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2130-06-20261  
February 3, 2006

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555

Oyster Creek Generating Station  
Facility Operating License No. DPR-16  
NRC Docket No. 50-219

Subject: Response to NRC Request for Additional Information, dated January 5, 2006,  
Related to Oyster Creek Generating Station License Renewal Application (TAC  
No. MC7624)

Reference: "Request for Additional Information for the Review of the Oyster Creek Nuclear  
Generating Station, License Renewal Application (TAC No. MC7624)," dated  
January 5, 2006

In the referenced letter, the NRC requested additional information related to Section 2.3 and 3.3  
of the Oyster Creek Generating Station License Renewal Application (LRA). Enclosed are the  
responses to this request for additional information.

If you have any questions, please contact Fred Polaski, Manager License Renewal,  
at 610-765-5935.

I declare under penalty of perjury that the foregoing is true and correct.

Respectfully,

Executed on

2/3/06

  
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Pamela B. Cowan  
Director - Licensing & Regulatory Affairs  
AmerGen Energy Company, LLC

Enclosure: Response to 1/5/06 Request for Additional Information

cc: Regional Administrator, USNRC Region I, w/o Enclosure  
USNRC Project Manager, NRR - License Renewal, Safety, w/Enclosure  
USNRC Project Manager, NRR - License Renewal, Environmental, w/o Enclosure  
USNRC Project Manager, NRR - Project Manager, OCGS, w/o Enclosure  
USNRC Senior Resident Inspector, OCGS, w/o Enclosure  
Bureau of Nuclear Engineering, NJDEP, w/Enclosure  
File No. 05040

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**Enclosure**

**Response to 1/5/06 Request for Additional Information  
Oyster Creek Generating Station  
License Renewal Application (TAC No. MC7624)**

**RAI 2.3.3.15-1  
RAI 2.3.3.15-2  
RAI 2.3.3.15-3  
RAI 2.3.3.15-4  
RAI 2.3.3.15-5  
RAI 3.3.2.1.15-1  
RAI 3.3.2.1.15-2  
RAI 3.3.2.1.15-3**

## Fire Protection System RAIs

### **RAI 2.3.3.15-1**

**LRA Drawing LR-JC-19479, Sheet 2 shows the sprinkler system valve for sprinkler systems 17A and 17B (C-1) colored in green (i.e., in scope). LRA Drawing LR-JC-19479, Sheet 3 shows sprinkler systems 17A and 17B (A-6) as out of scope. Verify whether sprinkler valves 17A and 17B are in scope of license renewal in accordance with Title 10 of the *Code of Federal Regulations* Part 54.4(a) (10 CFR 54.4(a)) and subject to an aging management review (AMR) in accordance with 10 CFR 54.21(a)(1). If they are excluded from the scope of license renewal and not subject to an AMR, provide justification for the exclusion.**

#### **Response:**

Drawing LR-JC-19479 sheet 2 inadvertently identified sprinkler systems 17A and 17B as in the scope of license renewal. These systems are not in the scope of license renewal. The basis for these sprinkler systems being excluded from the scope of license renewal is documented in Oyster Creek license renewal Position Paper PP-07, "Systems and Structures Relied upon to Demonstrate Compliance With 10 CFR 50.48 - Fire Protection," as follows:

These sprinkler systems, downstream of the isolation valve V-9-913, are classified as Not Important to Safety (NITS) on the flow diagram and in TDR-622, "ITS/NITS Classification of Fire Suppression Systems and Fire Detection Systems." The Component Record List (CRL) does not identify any safety related components in the areas covered by these sprinkler systems. The Oyster Creek Fire Hazards Analysis Report does not identify any fire safe shutdown (FSSD) equipment in these areas. A fire in these areas does not significantly increase the risk of radioactive releases to the environment. These sprinkler systems are not included in the scope of license renewal.

Drawing LR-JC-19479 sheet 2 will be revised to show details for sprinkler systems 17A and 17B as black and not in the scope of license renewal.

