

August 11, 2006

LICENSEE: AmerGen Energy Company, LLC

FACILITY: Oyster Creek Nuclear Generating Station

SUBJECT: SUMMARY OF A TELEPHONE CONFERENCE CALL HELD ON
FEBRUARY 8, 2006, BETWEEN THE U.S. NUCLEAR REGULATORY
COMMISSION AND AMERGEN ENERGY COMPANY, LLC, CONCERNING
DRAFT REQUESTS FOR ADDITIONAL INFORMATION PERTAINING TO THE
OYSTER CREEK NUCLEAR GENERATING STATION, LICENSE RENEWAL
APPLICATION

The U.S. Nuclear Regulatory Commission staff (NRC or the staff), and representatives of AmerGen Energy Company, LLC (AmerGen), held a telephone conference call on February 8, 2006, to discuss and clarify the staff's draft requests for additional information (D-RAIs) concerning the Oyster Creek Nuclear Generating Station license renewal application (LRA). The conference call was useful in clarifying the intent of the staff's D-RAIs.

Enclosure 1 provides a listing of the conference call participants. Enclosure 2 contains a listing of the D-RAIs discussed with the applicant, including a brief description on the status of the items.

The applicant had an opportunity to comment on this summary.

/RA/

Donnie J. Ashley, Project Manager
License Renewal Branch A
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket No. 50-219

Enclosures:
As stated

cc w/encls: See next page

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OFFICE	PM:RLRA	LA:DLR	BC:RLRA
NAME	DAshley	YEdmonds	LLund
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**LIST OF PARTICIPANTS FOR TELEPHONE CONFERENCE CALL
TO DISCUSS THE OYSTER CREEK NUCLEAR GENERATING STATION
LICENSE RENEWAL APPLICATION**

February 8, 2006

Participants

Donnie J. Ashley
John Ma
Hans Ashar
Don Warfel
George Beck
Ahmed Ouaou

Affiliations

U.S. Nuclear Regulatory Commission (NRC)
NRC
NRC
AmerGen Energy Company, LLC (AmerGen)
AmerGen
AmerGen

ENCLOSURE 1

**DRAFT REQUESTS FOR ADDITIONAL INFORMATION (D-RAIs)
OYSTER CREEK NUCLEAR GENERATING STATION
LICENSE RENEWAL APPLICATION**

February 8, 2006

The U.S. Nuclear Regulatory Commission staff (NRC or the staff), and representatives of AmerGen Energy Company, LLC (AmerGen), held a telephone conference call on February 8, 2006, to discuss and clarify the staff's draft requests for additional information (D-RAIs) concerning the Oyster Creek Nuclear Generating Station, license renewal application (LRA). The following D-RAIs were discussed during the telephone conference call.

D-RAI 2.4.1-1

A review of Table 2.4.1 indicates that drywell seismic support and anchorages are not within the scope of license renewal, though they are relied upon for drywell stability. A component type "Biological Shield Wall - Lateral Support" is in the Table. The staff requests the applicant to provide justification for not including the drywell seismic lateral supports within the scope of license renewal.

Discussion: The applicant indicated that the question is clear. This D-RAI will be sent as a formal RAI.

D-RAI 2.4.1-2

Neither Table 2.4.1 nor Table 2.4.2 incorporates refueling cavity seal components within the scope of license renewal, though the plant has experienced significant corrosion (as described in Item 4 of LRA Section 3.5.2.2) of the drywell as a result of leakage from the seal. The staff requests the applicant to include the seal in the scope of license renewal, or provide justification for not including it in the scope of license renewal.

Discussion: The applicant indicated that the question is clear. This D-RAI will be sent as a formal RAI.

D-RAI 2.4.2-1

LRA Section 2.4.8 states that structural seals are within the boundary of evaluation, but without explaining what they are. The staff requests the applicant to identify all the structural seals in the reactor building.

Discussion: The applicant indicated that the question is clear. This D-RAI will be sent as a formal RAI.

D-RAI 2.4.8-1

LRA Section 2.4.8, Fire Pond dam, states that the dam is classified as Safety Class III. Provide the location in the LRA or updated final safety analysis report (UFSAR) where the definition of

ENCLOSURE 2

Safety Class III was provided. If the definition was not provided in the LRA or UFSAR, the staff requests the applicant to provide a definition for Safety Class III.

Discussion: The applicant indicated that the question is clear. This D-RAI will be sent as a formal RAI.

