



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

FPL Energy Seabrook Station  
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**MAY 26 2004**

Docket No. 50-443

NYN-04042

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

Seabrook Station  
Special Report: Explosive Gas Monitoring  
Instrumentation Inoperable Greater than 30 Days

FPL Energy Seabrook, LLC (FPL Energy Seabrook) submits this Special Report pursuant to Technical Specification 6.8.2. Technical Specification 3.3.3.10, "Explosive Gas Monitoring Instrumentation," requires one explosive gas monitoring instrumentation channel to be operable when the waste gas system is in service. Action statement 3.3.3.10.b requires that, with the number of operable channels less than the required minimum channels, action be taken to restore the inoperable explosive gas monitoring instrumentation channel within 30 days or a Special Report be submitted pursuant to Technical Specification 6.8.2.

On April 7, 2004, both explosive gas monitoring instrumentation channels were out of service due to their inability to accurately measure oxygen levels. At that time, the requirements of the Action Statement were met by the collection and analysis of grab samples in accordance with Action 34 of Technical Specification Table 3.3-13. Extensive troubleshooting, with vendor support, was conducted, the pressure sensors and monitoring cells were replaced, and the monitors were calibrated. Following these repairs, the oxygen monitoring function did not achieve the desired level of stability and reliability due to the sensitive electronic circuitry the units use to measure and display oxygen and temperature data. The monitors are being affected by electronic noise. Attempts to harden the monitoring circuitry from the noise have included application of ferrite bead noise limiting technology and reconfiguration of the ground grid in the area around the monitors. Although some improvements have been seen, spurious alarms and programming failures are still occurring, therefore the monitors have not been returned to operable status.

There are no safety consequences associated with the permanent explosive gas monitoring instrumentation being inoperable as the Action Statement requirements are being met by the collection and analysis of grab samples.

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FPL Energy Seabrook is continuing to work with the vendor to determine the cause for the unstable operation of the oxygen monitors and will continue to keep the Resident Inspectors informed of our systematic troubleshooting plans and repair activities.

If you have any questions regarding this report, please contact James M. Peschel, Regulatory Programs Manager, at 603-773-7194.

Very truly yours,

FPL Energy Seabrook, LLC



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Mark E. Warner  
Site Vice President

cc: H. J. Miller, NRC Region I Administrator  
V. Nerses, NRC Project Manager, Project Directorate I-2  
G. T. Dentel, NRC Senior Resident Inspector