



**FPL Energy**  
**Seabrook Station**

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

August 17, 2004

Docket No. 50-443

SBK-L-04021

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

Seabrook Station  
Licensee Event Report (LER) 2004-001-00 for  
Accident Monitoring Instruments Inoperable Due to Inadequate Indicating Range

Enclosed is Licensee Event Report (LER) 2004-001-00. This LER reports an event that occurred at Seabrook Station on June 22, 2004. This event is being reported pursuant to the requirements of 10 CFR 50.73(a)(2)(i)(B).

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

Very truly yours,

FPL ENERGY SEABROOK, LLC

A handwritten signature in cursive script, appearing to read 'Mike Kiley', written over a horizontal line.

Mike Kiley  
Operations Manager

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

IE22

**ENCLOSURE TO SBK-L-04021**

Estimated burden per response to comply with this mandatory information 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 Management Branch (T-6 E6), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by Internet e-mail to bjs1@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 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 <b>Seabrook Station</b>	2. DOCKET NUMBER <b>0500 - 0443</b>	3. PAGE <b>1 OF 3</b>
---------------------------------------------	----------------------------------------	--------------------------

4. TITLE  
**Accident Monitoring Instruments Inoperable Due to Inadequate Indicating Range**

5. EVENT DATE			6. LER NUMBER			7. REPORT DATE			8. OTHER FACILITIES INVOLVED	
MO	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV NO	MO	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
06	22	2004	2004	001	00	08	17	2004	N/A	N/A
									FACILITY NAME	DOCKET NUMBER
									N/A	N/A

9. OPERATING MODE <b>1</b>	11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR <input type="checkbox"/> (Check all that apply)									
	20.2201(b)		20.2203(a)(3)(ii)		50.73(a)(2)(ii)(B)		50.73(a)(2)(ix)(A)			
10. POWER LEVEL <b>100</b>	20.2201(d)		20.2203(a)(4)		50.73(a)(2)(iii)		50.73(a)(2)(x)			
	20.2203(a)(1)		50.36(c)(1)(i)(A)		50.73(a)(2)(iv)(A)		73.71(a)(4)			
	20.2203(a)(2)(i)		50.36(c)(1)(ii)(A)		50.73(a)(2)(v)(A)		73.71(a)(5)			
	20.2203(a)(2)(ii)		50.36(c)(2)		50.73(a)(2)(v)(B)		OTHER Specify in Abstract below or in NRC Form 366A			
	20.2203(a)(2)(iii)		50.46(a)(3)(ii)		50.73(a)(2)(v)(C)					
	20.2203(a)(2)(iv)		50.73(a)(2)(i)(A)		50.73(a)(2)(v)(D)					
	20.2203(a)(2)(v)		x 50.73(a)(2)(i)(B)		50.73(a)(2)(vii)					
	20.2203(a)(2)(vi)		50.73(a)(2)(i)(C)		50.73(a)(2)(viii)(A)					
20.2203(a)(3)(i)		50.73(a)(2)(ii)(A)		50.73(a)(2)(viii)(B)						

12. LICENSEE CONTACT FOR THIS LER

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

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

14. SUPPLEMENTAL REPORT EXPECTED				15. EXPECTED SUBMISSION DATE			MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE)			x NO				N/A	N/A	N/A

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

On June 22, 2004, the accident monitoring instrumentation (AMI) for containment enclosure negative pressure was declared inoperable after discovery that the instruments did not encompass the range of pressure needed to measure the variable under worst case conditions.

An engineering evaluation, performed in 1991 in response to NRC Information Notice 88-76, determined that a negative pressure of (-) 0.685 inch water gauge needed to be measured at the location of the instruments to ensure that (-) 0.25 inch water gauge existed between the entire containment enclosure and the outside environment. However, the installed instruments had a range of only 0 to (-) 0.50 inch water gauge. While Technical Specification 3.3.3.6 has a 48-hour allowed outage time for two inoperable containment enclosure pressure channels, this condition existed since 1991 until discovery on June 22, 2004, resulting in a condition prohibited by the Technical Specifications. A review of previous LERs identified no similar occurrences.

The cause of this event was the lack of a formal inter-discipline review of the engineering evaluation performed in 1991, resulting in a failure to recognize the AMI aspects of this instrumentation. Implementation of a design change to re-scale the containment enclosure negative pressure instruments corrected this condition. No adverse safety consequences resulted from this event.

