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U. S. Nuclear Regulatory Commission
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Washington, DC 20555-0001

Braidwood Station, Units 1 and 2
Facility Operating License Nos. NPF-72 and NPF-77
NRC Docket Nos. STN 50-456 and STN 50-457

Subject: 2004 Annual Environmental Report

The attached document includes the Annual Environmental Operating Report for Braidwood Station. This report is being submitted in accordance with Section 5.4.1, "Routine Reports," in Appendix B, "Environmental Protection Plan (Non-radiological)," of Braidwood Station's Facility Operating License, and covers the time period from January 2004 through December 2004.

Braidwood Station evaluated the objectives stated in the Braidwood Station Facility Operating License, Appendix B, "Environmental Protection Plan," Section 1, "Objectives of the Environmental Protection Plan." Exceptions to these objectives are listed in the applicable attachments.

The following Attachments are included in this report.

Attachment A - List of all changes in Station design or operations, tests, and experiments as required by Appendix B, Section 3.1, "Plant Design and Operation"

Attachment B - List of all nonroutine reports as required by Appendix B, Section 5.4.2, "Nonroutine Reports"

Attachment C - List of noncompliances to the Environmental Protection Plan and the corrective actions

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Should you have any questions regarding this submittal, please contact Mr. Dale Ambler, Regulatory Assurance Manager, at (815) 417-2800.

Respectfully,



Keith J. Polson
Site Vice President
Braidwood Station

Attachments:
Attachment A
Attachment B
Attachment C

cc: Regional Administrator - NRC Region III
NRC Senior Resident Inspector - Braidwood Station

ATTACHMENT A

**List of all changes in Station design or operations, tests, and experiments as required by
Appendix B, Section 3.1, "Plant Design and Operation"**

None for 2004.

ATTACHMENT B

List of all nonroutine reports as required by Appendix B, Section 5.4.2, "Nonroutine Reports"

There were no non-routine reports for 2004. Braidwood Station made a 4-hour ENS notification on September 13, 2004 due to a hydraulic oil spill of approximately 1 gallon from a machine cleaning a ditch on company property. Notifications were also made to The Illinois Emergency Management Agency (IEMA) and the National Response Center. The IEMA incident number was 2004-1287. The National Response Center report number was 734969. The ENS event notification number was 41038. Because the event was reported via the ENS call, no report was required under Section 5.4.2 of the Environmental Protection Plan.

ATTACHMENT C

List of noncompliances to the Environmental Protection Plan and the corrective actions

None for 2004.