



Indian Point Energy Center  
450 Broadway, GSB  
P.O. Box 249  
Buchanan, N.Y. 10511-0249  
Tel (914) 734-6700

J. E. Pollock  
Site Vice President

April 11, 2008  
Indian Point Unit No. 3  
Docket No. 50-286  
NL-08-065

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Mail Stop O-P1-17  
Washington, D.C. 20555-0001

Subject: Three Month Response to NRC Generic Letter 2008-001, "Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems"

Reference: NRC Generic Letter 2008-001, "Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems" dated January 11, 2008.

Dear Sir or Madam:

The Nuclear Regulatory Commission (NRC) issued Generic Letter (GL) 2008-001 dated January 11, 2008, to address the issue of gas accumulation in emergency core cooling, decay heat removal, and containment spray systems, to ensure that gas accumulation is maintained less than the amount that challenges operability of these systems, and that appropriate actions are taken when conditions adverse to quality are identified.

The NRC, in GL 2008-001, requested each licensee to submit a written response in accordance with 10 CFR 50.54(f) within 9 months of the date of the GL to provide the following information:

"(a) A description of the results of evaluations that were performed pursuant to the requested actions. This description should provide sufficient information to demonstrate that you are or will be in compliance with the quality assurance criteria in Sections III, V, XI, XVI, and XVII of Appendix B to 10 CFR Part 50 and the licensing basis and operating license as those requirements apply to the subject systems.

A134  
NRR

(b) A description of all corrective actions, including plant, programmatic, procedure, and licensing basis modifications that you determined were necessary to assure compliance with these regulations; and,

(c) A statement regarding which corrective actions were completed, the schedule for completing the remaining corrective actions, and the basis for that schedule.”

Additionally, the NRC requested that if a licensee cannot meet the requested response date, the licensee “shall provide a response within 3 months of the date of this GL.” In the 3 month response, the licensee was requested to describe the alternate course of action that the licensee proposes to take, including the basis for the acceptability of the proposed alternative course of action.

On April 7, 2008, Entergy Nuclear Operations, Inc. (Entergy) notified Mr. Jerry Wermiel of your staff that Indian Point Unit No. 3 could not complete all the requested actions required by the GL within 9 months and would be submitting the required 3 month letter. Attachment 1 to this letter contains the Indian Point Unit No. 3 three month response to the requested information in NRC Generic Letter 2008-001. Attachment 2 to this letter contains new commitments to complete the walk down of the inaccessible portions of the applicable systems during the refueling outage scheduled for the spring of 2009 and supplement the 9 month response to the GL by October 9, 2009.

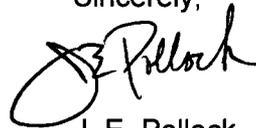
Should you have any questions regarding this matter, please contact Mr. Robert Walpole, Manager, Licensing, Indian Point Energy Center at (914) 734-6710.

The requested information is being provided pursuant to the requirements of 10 CFR 50.54(f).

I declare under the penalty of perjury that the foregoing information is true and correct.

Executed on April 11, 2008.

Sincerely,



J. E. Pollock  
Site Vice President  
Indian Point Energy Center

- Attachment:
1. Three Month Response to NRC Generic Letter 2008-001, “Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems”
  2. Commitment(s)

cc: Mr. Samuel J. Collins, Region I Administrator, U.S. Nuclear Regulatory Commission  
Mr. John P. Boska, Senior Project Manager, U.S. Nuclear Regulatory Commission  
Resident Inspector, Indian Point Unit 3, U.S. Nuclear Regulatory Commission  
Mr. Paul Eddy, New York State Department of Public Service  
Mr. Paul D. Tonko, President NYSERDA

**Attachment 1 to NL-08-065**

Three Month Response to NRC Generic Letter 2008-001,  
"Managing Gas Accumulation in Emergency Core Cooling,  
Decay Heat Removal and Containment Spray Systems"

ENTERGY NUCLEAR OPERATIONS, INC.  
INDIAN POINT NUCLEAR GENERATING UNIT NO. 3  
DOCKET NO. 50-286

Three Month Response to NRC Generic Letter 2008-001

This response to Generic Letter (GL) 2008-01, "Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems," addresses the three month response requested in NRC GL 2008-01, which was dated January 11, 2008.

This response discusses:

- The required evaluations that will not be complete by October 11, 2008 (nine months from the date of GL 2008-01),
- The alternative course of action planned.
- The basis for the acceptability of the proposed alternative course of action.

