

September 11, 2002

Mr. John L. Skolds, President  
and Chief Nuclear Officer  
Exelon Nuclear  
Exelon Generation Company, LLC  
4300 Winfield Road  
Warrenville, IL 60555

SUBJECT: OYSTER CREEK NUCLEAR GENERATING STATION - ISSUANCE OF  
AMENDMENT RE: SUPPRESSION CHAMBER-TO-DRYWELL VACUUM  
BREAKERS (TAC NO. MB2958)

Dear Mr. Skolds:

The Commission has issued the enclosed Amendment No. 230 to Facility Operating License No. DPR-16 for the Oyster Creek Nuclear Generating Station, in response to your application dated September 19, 2002, as supplemented on January 17 and July 1, 2002.

The amendment revises Technical Specifications Subsections 3.5.A.5.b and c, concerning operability of suppression chamber-to-drywell vacuum breakers.

A copy of the related Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely,

*/RA/*

Peter S. Tam, Senior Project Manager, Section 1  
Project Directorate I  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket No. 50-219

Enclosures: 1. Amendment No. 230 to DPR-16  
2. Safety Evaluation

cc w/encls: See next page

September 11, 2002

Mr. John L. Skolds, President  
and Chief Nuclear Officer  
Exelon Nuclear  
Exelon Generation Company, LLC  
4300 Winfield Road  
Warrenville, IL 60555

SUBJECT: OYSTER CREEK NUCLEAR GENERATING STATION - ISSUANCE OF  
AMENDMENT RE: SUPPRESSION CHAMBER-TO-DRYWELL VACUUM  
BREAKERS (TAC NO. MB2958)

Dear Mr. Skolds:

The Commission has issued the enclosed Amendment No. 230 to Facility Operating License No. DPR-16 for the Oyster Creek Nuclear Generating Station, in response to your application dated September 19, 2002, as supplemented on January 17 and July 1, 2002.

The amendment revises Technical Specifications Subsections 3.5.A.5.b and c, concerning operability of suppression chamber-to-drywell vacuum breakers.

A copy of the related Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely,

*/RA/*

Peter S. Tam, Senior Project Manager, Section 1  
Project Directorate I  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket No. 50-219

Enclosures: 1. Amendment No. 230 to DPR-16  
2. Safety Evaluation

cc w/encls: See next page

DISTRIBUTION:

PUBLIC	OGC	SRichards	PD1-1 R/F
GHill (2)	RLaufer	WBeckner	PTam
SLittle	ACRS	JRogge, RI	RLobel

Accession Number: **ML022530450**

OFFICE	PD1-1/PM	PD1-1/LA	OGC	PDI-1/SC	PDI-1/SC
NAME	PTam	SLittle	SUttal	SWeerakkody*	RLaufer
DATE	8/30/02	8/30/02	9/10/02	8/22/02	9/11/02

OFFICIAL RECORD COPY

\*SE transmitted by memo of 8/22/02

AMERGEN ENERGY COMPANY, LLC

DOCKET NO. 50-219

OYSTER CREEK NUCLEAR GENERATING STATION

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 230  
License No. DPR-16

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by AmerGen Energy Company, LLC (the licensee), dated September 19, 2002, as supplemented on January 17 and July 1, 2002, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance: (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-16 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 230, are hereby incorporated in the license. AmerGen Energy Company, LLC, shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of issuance and shall be implemented within 30 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

*/RA/*

Richard J. Laufer, Chief, Section 1  
Project Directorate I  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical  
Specifications

Date of Issuance: September 11, 2002

ATTACHMENT TO LICENSE AMENDMENT NO. 230

FACILITY OPERATING LICENSE NO. DPR-16

DOCKET NO. 50-219

Replace the following pages of the Appendix A, Technical Specifications, with the attached revised pages as indicated. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Remove

