

September 7, 2006

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

Limerick Generating Station, Units 1 and 2
Facility Operating License Nos. NPF-39 and NPF-85
NRC Docket Nos. 50-352 and 50-353

Subject: Special Report - Seismic Monitoring Instrumentation Inoperability

This Special Report is being submitted pursuant to the requirements of Limerick Generating Station (LGS), Unit 1 and Unit 2 Updated Final Safety Analysis Report (UFSAR) section 3.7.4.5, Technical Specifications 6.9.2, and Technical Requirements Manual 3.3.7.2. "With one or more of the seismic monitoring instruments inoperable for more than 30 days, a Special Report shall be prepared and submitted to the Nuclear Regulatory Commission pursuant to Specification 6.9.2 of the Technical Specifications within the next ten days outlining the cause of the malfunction and the plans for restoring the instrument(s) to operable status."

On July 26, 2006, with both units operating at full power while performing seismic instrumentation surveillance test (ST-2-036-600-0), seismic monitor sensor array XE-VA-105 for 'D' Main Steam Line (MSL) failed to provide the expected indication. Each sensor array has three sensors, one for longitudinal movement, vertical movement, and transverse movement. The ring-back signal for the vertical and transverse sensors did not respond per the ST requirement. It is believed that the sensor may not respond as required. Instrumentation and Control (I&C) and Engineering personnel determined that 'D' MSL channel sensor array of the seismic monitor was not functional. Accordingly, Operations declared the Seismic Monitor inoperable. The failed sensor array is located in the Unit 1 Drywell and cannot be accessed for recalibration or repair without a plant outage.

The Seismic Monitoring System consists of two systems. One system is located in the main Control Room (MCR) with 5 sensors located at various plant locations and elevations. The MCR Seismic Monitor has 5 tri-axial time history accelerometers, 1 response spectrum analyzer, 5 digital recorders and a playback unit. Four of the five sensor arrays have passed their channel functional surveillance. The fifth sensor is available but degraded. The seismic monitor sensor array (XE-VA-105) that is located in the Drywell of Unit 1 will be repaired, tested, and returned to operable status by the end of 1R12 outage (March 2008).

The second system is a stand-alone system located at the Spray Pond Pump House. The Spray Pond Seismic Monitor is a self-contained system with its own sensor array not associated with the MCR Seismic Monitor. The Spray Pond Seismic Monitor remains operable and is not affected by the degraded sensor array XE-VA-105.

The report was due on Tuesday September 5, 2006 and was discovered to be late on Wednesday September 6, 2006. This report is late due to a failure to create the required action tracking assignment. The issue has been entered into the site corrective action process for resolution.

If you have any questions or require additional information, please do not hesitate to contact us.

Sincerely,

Original signed by

Ron J. DeGregorio
Vice President – Limerick
Exelon Generation Company, LLC

cc: S. J. Collins, Administrator, Region I, NRC
S.L. Hansell, NRC Senior Resident Inspector, Limerick

SUMMARY OF EXELON NUCLEAR COMMITMENTS
LS-AA-117-1003 Rev.4

The following table identifies commitments made in this document. (Any other actions discussed in the submittal represent intended or planned actions. They are described to the NRC for the NRC's information and are not regulatory commitments.)

Commitment #1

The seismic monitor sensor array (XE-VA-105) that is located in the Drywell of Unit 1 will be repaired, tested, and returned to operable status by the end of 1R12 outage (March 2008).

Committed date or "outage": Outage

Commitment Type

One-Time Action (Yes/No): Yes

Programmatic (Yes/No): No