D-RAI 2.4.9-1

LRA Section 2.4.9, Fire Pumpouses, states that the pumphouse and the tank foundations are classified non-safety related, Seismic Class II. Provide the location in the LRA or UFSAR where the definition of Safety Class II was provided. If the definition was not provided in the LRA or UFSAR, the staff requests the applicant to provide a definition for Safety Class II.

Discussion: The question will be revised to read as follows. This D-RAI will be sent as a formal RAI.

“LRA Section 2.4.9, Fire Pumpouses, states that the pumphouse and the tank foundations are classified non-safety related, Seismic Class II. Provide the location in the LRA or UFSAR where the definition of Seismic Class II was provided. If the definition was not provided in the LRA or UFSAR, the staff requests the applicant to provide a definition for Seismic Class II.”

D-RAI 3.5-1

Table 3.5.2.1.1 indicates that fretting and lockup of suppression pool downcomers will be managed by ASME Section XI, Subsection IWE, (AMP B.1.27). Directly, the downcomers are not part of the pressure boundary. Subsection IWE does not provide examination requirements and acceptance criteria for downcomers. However, as a convenience, the examinations of downcomers can be included in Subsection IWE requirements, with special provisions for examining the downcomers for fretting or lockups in the plant-specific procedures. The staff requests the applicant to provide (1) a discussion of operating experience related to downcomers fretting or lockups, and (2) the ISI provisions incorporated in the plant-specific IWE program.

Discussion: The applicant indicated that the question is clear. This D-RAI will be sent as a formal RAI.

D-RAI 3.5-2

Table 3.5.2.1.1 credits 10 CFR 50, Appendix J (AMP B.1.29) for management of downcomers “Loss of Material.” It is not apparent, how the leak testing requirement of Appendix J will detect loss of material of downcomers. The staff requests the applicant to discuss the use of Appendix J in managing loss of material in downcomers.

Discussion: The applicant indicated that the question is clear. This D-RAI will be sent as a formal RAI.

D-RAI 3.5-3

Under component types “Reactor Pedestal” and “R.C. Floor Slab,” a reference is made to Table 1 Item 3.5.1-29. The discussion in Item 3.5.1-29 indicates that the concrete temperatures in the upper part of the drywell could be as high as 259EF. As a result, the reactor building drywell shield concrete had significant cracking. However, the cause of the high temperature is not indicated. In light of the above discussion, the staff requests the applicant to provide the following information:

- a. Type and adequacy of the cooling system used to control the temperatures in drywell.
- b. Operating experience related to the reliability of the cooling system.
- c. Actions taken to reduce the high temperatures in the upper part of the drywell.
- d. A summary of the results of the last inspection of reactor pedestal, R.C. floor slabs, drywell lateral supports, and sacrificial shield wall, including the date of the inspection, and frequencies of inspection during the period of extended operation.

Discussion: The applicant indicated that the question is clear. This D-RAI will be sent as a formal RAI.

D-RAI 3.5-4

Component type “Shielding Blocks and Plates,” uses patented material “Permall,” for which no aging effects are indicated in Table 3.5.2.1.1. The staff requests the applicant to provide a brief description of the material, and the AMR results that justified that it does not need aging management during the period of extended operation.

Discussion: “Permall” should be changed to “Permalli”. This D-RAI will be sent as a formal RAI following this change.

D-RAI 3.5-5

For all component types described in Table 3.5.2.1.1 (Primary Containment), “water chemistry program” is vital for the components fully or partially submerged in water, in addition to the programs noted in the individual component types. The staff requests the applicant to provide reasons for not including water chemistry program to manage the aging degradation of these components.

Discussion: The applicant indicated that the question is clear. This D-RAI will be sent as a formal RAI.

D-RAI 3.5-6

The through-wall cracking of Fitzpatrick torus indicates a need for closer examination of the highly restrained and structurally discontinuous areas subjected to operational cyclic loads. The prime aging management program used for managing degradation of the primary containment structure is Subsection IWE (AMP B.1.27). The program is focused towards detecting loss of material. The staff requests the applicant to discuss how the program would detect initiation of such cracking in the Oyster Creek primary containment.

Discussion: The applicant indicated that the question is clear. This D-RAI will be sent as a formal RAI.

