

August 21, 2007

Mr. Christopher M. Crane  
President and CNO  
Exelon Nuclear  
Exelon Generation Company, LLC  
200 Exelon Way  
Kennett Square, PA 19348

SUBJECT: LIMERICK GENERATING STATION - NRC EVALUATED EMERGENCY  
PREPAREDNESS EXERCISE - INSPECTION REPORT NOS.  
05000352/2007502 AND 05000353/2007502

Dear Mr. Crane:

On August 10, 2007, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection of the 2007 evaluated emergency preparedness exercise at your Limerick Generating Station. The enclosed inspection report documents the inspection results, which were discussed on August 10, 2007, with Mr. C. Mudrick and other members of your staff.

The inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

Based on the results of this inspection, no findings of significance were identified.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure and your response (if any) will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

*/RA/*

James M. Trapp, Chief  
Plant Support Branch 1  
Division of Reactor Safety

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Sincerely,

**/RA/**

James M. Trapp, Chief  
Plant Support Branch 1  
Division of Reactor Safety

SUNSI Review Complete: JMT (Reviewer's Initials)

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C. Crane

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Docket Nos: 50-352, 50-353  
License No: NPF-39, NPF-85

Enclosure: Inspection Report Nos. 05000352/2007502 and 05000353/2007502  
w/Attachment: Supplemental Information

cc w/encl:

Chief Operating Officer, Exelon Generation Company, LLC  
Site Vice President - Limerick Generating Station  
Plant Manager, Limerick Generating Station  
Regulatory Assurance Manager - Limerick  
Senior Vice President - Mid-Atlantic Operations  
Senior Vice President - Operations Support  
Vice President - Licensing and Regulatory Affairs  
Director - Licensing and Regulatory Affairs, Exelon Generation Company, LLC  
Manager, Licensing - Limerick Generating Station  
Vice President, General Counsel and Secretary  
Correspondence Control Desk  
Director, Bureau of Radiation Protection, PA Department of Environmental Protection  
J. Johnsrud, National Energy Committee, Sierra Club  
Chairman, Board of Supervisors of Limerick Township

C. Crane

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U. S. NUCLEAR REGULATORY COMMISSION REGION I  
REGION I

Docket Nos: 50-352, 50-353

License Nos: NPF-39, NPF-85

Report No: 05000352/2007502, 05000353/2007502

Licensee: Exelon Generation Company, LLC

Facility: Limerick Generating Station, Units 1 & 2

Location: Sanatoga, PA 19464

Dates: August 6-10, 2007

Inspectors: S. Barr, Sr. Emergency Preparedness Inspector, DRS, Region I (Lead)  
J. Nick, Technical Assistant, DNMS, Region I  
C. Bickett, Limerick Resident Inspector, DRP, Region I  
R. Cureton, Emergency Preparedness Inspector, DRS, Region I

Approved by: James M. Trapp, Chief  
Plant Support Branch 1  
Division of Reactor Safety

Enclosure

## SUMMARY OF FINDINGS

IR 05000352/2007-502, IR 05000353/2007-502; 08/06/2007 - 08/10/2007; Limerick Generating Station, Units 1 and 2; Exercise Evaluation.

This was an announced inspection conducted by three region-based inspectors, and the Limerick Resident Inspector. No findings of significance were identified. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 4, dated December 2006.

### **Cornerstone: Emergency Preparedness**

A. NRC-Identified and Self-Revealing Findings

No findings of significance were identified

B. Licensee-Identified Findings

None.

## Report Details

### 1. **REACTOR SAFETY**

Cornerstone: Emergency Preparedness (EP)

#### 1EP1 Exercise Evaluation (71114.01 - 1 Sample)

##### a. Inspection Scope

Prior to the exercise, an in-office review was conducted of the exercise objectives and scenario submitted to the NRC, to determine if the exercise would test major elements of the emergency plan as required by 10 CFR 50.47(b)(14). A description of the evaluation conducted by the NRC during the exercise is described below. Overall, this inspection activity represented the completion of one sample on a biennial cycle.

The exercise evaluation consisted of the following review and assessment:

- The adequacy of Limerick's performance in the biennial full-participation exercise regarding the implementation of the risk-significant planning standards (RSPS) in 10 CFR 50.47 (b)(4), (5), (9), and (10), which are emergency classification, offsite notification, radiological assessment, and protective action recommendations, respectively.
- The overall adequacy of Limerick's emergency response facilities with regard to NUREG-0696, "Functional Criteria for Emergency Response Facilities," and Emergency Plan commitments. The facilities assessed were the control room simulator, the Technical Support Center (TSC), the Operations Support Center (OSC), the Joint Information Center (JIC), and the Emergency Operations Facility (EOF).
- Other performance areas, such as, the emergency response organization's (ERO's) recognition of abnormal plant conditions, command and control, intra- and inter-facility communications, prioritization of mitigation activities, utilization of repair and field monitoring teams, interface with offsite agencies, staffing and procedure adequacy, and the overall implementation of the emergency plan and its implementing procedures.
- Past performance issues from the last NRC exercise report and Limerick's drill reports to determine effectiveness of corrective actions as demonstrated during this exercise to ensure compliance with 10 CFR 50.47(b)(14).
- The post-exercise critiques to evaluate Limerick's self-assessment of its ERO performance during the exercise and to ensure compliance with 10 CFR 50, Appendix E, Paragraph IV.F.2.g.

The inspectors reviewed the documents listed in the attachment to this report.

Enclosure

b. Findings

No findings of significance were identified.

**4. OTHER ACTIVITIES (OA)**

40A6 Meetings, including Exit

On August 20, 2007, the inspector presented the inspection results to Mr. Christopher Mudrick, Limerick Generating Station Vice President, and other members of the licensee's staff. No proprietary information was provided to the inspectors during this inspection.

**ATTACHMENT**

**SUPPLEMENTAL INFORMATION**

**KEY POINTS OF CONTACT**

Licensee Personnel

R. Newmaster, Limerick Emergency Preparedness Manager  
K. Kemper, Exelon Emergency Preparedness Director

**LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED**

None

**LIST OF DOCUMENTS REVIEWED**

**Section 1EP1: Exercise Evaluation**

Limerick Generating Station Emergency Plan, Revision 11  
Limerick Generating Station Emergency Plan Implementing Procedures  
Limerick Generating Station 2007 Evaluated Exercise Scenario Manual  
Limerick Generating Station 2006 Training Drill Series Evaluation Report, December 13, 2006  
Limerick Generating Station 2007 Training Drill Series Evaluation Report, July 31, 2007  
Limerick Generating Station 2007 Pre-Exercise Evaluation Report, June 26, 2007

**LIST OF ACRONYMS**

CFR	Code of Federal Regulations
ERO	Emergency Response Organization
EOF	Emergency Operations Facility
EP	Emergency Preparedness
ERO	Emergency Response Organization
JIC	Joint Information Center
NRC	Nuclear Regulatory Commission
OSC	Operations Support Center
TSC	Technical Support Center