April 24, 2006

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 - NRC EMERGENCY PREPAREDNESS SUPPLEMENTAL INSPECTION REPORT NO. 05000289/2006010

Dear Mr. Crane:

On March 14, 2006, the U.S. Nuclear Regulatory Commission (NRC) completed an emergency preparedness (EP) supplemental inspection pursuant to Inspection Procedure 95001 at your Three Mile Island (TMI), Unit 1 facility. The inspection was conducted to evaluate your corrective actions associated with members of your emergency response organization (ERO) not receiving requalification training within the required annual periodicity. This issue, which resulted in a violation, was identified during a November 2004 EP program inspection and documented in a letter to you dated June 30, 2005. The enclosed inspection report documents the inspection results, which were discussed on March 14, 2006, with Mr. West and other members of your staff. The NRC was informed of your readiness for the inspection on February 10, 2006.

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 supplemental inspection was conducted to determine if the root causes and contributing causes of the White finding were understood, to assess the extent of the condition review, and to determine if the corrective actions were sufficient to address causes and to prevent recurrence. The inspector reviewed your root cause analysis and corrective action reports, interviewed personnel and conducted an independent inspection to assess your conclusions.

Based on our inspection, we concluded that your staff understood the root and contributing causes of the White finding, adequately addressed the extent of condition, and took adequate corrective actions for the underlying causes to prevent recurrence.

Given your acceptable performance in addressing the ERO training issue, the White finding associated with this issue will only be considered in assessing plant performance for a total of four quarters in accordance with the guidance in Inspection Manual Chapter (IMC) 0305, "Operating Reactor Assessment Program."

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 Publically Available Records (PARS) component of the NRC's document system (ADAMS). ADAMS is accessible from the NRC Website at http://www.nrc.gov/reading-rm/adams.html (The Public Electronic Reading Room).

Sincerely,

/RA/

Raymond K. Lorson, Chief
Plant Support Branch 1
Division of Reactor Safety

Docket No: 50-289
License Nos: DPR-50

Enclosure: Supplemental Inspection Report No. 05000289/2006010

cc w/encl:
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Site Vice President - TMI Unit 1, AmerGen
Plant Manager - TMI, Unit 1, AmerGen
Regulatory Assurance Manager - TMI, Unit 1, AmerGen
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Vice President - Mid-Atlantic Operations, AmerGen
Vice President - Operations Support, AmerGen
Vice President - Licensing and Regulatory Affairs, AmerGen
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U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket No:	50-289
License No:	DPR-50
Report No:	05000289/2006010
Licensee:	AmerGen Energy Company, LLC (AmerGen)
Facility:	Three Mile Island Station, Unit 1
Location:	P. O. Box 480 Middletown, Pennsylvania
Dates:	February 28, 2006 - March 14, 2006
Inspector:	Nancy T. McNamara, Emergency Preparedness Inspector
Approved by:	Raymond K. Lorson, Chief Plant Support Branch 1 Division of Reactor Safety

Enclosure

SUMMARY OF FINDINGS

IR 05000289/2006-010; 02/28/2006 - 03/14/2006; Three Mile Island Station, Unit 1; Supplemental Inspection.

The report covered a supplemental inspection by a regional emergency preparedness inspector. No findings 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 3, dated July 2000.

Cornerstone: Emergency Preparedness (EP)

The NRC performed this supplemental inspection to assess the licensee's evaluation for an issue associated with members of the ERO not receiving requalification training within the required annual periodicity. This performance issue was previously characterized as having low to moderate risk significance ("White") in NRC Inspection Report No. 05000289/2005006.

During this supplemental inspection, performed in accordance with Inspection Procedure 95001, the inspector determined that the licensee performed a comprehensive evaluation of the ERO training requalification issue. The licensee's evaluation identified the primary root cause of this issue was that EP management failed to exercise adequate technical rigor for ensuring the EP staff were implementing program requirements and meeting established priorities. The licensee implemented immediate corrective actions to ensure all emergency responders' training qualifications were current and the training tracking database system contained the correct training frequencies. AmerGen performed an extent of condition review to ensure all time-based requirements in implementing documents and station procedures were not in conflict with requirements in the Exelon Standard Emergency Plan (E-Plan) and the plant-specific Annex E-Plan.

Based on the results of this inspection, the inspector concluded that AmerGen adequately completed a root cause evaluation of the performance deficiency associated with this finding. Additionally, the inspector concluded that the planned and completed corrective actions appeared reasonable to address the related causes. Given AmerGen's acceptable performance in addressing the training requalification issue, the White finding associated with this issue will only be considered in assessing plant performance for a total of four quarters in accordance with the guidance in IMC 0305, "Operating Reactor Assessment Program." Implementation of the licensee's remaining corrective actions may be reviewed during future inspections.

