

APPENDIX

NOTICE OF VIOLATION

OMH Medical Center, Inc.  
dba Okmulgee Memorial Hospital  
Okmulgee, Oklahoma 74447

Docket No. 030-10552  
License No. 35-16189-01

During an NRC inspection conducted on March 22, 1993, violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C, the violations are listed below:

- A. 10 CFR 35.60(c) requires, in part, that a licensee require each individual to use a syringe radiation shield when administering a radiopharmaceutical by injection, unless the use of the shield is contraindicated for that patient.

Contrary to the above, on several occasions between March 19, 1991, and March 22, 1993, when administering radiopharmaceuticals by injection, the licensee's chief nuclear medicine technologist did not use a syringe radiation shield for syringes that contained technetium-99m, and the use of the shield was not contraindicated for these patients.

This is a Severity Level IV violation (Supplement VI).

- B. 10 CFR 35.70(a) requires that a licensee survey with a radiation detection survey instrument at the end of each day of use all areas where radiopharmaceuticals are routinely prepared for use or administered.

Contrary to the above, on several occasions from March 19, 1991, until March 22, 1993, the licensee did not survey with a radiation detection survey instrument at the end of the day the diagnostic imaging room where radiopharmaceuticals were routinely administered. For example, no such survey was performed on January 6, February 11, March 17, April 17, May 20, June 8, July 30, August 24, September 23, October 13, November 16, and December 18, 1992.

This is a Severity Level IV violation (Supplement VI).

Pursuant to the provisions of 10 CFR 2.201, OMH Medical Center, Inc., dba Okmulgee Memorial Hospital is hereby required to submit a written statement or explanation to the Regional Administrator, Region IV, with a copy to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555, within 30 days of the date of the letter transmitting this Notice of Violation (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each violation: (1) the reason for the violation, or, if contested, the basis for disputing the violation, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that will be taken to avoid further violations, and (4) the date when full compliance will be achieved. If an adequate reply is not received within the time specified in this Notice, an

order or demand for information may be issued as to why the license should not be modified, suspended, or revoked, or why such other action as may be proper should not be taken. Where good cause is shown, consideration will be given to extending the response time.

Dated at Arlington, Texas  
this 31st day of March , 1993

# IFS Data Entry Form

Reviewed By: Ch  
Date: 3/31/93

Reactor/Vendor Inspection (IFS Option 1) \_\_\_\_\_ Docket Related/P21 Items (IFS Option 4) \_\_\_\_\_  
Items Opened (Y/N): \_\_\_\_\_ Enter Log Number: \_\_\_\_\_  
 Material Inspection (IFS Option 2) \_\_\_\_\_ LER Items (IFS Option 5) \_\_\_\_\_  
SDI (Y/N): N Enter LER Number: \_\_\_\_\_  
Letter (Y/N): Y \_\_\_\_\_  
Clear (Y/N): N Non-Docket Related Items (IFS Option 6) \_\_\_\_\_

Site/Name: OMH Medical Center, Inc.  
Report Transmittal Date: 1/1

Lead Inspector: MS Responsible Org. Code: 4130R Report End Date: 03/22/93 Region: 4

Report NBR	Docket NBR	Materials Only License NBR	*Docket Name
A <u>93-001</u>	<u>030-10552</u>	<u>35-16189-01</u>	_____
B _____	_____	_____	_____
C _____	_____	_____	_____

Update? (Y/N): N Opened IR/LER/P21 LOG/IFS Number: \_\_\_\_\_

\*\*\*Sequence NBR: 01 Item Type: VIO \*\*Severity: 4 \*\*Supplement: 6

Status	*UPD I/R	*Proj. Closeout	*Actual Closeout	10 CFR	Materials Only License Cond.	Tie Down
A <u>N</u>	_____	<u>1/1</u>	<u>1/1</u>	<u>35.60</u>	_____	_____
B _____	_____	<u>1/1</u>	<u>1/1</u>	_____	_____	_____
C _____	_____	<u>1/1</u>	<u>1/1</u>	_____	_____	_____

Title: Syringe radiation shields not utilized (55 character width)

\*Closeout Org: N \*Closeout EMP: \_\_\_\_\_ \*Contact EMP: \_\_\_\_\_ \*Procedure: \_\_\_\_\_ \*Functl Area: \_\_\_\_\_  
\*Cause CD: \_\_\_\_\_ \*\*EA Number: \_\_\_\_\_ \*\*NOV/NNC Issue Date: 1/1

Text: See NOV letter A.

