EA-05-100

Mr. Christopher M. Crane President and CEO AmerGen Energy Company, LLC 200 Exelon Way, KSA 3-E Kennett Square, PA 19348

SUBJECT: THREE MILE ISLAND INSPECTION NRC EMERGENCY PREPAREDNESS

PROGRAM INSPECTION REPORT NO. 05000289/2005006; PRELIMINARY

WHITE FINDING

Dear Mr. Crane:

On May 19, 2005, the U. S. Nuclear Regulatory Commission (NRC) completed an inspection of your Three Mile Island, Unit 1 (TMI) facility. The purpose of the inspection was to review an unresolved item, documented in NRC Inspection Report No. 05000289/2004005, involving expired emergency responder qualifications. The enclosed report documents the inspection finding that was discussed on May 19, 2005, with Mr. G. Chick, Plant Manager, 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 inspector reviewed procedures and records, and interviewed personnel.

The inspector identified a finding that appears to have low to moderate safety significance. As described in Section 1EP3 of this report, this finding involved exceeding the required annual periodicity for conducting radiological response classroom retraining for members of the emergency response organization (ERO). This finding was assessed using the emergency preparedness significance determination process dated March 6, 2003, and was preliminarily determined to be "White," i.e., a finding with some increased importance to safety which may require additional NRC inspection. The finding has low to moderate safety significance because it is considered to be a loss of an emergency preparedness (EP) planning standard function. Specifically, approximately 50 percent of the ERO, including key responders, were overdue for the annual retraining necessary to maintain familiarity with their specific emergency response duties. As a consequence, for an approximate five month period (June-November 2004), those individuals would not have been considered available to respond to a radiological emergency. This resulted in some key ERO positions not being filled by qualified ERO members in accordance with AmerGen's TMI Emergency Plan requirements.

Upon notification during our inspection in mid-November 2004, your staff implemented immediate corrective actions to retrain and requalify two of the four ERO responder teams to enable 24 hour coverage. The remaining two teams were re-qualified by the end of November 2004.

The finding is an apparent violation of NRC requirements (10 CFR 50.54(q) and 50.47(b)(15)) and is being considered for escalated enforcement action in accordance with the NRC Enforcement Policy. The current policy is included on the NRC's website at http://www.nrc.gov; select **What We Do**, **Enforcement**, then **Enforcement Policy**.

We believe we have sufficient information to make a final risk significance determination on this issue. However, before we make a final decision on this matter, we are providing you an opportunity to: (1) present to the NRC your perspectives on the facts and assumptions used by the NRC to arrive at the finding and its significance, at a Regulatory Conference, or (2) submit your position on the finding to the NRC in writing. If you request a Regulatory Conference, it should be held within 30 days of the receipt of this letter and we encourage you to submit supporting documentation at least one week prior to the conference in an effort to make the conference more efficient and effective. If a Regulatory Conference is held, it will be open for public observation and a press release will be issued announcing it. If you decide to submit only a written response, such submittal should be sent to the NRC within 30 days of the receipt of this letter.

Please contact Mr. Raymond Lorson at (610) 337-5282 within 10 business days of the date of this letter to notify the NRC of your intentions. If we have not heard from you within 10 business days, we will continue with our significance determination and enforcement decision and you will be advised by separate correspondence of the results of our deliberations on this matter.

Since the NRC has not yet made a final determination in this matter, no Notice of Violation is being issued for this inspection finding at this time. In addition, please be advised that the characterization of the apparent violation described in the enclosed report may change as a result of further NRC review.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response if any will be made 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).

Should you have any questions concerning this inspection, I will be pleased to discuss them with you.

Sincerely,

/RA/

A. Randolph Blough, Director Division of Reactor Safety

Docket No. 50-289 License No. DPR-50

Enclosure: Inspection Report 05000289/2005006

cc w/Attachment: (VIA E-MAIL)

