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Indiana Michigan Power
Cook Nuclear Plant
One Cook Place
Bridgman, MI 49106
AEP.com

December 15, 2011

AEP-NRC-2011-74

Docket Nos.: 50-315
50-316

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

Donald C. Cook Nuclear Plant Unit 1 and Unit 2
SUBMITTAL OF NON-COMPLIANCE NOTIFICATION FOR
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT MI0005827

In a letter dated November 16, 2011, Indiana Michigan Power Company, the licensee for Donald C. Cook Nuclear Plant (CNP) Unit 2, submitted a non-compliance notification for National Pollutant Discharge Elimination System Permit MI0005827 to the Michigan Department Environmental Quality. On November 11, 2011, the daily maximum concentration of Total Residual Oxidant (TRO) discharged via Outfall 002 to Lake Michigan was 63 µg/l, which exceeded the continuous discharge limit for TRO of 38 µg/l. On November 11, at 1510 hours, a Chemical Technician responded to a Control Room alarm from the Orion 1770 Chlorine Analyzer for Outfall 002. The initial TRO value was 40 µg/l, which was verified by a second analyzer. A second sample reading taken at 1545 hours was 63 µg/l. The chemical delivery pumps were secured, and further monitoring indicated that the discharge concentration fell below the permit limit of 38 µg/l TRO at 1555 hours.

In accordance with Section 5.4.2 of Part II of Appendix B of the Environmental Technical Specifications for CNP, a copy of the notification is included as an attachment to this letter.

This letter contains no new commitments. Should you have any questions regarding this notification, please contact Jon H. Harner, Environmental Manager, at (269) 465-5901, extension 2102.

Sincerely,

Michael K. Scarpello
Regulatory Affairs Manager

JEN/jmr

Enclosure

COO1
NRR

c: J. T. King – MPSC, w/o enclosure
S. M. Krawec - AEP Ft. Wayne, w/o enclosure
MDEQ – WHMD/RPS, w/o enclosure
NRC Resident Inspector
C. D. Pederson – NRC Region III
P. S. Tam – NRC Washington DC

ENCLOSURE TO AEP-NRC-2011-74

NON-COMPLIANCE NOTIFICATION
FOR NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
PERMIT MI0005827



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November 16, 2011

AEP-MDEQ-2011-2

Mr. Kameron Jordon, District Supervisor
Michigan Department of Environmental Quality
Surface Water Quality Division
7953 Adobe Road
Kalamazoo, MI 49009

Dear Mr. Jordon:

Re: Cook Nuclear Plant
NPDES Permit MI0005827

This notification is made pursuant to the Donald C. Cook Nuclear Plant (CNP) NPDES Permit, MI 0005827, Part II, Section C.6, "Noncompliance Notification."

On November 11, 2011, the daily maximum concentration of Total Residual Oxidant (TRO) discharged via Outfall 002 to Lake Michigan was 63 µg/l. This concentration exceeds the continuous discharge limit for TRO of 38 µg/l.

On November 11, 2011, at 1510 hours, a Chemical Technician responded to a Control Room alarm from the Orion 1770 Chlorine Analyzer for Outfall 002. The initial TRO value was 40 µg/l, which was verified by a second analyzer. A second sample reading taken at 1545 hours was 63 µg/l. The chemical delivery pumps were secured, and further monitoring indicated that the discharge concentration fell below the permit limit of 38 µg/l TRO at 1555 hours.

The period of noncompliance occurred from 1510 hours to 1555 hours. The cause of the exceedence appears to be a malfunctioning sample pump. The low sample flow produced artifacts from the intermittent chlorination period that was completed 40 minutes prior to the alarm. The concentration of TRO created no adverse environmental effects.

Should you have any questions please contact me at (269) 465-5901, extension 1153.

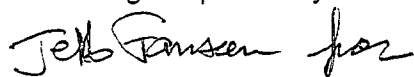
Sincerely,

Jon H. Harner
Environmental Manager

JEN/jmr

Michigan Department of Environmental Quality
Mr. Kameron Jordon
AEP-MDEQ-2011-2
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I certify under penalty of law that I have personally examined and am familiar with the information submitted on this and all attached documents, and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A handwritten signature in cursive script that reads "Jon H. Harner for".

Jon H. Harner
Environmental Manager