2002
Annual Radioactive Effluent Release Report
Oyster Creek Generating Station
AmerGen Energy Company

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OYSTER CREEK GENERATING STATION
ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT
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This report summarizes the radioactive liquid and gaseous effluents from the Oyster Creek Generating Station and the calculated maximum hypothetical radiation exposure to the public resulting from those effluents. This report covers the period of operation from January 1, 2002 through December 31, 2002.

Radioactive gaseous releases from the plant are monitored by radiation monitors and filtering systems installed in the plant stacks. Regarding liquid releases, representative samples are collected and analyzed prior to discharge. These methods accurately determine the types and quantities of radioactive materials being released to the environment.

Utilizing gaseous effluent data, the maximum hypothetical dose to any individual in the vicinity of the plant was calculated using a mathematical model, which is based on the methods defined by the U.S. Nuclear Regulatory Commission. There was no dose attributable to liquid effluents because there were no liquid radioactive releases from the facility in 2002.

The maximum hypothetical doses (Table 1) are conservative overestimates of the actual off-site doses, which are likely to occur. For example, wet deposition due to precipitation events decreases the off-site dose, but this phenomenon is not incorporated into the mathematical dose model.

Radioactive airborne discharges from the facility during 2002 consisted of 137 curies of noble gases, 9.87E-2 (0.0987) curies of radioiodines, and 29.4 curies of tritium. The total quantity of particulate radioactivity released form the facility has yet to be determined because the strontium 89 and 90 analyses results for the fourth quarter have yet to be completed due to the involved analysis process. Once these data become available, a completed addendum to this report, which will be the final report, will be issued.

Eighteen (18) solid, low level radioactive waste shipments, totaling approximately 1504 cubic meters, were shipped from the Oyster Creek Generating Station during the reporting period. This material went to either a licensed burial site or to a waste processor for volume reduction. No solidification agent was used in any of the 18 shipments.

Because the fourth quarter strontium 89 and 90 results have yet to be obtained, no annual doses using these data can be calculated. As previously stated, these doses will be provided when the strontium data become available.

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YEAR 2002 EVENT REPORT

LIQUID EFFLUENT RELEASES

There were no liquid radioactive releases from the facility in 2002.

CHANGES TO THE OFFSITE DOSE CALCULATION MANUAL

There were no revisions made to the Oyster Creek Generating Station Offsite Dose Calculation Manual during 2002.

EFFLUENT MONITORS OUT OF SERVICE GREATER THAN 30 DAYS

The effluent monitor on the 1-5 sump was out of service from January 28, 2002 to April 26, 2002 due to the failure of the preamplifier. Although it is possible to valve this sump in for overboard release, this is never done. Administrative procedures require all water from this sump to be pumped to the Radwaste Facility for processing.

CHANGES TO THE PROCESS CONTROL PLAN

There were no changes to the Process Control Plan (PCP) during 2002.