Chief Operating Officer, AmerGen

Site Vice President - TMI Unit 1, AmerGen

Plant Manager - TMI, Unit 1, AmerGen

Regulatory Assurance Manager - TMI, Unit 1, AmerGen

Senior Vice President - Nuclear Services, AmerGen

Vice President - Mid-Atlantic Operations, AmerGen

Vice President - Operations Support, AmerGen

Vice President - Licensing and Regulatory Affairs, AmerGen

Director Licensing - AmerGen

Manager Licensing - TMI, AmerGen

Vice President - General Counsel and Secretary, AmerGen

T. O'Neill, Associate General Counsel, Exelon Generation Company

J. Fewell, Esq., Assistant General Counsel, Exelon Nuclear

Correspondence Control Desk - AmerGen

Chairman, Board of County Commissioners of Dauphin County

Chairman, Board of Supervisors of Londonderry Township

R. Janati, Chief, Division of Nuclear Safety, State of PA

J. Johnsrud, National Energy Committee

E. Epstein, TMI-Alert (TMIA)

D. Allard, PADER

Distribution w/encl:

- S. Collins, RA
- G. Matakas, ORA
- D. Corlew, ORA
- R. Bellamy, DRP
- D. Kern, DRP, Senior Resident Inspector
- P. Sauder, DRP, Resident OA
- S. Lee, RI OEDO
- R. Laufer, NRR
- D. Skay, PM, NRR
- T. Colburn, NRR

Region I Docket Room (with concurrences)

ROPreports@nrc.gov

- M. Johnson, OE
- S. Figueroa, OE
- M. Elwood, OGC
- D. Holody, EO, RI
- K. Farrar, RC, RI
- R. Urban, ORA, RI
- R. Kahler, NSIR/EPD
- S. LaVie, NSIR/EPD

DOCUMENT NAME: E:\Filenet\ML051820168.wpd

After declaring this document "An Official Agency Record" it will not be released to the Public.

SISP Review Complete: NTM (Reviewer's Initials)

To receive a copy of this document, indicate in the box: "C" = Copy without attachment/enclosure "E" = Copy with attachment/enclosure "N" = No copy

OFFICE	RI/DRS		RI/DRS		RI/DRP		RI/DRS/SRA		RI/OE	
NAME	NMcNamara (NTM)		RLorson (RKL)		RBellamy (RRB))	WSchmidt (WLS	3)	RUrban (RJU)	
DATE	06/7/05		06/27/05		06/15/05		06/15/05		06/15/05	
OFFICE	NSIR/EPD		RI/DRS							
OFFICE NAME	NSIR/EPD LaVie (via teleconf	·)	RI/DRS RBlough (ARB)							

U. S. NUCLEAR REGULATORY COMMISSION REGION I

Docket No. 50-289

License No. DPR-50

Report No. 05000289/2005006

Licensee: AmerGen Energy Company, LLC (AmerGen)

Facility: Three Mile Island Station, Unit 1

Location: P O Box 480

Middletown, Pennsylvania

Dates: April 14, 2005 and May 19, 2005

Inspector: Nancy T. McNamara, Emergency Preparedness Inspector

Approved by: Raymond K. Lorson, Chief

Plant Support Branch 1 Division of Reactor Safety

SUMMARY OF FINDINGS

IR 05000289/2005-006; 11/19/2004 - 05/19/2005; Three Mile Island Station, Unit 1; Emergency Response Organization (ERO) Augmentation.

The report covered a followup inspection by a regional emergency preparedness inspector. One potentially greater than Green finding and apparent violation was identified. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter (IMC) 0609, "Significance Determination Process" (SDP). The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 3, dated July 2000.

A. NRC-Identified Findings and Self-Revealing Findings

Cornerstone: Emergency Preparedness (EP)

White (Preliminary). An apparent violation associated with EP planning standard 10 CFR 50.47(b)(15) was identified. This apparent violation, which has low to moderate safety significance, occurred because AmerGen did not conduct annual required radiological response classroom retraining for approximately 50 percent of the ERO as specified in the TMI Annex Emergency Plan (E-Plan).

The finding is more than minor because it is associated with the EP cornerstone attribute of ERO readiness (training). It affects the cornerstone objective of ensuring the capability to implement measures to protect the health and safety of the public during an emergency. The ERO, including several key responders, had not received the training necessary to maintain familiarity with their specific emergency response duties. As a consequence, for an approximate five month period (June-November 2004), those individuals would not have been considered available to respond to a radiological emergency. This resulted in some key ERO positions not being filled by qualified ERO members in accordance with AmerGen's TMI E-Plan requirements. (1EP3)

Using Inspection Manual Chapter 0609, Appendix B, "Emergency Preparedness Significance Determination Process, Section 4.15 and Sheet 1," this finding was determined to be of low to moderate safety significance because it was considered to be a loss of an EP planning standard function because several key responders were not trained as required.

