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TS 6.9.2

July 25, 2003

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

Limerick Generating Station (LGS) 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

Reference: Special Report dated May 10, 2003 "Seismic Monitoring Instrumentation Operability"

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 June 17, 2003, 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 longitudinal did not respond per the ST requirement. It is believed that the sensor array is still active, however, the longitudinal axis 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 1R10 outage (March 20, 2004).

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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.

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

Sincerely,

A handwritten signature in black ink, appearing to read 'R. DeGregorio', is written over a circular stamp or seal.

Ronald J. DeGregorio
Vice President, LGS

cc: H. J. Miller, Administrator Region I, USNRC
A. L. Burritt, USNRC Senior Resident Inspector, LGS

bcc: W. Levis - KSA 3N
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