



TS 6.9.1.7

April 30, 2013

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

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: 2012 Annual Radiological Environmental Operating Report

Dear Sir:

In accordance with the requirements of Section 6.9.17 of Limerick Generating Station (LGS) Unit 1 and Unit 2 Tech. Specs., and Section 6.1 of the LGS Units 1 and 2 Offsite Dose Calculation Manual (ODCM), this letter submits the 2012 Annual Radiological Environmental Operating Report No. 27. This report provides the 2012 results for the Radiological Environmental Monitoring Program (REMP) as called for in the Offsite Dose Calculation Manual.

In assessing the data collected for the REMP, it has been concluded that the operation of LGS, Units 1 and 2 had no adverse impact on the environment. No plant-produced fission or activation products, with the exception of Cs-137, were found in any pathway modeled by the REMP. Cesium-137 levels detected in sediment were consistent with levels found in previous years and were attributable to LGS liquid releases. Results of the groundwater protection program are also included in this report. Positive tritium was found in 4 of 12 groundwater monitoring locations that ranged up to 14,200 pCi/L.

There are no commitments contained in this letter.

If you have any questions, please do not hesitate to contact us.

Sincerely,

Thomas J. Dougherty  
Vice President -LGS  
Exelon Generation Company, LLC

Attachment: 2012 Annual Radiological Environmental Operating Report No. 27

cc: W. Dean, Administrator, Region I, USNRC (w/Attachment)  
E. DiPaolo, USNRC Senior Resident Inspector, LGS (w/Attachment)  
R. Ennis -Senior Project Manager-NRR, USNRC (w/Attachment)  
R. Nimitz, Inspector, Region I, USNRC (w/Attachment)

JE25  
NRR

bcc: D. Lewis – GML 5-1 (w/o Attachment)  
T. Dougherty –GML 5-1 (w/o Attachment)  
D. Merchant – GML 1-1 (w/o Attachment)  
R. Dickinson – SSB 2-4 (w/Attachment)  
R. Lance– SSB 2-2(w/Attachment)  
L. Birkmire -SSB 2-2 (w/o Attachment)  
C. Gerdes – SSB 2-2 (w/oAttachment)  
C. Smith – SSB 2-2 (w/o Attachment)  
S. Gamble – SSB 2-4 (w/o Attachment)  
A. Columbus- SMB 1-2 (w/Attachment)  
K. Jury – Cantera (w/o Attachment)  
C. Cooney – KSA 3N (w/o Attachment)  
D. Helker – KSA 3E (w/o Attachment)  
R. Janati-Commonwealth of PA (w/Attachment)  
M. Murphy- PA DEP BRP Inspector – SSB 2-4 (w/Attachment)  
J. Folkwein – ANI (w/Attachment)  
David Katz - Deputy Water Commissioner Environmental Policy and Planning  
City of Phila. Water Dept, ARAMark Tower 5<sup>th</sup> Flr, 1101 Market St. Phila. PA 19107-2994  
(w/Attachment)  
Aqua Pennsylvania 762 West Lancaster Ave. Bryn Mawr PA10010 (w/Attachment)  
Andrew Fabian -Phoenixville Water Works 140 Church St Phoenixville, PA 19460  
(w/Attachment)  
Pennsylvania American Water 800 W. Hershey Park Dr. Hershey, PA 17033 (w/Attachment)  
James Hennessey - Pottstown Water Authority 100 E. High St Pottstown, PA 19464-9525  
(w/Attachment)

ATTACHMENT 1

2012 ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT NO. 27