B. Licensee-Identified Findings

None

Report Details

1. REACTOR SAFETY

Emergency Preparedness

1EP3 Emergency Response Organization Augmentation

a. Inspection Scope (71114.03 - 1 Sample)

During an onsite inspection conducted on November 15 -18, 2004, the NRC inspector identified that AmerGen had not conducted annual required radiological response classroom retraining for approximately 50 percent of the TMI ERO within the periodicity specified in Section 2.3 of the TMI Annex E-Plan. Upon further review, the inspector determined that the ERO qualifications had expired in June 2004. The issue was entered into AmerGen's corrective action system (CAP No. 274740). This matter was considered unresolved (URI 05000289/2004005-02) pending further NRC review of additional information pertaining to the E-Plan and the corporate training procedure.

Subsequently, the inspector reviewed AmerGen's root cause and regulatory analysis report. On April 14, 2005, the inspector conducted an on-site review of the 2004 drill and exercise reports and the 2004 classroom ERO lesson plans to assess whether training associated with previously conducted drills and exercises covered information equivalent or similar to the information contained in the classroom training lesson plans.

b. <u>Findings</u>

<u>Introduction</u>. A preliminary White Violation was identified because AmerGen did not conduct radiological response classroom retraining within the required periodicity for approximately 50 percent of the TMI ERO and, as such, those individuals (including key responders) did not meet the qualification requirements specified in the TMI Annex E-Plan.

Description. During an onsite inspection conducted in November 2004, the NRC determined that the last annual radiological response classroom training for individuals filling ERO response positions in the technical support center and the operations support center was conducted in March 2003. The TMI Annex E-Plan requires annual retraining comprised of both classroom training and participation in drills and exercises, with "annual" being defined as occurring every 12 ± 3 months. Based on the TMI Annex E-Plan requirement, the 2004 retraining should have been completed no later than June 2004. Instead, the training had been scheduled for the November-December 2004 timeframe. The schedule was based on Exelon EP Corporate Office Administrative Training Procedure, TQ-AA-113, which defines annual training as being conducted "anytime within the calendar year." The annual training procedure definition is less restrictive in that the interval between retraining could be as much as 23 months and 30 days.

The Exelon Standardized E-Plan states that responsibilities for implementing the training program are contained in plant procedures and further states that "where a Station Annex deviates from the general requirements of the Standardized E-Plan, the Station Annex shall serve as the controlling document." The TMI EP staff had scheduled training for late 2004, apparently not recognizing that the training requirement in the TMI Annex E-Plan was more restrictive.

The training procedure also requires that, "those individuals failing to maintain ERO qualifications shall be removed from the ERO roster." The ERO members who had not completed their annual retraining requirements should have been removed from the ERO roster and should not have been considered available to respond to a radiological emergency. Approximately 50 percent of the ERO, including several key responders, were in this unqualified status for a five-month period between June 2004 and November 2004. Consequently, there were some key ERO positions that may not have been filled by qualified ERO members in accordance with their E-Plan requirements if a need to implement the E-Plan had occurred. Upon identification of this problem by the inspector, the licensee took immediate corrective actions to retrain and requalify two of the four ERO responder teams (to enable 24 hour coverage). The remaining two teams were requalified by the end of November 2004.

The inspector reviewed AmerGen's regulatory analysis which indicated that the training associated with the drills and exercises was equivalent to the information contained in the classroom training lesson plans. The inspector reviewed both the 2004 drills and exercise reports, compared them to the 2004 lesson plans and identified some topics covered in the classroom training that were not part of the drills and exercises. For example, during classroom training, AmerGen discusses the recovery process; yet recovery was not exercised during any of the 2004 drills and exercises.

NRC regulations provides emergency response training requirements in two EP planning standards: 10 CFR 50.47(b)(14) addresses exercises and drills; and 10 CFR 50.47(b)(15) addresses response training. In addition, NUREG 0654, Section O.2, states that the training program for members of the onsite emergency organization shall, besides classroom training, include practical drills..." Drills and exercises are designed to reinforce, but are not an authorized substitute for the content of classroom training for the ERO members. Therefore, both classroom training and participation in drills and exercises are required and having met the drill and exercise requirement does not lessen the significance of not having met the classroom training requirements.

