

10 CFR 50.90  
10 CFR 50.67March 28, 2007  
2130-07-20480U.S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, DC 20555-0001Oyster 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, “Additional Information - License Amendment Request No. 315, “Application of Alternative Source Term” (TAC No. MC6519),” dated March 23, 2007.

This letter provides the additional information discussed in a conference call held on March 28, 2007, regarding Oyster Creek License Amendment Request No. 315, submitted in Reference 1, and the control room occupancy assumed for the revised radiological dose analysis supporting the Oyster Creek application for alternative source term submitted in Reference 2.

The occupancy factor used in the Oyster Creek control room post-LOCA radiological analysis (Reference 2) is assumed to be 1.0 for the first 24 hours and 0.25 for the remainder of the 720 hours of the postulated event. These values are determined to be conservative for the most exposed operator following the Oyster Creek shift rotation schedule. Oyster Creek operates with 5 crews rotating 8-hour shifts. For the case of the maximum exposed operator, it is assumed that the design basis accident occurs during the day shift, with the shift operator expected to work for a 24-hour period. It is conservatively assumed that he works on Day 2, and continues his scheduled day shift rotation through day 5 of the accident. After this rotation, he is scheduled off for the next 7 days. He will then work 2 days of day shift, followed by 3 days off, 7 days of afternoon shift, 2 days off, and then 4 night shifts to complete his 30 days.

For all scheduled days (other than the first 24-hour day), it is assumed that he works 9 hours per day to account for shift turnover. This operator will be in the control room for a total of 177 hours over the 30-day period. This period of 177 hours of work over the 720-hour period equates to a fractional value of occupancy of 0.245 ( $177/720 = 0.245$ ). It is noted that the total hours worked over the 696 hours following the initial 24-hour occupancy is 153 hours, which yields a lower occupancy value of 0.22 ( $(17 \times 9)/(720 - 24) = 0.22$ ). Other shift rotations for the

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30-day period were reviewed. The other occupancy factors calculated yield lower values than the case described above. Therefore, the value of 0.25 used after the first 24 hours is conservative.

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 28<sup>th</sup> day of March, 2007.

Respectfully,

gbc 

Pamela B. Cowan

Director - Licensing & Regulatory Affairs  
AmerGen Energy Company, LLC

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