Update? (Y/N): N Opened IR/LER/P21 LOG/IFS Number: \_\_\_\_\_

\*\*\*Sequence NBR: 02 Item Type: VIO \*\*Severity: 4 \*\*Supplement: 6

Status	*UPD I/R	*Proj. Closeout	*Actual Closeout	10 CFR	Materials Only License Cond.	Tie Down
A <u>N</u>	_____	<u>1/1</u>	<u>1/1</u>	<u>35.70</u>	_____	_____
B _____	_____	<u>1/1</u>	<u>1/1</u>	_____	_____	_____
C _____	_____	<u>1/1</u>	<u>1/1</u>	_____	_____	_____

Title: Radiopharmaceutical administration area not surveyed (55 character width)

\*Closeout Org: N \*Closeout EMP: \_\_\_\_\_ \*Contact EMP: \_\_\_\_\_ \*Procedure: \_\_\_\_\_ \*Functl Area: \_\_\_\_\_  
\*Cause CD: \_\_\_\_\_ \*\*EA Number: \_\_\_\_\_ \*\*NOV/NNC Issue Date: 1/1

Text: See NOV letter B.

\* Optional Fields.  
\*\* Severity, Supplement, and NOV/NCC only applicable for Violations; EA Number only applicable for Apparent Violations.  
\*\*\* Sequence NBR is not applicable for docket related/P21, LER, or non-docket related items.

ITEMS CONTINUED? (Y/N): N

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 RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1) Point Beach Nuclear Plant, Unit 1	DOCKET NUMBER (2) 0 5 0 0 0 2 1 6 1 6	PAGE (3) 1 OF 016
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TITLE (4)  
Inoperability of Both Emergency Diesel Generators

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)										
MONTH	DAY	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAMES		DOCKET NUMBER(S)									
0	2	1	8	9	3	9	3	0	0	2	0	0	0	3	2	9	3	PBNP Unit 2	0 5 0 0 0 1 3 1 0 1 1

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

OPERATING MODE (8) N	20.402(b)	20.406(c)	50.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10) 1 0 0	20.406(a)(1)(ii)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
	20.406(a)(1)(iii)	50.36(c)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
	20.406(a)(1)(iii)	X 50.73(a)(2)(ii)	50.73(a)(2)(viii)(A)	
	20.406(a)(1)(iv)	50.73(a)(2)(iii)	50.73(a)(2)(viii)(B)	
	20.406(a)(1)(iv)	50.73(a)(2)(iii)	50.73(a)(2)(ix)	

LICENSEE CONTACT FOR THIS LER (12)

NAME Curt Castell	TELEPHONE NUMBER 4 1 4 2 2 1 - 2 0 1 1 9
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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
A	ELF	IFIU	X191919	N					

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE)  NO

EXPECTED SUBMISSION DATE (15)

MONTH	DAY	YEAR

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

ABSTRACT

At approximately 0845 hours on February 18, 1993, with both units operating at full power, the synchroscope switch for the Train B Emergency Diesel Generator (EDG) G-02 was turned on while the synchroscope switch for Train A EDG G-01 was already on. This caused a fuse in the EDG G-02 output metering circuit to blow. EDG G-02 was declared inoperable. EDG G-01 had been previously taken out of service for its annual maintenance outage on February 15, 1993. Therefore, both Emergency Diesel Generators G-01 and G-02 were inoperable, a condition prohibited by Technical Specifications. Technical Specification 15.3.0 was entered. Technical Specification 15.3.0 requires that the affected units be placed in hot shutdown within 3 hours and in cold shutdown within 48 hours if the condition is not corrected. The condition was corrected by replacing the blown fuse. EDG G-02 was declared operable at approximately 0953 hours. The daily operability test of EDG G-02, required by Technical Specification 15.3.7 for EDG G-01 being inoperable, was successfully completed at 1138 hours.

LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST 500 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)  Point Beach Nuclear Plant, Unit 1	DOCKET NUMBER (2)  0   5   0   0   0   2   6   6   9   3	LER NUMBER (6)			PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
		9   3	-   0   0   2	-   0   0	0   2	OF 0   6

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

EVENT DESCRIPTION

The limiting condition for operation in Technical Specification 15.3.7, "Auxiliary Electrical Systems," states that one EDG may be inoperable for a period not exceeding 7 days provided the other diesel generator is tested daily to ensure operability and the engineered safety features associated with this diesel generator are operable. On February 15, 1993, EDG G-01 was taken out of service for its annual maintenance outage. Daily testing of EDG G-02 was being conducted as required by Technical Specification 15.3.7.