Analysis. The inspector determined that because AmerGen did not conduct annual required radiological response classroom retraining for approximately 50 percent of the ERO, including several key responders, as specified in the TMI Annex E-Plan, it was a performance deficiency because AmerGen did not meet the requirements of 10 CFR 50.47(b)(15). Traditional enforcement does not apply because the issue did not have any actual safety consequences or potential for impacting the NRC's regulatory function and was not the result of any willful violation of NRC requirements or AmerGen procedures.

The performance deficiency is more than minor because it affects the EP cornerstone objective and the attribute of ERO readiness (training). It affects the cornerstone objective of ensuring the capability to implement measures to protect the health and safety of the public during an emergency. The finding is potentially greater than very low safety significance because several key responders had not received the training necessary to maintain familiarity with their specific emergency response duties. As a consequence, for an approximate five month period (June - November 2004), those individuals would have been considered unavailable to respond to a radiological emergency, resulting in some key ERO positions not being filled by qualified ERO members in accordance with AmerGen's TMI E-Plan requirements.

Using Inspection Manual Chapter 0609, Appendix B, "Emergency Preparedness Significance Determination Process, Section 4.15 and Sheet 1," this finding was determined to be of low to moderate safety significance because it was considered to be a loss of an EP planning standard function because several key responders were not retrained as required.

<u>Enforcement</u>. In accordance with 10 CFR 50.54(q), a licensee authorized to possess and operate a nuclear power reactor shall follow and maintain in effect emergency plans which meet the standards in 10 CFR 50.47(b). Also, 10 CFR 50.47(b)(15) states, "radiological emergency response training is provided to those who may be called on to assist in an emergency." TMI Annex E-Plan, Section 2.3, states, in part, "Retraining is performed on an annual basis, which is defined every 12 months ± 3 months."

Contrary to the above, from June to November, 2004, AmerGen did not conduct annual required radiological response classroom retraining within the required periodicity for approximately 50 percent of the ERO and, as such, those individuals (including several key responders) did not meet their qualification requirements specified in the TMI Annex E-Plan. As a consequence, for an approximate five month period (June-November 2004), those individuals would have been considered unavailable to respond to a radiological emergency, resulting in some key ERO positions not being filled by qualified ERO members in accordance with AmerGen's TMI E-Plan requirements.

(AV 05000289/2005006-01)

The licensee took immediate corrective actions and is pursuing long-term corrective actions to prevent recurrence. The licensee has entered this issue into their corrective action process under CAP No. 274740.

40A6 Meetings, Including Exit

On May 19, 2005, the inspector presented the inspection results to Mr. G. Chick and other AmerGen staff. The inspector confirmed that no proprietary information was provided or examined during the inspection.

ATTACHMENT

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee Personnel

- J. Hufnagle, EP Site Manager
- H. Langley, EP Coordinator
- J. Karkoska, MAROG Emergency Preparedness Manager

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

05000289/200506-01 AV ERO Qualifications Expired Due to Untimely

Training (Section 1EP3)

Closed

05000289/2004005-02 URI ERO Qualifications Expired Due to Untimely

Training (Section 1EP3)

Discussed:

None

LIST OF DOCUMENTS REVIEWED

Section 1EP3: Emergency Response Organization (ERO) Augmentation Testing

Exelon Consolidated Emergency Plan

TMI Annex Emergency Plan

Procedure TQ-AA-113, ERO Training and Qualification, Rev. 3

2004 Drill/Exercise Reports

Position - Lesson Plan Matrix

Position Specific Lesson Plans

TMI Root Cause Report, Action Tracking Item No. 274740, Dated 11/18/2004

TMI Regulatory Analysis

TMI 1004 Lesson Learned Review Packages

LIST OF ACRONYMS

ΑV **Apparent Violation**

Corrective Action Process CAP ΕP **Emergency Preparedness**

E-Plan

Emergency Plan
Emergency Response Organization **ERO**

Inspection Manual Chapter IMC Nuclear Regulatory Commission **NRC** Significant Determination Process SDP

TMI Three Mile Island Unresolved Item URI