



An Exelon/British Energy Company

**Clinton Power Station**

R R 3 Box 228  
Clinton, IL 61727-9351

U-603618  
May 01, 2003

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, D.C. 20555-0001

Clinton Power Station  
Facility Operating License No. NPF-62  
NRC Docket No. 50-461

Subject: Annual Environmental Operating Report

In accordance with Appendix B, Environmental Protection Plan, of Facility Operating License No. NPF-62 for Clinton Power Station, AmerGen Energy Company, LLC (AmerGen) is submitting the attached Annual Environmental Operating Report. This report covers the period of January 1, 2002 through December 31, 2002.

Due to a report submittal tracking error, this report is being submitted beyond the "prior to May 1" due date specified in Environmental Protection Plan, Section 5.4.1. This error has been entered into the Clinton Power Station Corrective Action Program.

Respectfully,

Keith J. Polson  
Plant Manager  
Clinton Power Station

RSF/blf

Attachment

cc: Regional Administrator - NRC Region III  
NRC Senior Resident Inspector – Clinton Power Station  
Office of Nuclear Facility Safety - Illinois Department of Nuclear Safety

JE25

### **Annual Environmental Operating Report**

The Environmental Protection Plan (EPP) for Clinton Power Station (CPS) requires that the Annual Environmental Operating Report include:

- (a) A list of EPP noncompliances and the corrective actions taken to remedy them.
- (b) A list of all changes in station design or operation, tests, and experiments made in accordance with Subsection 3.1 of the EPP which involved a potentially significant unreviewed environmental issue.
- (c) A list of non-routine reports submitted in accordance with Subsection 5.4.2 of the EPP.
- (d) Any results and/or assessments for the environmental monitoring programs described in Subsection 2.0 of the EPP which were submitted to the respective regulatory agencies during the annual reporting period.

The following provides AmerGen's response to each listed item for CPS:

**A. A list of EPP noncompliances and the corrective actions taken to remedy them:**

**1. Noncompliance:**

An NPDES non-compliance occurred at the Shutdown Service Water outfall when Total Residual Chlorine was measured at 0.35 mg/l during required weekly analysis. This is above the NPDES limit of 0.05 mg/l. The cause was found to be degraded bisulfate system components, namely the Bisulfate pump, backflow valve, and associated flow switch. These parts were replaced and preventive maintenance tasks were improved to detect component degradation. No further occurrences have taken place.

**2. Noncompliance:**

An NPDES noncompliance occurred when collected digital temperature data was lost from a period of July 9 through July 31, 2002 at the lake spillway. During this time period, actual lake water temperatures were within water quality temperature standards. The data loss occurred during offsite analysis and repair of one of two temperature probes. The second redundant probe had also coincidentally failed during this period. Offsite analysis determined that a digital chip in the second probe had failed. Although no specific cause could be determined, the vendor indicated the most likely cause for the failures was a lightning strike to the water. The probes were refurbished with upgraded software and returned to service. Additionally, a third temperature monitoring unit was installed with remote, real-time monitoring capability to serve as additional backup.

**3. Noncompliance:**

An NPDES noncompliance occurred for the Circulating Water System when the NPDES Permit Limit of 0.2 mg/l Total Residual Chlorine was exceeded during the week of November 14, 2002. The measured value was 0.24 mg/l, slightly above the NPDES Permit Limit. The cause of the occurrence was a human performance error. Corrective actions include requirements for written permission to make adjustments to Chlorine injection rate. No further events have occurred.

**B. A list of all changes in station design or operation, tests, and experiments made in accordance with Subsection 3.1 of the EPP that involved a potentially significant unreviewed environmental issue:**

In a letter from J. M. Heffley (AmerGen Energy Company, LLC) to the NRC dated June 18, 2001, CPS submitted a request for changes to the Facility Operating License No. NPF-62 and Appendix A to the Facility Operating License, Technical Specifications (TS), to allow operation at an uprated power level. The proposed changes would allow CPS to operate at a power level of 3473 megawatts thermal (MWt), an increase of approximately 20 percent rated core thermal power over the previous 100 percent power level of 2894 MWt. The NRC requested additional information on the status of the pathogenic *Naegleria fowleri* monitoring program at Clinton Lake. In addition, the NRC requested information on the impact of power uprate on the potential for occurrence of these organisms in Clinton Lake and the subsequent need for continuing a monitoring program following power uprate. The requested additional information was provided to the NRC in a letter from K. R. Jury (AmerGen Energy Company, LLC), to the NRC dated November 29, 2001. The NRC concluded in their Safety Evaluation dated April 5, 2002, that the issuance of the license amendment for the power uprate changes will not have a significant effect on the quality of the human environment.

**C. A list of non-routine reports submitted in accordance with Subsection 5.4.2 of the EPP:**

Clinton Power Station did not submit any non-routine reports to the NRC in accordance with Subsection 5.4.2 of the EPP during 2002.

**D. Any results and/or assessments for the environmental monitoring programs described in Subsection 2.0 of the EPP which were submitted to the respective regulatory agencies during the annual reporting period:**

There were no results and/or assessments submitted to regulatory agencies regarding environmental monitoring programs described in Subsection 2.0.