On February 18, 1993, the daily operability test of EDG G-02 commenced at about 0800 hours. The instructions being used to perform this test are contained in Technical Specification Surveillance Procedure TS-2 "Emergency Diesel Generator G-02 Biweekly." The purpose of this test is to assess the operational readiness of Emergency Diesel Generator G-02 as required by Technical Specifications. The basic method used in the test to demonstrate operability is to start and load EDG G-02. The test was being performed by one operator in the control room in coordination with one operator in the EDG G-02 room.

At about the same time as the operability test of EDG G-02, other operations, engineering, and maintenance personnel began control and indication circuitry functional testing of EDG G-01. This functional testing was being performed while EDG G-01 was still out of service to verify the operability of the EDG G-01 control and output breaker circuitry after the wiring verification that was performed on February 15, 16, and 17. The wiring verification is part of our continuing effort to verify the accuracy of drawings for PBNP. The instructions being used to perform this test are contained in Special Maintenance Procedure SMP-1133-2, "Post As-Built Testing of EDG G-01 Controls and Output Breakers' Circuits Following Wire Tracing in C-02." The functional testing of EDG G-01 circuitry was being performed by one operator in the control room in coordination with one maintenance electrician and one engineer in the EDG G-01 room.

At about 0840 hours, the operator in the control room performing the actions for EDG G-01 control and indication circuitry functional testing turned on the synchroscope switch for the EDG G-01 output breaker to Unit 1. At about 0841 hours, the operator in the control room performing the actions for the EDG G-02 operability test came to a point in the procedure to turn on the synchroscope switch for the EDG G-02 output breaker to Unit 2. There is one synchroscope on Control Board C-02 that is used for all the switching operations for the 13.8 and 4 KV electrical systems. This synchroscope on C-02 can only be used for one synchronizing operation at a time.

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 (F-630), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)  Point Beach Nuclear Plant, Unit 1	DOCKET NUMBER (2)  0500026593	LER NUMBER (6)		PAGE (5)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
		0	0	2	03 OF 06

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

The control switches that are used to turn on the synchroscope for a breaker normally have the handle removed. A single handle is at the front of the Control Board C-02. The handle is locked into the synchroscope control switch when the handle is placed in the synchroscope control switch and turned to the "on" position. The locking-in of the control switch handle is the main method for preventing two or more synchroscope control switches on C-02 from being turned on simultaneously.

The operator performing the operability test of EDG G-02 recognized that the C-02 synchroscope control switch handle was being used by the operator performing the EDG G-01 functional testing and asked when the C-02 synchroscope control switch handle would be available. The Unit 1 control operator overheard the question, took a control switch handle from the C-01 control board, and handed it to the operator performing the EDG G-01 functional testing. The operator performing the EDG G-01 functional testing handed the control switch handle to the operator performing the EDG G-02 operability test. The operator performing the EDG G-02 operability test inserted the synchroscope switch handle and turned the synchroscope switch on. This connected the two synchroscope input circuits, which caused a higher than normal current in the EDG G-02 metering circuitry. This caused a fuse to blow in the EDG G-02 metering circuitry. EDG G-02 was declared inoperable.

As stated previously, EDG G-01 had been taken out of service for its annual maintenance outage on February 15, 1993. Therefore, both Emergency Diesel Generators G-01 and G-02 were considered to be inoperable, a condition prohibited by Technical Specifications. Technical Specification 15.3.0, "General Considerations" section of Technical Specification of 15.3 "Limiting Conditions for Operation," was entered. Technical Specification 15.3.0 requires that the affected units be placed in hot shutdown within 3 hours and in cold shutdown within 48 hours if the condition is not corrected.

The blown fuse was replaced and EDG G-02 was declared operable at 0953 hours. The EDG G-02 daily operability test was successfully completed at 1138 hours. The EDG G-01 maintenance outage continued. Technical Specification 15.3.7 that states one diesel may be inoperable for 7 days remained in effect for the inoperability of EDG G-01.

Both units remained at full power before, during, and following this event. The engineered safety features associated with both diesel generators remained operable during this event.

LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 500 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (F-830), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)  Point Beach Nuclear Plant, Unit 1	DOCKET NUMBER (2)  0500026693	LER NUMBER (3)			PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
		93	002	00	04	OF 06

TEXT (if more space is required use additional NRC Form 305A's) (17)

A human performance evaluation was performed to determine the causes and contributing factors for this event. It has been concluded this event was caused by a personnel error and procedural deficiencies.

Personnel failed to recognize that turning the second synchroscope switch to the on position would cause this problem. The functional testing of EDG G-01 was being performed using a special maintenance procedure. EDG G-01 was out of service, equipment isolation tags were in use and visible to the operators. Personnel involved in this event believed that the functional testing of EDG G-01 was being performed in a condition that would prevent this problem.

The procedural deficiencies include lack of a caution in the EDG G-01 functional test procedure (SMP-1133-2) that would have warned the operator that this situation could occur during the circuitry functional testing. Also, the procedure did not provide directions to the operator in the control room to verify actions with resulting indications. Directions for the operator to check the synchroscope and metering indications would have helped the operator recognize that the synchroscope and metering circuitry was being energized by this action.

COMPONENT AND SYSTEM DESCRIPTION

The synchronizing circuitry is used to verify that the frequency, phase, and voltage on each side of breaker are sufficiently compatible to allow the breaker to be closed. The fuse that blew during this event was in the circuitry that provides the inputs to the synchroscope from the output of EDG G-02. The synchronizing circuitry is used to connect an operating EDG to a bus that is energized from another source. It is not used to connect an EDG to a de-energized bus. This circuitry also provides indication for EDG G-02 electrical output (voltage, current, VARS, kilowatts, and frequency).

The IEEE Standard 803A-1983 component identifiers for this report are:

Emergency Diesel Generators	DG
Synchronizing Circuitry	25
Synchroscope	SYN
Synchroscope Hand Switch	HS
Fuse	FU

REPORTABILITY

This Licensee Event Report is provided pursuant to the requirements of 10 CFR 50.73(a)(2)(i)(B), "Any operation or condition prohibited by the plant's Technical Specifications."

LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 900 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (F-630), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)  Point Beach Nuclear Plant, Unit 1	DOCKET NUMBER (2)  10500026693	LER NUMBER (B)			PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
			002	00	05	OF 06

TEXT: (If more space is required, use additional NRC Form 305A's) (17)

**SAFETY ASSESSMENT**

During this event, EDG G-01 was out of service for a maintenance outage. A fuse blew in the metering circuitry for EDG G-02 due to personnel error and procedure deficiencies. This blown fuse would not prevent EDG G-02 from automatically starting and loading. However, the control for EDG G-02 was maintained in exercise mode during the trouble shooting of the blown fuse, which disables the automatic starting capability. EDG G-02 was still capable of starting and providing electrical power to the emergency buses by operator action. The blown fuse only affected the ability to synchronize the EDG to a bus already energized from another source and the metering of load, current, frequency, and voltage. The lack of metering capability would make it more difficult for the operator to monitor the EDG performance during an emergency.

**CORRECTIVE ACTIONS**

The immediate corrective action was to trouble shoot and replace the blown fuse in the metering circuit.

The causes of this event include: personnel involved failed to recognize that turning the second synchroscope switch to the on position would cause this problem and procedural deficiencies.

Corrective actions for this event include:

- Review the Maintenance Procedure Writers' Guides for inclusion of pre-job briefing, delineation of responsibilities, and operator verification of changing indications, and revise these guides as necessary.
- Revise the Operations Instruction OI-35 "Electrical Equipment Operation" to include a caution against turning two or more synchroscope switches on at the same time.
- Evaluate the need for training on this event.
- Communicate to the operators the importance of checking indications prior to switching operations.
- Review the equipment isolation tag-out being used for the emergency diesel generators annual maintenance for inclusion of isolation of the synchronizing circuitry.

All corrective actions are expected to be completed by September 1993.



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-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)  Point Beach Nuclear Plant, Unit 1	DOCKET NUMBER (2)  0500026693	LER NUMBER (6)			PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
		0	0	2	0	6 OF 6

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

**SIMILAR OCCURRENCES**

Other Licensee Event Reports that describe events that occurred while one EDG was out of service and electrical system operational errors that affected both trains of Engineered Safety Features include:

Unit 1

LER 88-010      Electrical System Misalignment

Unit 2

LER 80-006      Defeat Containment Spray Actuation during Surveillance  
LER 80-007      Loss of RHR Redundancy During Surveillance