### **RAI 2.3.3.15-2**

**NRC Safety Evaluation Report dated March 3, 1978, Sections 3.1.5 and 5.9, discusses the Halon 1301 system for the Cable Spreading Room (CSR). The LRA does not list Halon 1301 system for CSR. Verify whether the Halon 1301 system and components are in scope of license renewal in accordance with 10 CFR 54.4(a) and subject to an AMR in accordance with 10 CFR 54.21(a)(1). If they are excluded from the scope of license renewal and not subject to an AMR, provide justification for the exclusion.**

#### **Response:**

The referenced NRC Safety Evaluation Report (SER) includes items marked with an asterisk to indicate that the NRC staff will require additional information for the subject SER item. SER Section 3.1.5 is marked with an asterisk, and the additional information

was provided to the NRC by letter dated August 31, 1979. In this letter, Halon systems were proposed for the 480 Volt Switchgear Room, Control Room Panels and A & B Battery Rooms. These proposed modifications were accepted by the NRC, as indicated in Supplement 3 to the Fire Protection SER dated August 25, 1980. These Halon systems are the Halon systems shown as in scope on drawing LR-JC-19629 sheet 2. Halon systems are included in the Fire Protection system for license renewal.

#### **RAI 2.3.3.15-3**

**NRC Safety Evaluation Report dated March 3, 1978, Section 3.1.6, discusses automatic water spray and detection systems to protect safety-related cabling on the 23-foot level and 51-foot level of the reactor building, and safety-related cables below the 4160V switchgear vault. The LRA does not list automatic spray system for the above-mentioned areas. Verify whether the automatic spray system and components are in scope of license renewal in accordance with 10 CFR 54.4(a) and subject to an AMR in accordance with 10 CFR 54.21(a)(1). If they are excluded from the scope of license renewal and not subject to an AMR, provide justification for the exclusion.**

#### **Response:**

The referenced NRC Safety Evaluation Report (SER) includes items marked with an asterisk to indicate that the NRC staff will require additional information for the subject SER item. SER Section 3.1.6 is marked with an asterisk, and the additional information was provided to the NRC by letter dated August 31, 1979. In this letter, water spray systems were proposed for the 23-foot and 51-foot elevations of the reactor building, and for the cable spreading room. These proposed modifications were accepted by the NRC, as indicated in Supplement 3 to the Fire Protection SER dated August 25, 1980. These systems are identified as deluge systems 4A, 4B, 5, 6, 7 and 8 on drawing LR-JC-19479 sheet 2 (F-2). These systems are shown as in scope on drawings LR-JC-19629 sheet 2 (typical details) and sheet 3 (B-4, F-5, C-5, G-5, B-5). Automatic spray systems are included in the Fire Protection system for license renewal.

#### **RAI 2.3.3.15-4**

**Safety Evaluation Report dated March 3, 1978, Section 3.1.7, discusses sprinkler system for: (1) metal deck roof at the 119-foot of the reactor building, (2) spent fuel pool cooling pumps, (3) above and below the suspended ceiling to protect cables above the ceiling in the monitor and change room, (4) diesel-driven fire pumps and outside fuel oil storage tanks, and (5) above cable trays which are at the ceiling level of the condenser bay along the west wall of the turbine building. Verify whether the sprinkler system and components are in scope of license renewal in accordance with 10 CFR 54.4(a) and subject to an AMR in accordance with 10 CFR 54.21(a)(1). If they are excluded from the scope of license renewal and not subject to an AMR, provide justification for the exclusion.**

Response:

