

December 12, 2013

AEP-NRC-2013-95  
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 & 2**  
**SUBMITTAL OF TURBINE ROOM SUMP**  
**pH LOWER LIMIT EXCEEDANCE**

**References:**

1. Letter from J. H. Harner, Indiana Michigan Power Company (I&M), to K. Jordan, Michigan Department of Environmental Quality (MDEQ), "American Electric Power Company, Donald C. Cook Nuclear Plant, Groundwater Permit No. GW1810102," dated November 20, 2013.
2. Letter from J. H. Harner, I&M, to K. Jordan, MDEQ, "American Electric Power Company, Donald C. Cook Nuclear Plant, Groundwater Permit No. GW1810102," dated November 27, 2013.


By Reference 1, Indiana Michigan Power Company (I&M), the licensee for Donald C. Cook Nuclear Plant (CNP) Units 1 and 2, submitted to the Michigan Department of Environmental Quality (MDEQ), a notification of Turbine Room Sump (Outfall 00D) pH lower limit exceedance for Groundwater Permit GW1810102. I&M is submitting this report as required by CNP's Environmental Technical Specification, Part II – Nonradiological Environmental Protection Plan, Section 5.4.2. On November 14, 2013, between 1747 hours and 1752 hours, the Turbine Room Sump pH lower limit of 6.5 was exceeded. During this period, a discharge of approximately 9400 gallons at a pH range of 2.5 - 2.4 to the onsite absorption pond occurred. Turbine Room Sump pH value of 8.4 was recorded on November 15, 2013, at 0220 hours during the next discharge period, which is within CNP's Groundwater Permit pH range of 6.5 - 9.5. (This date was incorrectly documented as November 13, 2013, in Reference 1, but correctly documented in Reference 2).

By Reference 2, I&M submitted to the MDEQ a 60-day follow-up notification as required by GW1810102. The event was caused when a tank overflowed during a transfer of sulfuric acid from the main tank. Some of the acid overflowed the secondary containment and flowed to the turbine room sump. The pH of the sump dropped to a value of 2.4. The sump level was rising and in order to prevent an overflow of the sump, a small volume was pumped to the onsite absorption pond to clear the level alarm. The pH of the pond was 7.7 on November 18, 2013, which is within CNP's Groundwater Permit range of 6.5 - 9.5. To correct this event, the sump was neutralized until the correct pH levels were obtained. Corrective action taken to preclude repetition of this event is being managed by the Human Resources Organization, as I&M's evaluation identified this event as an isolated procedure violation. There was no impact to the environment as a result of this event.

COO/  
NRR

Reference 1 and Reference 2 are provided as enclosures to this letter in accordance with CNP's Environmental Technical Specification, Part II – Nonradiological Environmental Protection Plan, Section 5.4.2. This letter contains no new commitments. Should you have any questions, please contact Jon Harner, Environmental Manager, at (269) 465-5901, extension 2102.

Sincerely,

 for Michael Scarpello

Michael K. Scarpello  
Regulatory Affairs Manager

Enclosures:

1. Letter from J. H. Harner, Indiana Michigan Power Company (I&M), to K. Jordan, Michigan Department of Environmental Quality (MDEQ), "American Electric Power Company, Donald C. Cook Nuclear Plant, Groundwater Permit No. GW1810102," dated November 20, 2013.
2. Letter from J. H. Harner, I&M, to K. Jordan, MDEQ, "American Electric Power Company, Donald C. Cook Nuclear Plant, Groundwater Permit No. GW1810102," dated November 27, 2013.

KMH/amp

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

ENCLOSURE 1 TO AEP-NRC-2013-95

Letter from J. H. Harner, Indiana Michigan Power Company (I&M), to K. Jordan, Michigan Department of Environmental Quality (MDEQ), "American Electric Power Company, Donald C. Cook Nuclear Plant, Groundwater Permit No. GW1810102," dated November 20, 2013.



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

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

November 20, 2013

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 GW1810102, Part I.11.b, Compliance Requirements.

On November 14, 2013, the pH lower limit was exceeded at Outfall 00D, Turbine Room Sump (TRS). Between 1747 hrs and 1752 hrs on November 14, 2013 a discharge of approximately 9400 gallons at a pH range of 2.5 - 2.4 to the on-site absorption pond occurred. This exceeds the permit minimum pH limit of 6.5.

The discharge was performed to prevent overflowing the TRS, and was isolated as soon as practical.

As required by Part I.11.c, we have resampled using the on-line pH meter data. A pH value of 8.4 was recorded on November 13, 2013 at 0220 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 January 13, 2014).

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

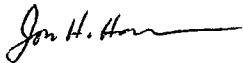
Sincerely,

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  
TRS pH exceedence  
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November 20, 2013

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, appearing to read "Jon H. Harner", written in black ink.

J.H. Harner  
Environmental Manager

Mr. Kameron Jordan  
TRS pH exceedence  
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bc: S. M. Partin  
J. P. Gebbie  
J. H. Harner  
C. E. Hawk  
R. E. Hite  
L. J. Weber  
M. K. Scarpello  
W. H. Schalk  
J. C. Krieger  
B. K. Zordell  
NDM  
MDEQ File

**ENCLOSURE 2 TO AEP-NRC-2013-95**

Letter from J. H. Harner, I&M, to K. Jordan, MDEQ, "American Electric Power Company, Donald C. Cook Nuclear Plant, Groundwater Permit No. GW1810102," dated November 27, 2013.



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

November 27, 2013

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 GW1810102, Part I.11.d, Compliance Requirements.

This letter is a follow-up letter to our previous notification dated November 20, 2013. On November 14, 2013, the pH lower limit was exceeded at Outfall 00D, Turbine Room Sump. Between 1747 hrs to 1752 hrs on November 14, 2013, a discharge of approximately 9400 gallons at a pH range of 2.5 - 2.4 to the on-site absorption pond occurred. This exceeds the permit minimum pH limit of 6.5.

As required by Part I.11.c, we have resampled using the on-line pH meter data. A pH value of 8.4 was recorded on November 15, 2013, at 0220 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:

The neutralization system for Outfall 00D was removed from service for maintenance at the time. The event was caused when a tank overflowed during a transfer of sulfuric acid from the main tank. Some (approximately 50 gallons) of the acid overflowed the secondary containment and flowed to the turbine room sump (Outfall 00D). The pH of the sump dropped to a value of 2.4. The sump level was rising, and in order to prevent an overflow of the sump, a small volume was pumped to the onsite absorption pond to clear the level alarm. There were no impacts to the receiving pond. The pH of the pond was 7.7 on November 18, 2013.

The CNP corrective action process investigated the incident to determine if this procedure violation or shortcut, is a work group norm, or a routine violation. The other Make Up Plant operators interviewed noted that they are fully aware of the consequences of an acid transfer and follow the procedure's written instructions not to leave the area when a transfer is occurring. Therefore, this procedure



Mr. Kaméron Jordan  
Outfall OOD exceedence report  
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violation was noted as an isolated incident, so additional preventive actions are not necessary to prevent recurrence. This particular incident was managed by Human Resources, where the individual was terminated.

The exceedence occurred for approximately 5 minutes; the outfall pH was resampled on the next pump out and had returned to 8.4 pH (within permit limits). A pH sample of the receiving pond on November 18, 2013 was 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  
Page 3  
November 27, 2013

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.

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J.H. Harner  
Environmental Manager