FENOC™
FirstEnergy Nuclear Operating Company

Perry Nuclear Power Plant
P.O. Box 97
10 Center Road
Perry, Ohio 44081

Vito A. Kaminskas
Vice President

440-280-5382
Fax: 440-280-8029

March 15, 2013
L-13-119

10 CFR 73.71(a)(4), 10 CFR 20.2201(b)

ATTN: Document Control Desk
U. S. Nuclear Regulatory Commission
Washington, DC 20555-0001

SUBJECT:
Perry Nuclear Power Plant, Unit 1
Docket No. 50-440, License No. NPF-58
Security Licensee Event Report Submittal

Enclosed is Security Licensee Event Report (SLER) 2013-S01, "Local Power Range Monitors Delivered to the Incorrect Address." There are no regulatory commitments contained in this submittal.

If there are any questions or if additional information is required, please contact Mr. Thomas Veitch, Manager – Regulatory Compliance, at (440) 280-5188.

Sincerely,

Vito A. Kaminskas

Vito A Kaminskas

Enclosure:
SLER 2013-S01

cc: NRC Project Manager
NRC Resident Inspector
NRC Region III Regional Administrator
Director, Division of Security Policy, Office of Nuclear Security and Incident Response

IE74
NRR

NRC FORM 366 (10-2010) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB NO. 3150-0104 EXPIRES 10/31/2013

LICENSEE EVENT REPORT (LER)

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

1. FACILITY NAME	2. DOCKET NUMBER	3. PAGE
Perry Nuclear Power Plant, Unit 1	05000440	1 OF 5

4. TITLE

Local Power Range Monitors Delivered to the Incorrect Address

5. EVENT DATE			6. LER NUMBER			7. REPORT DATE			8. OTHER FACILITIES INVOLVED	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV NO.	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
01	16	2013	2013 -	S01 -	00	03	15	2013	FACILITY NAME	DOCKET NUMBER

9. OPERATING MODE: 1

10. POWER LEVEL: 100

11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: *(Check all that apply)*

☒ 20.2201(b)	☐ 20.2203(a)(3)(i)	☐ 50.73(a)(2)(i)(C)	☐ 50.73(a)(2)(vii)
☐ 20.2201(d)	☐ 20.2203(a)(3)(ii)	☐ 50.73(a)(2)(ii)(A)	☐ 50.73(a)(2)(viii)(A)
☐ 20.2203(a)(1)	☐ 20.2203(a)(4)	☐ 50.73(a)(2)(ii)(B)	☐ 50.73(a)(2)(viii)(B)
☐ 20.2203(a)(2)(i)	☐ 50.36(c)(1)(i)(A)	☐ 50.73(a)(2)(iii)	☐ 50.73(a)(2)(ix)(A)
☐ 20.2203(a)(2)(ii)	☐ 50.36(c)(1)(ii)(A)	☐ 50.73(a)(2)(iv)(A)	☐ 50.73(a)(2)(x)
☐ 20.2203(a)(2)(iii)	☐ 50.36(c)(2)	☐ 50.73(a)(2)(v)(A)	☒ 73.71(a)(4)
☐ 20.2203(a)(2)(iv)	☐ 50.46(a)(3)(ii)	☐ 50.73(a)(2)(v)(B)	☐ 73.71(a)(5)
☐ 20.2203(a)(2)(v)	☐ 50.73(a)(2)(i)(A)	☐ 50.73(a)(2)(v)(C)	☐ OTHER
☐ 20.2203(a)(2)(vi)	☐ 50.73(a)(2)(i)(B)	☐ 50.73(a)(2)(v)(D)	Specify in Abstract below or in NRC Form 366A

12. LICENSEE CONTACT FOR THIS LER

FACILITY NAME	TELEPHONE NUMBER *(Include Area Code)*
Eric Blood, Compliance Engineer, Regulatory Compliance	(440) 280-6358

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

CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX

14. SUPPLEMENTAL REPORT EXPECTED		15. EXPECTED SUBMISSION DATE	MONTH	DAY	YEAR
☐ YES *(If yes, complete EXPECTED SUBMISSION DATE).*	☒ NO				

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

On January 16, 2013, at 1244 hours, it was determined that an anticipated shipment of Special Nuclear Material (SNM), destined for the Perry Nuclear Power Plant was delivered to an incorrect address. The shipment consisted of 34 unirradiated Local Power Range Monitor in-core detectors; each containing a small quantity of SNM. The shipment was retrieved and returned to the manufacturer where the SNM was accounted for through an inventory and radiological surveys. The shipment was delivered to the incorrect location due to a destination data entry error made during the generation of an internal shipping document by the carrier.