D-RAI 3.5-7

Table 3.5.3.1.18 indicates that the aging of Class MC component supports is managed by ASME Section XI, Subsection IWF during the CLB. However, a review of the “Enhancement” in AMP B.1.28 (ASME Section XI, Subsection IWF) indicates that the program will be enhanced during the period of extended operation to include additional MC supports and underwater structures in the torus. The staff requests the applicant to provide clarifications regarding the inspection of Class MC supports during the CLB and during the PEO.

Discussion: The applicant indicated that the question is clear. This D-RAI will be sent as a formal RAI.

D-RAI 3.5-8

Tables 3.5.2.1.6, 3.5.2.1.15, 3.5.2.1.16, and 3.5.2.1.17 identify loss of preload as the aging effect requiring management for structural bolts, and the structural monitoring program (B.1.31) as its aging management program. The structural monitoring program (B.1.31) states that exposed surfaces of bolting are monitored for indications of loss of preload, and that the program relies on procurement controls and installation practices, defined in plant procedures, to ensure that only approved lubricants and proper torque are applied consistent with the NUREG-1801 bolting integrity program. LRA B.1.12 bolting integrity program states that the bolting integrity program takes exception to NUREG-1801 and that the aging management of structural bolting is addressed by structural monitoring program (B.1.31). The staff’s questions are as follows:

- a. The applicant needs to resolve the apparent inconsistency that the structural monitoring program states that the proper torque for bolts is applied consistent with the NUREG-1801 bolting integrity program while the bolting integrity program takes exception to NUREG-1801 and refer the aging management of structural bolting back to the structural monitoring program.
- b. Does the identification of the loss of preload of structural bolts by visual inspection or by applying a torque wrench? If it is by visual inspection, explain how the loss of preload can be estimated by visual inspection.
- c. B.1.31 states that the structural monitoring program relies on procurement controls and installation practices, defined in plant procedures, to ensure that only approved lubricants and proper torque are applied. The staff believes that bolt procurement controls and installation practices were supposedly used before, during, or immediately after the bolts were installed. Since the structural monitoring program is being used to inspect structural bolts after the bolts were installed for sometime, the staff requests the applicant to explain how could the structural monitoring program rely on bolt procurement controls and installation practices.
- d. Are there any structural bolts or fasteners, which have a yield strength equal to or greater than 150 ksi, managed by the structural monitoring program? If yes, provide justification for not using the bolting integrity program as the aging management program for structural bolts.

Discussion: The applicant indicated that the question is clear. This D-RAI will be sent as a formal RAI.

D-RAI 3.5-9

Table 3.5.2.1.7 lists structural monitoring program as the aging management program for penetration seals of elastomer and grout in the soil environment. The aging management program in LRA, Appendix B states that the program will require inspection of penetration seals, but does not state how the inspection should be conducted for penetration seals of elastomer and grout in the soil environment and the frequency of the inspection. The staff requests the applicant to describe the inspection method and frequency for penetration seals of elastomer and grout in the soil environment.

Discussion: The applicant indicated that the question is clear. This D-RAI will be sent as a formal RAI.

D-RAI 3.5-10

Table 3.5.2.1.7 lists aluminum material embedded in concrete, and states no aging effect and requiring no aging management program. The ACI Building Code prohibits the use of aluminum in structural concrete unless it is coated or covered to prevent aluminum-concrete reaction or electrolytic action between aluminum and steel. The staff requests the applicant to provide reasons for the use of aluminum material in concrete and for stating no aging effect and requiring no aging management program.

Discussion: The applicant indicated that the question is clear. This D-RAI will be sent as a formal RAI.

Oyster Creek Nuclear Generating Station

cc:

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

License Renewal Manager
Exelon Generation Company, LLC
200 Exelon Way, Suite 230
Kennett Square, PA 19348

Oyster Creek Nuclear Generating Station

cc:

Mr. James Ross
Nuclear Energy Institute
1776 I Street, NW, Suite 400
Washington, DC 20006-3708

Mr. Michael P. Gallagher
Vice President License Renewal
Exelon Generation Company, LLC
200 Exelon Way, Suite 230
Kennett Square, PA 19348

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

Note to AmerGen Energy Company, LLC, from Donnie Ashley dated August 11, 2006

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E-MAIL:

JFair
RWeisman
AMurphy
RPettis
GGalletti
CLi
GBagchi
SSmith (srs3)
SDuraiswamy
YL (Renee) Li
RidsNrrDlr
RidsNrrDlrRIra
RidsNrrDlrRIrb
RidsNrrDe
RidsNrrDci
RidsNrrEemb
RidsNrrDeEeeb
RidsNrrDeEqva
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