FPL Energy
Seabrook Station

FPL Energy Seabrook Station
P.O. Box 300
Seabrook, NH 03874
(603) 773-7000

July 19, 2006

Docket No. 50-443

SBK-L-06156

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

Seabrook Station
Licensee Event Report (LER) 2006-004-00
Technical Specification Violation Due to Inoperable Battery Charger

Enclosed is Licensee Event Report (LER) 2006-004-00. This LER reports an event that occurred at Seabrook Station on June 22, 2006. This event is being reported pursuant to the requirements of Facility Operating License Condition 2.G.

Should you require further information regarding this matter, please contact Mr. James M. Peschel, Regulatory Programs Manager, at (603) 773-7194.

Very truly yours,

FPL Energy Seabrook, LLC

Gene St. Pierre
Site Vice President

cc: S. J. Collins, NRC Region I Administrator
G. E. Miller, NRC Project Manager, Project Directorate I-2
G. T. Dentel, NRC Senior Resident Inspector

IE22

ENCLOSURE TO SBK-L-06156

NRC FORM 366 (6-2004) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3150-0104 EXPIRES: 06/30/2007

Estimated burden per response to comply with this mandatory collection request: 50 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the Records and FOIA/Privacy Service Branch (T-5 F52), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0104), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

LICENSEE EVENT REPORT (LER)

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

1. FACILITY NAME	2. DOCKET NUMBER	3. PAGE
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4. TITLE
Technical Specification Violation Due to Inoperable Battery Charger

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
									N/A	05000
06	22	2006	2006	- 004 -	00	07	19	2006	FACILITY NAME: N/A	DOCKET NUMBER: 05000

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)
- ☐ 20.2201(d)
- ☐ 20.2203(a)(1)
- ☐ 20.2203(a)(2)(i)
- ☐ 20.2203(a)(2)(ii)
- ☐ 20.2203(a)(2)(iii)
- ☐ 20.2203(a)(2)(iv)
- ☐ 20.2203(a)(2)(v)
- ☐ 20.2203(a)(2)(vi)
- ☐ 20.2203(a)(3)(i)
- ☐ 20.2203(a)(3)(ii)
- ☐ 20.2203(a)(4)
- ☐ 50.36(c)(1)(i)(A)
- ☐ 50.36(c)(1)(ii)(A)
- ☐ 50.36(c)(2)
- ☐ 50.46(a)(3)(ii)
- ☐ 50.73(a)(2)(i)(A)
- ☒ 50.73(a)(2)(i)(B)
- ☐ 50.73(a)(2)(i)(C)
- ☐ 50.73(a)(2)(ii)(A)
- ☐ 50.73(a)(2)(ii)(B)
- ☐ 50.73(a)(2)(iii)
- ☐ 50.73(a)(2)(iv)(A)
- ☐ 50.73(a)(2)(v)(A)
- ☐ 50.73(a)(2)(v)(B)
- ☐ 50.73(a)(2)(v)(C)
- ☐ 50.73(a)(2)(v)(D)
- ☐ 50.73(a)(2)(vii)
- ☐ 50.73(a)(2)(viii)(A)
- ☐ 50.73(a)(2)(viii)(B)
- ☐ 50.73(a)(2)(ix)(A)
- ☐ 50.73(a)(2)(x)
- ☐ 73.71(a)(4)
- ☐ 73.71(a)(5)
- ☒ OTHER

Specify in Abstract below or in NRC Form 366A

12. LICENSEE CONTACT FOR THIS LER

FACILITY NAME	TELEPHONE NUMBER (Include Area Code)
James M. Peschel, Regulatory Programs Manager	603-773-7194

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

☐ YES *(If yes, complete 15. EXPECTED SUBMISSION DATE)* ☒ NO

15. EXPECTED SUBMISSION DATE

MONTH	DAY	YEAR

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

On June 22, 2006, at 0620, with the plant at 100% power, it was discovered that there was no battery charger in service on one of the two Train B vital batteries in violation of Technical Specification 3.8.2.1, DC Sources. Further review determined that the battery charger had been disconnected from its associated battery bank since approximately 1858 hours on June 21 when alarms caused by the opening of the battery charger breaker were received in the Control Room. While securing battery charger 1B after capacity testing, Maintenance electricians opened breaker DN4, which isolated both the battery charger and the portable battery charger from 125 VDC Bus 11B. The maintenance activity should not have repositioned breaker DN4. The opening of the breaker resulted in two Control Room alarms which operators believed to be expected alarms associated with the maintenance activity. The condition went unrecognized for approximately 12 hours. The cause of the event was personnel error by the electricians for opening the breaker when unsure of how to secure the charger and by the licensed Control Room Operator for incorrectly processing the alarms as expected. Additionally, subsequent Operations personnel failed to recoginize the meaning of the alarms or validate the status of the battery.

