



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**  
REGION III  
2443 WARRENVILLE ROAD, SUITE 210  
LISLE, IL 60532-4352

July 28, 2010

Mr. Michael J. Pacilio  
Senior Vice President, Exelon Generation Company, LLC  
President and Chief Nuclear Officer (CNO), Exelon Nuclear  
4300 Winfield Road  
Warrenville IL 60555

**SUBJECT: BRAIDWOOD STATION - NOTIFICATION OF AN NRC MANAGEMENT OF GAS ACCUMULATION IN EMERGENCY CORE COOLING, DECAY HEAT REMOVAL, AND CONTAINMENT SPRAY SYSTEMS INSPECTION; AND REQUEST FOR INFORMATION 05000456/2010-005; 05000457/2010-005**

Dear Mr. Pacilio:

On November 15, 2010, the NRC will begin the on-site portion of the Gas Accumulation Management in Emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems Temporary Instruction at your Braidwood Station. This inspection will be performed in accordance with NRC Temporary Instruction (TI) 2515/177.

In order to minimize the impact that the inspection has on the site and to ensure a productive inspection, we have enclosed a request for documents needed for the inspection. The documents have been divided into three groups.

- The first group lists information necessary for our initial inspection scoping activities. This information should be available to the inspector no later than September 30, 2010. By October 7, 2010, the inspector will communicate the initial selected samples.
- The second group of documents includes items needed to support our in-office preparation activities. This set of documents should be available at the Regional Office no later than November 4, 2010. This information should be separated by information request number, especially if provided electronically (e.g., folder with the information request number). During the in-office preparation activities, the inspector may identify additional information needed to support the inspection.
- The last group includes the additional information above as well as plant specific reference material. This information should be available to the inspector on November 15, 2010. It is also requested that corrective action documents and/or questions developed during the inspection be provided to the inspector as the documents are generated.

Please send the information to the following e-mail address [nestor.feliz-adorno@nrc.gov](mailto:nestor.feliz-adorno@nrc.gov). A hard-copy with the required information is also an acceptable option.

It is important that these documents be as complete as possible, in order to minimize the number of documents requested during the preparation week or during the on-site inspection.

If no activities were accomplished associated with a specific request, then provide a statement indicating that the request is not applicable.

The lead inspector for this inspection is Mr. Néstor J. Félix Adorno. If there are questions about the material requested, or the inspection, please call Mr. Félix Adorno at (630) 829-9739.

This letter does not contain new or amended information collection requirements subject to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.). Existing information collection requirements were approved by the Office of Management and Budget, control number 3150-0011. The NRC may not conduct or sponsor, and a person is not required to respond to, a request for information or an information collection requirement unless the requesting document displays a currently valid Office of Management and Budget control number."

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure 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), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA by C. Tilton for/

Ann Marie Stone, Chief  
Engineering Branch 2  
Division of Reactor Safety

Docket Nos. 50-456; 50-457  
License Nos. NPF-72; NPF-77

Enclosures: TEMPORARY INSTRUCTION 2515/177 REQUEST FOR INFORMATION  
MANAGEMENT OF GAS ACCUMULATION IN EMERGENCY CORE COOLING,  
DECAY HEAT REMOVAL, AND CONTAINMENT SPRAY SYSTEMS

cc w/encl: Distribution via ListServ

## TEMPORARY INSTRUCTION 2515/177 REQUEST FOR INFORMATION DOCUMENTS

**Inspection Report:** 05000456/2010-005; 05000457/2010-005(DRS)

**Onsite Inspection Dates:** November 15 – 19, 2010, and November 29 – December 3, 2010

**Inspection Procedure:** TI 2515/177, "Management of Gas Accumulation in Emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems"

**Inspectors:** Néstor J. Feliz Adorno  
(630) 829-9739  
[nestor.feliz-adorno@nrc.gov](mailto:nestor.feliz-adorno@nrc.gov)

Larry Jones  
(630) 829-9864  
[larry.jones@nrc.gov](mailto:larry.jones@nrc.gov)

### ***I. Information Requested By September 30, 2010***

1. Copy of the station response to Generic Letter (GL) 2008-01 and any supplemental report.
2. Copies of all the requests for additional information (RAIs) and the associated responses.
3. List of corrective action program documents (with a short description) associated with GL 2008-01, voids in piping, and pressure transients for the previous three years.
4. List of the suction piping sections identified as susceptible to gas accumulation (the list should identify the corresponding system).
5. List of the discharge piping sections identified as susceptible to gas accumulation (the list should identify the corresponding system).
6. List of changes (with a short description and tracking number) to the Final Safety Evaluation Report (FSAR), Technical Specifications, Technical Specification Bases, and Technical Requirement Manual associated with the resolution of GL 2008-01.
7. List of calculations that have been change or created in response to GL 2008-01 (with a short description of the calculation and the change).
8. Copies of self-assessments associated with the implementation of the GL 2008-01 program.