3.5-4  
3.5-10  
3.5-12

Insert

3.5-4  
3.5-10  
3.5-12

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 230

TO FACILITY OPERATING LICENSE NO. DPR-16

AMERGEN ENERGY COMPANY, LCC

OYSTER CREEK NUCLEAR GENERATING STATION

DOCKET NO. 50-219

1.0 INTRODUCTION

By letter dated September 19, 2001, as supplemented on January 17 and July 1, 2002, AmerGen Energy Company, LLC (AmerGen or the licensee), submitted a request for changes to the Oyster Creek Nuclear Generating Station (Oyster Creek) Technical Specifications (TSs). The January 17 and July 1, 2002, letters provided clarifying information that did not change the scope of the original Federal Register notice or the NRC staff's initial proposed no significant hazards consideration determination.

The proposed amendment would revise the TSs dealing with the suppression chamber-to-drywell vacuum breakers and the associated vacuum breaker position alarm circuits. This safety evaluation (SE) documents the Nuclear Regulatory Commission (NRC) staff's review and findings.

Oyster Creek Nuclear Generating Station is a boiling-water reactor (BWR) of the BWR/2 design with a Mark I containment. The containment design contains seven pairs (14 total) of suppression chamber-to-drywell vacuum breakers. The safety function of these vacuum breakers is to limit the reduction in pressure in the drywell with respect to the suppression chamber by permitting gas and vapor flow from the suppression chamber air space to the drywell. The general term "air space" is used even though the containment atmosphere is required by the TSs to be inerted with nitrogen gas. Licensee calculations discussed in this SE assumed the gas to be nitrogen.

The Oyster Creek Nuclear Generating Station Updated Final Safety Analysis Report (UFSAR) describes the containment. The Oyster Creek containment consists of two large chambers, the drywell and the suppression chamber. The drywell houses the reactor vessel, the reactor recirculating loops and other components of the reactor coolant system (RCS). It is a 70-foot spherical steel shell with a 33-foot diameter by 23-foot high cylindrical steel shell extending from the top.

The suppression chamber is a toroid-shaped steel shell located below and around the base of the drywell. It has a major diameter of 101 feet, a chamber diameter of 30 feet and is filled with water to a depth of approximately 12 feet. Oyster Creek TSs Subsections 3.5.A.1.a and 3.5.A.1.b specify both the maximum and minimum amount of water in the suppression pool. This water condenses the steam released from the RCS in the case of a loss-of-coolant accident (LOCA).

The two chambers, drywell and suppression chamber, are interconnected through ten vent pipes, 6-feet 6-inches in diameter, equally spaced around the circumference of the suppression chamber. These vent pipes feed into a common toroid-shaped ring header inside the air space of the suppression chamber. This ring header has a major diameter of 101 feet and a minor diameter of 4 feet 7 inches. There are 120 uniformly spaced downcomer pipes, 2 feet in diameter, extending from the ring header to approximately 3 feet below the water level in the suppression chamber.

Return lines with vacuum breaker valves (suppression chamber-to-drywell) feed back gas and vapor to the drywell when the suppression chamber pressure is greater than the drywell pressure by a specified amount. (The Oyster Creek drywell is designed for a pressure difference of 2 psid at 205 °F).

Current Oyster Creek TSs Subsection 3.5.A.5.b specifies that 2 of the 14 suppression chamber-to-drywell vacuum breakers may be inoperable provided that the inoperable vacuum breakers are secured in the closed position. The licensee proposed to revise the number of allowable inoperable suppression chamber-to-drywell vacuum breakers in Subsection 3.5.A.5 from 2 to 5, i.e., reducing the required number from 12 to 9. The licensee's analyses demonstrate that only eight vacuum breakers must open to ensure that the suppression chamber-to-drywell vacuum breaker acceptance criteria are satisfied. These criteria are discussed in Section 3.1 below. The licensee increased this number to nine in order to account for a single failure.

The licensee proposed to revise Subection 3.5.A.5.b to add a 72-hour allowed outage time to restore one of the nine required suppression chamber-to-drywell vacuum breakers to operable status if it is found to be inoperable. This revision is consistent with the BWR/4 Standard Technical Specifications, NUREG-1433, Revision 2, Section 3.6.1.8.