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET (2)	LER NUMBER (6)			PAGE (3)
Seabrook Station	0500-0443	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	2 OF 3
		2004	- 001	- 00	

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

I. Description of Event

On June 22, 2004, at 1100 while operating in Mode 1 at 100% power both channels of accident monitoring instrumentation for containment enclosure negative pressure (1-EAH-PDI-5782 and 1-EAH-PDI-5789) [PDI] were declared inoperable, requiring entry into Technical Specification (TS) 3.3.3.6, action b. These instruments are Regulatory Guide 1.97, type B variables, which monitor containment enclosure negative pressure as an indication of containment enclosure emergency air cleanup system [BD] performance. Station personnel discovered that the instruments did not encompass the range of pressure necessary to measure the variable under worst case conditions.

An engineering evaluation (SBC-475), performed in 1991 in response to NRC Information Notice 88-76, determined the effect of temperature and elevation on the secondary containment pressure. The evaluation concluded that a negative pressure of (-) 0.685 inch water gauge needed to be measured at the location of the instruments to ensure that (-) 0.25 inch water gauge existed between the entire containment enclosure and the outside environment. However, the installed instruments had a range of 0 to (-) 0.50 inch water gauge, which was inadequate to monitor the required pressure.

During normal operation of the containment enclosure ventilation system, the instrumentation was on scale (in the range of 0 to (-) 0.5 inch water gauge) and passed the required channel checks. Operations personnel did not have a reason to question these instruments until a shift in flow balance caused the instruments to indicate off-scale high. In the process of resolving this issue, the discrepancy in the instruments' indicating range, which had existed since 1991, was identified.

II. Cause of Event

The cause of this event was a failure to use a formal process for the inter-discipline review of engineering evaluation SBC-475. While the evaluation was focused on the performance of the containment enclosure emergency air cleanup system, the conclusions in this evaluation did not receive an inter-discipline review. As a result, the impact of this engineering document on the installed instruments and their relationship to TS 3.3.3.6, Accident Monitoring Instrumentation, went unrecognized.

The evaluation of extent of condition for this event concluded that this was an isolated occurrence and did not have generic implications for the station's design control process. The event was a historical issue resulting from the lack of a formal inter-discipline review of an engineering evaluation in 1991. A detailed self-assessment, performed in 1996 following the NRC's request for information regarding the adequacy and availability of design bases information, concluded that Seabrook Station was being operated and maintained within its design basis.

III. Analysis of Event

Both channels of containment enclosure pressure instrumentation were discovered to be inoperable at 1100 on June 22, 2004, and this condition had existed since 1991. On June 23, 2004 at 1648, one channel of instrumentation (1-EAH-P-5789) was restored to operable status following implementation of a design change to re-scale the instrument. The remaining instrument (1-EAH-P-5782) was restored to operable status at 1640 on June 24, 2004, establishing full compliance with the limiting condition for operation of TS 3.3.3.6, Accident Monitoring Instrumentation.

No inoperable structures, systems, or components contributed to this event.

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET (2)	LER NUMBER (6)			PAGE (3)
Seabrook Station	0500-0443	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	3 OF 3
		2004	- 001	- 00	

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

This event resulted in no adverse safety consequences. The design function of these accident monitoring instruments is to provide information to indicate whether the containment enclosure emergency air clean up system (CEEACS) is accomplishing its design function of maintaining a negative pressure in the containment enclosure following an accident. However, the event does have regulatory significance in that it constituted a condition prohibited by the Technical Specifications.

Although the instruments were inoperable because they did not encompass the range of pressure necessary to measure containment enclosure pressure under worst case conditions, the inoperable instruments had no impact on the ability of the CEEACS to accomplish its safety function. Following the issuance of engineering evaluation SBC-475, the new pressure value was properly incorporated into surveillance procedure EX1808.014, "Containment Enclosure Emergency Exhaust Filter System 18 Month Surveillance", which verifies the ability of the CEEACS to establish a negative pressure in the containment enclosure. The procedure uses calibrated measuring and test equipment installed at various locations in the containment enclosure, and the results have shown that the CEEACS has been capable of producing the required negative pressure.

This event was classified as a maintenance rule functional failure, as defined in maintenance rule system function PAM-01, for EAH-PDI-5782 and EAH-PDI-5789.

IV Corrective Actions

Design change 04 DCR 008, Re-scaling of Containment Enclosure Negative Pressure (EAH-P-5782 and EAH-P-5789) was implemented to expand the range of the instruments to include the maximum pressure required by SBC-475.

No additional corrective actions were required to address the lack of a formal inter-discipline process in 1991 that led to this event. Since that time, the station has implemented a robust condition reporting system that provides an effective means for tracking document reviews and completing the associated actions.

V. Similar Events

None