Report Details

01. INSPECTION SCOPE

The NRC performed this supplemental inspection to assess AmerGen's evaluation of an issue associated with ERO training qualifications not being maintained current. This performance issue was previously characterized as "White" in NRC Inspection Report No. 05000289/2005006 and is related to the EP cornerstone in the reactor safety strategic performance area.

02. EVALUATION OF INSPECTION REQUIREMENTS

02.01 Problem Identification

a. Determination of who identified the issue and under what conditions.

The NRC identified the issue during a routine baseline inspection of the EP program in November 2004.

b. Determination of how long the issue existed, and prior opportunities for identification.

The condition existed for a period of five months, June - November 2004.

The root cause report identified several prior opportunities to identify this problem including:

- In April 2003, EP Exelon Corporate personnel identified numerous issues concerning training and qualifications during a common cause analysis, but training frequency was not addressed.

- In August 2004, the TMI training database was revised to implement the incorrect training requalification frequency without reviewing the training requirements specified in the TMI Annex E-Plan.

- In September 2004, an Exelon site EP Manager circulated electronic mail between the Corporate and other Exelon sites questioning the difference between the corporate procedure training frequency and the site-specific annexes. However, the Corporate EP staff, failed to issue a condition report to adequately review the issue and did not ensure all site EP Manager's understood the site annex plan serves as the controlling document.

c. Determination of the plant-specific risk consequences (as applicable) and compliance concerns associated with the issue.

Due to the nature of this issue, there are no plant-specific risk consequences (to core damage). The potential consequences were that key ERO responders would not have been considered available to respond to a radiological emergency. AmerGen

acknowledged they had not effectively implemented the ERO training program as required by the TMI Annex E-Plan and 10 CFR 50.47(b)(15). Following the NRC's identification of this issue, AmerGen immediately trained two ERO teams to restore compliance with NRC regulations. The NRC staff determined this was an issue of low to moderate significance as documented in NRC Inspection Report No. 05000289/05-006.

02.02 Root Cause and Extent of Condition and Extent of Cause Evaluation

a. Evaluation of methods used to identify the root causes and contributing causes.

AmerGen used two acceptable methods of evaluation to assess the training issue: 1) "Barrier analysis" to identify what barriers existed to break the sequence of events that led to the problem; and, 2) "Tap Root" methodology which included a causal factor review and corrective actions for each identified root cause and causal factor. Key team members were trained in root cause methodology. Also, the investigation considered the oversight of the work, individual accountabilities, and involvement of various levels of corporate and station management for identifying the contributing causes. The inspector found the evaluation methods used by the licensee to be acceptable.

b. Level of detail of the root cause evaluation.

An initial root cause report was issued and determined later by the licensee to be insufficient because it was narrowly focused and did not conduct an adequate extent of condition review. A second root cause investigation was initiated which captured the underlying root causes of the ERO training issue, some of which included:

- EP management failed to exercise adequate technical rigor for ensuring the EP staff were implementing program requirements and meeting established priorities.

- The EP organization (site and corporate) failed to correct a deficient procedure condition when identified. There was inadequate risk perception associated with allowing this discrepancy to exist, and no condition/issue reports were generated to address the inconsistencies.

- A decision to change the ERO requalification training time periodicity was made without a thorough review of all program requirements and without site and corporate management approval.

- There were no controls in place to ensure that the training tracking database used for tracking staff training qualifications could not be arbitrarily changed without sufficient research and management approval.

The inspector determined with the combination of both root causes analyses, the evaluation of this issue was thorough and commensurate with the significance of the problem.

c. Consideration of prior occurrences of the problem and knowledge of prior operating experience.

There were no other occasions in which TMI had not met their annual ERO requalification training requirements. However, as was noted in Section 2.01.b, the licensee had several opportunities in which both site and corporate sources could have brought attention to the timeliness issue.

d. Consideration of potential common causes and extent of condition of the problem.

AmerGen immediately conducted an extent of condition review specific to the training issue and determined this was an isolated event. However, the common causes related to the inadequate governance and oversight of the EP program were also found in other site departments. AmerGen made changes to their EP management team and generated several corrective action reports to address the common causes related to this issue. AmerGen also reviewed time-based requirements in implementing documents and station procedures to ensure they were not in conflict with requirements in the Exelon Standard E-Plan and the plant-specific annex E-Plan. This review was also extended to all Exelon Mid-Atlantic sites and no other instances were found that specifically related to this issue. The inspector determined the licensee adequately considered the common causes and the extent of condition for ensuring the corrective actions would prevent recurrence.

02.03 Corrective Actions

a. Appropriateness of corrective actions.