It was determined that there were ineffective error prevention barriers used by the carrier, as the company had insufficient written standards on how to confirm an order. Additionally, there was a lack of established self and peer verification standards to preclude a human performance error. The external companies involved have taken corrective actions to perform shipment information verifications and have conducted training to reinforce expectations.

This report is submitted pursuant to the requirements of 10 CFR 73.71(a)(4) and 10 CFR 20.2201(b). 10 CFR 20.2201(c), states that duplicate reports are not required if a report is made under 10 CFR 73.71. This report does not contain safeguards or any personally identifiable information.

NARRATIVE

INTRODUCTION

On January 16, 2013, a Local Power Range Monitor shipment, which contains a small quantity of Special Nuclear Material (SNM), was incorrectly delivered to a facility that was not licensed to possess the material. The SNM consisted of 34 General Electric (GE) NA250 Local Power Range Monitors (LPRMs) that are used as in-core instrumentation and provide indication of the reactor power levels. Each of the LPRMs contains a small amount of SNM in the form of Uranium 235. The LPRMs were manufactured by GE - Reuter Stokes located in Twinsburg, OH. The carrier for the delivery of the LPRMs was arranged via a third party logistics (TPL) company contracted by the FirstEnergy corporation. The TPL hired a carrier to provide direct, door-to-door delivery. The shipment was Department of Transportation (DOT) classified as "UN2911, Radioactive material, excepted package - instruments or articles" in accordance with 49 CFR 173.424.

The 34 LPRMs consisted of four different models of instrumentation that contain a proprietary blend of Uranium 234 and Uranium 235, with a total mass of approximately 0.00918 grams of Uranium 235 and a total activity of approximately 198 microcuries.

This event is being reported pursuant to the requirements of 10 CFR 73.71(a)(4) and 10 CFR 20.2201(b). 10 CFR 20.2201(c), states that duplicate reports are not required if a report is made under 10 CFR 73.71. This report does not contain safeguards or any personally identifiable information.

EVENT DESCRIPTION

On January 14, 2013, at 1543 hours, the TPL company arranged for the pickup and delivery of the LPRMs with the carrier. The TPL requested pick-up at GE and delivery to FirstEnergy Perry Nuclear Power Plant (PNPP) in Perry, OH. The carrier's agent, during the order development, selected the wrong destination address from the search results in the carrier's software (specifically selecting First Solar in Perrysburg, OH versus FirstEnergy PNPP Perry, OH).

At 1547 hours, an order confirmation was sent to the Operations Manager at the TPL. The order confirmation reflected the incorrect First Solar delivery location. The incorrect destination address was not identified by the TPL company.

At 1548 hours, a TPL Load Tender (i.e., a TPL generated document that is provided to the carrier as a confirmation regarding origin, destination, date, time, equipment, special instructions and the agreed upon rate for the service requested), containing the shipment information was sent to the carrier via email. The TPL Load Tender contained the address for the PNPP.

On January 16, 2013, at 0825 hours, the shipment of LPRMs left the GE facility and was en route to the incorrect location (i.e., First Solar) in Perrysburg, OH. At 1113 hours, the shipment arrived at the incorrect address and was signed for at 1115 hours. The carrier's truck left the First Solar location at 1130 hours.

NARRATIVE

At 1153 hours, the carrier was notified by the TPL that the shipment was delivered to the incorrect location. The carrier's truck returned and took possession of the LPRM shipment at 1310 hours. First Solar had control of the shipment for approximately 1 hour and 40 minutes and during that time it was considered lost based upon the lack of control by the licensee, manufacturer, and/or the carrier company.

At 1244 hours, with the plant operating in MODE 1 (Power Operation) at 100 percent rated thermal power, it was determined that an anticipated shipment of SNM was delivered to the incorrect address. The facility that the SNM was delivered to does not have a license to possess the SNM. At 1343 hours and within one hour of PNPP being made aware of the loss of control of the SNM, a notification was made to the NRC Operations Center in accordance with 10 CFR 73.71(a)(1), 10 CFR 20.2201(a)(1) and 10 CFR 74.11(a) (reference ENF No. 48677).

