

July 19, 2007

Mr. Christopher M. Crane
President and Chief Executive Officer
AmerGen Energy Company, LLC
4300 Winfield Road
Warrenville, IL 60555

SUBJECT: OYSTER CREEK NUCLEAR GENERATING STATION (OCNGS) - CLOSEOUT
OF GENERIC LETTER 2003-01, "CONTROL ROOM HABITABILITY"
(TAC NO. MB9832)

Dear Mr. Crane:

The Nuclear Regulatory Commission (NRC) acknowledges the receipt of your responses to Generic Letter (GL) 2003-01, "Control Room Habitability," dated December 9, 2003 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML033560302); September 30, 2004 (ADAMS Accession No. ML042740704); November 29, 2004 (ADAMS Accession No. ML043420211); July 11, 2005 (ADAMS Accession No. ML051920406); November 17, 2005 (ADAMS Accession No. ML053220138); and April 17, 2007 (ADAMS Accession No. ML071070446). This letter provides a status of your responses and describes any actions that may be required to consider your responses to GL 2003-01 complete.

The GL requested that you confirm that your control room meets the design bases (e.g., General Design Criteria (GDC) 1, 3, 4, 5, and 19, draft GDC, or principal design criteria), with special attention to: (1) Determination of the most-limiting unfiltered and/or filtered inleakage into the control room and comparison to values used in your design bases for meeting control room operator dose limits from accidents (GL 2003-01, Item 1a); (2) Determination that the most-limiting unfiltered inleakage is incorporated into your hazardous chemical assessments (GL 2003-01, Item 1b); and, (3) Determination that reactor control capability is maintained in the control room or at the alternate shutdown location in the event of smoke (GL 2003-01, Item 1b). The GL further requested information on any compensatory measures in use to demonstrate control room habitability (CRH), and plans to retire them (GL 2003-01, Item 2).

Your responses stated that you did not perform ASTM E741 (American Society for Testing Materials, Standard Test Method for Determining Air Changes in a Single Zone by Means of a Tracer Gas Dilution) tracer gas tests for the OCNGS control room.

You stated that your control room envelope (CRE) heating, ventilating, and air conditioning (HVAC) system does NOT have high efficiency particulate air (HEPA) filters NOR charcoal filters and no credit is taken in your control room accident dose analyses for reduction of airborne contamination. You stated that both the existing and the alternate source term (AST) dose analyses show CRE occupant dose to be acceptable with margin to the corresponding limits. You provided results of an unfiltered air intake flowrate to CRE occupant dose

contribution sensitivity study. These study results showed relative insensitivity ($< 2\%$ increase in dose) to unfiltered intake flow rate changes from 2,000 cubic feet per minute (cfm) to 80,000 cfm. Your description of your CRE HVAC system identified the 2,000 cfm as the expected flow rate during the partial recirculation mode used should an accident analyzed in your dose analyses occur. Your HVAC description also indicated that 14,000 cfm unfiltered intake air would be expected when the system was operated in the smoke purge mode and that 30,000 cfm unfiltered intake air flow rate was the expected upper limit to the unfiltered air intake capability of the system. Your evaluation determined that any unfiltered inleakage from unsealed ductwork and CRE penetrations would not adversely affect the calculated CRE occupant radiation dose and thus tracer gas testing to verify a tight, very low unfiltered inleakage rate CRE was not warranted.

You provided information that your hazardous chemical release analysis shows the only on-site challenge to be from the chlorine gas cylinders used in the radwaste chlorination system. You stated that a chlorine detector located in the chlorination building would alarm in the control room allowing operators sufficient time even with the CRE HVAC in smoke purge mode to don self-contained breathing apparatus (SCBA) as plant procedures direct. You indicated that SCBA re-supply capability was adequate for an extended duration release. You also indicated that your assessment of off-site stationary and mobile hazardous chemical sources showed acceptable results, with no additional hazards requiring further consideration, regarding impact on CRH.

You provided information that fire byproducts (e.g., smoke or fire suppression agents) would not prevent safe shutdown of the plant from either the control room or the alternate control stations (ACSS). You stated that if a fire should occur in the control room, the CRE HVAC system would automatically shutdown and a halon fire suppression system would actuate. The halon system discharges to control panels and not to the general control room airspace. When the fire is extinguished or under control, operators could restart the CRE HVAC system in smoke purge mode (intake flowrate replaces CRE volume every 2 minutes) to remove smoke and halon. You stated that your plant halon systems are designed to provide an initial concentration below the 10% threshold for personnel health. If smoke is detected in the CRE HVAC air supply duct, back draft dampers automatically close minimizing intake of fire byproducts. You indicated that your alternate shutdown evaluation showed ACSs remaining smoke free with respect to a fire in the control room given proceduralized actions are taken by operators.