The licensee proposed to revise the required action statement of Subection 3.5.A.5.c for an inoperable vacuum breaker position alarm circuit. This subsection currently permits one position alarm circuit inoperable for up to 15 days provided each operable suppression chamber-to-drywell vacuum breaker with one defective alarm circuit is physically verified to be closed. Physical verification is possible because the suppression chamber-to-drywell vacuum breakers are located external to the suppression chamber and the drywell. This proposed change removes the 15-day limitation and allows an operable vacuum breaker with an inoperable position alarm circuit to be considered operable indefinitely, provided the affected vacuum breaker and associated remaining position alarm circuit are verified to be operable immediately and monthly in accordance with existing TSs Subsection 4.5.F.5.a. Additionally, the licensee proposed a daily verification that the affected vacuum breaker is closed using the operable position alarm circuit, rather than physical verification, in order to minimize personnel radiation dose.

Leak tightness of vacuum breakers is important to safety since this ensures that all the steam from a LOCA will be condensed and will not overpressurize the suppression chamber.

The licensee also proposed to revise Section 3.5 of the TSs Bases to describe the reasons for

the proposed changes.

## 2.0 REGULATORY EVALUATION

Oyster Creek began commercial operation in December 1969, before Appendix A, General Design Criteria (GDC) of Title 10 of the *Code of Federal Regulations* (10 CFR), Part 50, was issued (March 6, 1972). However, as part of the application for a full-term operating license, the design of Oyster Creek was evaluated against these GDC. The Oyster Creek UFSAR also notes that conformance with the GDC was established as part of the Systematic Evaluation Program.

GDC-16, "Containment Design," requires, in part, that the containment design conditions important to safety are not exceeded for as long as postulated accident conditions require. Thus, the suppression pool-to-drywell vacuum breakers must control the pressure distribution in the containment so that the design limit on the negative pressure differential between the drywell and the suppression pool is not exceeded.

## 3.0 TECHNICAL EVALUATION

### 3.1 Subsection 3.5.A.5.b

Currently Subsection 3.5.A.5.b specifies that operation may continue in a mode for which suppression chamber-to-drywell operability is required with two of the fourteen suppression chamber-to-drywell vacuum breakers inoperable provided that they are secured in the closed position. If more than two suppression chamber-to-drywell vacuum breakers are inoperable, Subsection 3.5.A.5.d requires that the reactor be placed in cold shutdown within 24 hours.

The licensee proposes to revise this requirement to state:

Five of the fourteen suppression chamber - drywell vacuum breakers may be inoperable provided that they are secured in the closed position.

The licensee performed calculations to demonstrate that the vacuum breakers could still perform their safety function with five vacuum breakers inoperable rather than two.

There are two acceptance criteria for the suppression chamber-to-drywell vacuum breakers: (1) the maximum calculated suppression chamber-to-drywell differential pressure is 2 psid, and (2) the maximum downcomer water height is less than 6.75 feet.

The 2 psid differential pressure criterion is based on the structural capability of the Oyster Creek containment.

The maximum downcomer water height ensures that the water in the downcomer does not rise to a level that would interfere with vacuum breaker performance. Limiting the downcomer water height to 6.75 feet ensures that the water height in the downcomer remains below the bottom of the ring header. The licensee's July 1, 2002, letter states that the Oyster Creek suppression



chamber-to-drywell vacuum breakers are located on external vent pipes connecting the suppression chamber air space to the major vents from the drywell to the suppression chamber. Thus, the water height in the downcomer during containment spray events is not limited by the elevation of the vacuum breakers. However, the licensee still conservatively limits the height of

water in the downcomer. The July 1, 2002, letter discusses how the 6.75 feet criterion was determined.

