

February 11, 2013

AEP-NRC-2013-12  
10 CFR 50.4

Docket No.: 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 APPLIANCE REPAIR

- References:
1. Letter dated January 22, 2013, to United States Environmental Protection Agency, from Jon Harner, Environmental Manager, Indiana Michigan Power Company.
  2. Letter dated January 31, 2013, to United States Environmental Protection Agency, from Jon Harner, Environmental Manager, Indiana Michigan Power Company.

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 United States Environmental Protection Agency (EPA) in accordance with 40 CFR Part 82.166(n)(1).

In Reference 2, I&M, submitted a request for additional time for retrofit/retirement to the United States EPA in accordance with 40 CFR Part 82.156(i)(7)(i).

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 August 2013.

In Reference 2, I&M has requested to extend the completion of this retrofit/retirement to October 2013.

Copies of the notifications are enclosed in accordance with CNP's Environmental Technical Specification, Part II- Nonradiological Environmental Protection Plan, Section 5.4.2.

A001  
NRR

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/ssl

Enclosures:

1. Letter Dated January 22, 2013, to United States Environmental Protection Agency (EPA), from Jon Harner, Environmental Manager, Indiana Michigan Power Company (I&M)
2. Letter Dated January 31, 2013, to United States Environmental Protection Agency (EPA), from Jon Hamer, Environmental Manager, Indiana Michigan Power Company (I&M)

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-2013-12**

**Letter Dated January 22, 2013, to United States Environmental Protection Agency, from  
Jon Harner, Environmental Manager, Indiana Michigan Power Company**



**INDIANA  
MICHIGAN  
POWER**

A unit of American Electric Power

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

January 22, ~~2013~~ <sup>2013</sup> <sub>or</sub> 1-24-2013

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:

Pursuant to 40 CFR Part 82.166.n (1), we are providing you with an initial report regarding why more than 30 days are needed to complete an appliance repair. Due to a scheduling error, the equipment repair due date was extended to beyond the required 30 day limit.

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:

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

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: Due to error in the scheduling process, the job was moved out beyond the required 30 day period and the repairs were not performed. On 1/15/2013, it was discovered that the repairs had not yet been made. The affected appliance was removed from service and evacuated (mothballed) on 1/18/2013, with an estimated repair and return to service date of 2/25/2013.

USEPA

January 22, ~~2012~~ 2013

Page 2

Bk2 1-29-2012

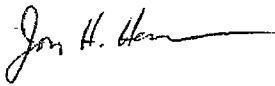
Type of equipment, Make model size or unique ID.

12-OME-129-9 Westinghouse 25 ton glycol chiller. R502 charged

A retrofit/retirement plan for the entire 10 compressor system is in progress. Due to nuclear safety requirements placed on this system, a minimum of 6 operable compressors are needed at this time. Based on the current schedule, the estimated completion date for the entire retrofit/retirement project is August 8, 2013.

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.



**INDIANA  
MICHIGAN  
POWER®**

*A unit of American Electric Power*

**Indiana Michigan Power**  
Cook Nuclear Plant  
One Cook Place  
Bridgman, MI 49106  
[IndianaMichiganPower.com](http://IndianaMichiganPower.com)

January 30, 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:

In a previous correspondence that we sent you on January 22, 2013, we noted an error in the date. The year was incorrectly shown as 2012, instead of 2013. We are attaching the original letter we sent to you with the corrected date. We apologize for the inconvenience.

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.

bc:

J. C. Hendricks/D. J. Long - Columbus  
S. M. Partin  
J. P. Gebbie  
J. H. Harner  
C. E. Hawk  
L. J. Weber  
M. K. Scarpello  
W. H. Schalk  
B. K. Zordell  
NDM  
MDEQ File

ENCLOSURE 2 TO AEP-NRC-2013-12

Letter Dated January 31, 2013, to United States Environmental Protection Agency, from  
Jon Harner, Environmental Manager, Indiana Michigan Power Company





**INDIANA  
MICHIGAN  
POWER®**

A unit of American Electric Power

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

January 31, 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:

Pursuant to 40 CFR Part 82.156.(i) (7) and 40CFR Part 82.156 (i) (7) (i) we are requesting additional time to complete the retrofit/retirement of the Glycol Chiller replacement project PRF040034.

Identification of facility: Cook Nuclear Plant located in Berrien County, Lake Township, Bridgman, Michigan. Mailing address is: One Cook Place, Bridgman, MI 49106

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 %.

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 (mothballed) and evacuated on 1/18/2013, with an estimated repair and return to service date of 2/25/2013.

Replacement work continues on the system. Two of the ten chillers have been staged for replacement. In our original request dated January 22, 2013 we stated that the retrofit/retirement project would be completed on August 8,

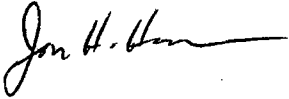
2013. Due to Nuclear Regulatory Commission safety requirements, we are working to ensure adequate back up chillers are available to the system during the replacement process. The remaining eight chillers are on schedule to be completed prior to the upcoming refueling outage in October 2013. Each Compressor in the new system uses 46.3 pounds of refrigerant R404A, which is a substitute to R502 with a lower ozone -depleting potential.

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.

bc:

J. C. Hendricks/D. J. Long - Columbus  
S. M. Partin  
J. P. Gebbie  
J. H. Harner  
C. E. Hawk  
L. J. Weber  
M. K. Scarpello  
W. H. Schalk  
B. K. Zordell  
NDM  
MDEQ File