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

I. Description of Event

On June 22, 2006, at 0620, with the plant at 100% power, it was discovered that there was no battery charger [EJ, BYC] in service on one of the two Train B vital batteries [EJ, BTRY] in violation of Technical Specification 3.8.2.1, DC Sources. Further review determined that the battery charger had been disconnected from its associated battery bank since approximately 1858 hours on June 21 when alarms caused by the opening of the battery charger breaker [BKR] were received in the Control Room. While securing battery charger EDE-BC-1B [EJ, BYC] after capacity testing, Maintenance electricians opened breaker DN4, which isolated both the battery charger and the portable battery charger from 125 VDC Bus 11B [EJ, BU]. The maintenance activity should not have repositioned breaker DN4. The opening of the breaker resulted in two Control Room alarms which operators believed to be expected alarms associated with the maintenance activity. The condition went unrecognized for approximately 12 hours. The cause of the event was personnel error by the electricians for opening the breaker when unsure of how to secure the charger and by the licensed Control Room Operator for incorrectly processing the alarms as expected. Additionally, subsequent Operations personnel failed to recoginize the meaning of the alarms or validate the status of the battery.

The oncoming Control Room day shift questioned the alarms and discovered that 125 VDC bus 11B was supplied by its battery and that battery charger EDE-BC-1B was out of service. The battery charger was declared inoperable and TS 3.8.2.1 entered. At 0722 on June 22, 2006 station personnel closed the battery charger breaker to 125 VDC Bus 11B and exited TS 3.8.2.1.

II. Cause of Event

The cause for the event is personnel error by the electricians for opening battery charger output breaker DN4 when unsure of how to secure the charger. The maintenance procedure lacked detailed steps for "securing the battery charger." Although other electricians have successfully used the procedure in past maintenance activities, in this event the electricians were unsure of how to secure the battery charger. Upon recognition of the inadequate procedural guidance, the electricians did not seek clarification of the instruction, but developed a plan based on their understanding of the assignment and system line up to secure the battery charger. They did not stop and process a procedure change to incorporate the plan into the procedure.

A personnel error was also committed by Licensed Control Room Operators who assumed the alarms were associated with maintenance activities. The cause for this personnel error is that a licensed operator incorrectly processed the alarms as expected for the maintenance activity being performed. The licensed operator discussed the maintenance activity with the electrician, but resultant alarms and expected durations were not identified. Based on the communication with the electrician, the licensed operator processed the alarms as "expected," which resulted in Operations personnel failing to validate the reasons for the alarms. In addition, subsequent Operations personnel failed to recognize the meaning of the alarms or validate the actual status of the battery.

III. Analysis of Event

Each Train of the safety related portion of the DC power system consists of two 125-volt batteries, battery chargers and distribution panels. The loads supplied by the distribution panels include inverters for redundant vital instrument busses, distribution panels for power to Class 1E loads, power for control and operation of Class 1E systems for Engineered Safety Features, and power for selected non-Class 1E loads. There are two Trains of DC power system at Seabrook Station. Each Train is equipped with a spare battery charger that can be connected to either battery on that Train.

The event consisted of not having a battery charger connected to one of the four vital batteries (EDE-B-1B) for a period of time longer than allowed by Technical Specification 3.8.2.1. While a battery charger was not connected, the associated battery provided power to the associated loads. Analysis determined that EDE-B-1B would have been able to supply the 2-hour and 4-hour load profiles if a loss of offsite power or station blackout had occurred during the 12-hour period that the battery charger was disconnected.

This event is of regulatory significance because it met the reporting criterion of 10 CFR 50.73(a)(2)(i)(B) for a condition prohibited by the TS. The event was reported to the NRC on June 22, 2006 at 1428 (event # 42260) in accordance with Seabrook Station operating license condition 2.G for a violation of the Technical Specifications.

The event had no adverse impact on the plant or on the health and safety of the public or plant personnel. No plant transients, system actuations, or consequences resulted from the event. No other inoperable structures, systems, or components contributed to this event. The condition did not involve a safety system functional failure.

IV. Corrective Action

The corrective actions to address this event include:

1. The individuals involved were coached and mentored on Station expectations.

2. An Operations Department Improvement Initiative was issued that focused on reinforcing management's expectations regarding the conduct of operations including control board monitoring, alarm response, configuration control and the return of equipment to service.

3. Management on shift obervations were conducted with each operating crew for a minimum of 8 hours to ensure consistent adherence to Station standards for the Conduct of Operations.

4. The Operations Department Manager will walk down this event in the field with Operations shift personnel, highlighting the actual vs. expected performance, what information and indications should have been used and what the expectations are for the Department.

5. The Maintenance Department Manager will walk down this event in the field with Mechanical, Electrical and I&C Maintenance personnel, highlighting the actual vs. expected performance, what information and indications should have been used and what the expectations are for the Department.

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

V. Similar Events

A review of LERs for the previous two years did not identify any similar events.