The licensee bases the increased allowable number of inoperable suppression chamber-to-drywell vacuum breakers on analyses demonstrating that these two criteria, differential pressure and downcomer water height, are satisfied for three cases. The licensee states that the three bounding events which challenge the suppression chamber-to-drywell vacuum breakers are:

- Inadvertent actuation of one loop of drywell spray during normal operation
- Drywell spray activation during a design basis LOCA (both one loop and two loops of drywell spray)
- Core spray flow into the drywell during a design basis LOCA following vessel reflood

The NRC staff agrees that these cases represent a reasonable spectrum of possible events. Note that for Case 1, inadvertent actuation of one train, not both, of drywell spray is assumed. The licensee's July 1, 2002, letter discusses this assumption. The Oyster Creek containment spray system does not have the capability for automatic initiation. Therefore, only manual initiation of drywell spray is possible. The licensee states that it would require more than a single operator error to initiate both trains of containment spray. Manual initiation, for testing, requires verification that the drywell spray valve is closed which precludes spray flow into the drywell. In addition, the layout of containment spray system controls requires two hands to start one pump. Furthermore, the licensee states that there is a separate test procedure for each train which provides further assurance that the operators would operate only the controls of the train being tested. Because of this design and the licensee's procedures, the NRC staff agrees that it is acceptable to postulate inadvertent actuation of only a single train of containment spray. Note also that for the third case, the spray flow is not actuated but the flow of emergency core cooling water refills the reactor vessel and flows out the break. This provides the same effect on the drywell atmosphere as a spray: condensing steam and reducing drywell pressure.

The licensee's calculations demonstrating that the criteria are satisfied for these three cases are performed using the methods of General Electric Company Topical Report NEDE-24802, "Mark I Suppression Chamber-to-Drywell Vacuum Breaker Functional Requirements, Task 9.4.3," dated April 1980. The NRC staff has not previously reviewed this topical report, but the NRC staff's assessment of the licensee's methods follows.

The licensee's calculation methods use a formulation of the conservation laws of mass and energy. Thermodynamic equilibrium between the air, water and water vapor is assumed. Incompressible flow through the vacuum breaker is also assumed. Given the relatively small pressure difference between the drywell and the suppression chamber, this assumption is reasonable. By assuming incompressible flow, the vacuum breaker flow path is characterized by the parameter  $A/\sqrt{K}$ , where A is the flow area and K is a measure of the flow resistance.

The licensee's calculations assume that the vacuum breaker opens such that  $A/\sqrt{K}$  is a linear function of time from zero to the value corresponding to the full open position of the vacuum breaker.

The water level in the downcomer is calculated from a differential equation which is a variation of a basic equation for liquid expulsion from a uniform pipe<sup>1</sup>.

The licensee used conservative input values for key parameters. For example, for Case 1, the containment spray temperature is assumed to be 45 °F even though suction is taken from the suppression pool which would be at a higher temperature. The suppression pool temperature TSs limit is 95 °F. The licensee points out that suppression pool cooling could maintain the suppression pool at a lower temperature, but that 45 °F would still be bounding. The suppression pool temperature following a LOCA is assumed to be a conservatively low value of 105 °F. However, the licensee's July 1, 2002, letter stated that the results are not sensitive to this assumption.

Licensee calculations, as described in the July 1, 2002, letter, show that drywell spray activation of two spray headers during a design basis LOCA is the most limiting case; that is, requires the largest number of vacuum breakers to equalize the suppression chamber and drywell pressures. The next largest number of vacuum breakers is required for the drywell spray activation of one spray header during a design basis LOCA. Flow out of the pipe break and activation of one drywell spray header during normal operation require significantly fewer suppression chamber-to-drywell vacuum breakers to equalize the suppression chamber and drywell pressures. The licensee's calculations also show the same trend for the peak vent water level criterion. The latter case is more limiting in terms of the number of suppression chamber-to-drywell vacuum breakers required.