## **TEMPORARY INSTRUCTION 2515/177 REQUEST FOR INFORMATION DOCUMENTS**

### ***II. Information Requested By November 4, 2010***

1. Copies of program documents and procedures developed to implement the resolution of GL 2008-01.
2. Copies of the selected corrective action program documents.
3. Copies of the selected licensing and design basis document changes.
4. Copies of isometric drawings of the subject systems (hard-copies are preferred).
5. Copies of piping and instrumentation diagrams (P&IDs) of the subject systems (hard-copies are preferred).
6. List of commitments (with a description) in response to GL 2008-01.
7. List of actions that were completed in response to GL 2008-01.
8. Copies of all the corrective actions identified in the nine-month response and supplemental reports.
9. List (with a short description) of gas intrusion mechanisms that apply to the plant and the affected system locations (e.g., identify the source, conditions, and expected void locations).
10. Design basis documents of the subject systems (i.e., emergency core cooling, decay heat removal, and containment spray systems).
11. Design basis documents of keep-full systems of the subject systems.
12. If available, electronic copies of the current Technical Specifications, Technical Specifications Basis, Final Safety Analysis Report, and Technical Report Manual.

### ***III. Information Requested to be Available on First Day of Inspection, November 15, 2010***

1. Copies of surveillance procedures associated with the resolution of GL 2008-01 and the results of the last two surveillances for the subject systems.
2. Copies of the modification packages for hardware modifications as part of the resolution of GL 2008-01.
3. Copies of the selected calculations.
4. Copies of procedures use for detecting and determining void volumes.
5. Copies of procedures use for filling and venting.

## TEMPORARY INSTRUCTION 2515/177 REQUEST FOR INFORMATION DOCUMENTS

6. Subject systems walkdown work documents associated with the resolution of GL 2008-01 and the results of these walkdowns.
7. Copies of the engineering evaluations performed for all identified voids.
8. Copies of trends of periodic venting results.
9. Copy of the design change review checklist that establish if a design change introduces or increases the potential for gas accumulation beyond established acceptance criteria.
10. Copies of training documents that ensure that personnel are aware of gas-related concerns.
11. Copy of the void transport analysis.
12. Basis for the void acceptance criteria (e.g., calculation). If applicable, provide the justification for any deviation from the void acceptance criteria established by the Office of Nuclear Reactor Regulations (NRR).
13. Basis for horizontal pipe acceptance criteria (e.g., calculation).
14. Copy of vortexing calculations associated with systems under the scope of GL 2008-01.
15. If applicable, provide a list of inaccessible locations where plant walkdowns of the subject systems have not been completed. Include an explanation of why each area is considered inaccessible.

If you have questions regarding the information requested, please contact the lead inspector.

M. Pacilio

-2-

If no activities were accomplished associated with a specific request, then provide a statement indicating that the request is not applicable.

The lead inspector for this inspection is Néstor J. Félix Adorno. If there are questions about the material requested, or the inspection, please call Mr. Félix Adorno at (630) 829-9739.

This letter does not contain new or amended information collection requirements subject to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.). Existing information collection requirements were approved by the Office of Management and Budget, control number 3150-0011. The NRC may not conduct or sponsor, and a person is not required to respond to, a request for information or an information collection requirement unless the requesting document displays a currently valid Office of Management and Budget control number."

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure 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), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA by C. Tilton for/

Ann Marie Stone, Chief  
Engineering Branch 2  
Division of Reactor Safety

Docket Nos. 50-456; 50-457  
License Nos. NPF-72; NPF-77

Enclosures: TEMPORARY INSTRUCTION 2515/177 REQUEST FOR INFORMATION  
MANAGEMENT OF GAS ACCUMULATION IN EMERGENCY CORE COOLING,  
DECAY HEAT REMOVAL, AND CONTAINMENT SPRAY SYSTEMS

cc w/encl: Distribution via ListServ

**DISTRIBUTION:**

- RidsNrrDorlLpl3-2 Resource
- Susan Bagley
- RidsNrrPMBraidwood Resource
- RidsNrrDirslrib Resource
- Cynthia Pederson
- Steven Orth
- Jared Heck
- Allan Barker
- DRPIII
- DRSIII
- Carole Ariano
- Linda Linn
- Patricia Buckley
- Tammy Tomczak
- ROPreports Resource

DOCUMENT NAME: G:\DRS\Work in Progress\Ltr 072810 Braidwood TI-2515-177 RFI NFA.docx

Publicly Available  Non-Publicly Available  Sensitive  Non-Sensitive

To receive a copy of this document, indicate in the concurrence box "C" = Copy without attach/encl; "E" = Copy with attach/encl "N" = No copy

OFFICE	RIII	RIII			
NAME	CTilton for NFAAdorno:ls	CTilton for AMStone			
DATE	07/28/10	07/28/10			

**OFFICIAL RECORD COPY**