

July 28, 2006

LICENSEE: AmerGen Energy Company, LLC

FACILITY: Oyster Creek Nuclear Generating Station

SUBJECT: SUMMARY OF TELEPHONE CONFERENCE CALLS HELD ON
MARCH 24 AND APRIL 7, 2006, BETWEEN THE U.S. NUCLEAR
REGULATORY COMMISSION AND AMERGEN ENERGY COMPANY, LLC,
CONCERNING DRAFT REQUEST 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 two telephone conference calls on March 24 and April 7, 2006 to discuss and clarify the staff's draft request for additional information (D-RAI) concerning the Oyster Creek Nuclear Generating Station license renewal application (LRA). The conference calls were useful in clarifying the intent of the staff's D-RAI.

Enclosure 1 provides a listing of the conference call participants. Enclosure 2 contains a listing of the D-RAI 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

July 28, 2006

LICENSEE: AmerGen Energy Company, LLC

FACILITY: Oyster Creek Nuclear Generating Station

SUBJECT: SUMMARY OF TELEPHONE CONFERENCE CALLS HELD ON
MARCH 24 AND APRIL 7, 2006, BETWEEN THE U.S. NUCLEAR
REGULATORY COMMISSION AND AMERGEN ENERGY COMPANY, LLC,
CONCERNING DRAFT REQUEST 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 two telephone conference calls on March 24 and April 7, 2006 to discuss and clarify the staff's draft request for additional information (D-RAI) concerning the Oyster Creek Nuclear Generating Station license renewal application (LRA). The conference calls were useful in clarifying the intent of the staff's D-RAI.

Enclosure 1 provides a listing of the conference call participants. Enclosure 2 contains a listing of the D-RAI 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

DISTRIBUTION:
See next page

ADAMS Accession No.: **ML062160052**

DOCUMENT NAME: E:\Filenet\ML062160052.wpd

OFFICE	PM:RLRA:DLR	LA:RLRA:DLR	BC:RLRA:DLR
NAME	DAshley	YEdmonds	LLund
DATE	07/ 26 /06	07/ 26 /06	07/ 28 /06

OFFICIAL RECORD COPY

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, Facility: Oyster Creek Nuclear Generating Station from Donnie Ashley dated July 28, 2006.

SUBJECT: SUMMARY OF TELEPHONE CONFERENCE CALLS HELD ON
MARCH 24 AND APRIL 7, 2006 , BETWEEN THE U.S. NUCLEAR
REGULATORY COMMISSION AND AMERGEN ENERGY COMPANY, LLC,
CONCERNING DRAFT REQUEST FOR ADDITIONAL INFORMATION
PERTAINING TO THE OYSTER CREEK NUCLEAR GENERATING STATION,
LICENSE RENEWAL APPLICATION

HARD COPY

DLR R/F

E-MAIL:

JFair
RWeisman
AMurphy
RPettis
GGalletti
CLi
GBagchi
SSmith (srs3)
SDuraiswamy
YL (Renee) Li
RidsNrrDlr
RidsNrrDlrRIra
RidsNrrDlrRIrb
RidsNrrDe
RidsNrrDci
RidsNrrEemb
RidsNrrDeEeeb
RidsNrrDeEqva
RidsNrrDss
RidsNrrDnrl
RidsOgcMailCenter
RidsNrrAdes
DLR Staff

C. Holden
R. Laufer
G. Miller
R. Bellamy, RI
R. Cureton, RI
J. Lilliendahl, RI
M. Modes, RI
M. Sykes, RI
T. Mensah
M. Young
OPA

**LIST OF PARTICIPANTS FOR TELEPHONE CONFERENCE CALLS
TO DISCUSS THE OYSTER CREEK NUCLEAR GENERATING STATION
LICENSE RENEWAL APPLICATION**

March 24, 2006

Participants

Donnie Ashley
Amar Pal
Duc Nugyen
Don Warfel
John Hufnagel
Deborah Spamer

Affiliations

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

April 7, 2006

Participants

Donnie Ashley
Amar Pal
Duc Nugyen
Don Warfel
George Beckl
Deborah Spamer

Affiliations

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

ENCLOSURE 1

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

April 7, 2006

The U.S. Nuclear Regulatory Commission staff (the staff) and representatives of AmerGen Energy Company, LLC (AmerGen), held a telephone conference call on March 24, 2006, and April 7, 2006, to discuss and clarify the staff's draft request for additional information (D-RAI) concerning the Oyster Creek Nuclear Generating Station (OCNGS), license renewal application (LRA). The following D-RAIs were discussed during the telephone conference calls.

D-RAI-3.6.2.2.5

Industry operating experience as discussed in Information Notice 93-95 identified the potential for loss of offsite power due to salt contamination of the switchyard insulators. On March 17, 1993, Crystal River Unit 3 experienced a loss of the 230 kV switchyard (normal offsite power to safety-related busses) when a light rain caused arcing across salt-laden 230 kV insulators and opened breakers in switchyard. Since 1982, Pilgrim station has also experienced several loss of offsite power events when heavy ocean storms deposited salt on the 345 kV switchyard causing the insulator to arc to ground. The applicant stated that an incident on September 18, 2003, was considered a highly unusual weather condition that resulted in wind blown salty spray deposited on insulators causing flashing. The fact that industry operating experience has shown that the potential loss of offsite power due to salt contamination of switchyard insulators does exist for facilities that are near the sea coast where salt spray is prevalent, the staff requests the applicant to provide an aging management program (AMP) to manage the aging effects of insulator surface contamination due to salt deposits.