AmerGen immediately took action to train two ERO teams and completed the training for the remaining ERO members within the following two weeks. Additionally, the site training tracking database was corrected to reflect the correct training periodicity. The long-term corrective actions were related to making program changes to prevent recurrence, as discussed in Section 02.03.d of this report. The inspector determined the corrective actions were appropriate for resolving this issue. Also, as a result of this finding, the EP Corporate personnel conducted an audit of the EP program. Due to the audit results and the root causes analyses, AmerGen initiated an EP program improvement plan which is scheduled to be completed by June 2006.

b. Prioritization of corrective actions.

As stated in Section 02.03.a, the licensee took immediate short term corrective actions to address the training issue. Also, the licensee promptly initiated corrective actions and a root cause investigation prior to the NRC issuing the final White Determination. As of the time of this 95001 inspection, all the corrective actions had been completed. The licensee demonstrated proper prioritization of corrective actions for this issue.

c. Establishment of a schedule for implementing and completing the corrective actions.

As stated above, the licensee planned and implemented prompt corrective actions to address the root and contributing causes of the training issue. In most cases, AmerGen met their corrective action due dates and extended due dates if they believed the initial actions were not sufficient to prevent recurrence. At the time of the inspection, all the corrective actions had been completed. Also, the licensee has scheduled a review of the corrective actions in December 2006 to ensure that they prevented recurrence. The established schedule for reviewing and correcting the training problem was commensurate with the significance of this issue.

d. Establishment of quantitative or qualitative measures of success for determining the effectiveness of the corrective actions to prevent recurrence.

AmerGen conducted a focused area self-assessment to determine the effectiveness of the corrective actions. The results of the effectiveness review was presented to a site management review board who determined the corrective actions were adequate to prevent recurrence. Some of the measures that were put in place to prevent recurrence were:

- An EP schedule was implemented targeting the annual ERO requalification training commitment, including recurring tasks to ensure that the next annual schedule is developed.

- A training department procedure was revised to ensure that the training periodicity of required training classes could not be arbitrarily changed without sufficient research and management approval.

- The “EP Staff Initial Qualification Checklist” was revised to ensure that EP staff are aware of site-specific requirements in their station annexes that may differ from the Exelon Standard E-Plan.

- A site EP program improvement plan was initiated which included the regulatory assurance manager holding weekly staff meetings with the EP personnel to focus on department priorities and review items assigned to EP. The improvement plan was coordinated with Exelon Corporate EP to ensure that upcoming initiatives were integrated into the department priorities.

- An audit program was established to allow the Exelon Corporate EP staff to periodically audit all Exelon site EP programs for ensuring program commitments are being met.

03. MANAGEMENT MEETINGS

Exit Meeting Summary

The inspector presented the inspection results to Mr. West and other licensee personnel via teleconference on March 14, 2006. The inspector confirmed that proprietary information was not provided or examined during the inspection.

ATTACHMENT 1

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Persons Contacted

C. Smith, Manager, Regulatory Assurance
D. Neff, EP Manager
H. Langley, EP Coordinator
A. Graybill, Training Database Administrator

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Open

None

Closed

05000289/2005006-01 ERO Qualifications Expired Due to Untimely Training

LIST OF DOCUMENTS REVIEWED*

Procedures:

TMI Annex Emergency Plan
TQ-AA-113, ERO Training and Qualification, Rev. 8
LS-AA-125-1001, Root Cause Analysis Manual, Rev. 5
LS-AA-126, Self-Assessment Program, Rev. 4
LS-AA-125-1003, Apparent Cause Evaluation Manual, Rev. 6
LS-AA-126-1001, Focused Area Self-Assessments, Rev. 3
TQ-MA-210-4800, PIMS/ETUDE Qualification Hierarchy Administration, Rev. 0
LS-AA-125-1004, Effectiveness Review Committee, Rev. 2
LS-AA-125, Corrective Action Program Procedure, Rev. 10
HU-AA_102, Technical Human Performance Practices, Rev. 1
FASA #363167, TMI NRC Inspection Self Assessment
Nuclear Oversight Quarterly Report - NOSPA - TM-05-1Q
Nuclear Oversight Quarterly Report - NOSPA-TM-05-2Q

Corrective Action Process Report Numbers:

AR No. 300196-03, Root Cause Analysis Report
AR No. 284576-02, Root Cause Investigation - Condition Reports
AR No. 274740, Frequency of Requalification Training for ERO
AR No. 325011, Root Cause Investigation, Inadequate Governance and Oversight of TMI EP Organization
* - Does not include all procedures reviewed in preparation for the supplemental inspection.

LIST OF ACRONYMS

EP	Emergency Preparedness
E-Plan	Emergency Plan
ERO	Emergency Response Organization
IMC	Inspection Manual Chapter
NRC	Nuclear Regulatory Commission
PARS	Publicly Available Records
TMI	Three Mile Island