PNPP dispatched an individual to the GE facility to ensure that all the SNM was accounted for. At 1602 hours, the carrier's truck arrived back at the GE facility in Twinsburg, OH.

At 1704 hours, the licensee representative reported that all SNM was accounted for and that all the nuclear material was verified intact and undisturbed by a GE Reuter Stokes Radiation Protection Technician through surveys and swipes for contamination.

At 1751 hours, and within one hour of accounting for the SNM, a notification was made to the NRC Operations Center in accordance with 10 CFR 73.71(a)(1).

CAUSE OF EVENT

The first cause of this event was determined to be the lack of effective error prevention barriers. The TPL and carrier lacked written standards that specified how to "confirm" the order was accurate. The carrier did not have established self or peer verification standards for data entry to preclude a human performance error.

The second cause was determined to be inadequate procedure use and adherence. The two examples of this cause were found to be:

1) The carrier's procedures require the carrier agent to direct the carrier driver to read the delivery address from the shipper's Bill of Lading. Instead, it was found that the carrier agent read the address from the incorrect information entered into the carrier's system.

2) The carrier has expectations that data entry into the computer system is to be verified against the Load Tender or by phone call. The investigation determined the TPL Load Tender contained the correct address and was not verified against the order.

EVENT ANALYSIS

The carrier contracted to deliver the LPRMs possessed a DOT Hazardous Materials Safety Permit (HMSP). The carrier took control/responsibility of the SNM during the transportation and delivery of the shipment in accordance with the regulatory requirements and it was incumbent upon the carrier to deliver the shipment to the correct address. In this event, the

NARRATIVE

material was delivered to the incorrect address which resulted in a company having possession of SNM that they were not licensed to possess in accordance with 10 CFR 70, Domestic Licensing of Special Nuclear Material. The safety significance of this event has been evaluated below based upon the actual consequences of the event. The regulatory significance to PNPP from this event is small, based upon the site not taking possession/control of the materials.

The potential dose received by the individuals at the First Solar facility was evaluated. Through discussions with First Solar personnel, it is believed that the package containing the SNM was never fully opened. The potential exposure from the shipment was conservatively calculated to be a total of 1 mrem based upon the shipping documentation indicating the dose rates were below 0.5 mrem/hr. Follow-up surveys taken on the instrumentation during the subsequent delivery to the site indicated dose rates to be 0.1 mrem/hr. The total potential exposure of 1 mrem did not exceed the allowable limits for an individual member of the public specified in 10 CFR 20.1301. Based upon the radiological evaluation of this event and the actual consequences (i.e., the potential dose received by a member of the public), the safety significance was determined to be small. The maximum potential dose of 1 mrem that could have been received during the 1 hour and 40 minute period of time is a small fraction of the regulatory limit of 100 mrem for a member of the public in a year.

CORRECTIVE ACTIONS

Individual performance shortfalls by vendor personnel have been addressed within their own Performance Management processes.

The TPL company has converted the expectation for the coordinator to confirm all pertinent information sent to and received from the carrier for every radioactive shipment into standard procedures. Additionally, they added steps in processing of orders to send a Freight Company Shipping Confirmation and Load Tender to the Nuclear Supply Chain Manager, Site Contact, and Nuclear Supply Chain Director (site personnel). The dispatch system will also be programmed to provide a notification if the TPL Load Tender sent to the carrier is not received via email confirmation.

The carrier company has added an additional requirement to check the TPL Load Tender to assure the correct date/time, pick up location (address and contacts), delivery location (address and contacts), the truck size being requested (Pieces, Weight, Dimensions) and the DOT Hazard classification.

PREVIOUS SIMILAR EVENTS

A search of License Event Reports and the corrective action program documents for the last three years at the Perry Nuclear Power Plant found no similar events have been reported.

1. FACILITY NAME	2. DOCKET	6. LER NUMBER			3. PAGE
		YEAR	SEQUENTIAL NUMBER	REV NO.	
Perry Nuclear Power Plant, Unit 1	05000-440	2013	-- S01 --	00	5 OF 5

NARRATIVE

ADDITIONAL INFORMATION (Required by Regulatory Guide 5.62)

This event did not have an impact on the operation of the unit.
PNPP utilizes a proprietary security force.
No Local, State, or Federal law enforcement agencies were contacted.
There was no press release for this event.

COMMITMENTS

There are no regulatory commitments contained in this report. Actions described in this document represent intended or planned actions, are described for the NRC's information, and are not regulatory commitments.