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

September 12, 2012

AEP-NRC-2012-75
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
FOLLOW UP NOTIFICATION OF NONCOMPLIANCE FOR
INORGANIC MERCURY CONCENTRATION

Reference: Letter from Michael K Scarpello, Indiana Michigan Power Company (I&M), to the Nuclear Regulatory Commission (NRC), "Notification of Noncompliance for Inorganic Mercury Concentration," AEP NRC 2012-68, dated August 21, 2012.

By letter dated August 7, 2012, Indiana Michigan Power Company (I&M), the licensee for Donald C. Cook Nuclear Plant (CNP) Units 1 and 2, submitted a notification of noncompliance for inorganic mercury concentration at monitoring well 1A to the Michigan Department of Environmental Quality. On August 1, 2012, the inorganic mercury concentration was measured at 1.75 ng/L, which exceeded the permit limit of 1.3 ng/L.

Per the reference, a notification was provided to the NRC in accordance with CNP Environmental Technical Specification, Part II – Nonradiological Environmental Protection Plan, Section 5.4.2.

By letter dated August 23, 2012, I&M submitted a letter to the Michigan Department of Environmental Quality, regarding the August 7, 2012, notification. It was determined by the contract lab, who performs sample analyses for I&M, that the sample preservative containers were a source of mercury. Since each sample is preserved as it arrives at the lab, the container may have contributed to high mercury values. The contract lab has replaced all plastic preservative containers with glass to prevent recurrence. As a follow-up measure, on August 7, 2012, well 1A was resampled and all samples were below detectable levels (0.0005 ug/L).

A copy of the follow up notification is provided as an enclosure to this letter, in accordance with the CNP Environmental Technical Specification, Part II - Nonradiological Environmental Protection Plan, Section 5.4.2.

C001
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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

KMH/dmb

Enclosure:

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 August 23, 2012.

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

ENCLOSURE TO AEP-NRC-2012-75

LETTER DATED AUGUST 23, 2012

AMERICAN ELECTRIC POWER, DONALD C. COOK NUCLEAR PLANT,
GROUNDWATER PERMIT NO. GW 1810102

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Cook Nuclear Plant
One Cook Place
Bridgman, MI 49106
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Mr. Kameron Jordan, District Supervisor
Michigan Department of Environmental Quality
Surface Water Quality Division
7953 Adobe Road
Kalamazoo, MI 49009

August 23, 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. d, Compliance Requirements.

This letter is a follow-up letter to our previous notification dated August 7, 2012. Upon discovery of the monitoring well 1A exceedence for low level mercury, we resampled well 1A on August 7, 2012. We performed duplicate samples, and submitted them to two separate labs for analysis. Results of confirmation sampling for Monitoring Well 1A were below detectable (<0.0005 ug/L) for all samples. In addition, trip blanks, and field blanks were also below detectable limits.

Evaluation of the cause for the limit being exceeded and the impact of that event to the groundwater: A review of the dataset from the July 9, 2012 sample date shows a high bias in all samples from the day with the exception of Monitoring Well 13. The contract laboratory has discovered that the preservative containers were a source of mercury, and that each sample is preserved as they arrive at the lab prior to analysis. These containers may have contributed to the high values, since both the trip blank and field blank were above detectable limits of 0.0005 ug/L. Based on evaluation of the most recent monitoring well low level mercury data, and the overall high bias for the July 9, 2012 dataset, we have concluded that there is a good possibility that the laboratory results were incorrect for the initial mercury results for well 1A. The current analysis for low level mercury shows no issue with the groundwater at the D.C. Cook site, so there is no impact to the surrounding groundwater.

Proposal detailing steps taken to prevent recurrence. The contract lab has switched from plastic to glass preservative containers, and also obtained a different water source to use in the low level mercury analysis. Based on the most recent data when compared to historical data, the results from the August 7, 2012 samples are acceptable. No further corrective actions are necessary for this issue.

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

Sincerely,

Jon H. Harner

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

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