The NRC staff asked the licensee why it is acceptable to increase the number of inoperable vacuum breakers to five if the Bodega Bay<sup>2</sup> tests, which established the design basis for the Oyster Creek vacuum breaker system, limit the number of inoperable vacuum breakers to two. The licensee's July 1, 2002, letter explains that the Mark I Containment Program<sup>3</sup> demonstrated that the current limit of two inoperable vacuum breakers, determined by the Bodega Bay tests, is not the minimum. The licensee's calculations confirm this.

As a confirmation of the validity of its calculations, the licensee compared the results of the

---

<sup>1</sup> Fredrick J. Moody, "Introduction to Unsteady Thermofluid Mechanics," John Wiley and Sons, 1990.

<sup>2</sup> References 9 and 10 of the Bases for Oyster Creek Technical Specification Section 3.5 reference two reports which provide the design bases for the Oyster Creek drywell-to-suppression chamber vacuum breakers.

<sup>3</sup> NUREG-0661, "Safety Evaluation Report Mark I Containment Long-Term Program," July 1980.

calculations done with the methods of NEDE-24802 with the same cases using the GOTHIC computer code. The results are given in the licensee's July 1, 2002, letter. GOTHIC is a well established industry containment analysis code. Although the NRC staff has not reviewed and approved GOTHIC, it has accepted TS changes proposed by other licensees based on GOTHIC analyses. The calculations using GOTHIC compare well with those using the methods of NEDE -24802.

Based on the licensee's description of the methods of NEDE-24802, the licensee's selection of the limiting cases for vacuum breaker actuation, and the comparisons of these calculation methods with GOTHIC calculations, the NRC staff finds the licensee's proposed revision of Subsection 3.5.A.5.b with respect to the number of inoperable suppression chamber-to-drywell vacuum breakers acceptable.

The licensee also proposed to add the requirement to Subsection 3.5.A.5.b that if one of the nine required suppression chamber-to-drywell vacuum breakers is found to be inoperable, one suppression chamber-to-drywell vacuum breaker must be restored to operable status within 72 hours or Subsection 3.5.A.5.d will apply, which requires the reactor to be in cold shutdown within 24 hours. This is a reasonable time considering the importance of the suppression chamber-to-drywell vacuum breakers, and the fact that they are outside the containment and therefore are readily accessible, increasing the likelihood of successful repair. The 72-hour allowed outage time is consistent with the BWR/4 Standard Technical Specifications (NUREG-1433, Revision 2). In addition, the calculations which are the basis for the revision to the number of inoperable vacuum breakers support an additional vacuum breaker being inoperable in addition to the number allowed by the TSs. Therefore, the proposed 72-hour allowed outage time is acceptable.

### 3.2 Subsection 3.5.A.5.c

Subsection 3.5.A.5.c is concerned with requirements for operability of suppression chamber-to-drywell vacuum breaker position alarm circuits. It currently states that one position alarm circuit for each operable vacuum breaker (Oyster Creek has two position alarm circuits per vacuum breaker) may be inoperable for up to 15 days provided that each operable suppression chamber-to-drywell vacuum breaker with one defective alarm circuit is physically verified to be closed immediately and daily thereafter. If the position alarm circuit is not restored to operable status within 15 days, Subsection 3.5.A.5.c currently requires that the associated vacuum breaker be declared inoperable and tied closed.

The licensee proposed to change this requirement. The revision would require that one position alarm circuit for each operable vacuum breaker may be inoperable provided: (1) each operable suppression chamber-to-drywell vacuum breaker with one defective alarm circuit and its associated operable position alarm circuit are verified to be operable immediately and monthly in accordance with Surveillance Requirement 4.5.F.5.a. Surveillance Requirement 4.5.F.5.a requires that "[o]peration of position switches, indicators and alarms shall be verified...by operation of each operable vacuum breaker." Additionally, a daily verification that the affected vacuum breaker is closed will be required using the operable position alarm circuit. The licensee states that this change will reduce personnel exposure and safety risk.