Discussion: The applicant understands the question and will provide an answer.

D-RAI-3.6.2.2.6-1

Torque relaxation for bolted connections is a concern for switchyard bus connections and transmission conductors connections. An electrical connection must be designed to remain tight and maintain good conductivity through a large temperature range. Meeting this design requirement is difficult if the material specified for the bolt and the conductor are different and have different rates of thermal expansion. For example, copper or aluminum bus/conductor materials expand faster than most bolting materials. If thermal stress is added to stresses inherent at assembly, the joint members or fasteners can yield. If plastic deformation occurs during thermal loading (i.e., heatup) when the connection cools, the joint will be loose. EPRI document TR-104213, "Bolted Joint Maintenance & Application Guide" recommends inspection of bolted joints for evidence of overheating, signs of burning or discoloration, and indication of loose bolts. The staff requests the applicant to provide a discussion as to why torque relaxation for bolted connection is not a concern for OCNGS.

ENCLOSURE 2

Discussion: A review of the boundary drawings showed that the switchyard bus connections are not in the scope of license renewal. The question will be revised to remove the reference to the switchyard bus connections. The applicant understands the revised question and will provide an answer.

D-RAI-3.6.2.2.6-2

The staff requests the applicant to compare the Ontario Hydroelectric study to Oyster Creek.

Discussion: The applicant understands the question and will provide an answer.

D-RAI-3.6.2.3.1-1

In LRA Section 3.6.2.3.1, the applicant stated that “These panels are not located in adverse localized areas of high temperature or humidity. These rooms are protected from weather variations and are not subject to significant temperature variations.” The staff requests the applicant to explain how these rooms are protected from weather variations.

Discussion: The applicant understands the question and will provide an answer.

D-RAI-3.6.2.3.1-2

In LRA Section 3.6.2.3.1, the applicant indicated that “With regard to internal moisture (i.e., formation of condensation), a walkdown revealed no signs of moisture/humidity in the area, or any sign of moisture within the enclosure.” The staff requests the applicant to provide details about the walkdown (number of fuse holders inspected and condition of the fuse holders, etc.).

Discussion: The applicant understands the question and will provide an answer.

D-RAI-3.6.2.3.1-3

In the LRA Section 3.6.2.3.1, the applicant stated that “SCRAM solenoid fuses are not subject to frequent manipulations. When these circuits need to be de-energized, power is removed at the safety-related power supplies. When manipulated an inspection is performed...” The staff requests that the applicant discuss the disconnection means at the safety-related power supplies. Also, discuss how often the fuses are manipulated and the reason for this manipulation.

Discussion: The applicant understands the question and will provide an answer.

D-RAI-3.6.2.3.2

In LRA Section 3.6.2.3.2, the applicant stated that “Because of the non-EQ electrical penetrations are the same as the EQ electrical penetrations, and the EQ penetrations have been shown to have a qualified life of 60 years, Amergen concludes that non-EQ electrical penetrations are also qualified for a 60-year life.” The staff requests that the applicant confirm that non-EQ electrical penetrations will be exposed to the same environment as the EQ penetrations.

Discussion: The applicant understands the question and will provide an answer.

D-RAI-3.6.2.3.3

In LRA Section 3.6.2.3.3, under the heading “Thermal Cycling, Ohmic Heating and Electrical Transients,” the applicant stated that “At Oyster Creek, power supply cables are typically installed in a continuous run from the supply, e.g., switchgear, to the load, e.g., motor. The metallic parts of connections to the supply and load are therefore part of, or internal to, active components, e.g., the switchgear and motor, and therefore are not subject to aging management.” The AMP XI-E6, “Electrical Cable Connections not Subject to 10 CFR 50.49 Environmental Qualification Requirements” of NUREG-1801, Rev. 1 specified that connections associated with cables within the scope of license renewal are part of this program, regardless of their association with active or passive components. Also, refer to pages 107, 256 and 257 of NUREG-1833, “Technical Bases for Revision to the License Renewal Guidance Documents,” for additional information regarding AMP XI-E6. The staff requests that the applicant provide an AMP with the ten elements.

Discussion: The applicant understands the question and will provide an answer.

D-RAI-3.6.2.3.4

In LRA Section 3.6.2.3.4, the applicant stated that “Ground connections are commonly made with welds or compression type connectors, which include compression-, bolted-, and wedge type devices.” Torque relaxation for bolted connections is a concern for ground connections. An electrical connection must be designed to remain tight and maintain good conductivity through a large temperature range. Meeting this design requirement is difficult if the material specified for the bolt and the conductor are different and have different rates of thermal expansion. For example, copper or aluminum conductor materials expand faster than most bolting materials. If thermal stress is added to stresses inherent at assembly, the joint members or fasteners can yield. If plastic deformation occurs during thermal loading (i.e., heatup) when the connection cools, the joint will be loose. EPRI document TR-104213, “Bolted Joint Maintenance & Application Guide” recommends inspection of bolted joints for evidence of overheating, signs of burning or discoloration, and indication of loose bolts. The staff requests that the applicant provide a discussion as to why torque relaxation for bolted connection is not a concern for OCNCS.

Discussion: The applicant understands the question and will provide an answer.