE DATA

Since no component failure occurred, this section is not applicable.