This change would, therefore, permit the vacuum breaker to remain operable with one inoperable position alarm circuit. The current requirement calls for closing an operable vacuum breaker which is undesirable from the standpoint of maintaining the highest level of safety. The safety functions of the vacuum breaker would be tested by the required surveillances. Operability of the vacuum breaker would be ensured by daily verification that the vacuum breaker was closed and by monthly testing that the vacuum breaker would open and that position switches, indicators and alarms are working as expected. These requirements exceed those of BWR/4 Standard Technical Specifications, NUREG-1433, Revision 2, which do not contain operability requirements for the vacuum breaker position alarm circuits.

The revised Subsection 3.5.A.5.d will require the reactor to be placed in a cold shutdown condition within 24 hours with both vacuum breaker position alarm circuits on any vacuum breaker inoperable.

Based on the redundancy of the position alarm circuits for each vacuum breaker, and the proposed surveillances for one position alarm circuit inoperable, the NRC staff finds the proposed revision of Subsection 3.5.A.5.c acceptable.

An important function of the suppression chamber-to-drywell vacuum breakers is to remain closed and allow very little leakage during the blowdown phase of a LOCA. None of the changes proposed by the licensee affect this safety function. The daily surveillance to ensure that the affected vacuum breaker(s) is closed using the operable position alarm circuit helps ensure this safety function.

### 3.3 Associated TSs Bases

The licensee proposed to also revise the TS Bases related to TSs Subsections 3.5.A.5.b and c. In accordance with 10 CFR 50.36(a), the TS Bases are not part of the TSs. The NRC staff reviewed the proposed changes and found them to be consistent with and supportive of the proposed changes to the TSs.

### 3.4 Conclusion of Technical Evaluation

The NRC staff finds the licensee's proposed changes to Subsections 3.5.A.5.b and 3.5.A.5.c to be acceptable. The licensee performed the calculations supporting the proposed amendment with methods which compare well with a well-known industry computer code (GOTHIC) and used conservative input assumptions. The proposed changes concerning the operability of the vacuum breakers with one inoperable alarm circuit will provide for less opportunity for forced shutdowns while still maintaining reactor safety.

### 3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the New Jersey State official was notified of the proposed issuance of the amendment. The State official had no comments.

### 4.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20, and changes surveillance requirements. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding (66 FR 65749). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

## 5.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: R. Lobel

Date: September 11, 2002

Oyster Creek Nuclear Generating Station

cc:

Chief Operating Officer  
Exelon Generation Company, LLC  
4300 Winfield Road  
Warrenville, IL 60555

Senior Vice President - Nuclear Services  
Exelon Generation Company, LLC  
4300 Winfield Road  
Warrenville, IL 60555

Vice President - Mid-Atlantic Operations  
Support  
Exelon Generation Company, LLC  
200 Exelon Way, KSA 3-N  
Kennett Square, PA 19348

Senior Vice President -  
Mid Atlantic Regional Operating Group  
Exelon Generation Company, LLC  
200 Exelon Way, KSA 3-N  
Kennett Square, PA 19348

Kevin P. Gallen, Esquire  
Morgan, Lewis, & Bockius LLP  
1800 M Street, NW  
Washington, DC 20036-5869

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

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

Site Vice President  
Oyster Creek Nuclear Generating Station  
AmerGen Energy Company, LLC  
PO Box 388  
Forked River, NJ 08731

H. J. Miller  
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  
Exelon Generation Company, LLC  
Correspondence Control Desk  
P.O. Box 160  
Kennett Square, PA 19348

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

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

Vice President, General Counsel and  
Secretary  
Exelon Generation Company, LLC  
300 Exelon Way  
Kennett Square, PA 19348

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

Manager Licensing - Oyster Creek and  
Three Mile Island  
Exelon Generation Company, LLC  
Nuclear Group Headquarters  
Correspondence Control  
P.O. Box 160  
Kennett Square, PA 19348

Correspondence Control Desk  
Exelon Generation Company, LLC  
200 Exelon Way, KSA 1-N-1  
Kennett Square, PA 19348