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U.S. Nuclear Regulatory Commission Attn: Document Control Desk Washington, DC 20555-0001

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

- Subject: Additional Information License Amendment Request No. 315, "Application of Alternative Source Term" (TAC No. MC6519)
- References: (1) AmerGen letter to USNRC, "License Amendment Request No. 315-Application of Alternative Source Term," dated March 28, 2005.
  - (2) AmerGen letter to USNRC, "Response to Request for Additional Information-License Amendment Request No. 315, Application of Alternative Source Term (TAC No. MC6519)," dated January 24, 2007.
  - (3) GPU Nuclear letter to USNRC, "Control Room Habitability (NUREG-0737 Item III.D.3.4) Results of Whole Body and Beta Skin Dose Analysis," dated June 17, 1985

This letter provides additional information as discussed in conference calls held on February 9, 2007, March 5, 2007, and March 15, 2007, regarding Oyster Creek License Amendment Request No. 315, submitted in Reference 1.

As discussed on March 15, 2007, the radiological dose analysis supporting the Oyster Creek application for alternative source term is being revised to: (1) eliminate the previously assumed credit for secondary containment mixing, (2) replace the previous assumption of Main Steam Isolation Valve (MSIV) leak rate based on containment pressure with an assumption of constant MSIV leak rate at the Technical Specification (TS) value of 11.9 scfh for the first 24 hours with a 50% reduction after 24 hours, (3) credit delayed release for MSIV leakage travel time from the outboard MSIV to the turbine/condensers of 8.7 hours for the line with single isolation and 13 hours for the line with double isolation, (4) assume control room maximum exposed operator occupancy based on 100% occupancy for the first 24 hours and a four crew, eight hour shift rotation assumed thereafter, and (5) utilize updated offsite atmospheric dispersion values (X/Qs). Items (3) and (4) above, regarding the revised assumptions for delayed release for MSIV travel time and control room occupancy, are consistent with the assumptions described in the Oyster Creek control room habitability radiological analysis previously submitted to the NRC in Reference 3. This revised Oyster Creek radiological dose analysis will be submitted by March 23, 2007.

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U.S. Nuclear Regulatory Commission March 16, 2007 Page 2

The revised offsite X/Qs, discussed above, were recalculated (Enclosure 1) using PAVAN and the guidance regarding an increased amount of wind speed categories as described in Regulatory Issue Summary 2006-04. The revised offsite X/Qs are based on the same Oyster Creek 1995-1999 meteorological data set as currently used for the control room X/Qs. The Oyster Creek 1995-1999 meteorological data previously submitted (Reference 2) has been reformatted in ARCON96 format, and is provided in Enclosure 2.

Enclosure 3 provides the requested Oyster Creek site maps and clarifying sketches showing the postulated accident radiological release and receptor locations with the associated distances. No additional release points for other design basis accidents (i.e., Main Steam Line Break (MSLB), Fuel Handling Accident (FHA), and Control Rod Drop Accident (CRDA)) are postulated. The CRDA and FHA release points are via Standby Gas Treatment (SGTS) and the main stack (same as for containment and Engineered Safety Feature (ESF) leakage during a design basis loss-of coolant accident (LOCA)). The MSLB release uses the same release location as for the Turbine Building (TB) release in the LOCA analysis. Therefore, all postulated release locations are evaluated using the most restrictive source term.

The Enclosure 3 Figures are listed below:

- Figure 1: Drawing "Plot Plan" Sheet No. 1. This drawing shows the three (3) release points (TB, Yard/N<sub>2</sub>, and Main Stack) annotated with distances from the Control Room (CR) air intakes.
- <u>Figure 2:</u> Oyster Creek Site Plot Plan –Calculation No. C-1302-826-E540-017, Rev. 0, Sheet 80. This expanded site plan is annotated with the release locations and CR intakes.
- <u>Figure 3:</u> Oyster Creek Updated Final Safety Analysis Report (UFSAR) Figure 3.8-38 "Isometric of Oyster Creek Plant Showing Major Structures (Looking North)." This figure indicates relative positions of important structures for perspective only.

No new regulatory commitments are established by this submittal. If any additional information is needed, please contact David J. Distel at (610) 765-5517.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 16<sup>th</sup> day of March, 2007.

Respectfully,

SAH

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

- Enclosures: 1) Calculation No. C-1302-826-E310-018, Revision 0, "Oyster Creek Offsite Atmospheric Dispersion (X/Q) for Alternative Source Terms (AST)"
  - CD Oyster Creek Meteorological Data 1995, 1996, 1997, 1998, 1999 (ARCON96 Format)
  - 3) Oyster Creek Site Map Postulated Release Points and Receptor Points

cc: S. J. Collins, USNRC Administrator, Region I
G. E. Miller, USNRC Project Manager, Oyster Creek
M. S. Ferdas, USNRC Senior Resident Inspector, Oyster Creek
File No. 03079