Exelon Generation®

TRM 3.3.7.2

January 16, 2013

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 Specification 6.9.2, and Technical Requirements Manual 3.3.7.2 which states "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 Friday, December 7, 2012, Unit 1 and Unit 2 were operating at 100% power with functional testing (ST-2-036-600-0) of the seismic monitoring instrumentation in progress. During the test, the seismic monitor sensor array (XE-VA-105) for the "D" Main Steam Line (MSL) did not respond as expected.

Each sensor array has three channels which measure longitudinal movement, vertical movement, and transverse movement. The signal for the longitudinal channel did not respond per the functional test requirement. Instrumentation and Control (I&C) and Engineering personnel determined that the "D" MSL sensor array of the seismic monitor was not functional. Accordingly, Operations declared the sensor array 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 portion of the system located in Main Control Room (MCR) consists of five tri-axial time history accelerometers, one response spectrum analyzer, five digital recorders, and a playback unit. The Spray Pond Pump House portion of the system is a self-contained system with its own sensor array not associated with the MCR Seismic Monitor.

Five of six instrument sensors remain operable. The inoperable 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 1R15 refueling outage (April 2014).

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

Sincerely,

Original signed by

Thomas J. Dougherty
Vice President – Limerick Generating Station
Exelon Generation Company, LLC

Attachment: List of commitments

cc: Administrator, Region I, NRC
NRC Senior Resident Inspector, Limerick

SUMMARY OF REGULATORY COMMITMENTS

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	COMMITTED DATE OR "OUTAGE"	COMMITMENT TYPE	
		ONE-TIME ACTION (Yes/No)	PROGRAMMATIC (Yes/No)
The inoperable 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 the 1R15 refueling outage (April 2014).	Outage	Yes	No