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Indiana Michigan Power
One Cook Place
Bridgman, MI 49106
IndianaMichiganPower.com

September 25, 2012

AEP-NRC-2012-80
10 CFR 50.4

Docket Nos.: 50-315
50-316

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

**Donald C. Cook Nuclear Plant Units 1 and 2
NOTIFICATION OF pH LOWER LIMIT EXCEEDANCE
FOR TURBINE ROOM SUMP**

By letter dated September 4, 2012, Indiana Michigan Power Company (I&M), the licensee for Donald C. Cook Nuclear Plant (CNP) Units 1 and 2, submitted a notification of pH lower limit exceedance at outfall 00D, Turbine Room Sump, to the Michigan Department of Environmental Quality (MDEQ).

On August 28, 2012, approximately 46,000 gallons of water were discharged to the settling pond at a pH range of 5.8 - 6.1. This exceeded the CNP Groundwater Permit (No GW1810102) minimum pH limit of 6.5.

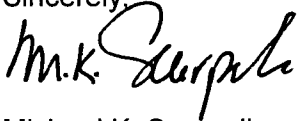
By letter dated September 20, 2012, I&M submitted additional information to the MDEQ regarding the August 28, 2012, event. It was determined that the Make Up Plant Operator improperly changed the pH monitor alarm set point to support an acid soak on a reverse osmosis membrane. This caused one pump-out to release approximately 46,000 gallons of effluent that was below the pH limit. During the next discharge period the pH value returned to an acceptable level of 6.6 pH. Based on the dilution of the effluent by the 6 million gallon settling pond, and additional groundwater dilution, it was determined that there is no impact to the surrounding groundwater from this event. The pH alarm setpoint was returned to its correct value per the procedure immediately. This was an isolated instance where work was performed outside of a process, procedure or permission. This event was entered into the CNP corrective action program. Human Resource aspects of the individual's performance have been addressed.

Enclosure 1 provides the I&M notification to MDEQ dated September 4, 2012. Enclosure 2 provides the I&M notification to MDEQ dated September 20, 2012. These notifications are provided, as enclosures to this letter, which is being sent in accordance with the CNP Environmental Technical Specification, Part II - Nonradiological Environmental Protection Plan, Section 5.4.2

IEZB
NRR

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

Sincerely,



Michael K. Scarpello
Regulatory Affairs Manager

Enclosures:

1. Letter from J. H. Harner, Indiana Michigan Power Company, to K. Jordan, Michigan Department of Environmental Quality, "American Electric Power Company, Donald C. Cook Nuclear Plant, Groundwater Permit No GW 1810102," dated September 4, 2012.
2. Letter from J. H. Harner, Indiana Michigan Power Company, to K. Jordan, Michigan Department of Environmental Quality, "American Electric Power Company, Donald C. Cook Nuclear Plant, Groundwater Permit No GW 1810102," dated September 20, 2012.

KMH/dmb

c: C. A. Casto, NRC Region III
J. T. King - MPSC
S. M. Krawec – AEP Ft Wayne
MDEQ- RMD/RPS
NRC Resident Inspector
T.J. Wengert, NRC Washington DC

ENCLOSURE 1 TO AEP-NRC-2012-80

LETTER TO MDEQ DATED SEPTEMBER 4, 2012

Letter from J. H. Harner, Indiana Michigan Power Company, to K. Jordan, Michigan Department of Environmental Quality, "American Electric Power Company, Donald C. Cook Nuclear Plant, Groundwater Permit No GW 1810102," dated September 4, 2012



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

September 4, 2012

Re: American Electric Power Company
Donald C. Cook Nuclear Plant
Groundwater Permit No. GW1810102

Dear Mr. Jordan:

This notification is made pursuant to Cook Nuclear Plant's Groundwater Permit GW 1810102, Part I.11. b, Compliance Requirements.