The GL further requested that you assess your Technical Specifications (TSs) to determine if they verify the integrity of the CRE, including ongoing verification of the inleakage assumed in the design-basis analysis for control room habitability, and in light of the demonstrated inadequacy of a delta (Δ) P measurement to alone provide such verification (GL 2003-01, Item 1.c). In your December 9, 2003, response you indicated that your TS's require measurement of control room ΔP , but that a TS requirement for periodic testing other than that is not warranted. Subsequently, in your July 11, 2005, response you committed to evaluate your submittal with respect to the elements contained in Technical Specification Task Force Traveler (TSTF) 448 and submit a proposed license amendment request based on your evaluation within 90 days following NRC approval of TSTF-448. This was also confirmed in your November 17, 2005, response.

The information you provided supports not having to take compensatory measures to

C. Crane

- 3 - 3 -

demonstrate control room habitability and also that you are committed to meeting the intent of GDC 19. The information you provided also establishes a rational basis for not needing to perform tracer gas testing to verify having a tight, low inleakage, CRE boundary.

Based on the information discussed above and your commitment to evaluate your submittal with respect to the elements contained in TSTF-448 and to submit a proposed license amendment request based on that evaluation, your response to GL 2003-01 is considered complete.

If you have any questions regarding this matter, please contact me at (301) 415-2481.

Sincerely,

/ra/

G. Edward Miller, Project Manager
Plant Licensing Branch I-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-219

cc: See next page

The information you provided supports not having to take compensatory measures to

C. Crane

- 3 -

demonstrate control room habitability and also that you are committed to meeting the intent of GDC 19. The information you provided also establishes a rational basis for not needing to perform tracer gas testing to verify having a tight, low inleakage, CRE boundary.

Based on the information discussed above and your commitment to evaluate your submittal with respect to the elements contained in TSTF-448 and to submit a proposed license amendment request based on that evaluation, your response to GL 2003-01 is considered complete.

If you have any questions regarding this matter, please contact me at (301) 415-2481.

Sincerely,

/ra/

G. Edward Miller, Project Manager
Plant Licensing Branch I-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-219

cc: See next page

DISTRIBUTION:

PUBLIC	RidsNrrDorl(CHaney/JLubinski)	RidsNrrDprPgcb(CJackson)
LPLI-2 R/F	RidsNrrDorlLpl1-2(HChernoff)	
RidsNrrPMGMiller	RidsNrrLAABaxter	
RidsAcrsAcnwMailCenter	RidsRgn1MailCenter(GMatakas)	
TidsNrrPgcb(JRobinson)	RidsNrrDssScvb(RDennig)	

Accession Number: **ML071490200**

OFFICE	LPLI-2/PM	LPLI-2/LA	SCVB/BC	PGCB/BC	LPLI-2/BC
NAME	GEMiller	ABaxter	RDennig	MMurphy	HChernoff
DATE	7/10/07	7/12/07	7/16/07	7/18/07	7/19/07

OFFICIAL RECORD COPY

Oyster Creek Nuclear Generating Station

Site Vice President - Oyster Creek
Nuclear Generating Station
AmerGen Energy Company, LLC
P.O. Box 388
Forked River, NJ 08731

Senior Vice President of
Operations
AmerGen Energy Company, LLC
200 Exelon Way, KSA 3-N
Kennett Square, PA 19348

Kathryn M. Sutton, Esquire
Morgan, Lewis, & Bockius LLP
1111 Pennsylvania Avenue, NW
Washington, DC 20004

Kent Tosch, Chief
New Jersey Department of
Environmental Protection
Bureau of Nuclear Engineering
CN 415
Trenton, NJ 08625

Vice President - Licensing and
Regulatory Affairs
AmerGen Energy Company, LLC
4300 Winfield Road
Warrenville, IL 60555

Regional Administrator, Region I
U.S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406-1415

Mayor of Lacey Township
818 West Lacey Road
Forked River, NJ 08731

Senior Resident Inspector
U.S. Nuclear Regulatory Commission
P.O. Box 445
Forked River, NJ 08731

Director - Licensing and Regulatory Affairs
AmerGen Energy Company, LLC
Correspondence Control
P.O. Box 160
Kennett Square, PA 19348

Manager Licensing - Oyster Creek
Exelon Generation Company, LLC
Correspondence Control
P.O. Box 160
Kennett Square, PA 19348

Regulatory Assurance Manager
Oyster Creek
AmerGen Energy Company, LLC
P.O. Box 388
Forked River, NJ 08731

Assistant General Counsel
AmerGen Energy Company, LLC
200 Exelon Way
Kennett Square, PA 19348

Ron Bellamy, Region I
U.S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406-1415

Correspondence Control Desk
AmerGen Energy Company, LLC
200 Exelon Way, KSA 1—1
Kennett Square, PA 19348

Oyster Creek Nuclear Generating Station
Plant Manager
AmerGen Energy Company, LLC
P.O. Box 388
Forked River, NJ 08731