

May 1, 2013

AEP-NRC-2013-43  
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 APPLIANCE REPAIR

- References:
1. Letter from M. K. Scarpello, Indiana Michigan Power Company, to U.S. Nuclear Regulatory Commission Document Control Desk, "Notification of Appliance Repair," AEP-NRC-2013-12, dated February 11, 2013.
  2. Letter from J. H. Harner, Indiana Michigan Power Company, to U.S. Environmental Protection Agency, dated April 19, 2013.

In Reference 1, Indiana Michigan Power Company (I&M), the licensee for Donald C. Cook Nuclear Plant (CNP) Units 1 and 2, submitted a repair notification to the Nuclear Regulatory Commission.

In Reference 2, I&M submitted a follow up notification of successfully performed repairs of the chiller, to the United States Environmental Protection Agency.

As described in Reference 1, due to an error in the scheduling process, a chiller equipment repair discovered on July 9, 2012, was extended beyond the required 30 day repair limit. It was discovered on January 15, 2013, that the repairs had not been made. A refrigerant leak located at the liquid line solenoid valve and three unloader solenoid valves occurred at the leak rate of 109 pounds per year, the maximum allowable leak rate for this chiller is 35 pounds per year. As a corrective measure, this chiller was removed from service and evacuated on January 18, 2013, with an estimated repair and return to service date of February 25, 2013. In addition, a retrofit/retirement of the entire system was to be completed by October 2013.

In Reference 2, I&M provided notification that CNP has successfully performed repairs of the chiller. Initial verification test and repairs to the liquid line solenoid valve and three of the unloader solenoid valves were performed during the week of March 15, 2013. Follow up verification testing was completed on March 28, 2013.

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A copy of Reference 2 is enclosed 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 Mr. Jon Harner, Environmental Manager, at (269) 465-5901, extension 2102.

Sincerely,



Michael K. Scarpello  
Regulatory Affairs Manager

KMH/rdw

Enclosure:

Letter from Jon Harner, Indiana Michigan Power Company, to U.S. Environmental Protection Agency, dated April 19, 2013

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 TO AEP-NRC-2013-43**

**Letter from Jon Harner, Indiana Michigan Power Company,  
to U.S. Environmental Protection Agency, dated April 19, 2013**



**INDIANA  
MICHIGAN  
POWER**

A unit of American Electric Power

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

April 19, 2013

Director  
Section 608 Recycling Program Manager  
Global Programs Division  
Mail Code: 6205J  
United States Environmental Protection Agency  
1200 Pennsylvania Avenue NW  
Washington D.C 20460.

Dear Sir or Madam:

We are providing you notification that we have successfully performed repairs of the chiller referenced in our previous notification letter dated January 31, 2013. The follow-up testing was completed on March 28, 2013.

Identification of facility: Cook Nuclear Plant located in Berrien County, Lake Township, Bridgman, Michigan.

The leak rate was calculated to be 109 % per year.

The method used to calculate leak rate is as follows:

$$\text{Leak rate (\% per year)} = \frac{\text{pounds of refrigerant added}}{\text{pounds of refrigerant in full charge}} \times \frac{365 \text{ days/year}}{\text{shorter of: \# days since refrigerant last added or 365 days}} \times 100\%$$

System manufacturer's determination of correct full charge was used to determine full charge.

The leak rate above the trigger point was discovered on 7/9/2012.

The maximum allowable leak rate for this chiller is 35 pounds per year.

The leak locations were the liquid line solenoid valve and three of the unloader solenoid valves.

Any repair work that has already been completed; and the date when that work was completed: The affected appliance was removed from service and evacuated (mothballed) on 1/18/2013, initial verification test and repairs to the liquid line solenoid valve and three of the unloader solenoid valves were repaired during the week of March 15, 2013. Follow up verification testing was completed on March 28, 2013.

USEPA  
April 19, 2013

Type of equipment, Make model size or unique ID.  
12-OME-129-9 Westinghouse 25 ton glycol chiller. R502 charged.

If you have any questions, please contact me at 269-465-5901 ext 2102 or Blair Zordell at 269-465-5901 ext 2006

Sincerely



Jon H. Harner  
Manager Environmental - Nuclear

Enclosure

c: Ms. Mary Douglas, MDNRE Air Quality Division Kalamazoo District Office  
USNRC per app. B T.S.