On August 28, 2012, we exceeded the pH lower limit at Outfall 00D, Turbine Room Sump. We have determined that at 1404 hrs on August 28, 2012, a discharge of approximately 46414 gallons at a pH range of 5.8 - 6.1 occurred. This exceeds the permit minimum pH limit of 6.5. We are currently investigating the issue and will provide the details in the 60 day letter as required in our permit.

As required by Part I.11.c, we have resampled using the on-line pH meter data. A value of 6.6 was recorded on August 28, 2012 at 1524 hrs during the next discharge period.

As required by Part I.11.d, we will submit a written report to the Kalamazoo Office within 60 days (due date October 27, 2012).

Please contact me at telephone (269) 465-5901 ext. 2102 if you have any questions regarding this information.

Sincerely,

Jon H. Harner
Environmental Manager
Donald C. Cook Nuclear Plant

c: Mr. Steve Norton, MDEQ - Kalamazoo
USNRC per Appendix B. T.S.

ENCLOSURE 2 to AEP-NRC-2012-80

LETTER TO MDEQ DATED SEPTEMBER 20, 2012

Letter from J. H. Harner, Indiana Michigan Power Company, to K. Jordan, Michigan Department of Environmental Quality, "American Electric Power Company, Donald C. Cook Nuclear Plant, Groundwater Permit No GW 1810102," dated September 20, 2012



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

September 20, 2012

Re: American Electric Power Company
Donald C. Cook Nuclear Plant (CNP)
Groundwater Permit No. GW1810102

Dear Mr. Jordan:

This notification is made pursuant to Cook Nuclear Plant's Groundwater Permit GW 1810102, Part I.11. d, Compliance Requirements.

This letter is a follow-up letter to our previous notification dated September 4, 2012. The lower limit for pH for Outfall OOD (Turbine Room Sump) was exceeded during a pump-out on August 28, 2012. Approximately 46414 gallons of pH range 5.8 - 6.1 was discharged to the on site absorption pond.

As required by Part I.11.c, the on-line pH meter data recorded a pH value of 6.6 on August 28, 2012 at 1524 hrs during the next discharge period.

The following is a summary of an internal evaluation of the cause for the pH lower limit to be exceeded:

On August 28, 2012, Chemistry Technicians found the lower alarm set point of the pH meter of the Turbine Room Sump (TRS) at 5.4 pH and not the required administrative set point of 7.0 pH. An investigation revealed that the designated Make Up Plant (MUP) operator errantly changed the set point to support an acid soak on a reverse osmosis (RO) membrane. Data trends from the plant process computer indicated an exceedence of the NPDES permit occurred at 14:04 on August 28, 2012 due to pumping out TRS water to the absorption pond with water at a pH below the permit limit of 6.5 pH. Based on verification from Chemistry, 46,414 gallons of effluent was pumped out below the pH limit. Upon discovery, the pH alarm set point was immediately returned to the correct value per the procedure.

The CNP corrective action process determined that this was an isolated instance where decision making occurred outside our normal process, procedure, and without proper permission. The individual responsible for incorrectly changing the alarm set points has been relieved of his duties and released from employment by CNP.

Mr. Kameron Jordan
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The exceedence occurred for approximately 20 minutes; the outfall pH was resampled on the next pump out and had returned to 6.6 pH (within permit limits). Based on the dilution of the effluent by a 6 million gallon settling pond, and additional groundwater dilution, there is no impact to the surrounding groundwater from this event.

Please contact me at telephone (269) 465-5901 ext. 2102 if you have any questions regarding this information.

Sincerely,

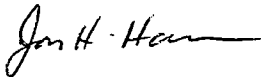


Jon H. Harner
Environmental Manager
Donald C. Cook Nuclear Plant

c: Mr. Steve Norton, MDEQ - Kalamazoo
USNRC per Appendix B. T.S.

Mr. Kameron Jordan
Outfall OOD exceedence report
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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.



J.H. Harner
Environmental Manager