The referenced NRC Safety Evaluation Report (SER) includes items marked with an asterisk to indicate that the NRC staff will require additional information for the subject SER item. SER Section 3.1.7 is marked with an asterisk, and the additional information was provided to the NRC by letter dated August 31, 1979. In this letter, sprinkler systems were proposed for the 119-foot elevation of the reactor building, spent fuel pool cooling pumps, monitor and change area, fire water pump house and diesel fuel tanks, condenser bay, and turbine building basement. These proposed modifications were accepted by the NRC, as indicated in Supplement 3 to the Fire Protection SER dated August 25, 1980. These systems are identified as sprinkler systems 1, 2, 3, 10, 11 and 12, and deluge system 9 on drawing LR-JC-19479 sheet 2 (F-2, G-2). These systems are shown as in scope on drawings LR-JC-19629 sheet 2 (typical details) and sheet 3 (D-5, G-7, E-4, C-4, E-9). Sprinkler systems are included in the Fire Protection system for license renewal.

**RAI 2.3.3.15-5**

**Safety Evaluation Report dated March 3, 1978, Section 3.1.21, discusses water shields, dikes, or other protection that will be provided where breaks of suppression system piping may damage safety-related equipment. Have water shields been installed? If so, are they in scope of license renewal in accordance with 10 CFR 54.4(a) and subject to an AMR in accordance with 10 CFR 54.21(a)(1)? If they are excluded from the scope of license renewal and not subject to an AMR, provide justification for the exclusion.**

Response:

The referenced NRC Safety Evaluation Report (SER) includes items marked with an asterisk to indicate that the NRC staff will require additional information for the subject SER item. SER Section 3.1.21 is marked with an asterisk, and the additional information was provided to the NRC by letter dated August 31, 1979. In this letter, the specific design features provided to preclude fire protection system water damage to safety related equipment is described. Curbs, drains and water shields were installed. These proposed modifications were accepted by the NRC, as indicated in Supplement 3 to the Fire Protection SER dated August 25, 1980. The in scope curbs and spray shields are identified with the Reactor Building structure. The in scope drains are identified as part of the Reactor Building Floor and Equipment Drains system, the Miscellaneous Floor and Equipment Drain System, and the Roof Drains and Overboard Discharge system, shown on drawings LR-JC-147434 sheet 3 and LR-JC-2005 sheet 2.

**RAI 3.3.2.1.15-1**

**LRA Table 3.3.2.1.15, "Fire Protection System" shows that there is no aging effect requiring management and no aging management program for fire barrier walls and slabs made of gypsum board exposed to indoor air. Explain why gypsum board does not require an AMP for indoor environment.**

Response:

The gypsum board in the scope of license renewal is installed in a location that is protected from weather and is not an aggressive environment. Review of Oyster Creek operating experience with gypsum board fire barriers indicate no significant age related degradation that would require an aging management program. This operating experience was confirmed by the Oyster Creek Fire Protection system manager.

**RAI 3.3.2.1.15-2**

**LRA Table 3.3.2.1.15, "Fire Protection System" shows that there is no aging effect requiring management and no aging management program for flexible hose made of polyethylene (teflon) exposed to internal and external environment. Explain why polyethylene (teflon) does not require an AMP for internal and external environment.**

Response:

The polyethylene (Teflon) flexible hose is located in the Halon system, and is subject to dry air internally and indoor air externally. The hose is not subject to significant radiation (including ultraviolet radiation) or high temperatures. The full chemical name for this polyethylene is Polytetrafluoroethylene (PTFE). DuPont's trademark for this compound is Teflon®. PTFE is a thermoplastic member of the fluoropolymer family of plastics. PTFE has a low coefficient of friction, excellent insulating properties, and is chemically inert to most substances. PTFE can withstand high heat applications and it is well known for its anti-stick properties. PTFE material has no significant aging effects in the environment where used in the Halon Fire Protection system at Oyster Creek, and therefore does not require an aging management program.

**RAI 3.3.2.1.15-3**

**LRA Table 3.3.2.1.15 lists spray nozzle (CO<sub>2</sub> and Halon) but does not list the spray nozzle (water). Explain why water spray nozzles do not require an AMP.**

Response:

For the fire water systems, all spray nozzles are included under "Sprinkler Heads."