For Indian Point 3, the following emergency core cooling systems and decay heat removal systems are considered within the scope of GL 2008-01:

- High Pressure Safety Injection (SI) System
- Containment Spray (CS) System
- Residual Heat Removal (RHR) System (ECCS and shut down cooling modes)
- Recirculation System

The information requested for the nine month response to GL 2008-01 includes: a description of the results of evaluations that were performed pursuant to the requested actions of the GL; a description of all corrective actions, including plant, programmatic, procedure, and licensing basis modifications that were determined necessary; and the status of corrective actions, a schedule for completion of outstanding corrective actions, and the basis for that schedule. The requested evaluations are those necessary to ensure that gas accumulation is maintained less than the amount that challenges operability of these systems so that they can reliably perform their intended functions. These items will be performed as required and reported on in the 9 month response letter, with the exception of that which is described below.

The performance of an in-field inspection of the system piping is considered to be a necessary part of the Indian Point 3 evaluations. Since portions of the above systems are inaccessible or high dose areas during power operations, an outage is required to complete the response to the GL. Indian Point 3 has a planned refueling outage (RFO) scheduled during the spring of 2009. Entergy will perform the remaining walkdowns and inspections of the inaccessible areas during the RFO. Therefore, the full scope of the required evaluations and any resultant corrective actions will not be complete prior to the requested nine month GL response date.

The 9 month response to GL 2008-001 will include engineering evaluations of non-accessible piping based on the existing plant as-built design drawings. A supplemental field walkdown of the non-accessible piping will not be performed by the response due date. The walkdowns of the non-accessible piping will not be completed due to requirement to enter containment high radiation areas during power operation, containment entry with high heat stress condition during power operation, and the

potential need for scaffold erection to access piping segments. The acceptability of delaying the supplemental walkdown until the next refueling outage for the applicable system piping segments not accessible during normal power operation is considered acceptable based on the following:

- The design drawings for the subject systems are controlled drawings that are regularly updated in accordance with plant procedures. Engineering is confident that these design drawings adequately reflect the current design configuration.
- Gas accumulation can result in water hammer or pressure transients particularly in the pump discharge piping following a pump start. The majority of the non-accessible piping, which is located in Containment, is piping from the pump discharge side. Due to a past gas void found in the Unit 3 RHR pump discharge piping, the RHR system was analyzed for water hammer. An acceptable size void was evaluated and demonstrated that this piping remains operable. Similarly, the Unit 2 SI System was also analyzed for water hammer based on an evaluated void size and demonstrated that the system remained operable. Although the SI System water hammer performed for Unit 2 was not specific for Unit 3, it provides reasonable confidence that the Unit 3 SI System will remain operable if such a void were present due to the similarity of piping and system design between Unit 2 and Unit 3.
- The majority of the piping on the suction side of the subject system pumps is accessible and will be inspected, evaluated and included in the 9 month response.
- The accessible portions of both the SI and RHR systems are inspected every month for gas voids using the UT method. These inspections are designed to detect the presence of gas voids. Corrective actions as appropriate (e.g., increased venting, UTs) are required if a void is discovered.
- The SI, RHR and CS pumps are tested quarterly as required by Technical Specifications in accordance with approved plant surveillance procedures. Pump performance data from the testing includes vibration and pump head that is trended to identify any adverse condition.
- A previous issue with gas voids in the Unit 3 RHR suction piping was inspected, evaluated (it did not challenge pump operability) and successfully resolved with a modification which installed a vent.

Indian Point 3 will have the walk downs and evaluations of the normally accessible portions of the above systems completed by October 11, 2008. Indian Point 3 will complete the walk down of the inaccessible portions of the systems during the spring 2009 scheduled refueling outage and will supplement the 9 month response to the GL by October 9, 2009.

**Attachment 2 to NL-08-065**

Commitment(s)

ENTERGY NUCLEAR OPERATIONS, INC.  
INDIAN POINT NUCLEAR GENERATING UNIT NO. 3  
DOCKET NO. 50-286

Commitment(s)

Commitment Number	Commitment	Due
NL-08-065-01	Indian Point 3 will complete the walk down of the inaccessible portions of the systems.	Spring 2009 scheduled refueling outage
NL-08-065-02	Indian Point 3 will supplement the 9 month response to the GL.	October 9, 2009