



**INDIANA  
MICHIGAN  
POWER®**

*A unit of American Electric Power*

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

June 1, 2006

AEP:NRC:6054-03

Docket Nos.: 50-315  
50-316

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
11555 Rockville Pike  
Rockville, MD 20852

Donald C. Cook Nuclear Plant Units 1 and 2  
60 DAY RESPONSE TO NUCLEAR REGULATORY COMMISSION GENERIC LETTER  
2006-03: POTENTIALLY NONCONFORMING HEMYC AND  
MT FIRE BARRIER CONFIGURATIONS

Generic Letter 2006-03 notified licensees of deficiencies identified in Hemyc and MT fire barriers during Nuclear Regulatory Commission (NRC) testing that was conducted in 2005. The testing revealed that both materials failed to provide the protective function intended for compliance with existing regulations for the configurations tested. The NRC requested that, within 60 days, licensees provide a statement on whether Hemyc or MT fire barrier material is used in their plants, and a description of the controls that were used to ensure that other fire barrier types relied on for the separation of redundant trains located in a single fire area are capable of providing the necessary level of protection. Additionally, plants that have installed Hemyc or MT fire barrier material were requested to provide additional information regarding the application of Hemyc or MT fire barrier material.

Indiana Michigan Power Company's response to the request is provided in the attachment to this letter.

This letter contains no new commitments. Should you have any questions, please contact Mr. Michael K. Scarpello, Regulatory Affairs Supervisor, at (269) 466-2649.

Sincerely,

Mark A. Peffer  
Site Vice President

RGV/rdw

A123

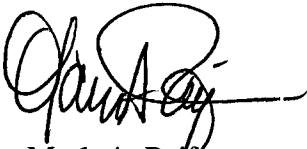
Attachment: 60 Day Response to Nuclear Regulatory Commission Generic Letter 2006-03,  
Potentially Nonconforming Hemyc and MT Fire Barrier Configurations

c: J. L. Caldwell – NRC Region III  
K. D. Curry – AEP Ft. Wayne  
J. T. King – MPSC  
MDEQ – WHMD/RPMWS  
NRC Resident Inspector  
P.S. Tam – NRC Washington, DC

**AFFIRMATION**

I, Mark A. Peifer, being duly sworn, state that I am Site Vice President of Indiana Michigan Power Company (I&M), that I am authorized to sign and file this response with the Nuclear Regulatory Commission on behalf of I&M, and that the statements made and the matters set forth herein pertaining to I&M are true and correct to the best of my knowledge, information, and belief.

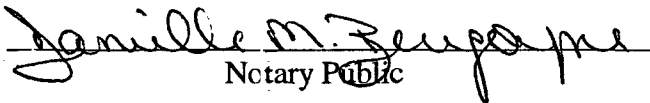
Indiana Michigan Power Company



Mark A. Peifer  
Site Vice President

SWORN TO AND SUBSCRIBED BEFORE ME

THIS 1 DAY OF June, 2006

  
Notary Public

My Commission Expires Apr. 4, 2008

**DANIELLE M. BURGOYNE**  
Notary Public, State of Michigan  
County of Berrien  
My Commission Expires Apr. 4, 2008  
Acting in the County of Berrien

**60 DAY RESPONSE TO NUCLEAR REGULATORY COMMISSION GENERIC LETTER  
2006-03: POTENTIALLY NONCONFORMING HEMYC AND  
MT FIRE BARRIER CONFIGURATIONS**

Generic Letter (GL) 2006-03 notified licensees of deficiencies identified in Hemyc and MT fire barriers during Nuclear Regulatory Commission (NRC) testing that was conducted in 2005. The testing revealed that both materials failed to provide the protective function intended for compliance with existing regulations for the configurations tested. The NRC requested that, within 60 days, licensees provide a statement on whether Hemyc or MT fire barrier material is used in their plants, and a description of the controls that were used to ensure that other fire barrier types relied on for separation of redundant trains located in a single fire area are capable of providing the necessary level of protection. Additionally, plants that have installed Hemyc or MT fire barrier material were requested to provide additional information regarding the application of Hemyc or MT fire barrier material.

Indiana Michigan Power Company's (I&M's) response to the request is provided below.

***NRC Request 1a***

*Provide a statement on whether Hemyc or MT fire barrier material is used at the Donald C. Cook Nuclear Plant (CNP) and whether it is relied upon for separation and/or safe shutdown purposes in accordance with the licensing basis, including whether Hemyc or MT is credited in other analyses (e.g., exemptions, license amendments, GL 86-10 analyses).*

**I&M Response to 1a**

Neither Hemyc nor MT fire barrier material is installed at CNP.

***NRC Request 1b***

*Provide a description of the controls that were used to ensure that other fire barrier types relied on for separation of redundant trains located in a single fire area are capable of providing the necessary level of protection. Licensees may reference their responses to GL 92-08 to the extent that the responses address this specific issue.*

**I&M Response to 1b**

As a result of the deficiencies identified for Thermo-Lag material in GL 92-08, Darmatt was installed at CNP to replace most of the Thermo-Lag material. With support provided by Transco Products, Incorporated, Darmatt was installed with an approved plant procedure that was based on the vendor recommended procedure for the installation of Darmatt KM1

Fire Protection System. The vendor procedure was tailored to address the Darmatt applications at CNP. Fire test reports supporting the CNP Darmatt applications are identified in the procedure. The replacement of Thermo-Lag material with Darmatt was documented in I&M's response to GL 92-08 (References 1 and 2).

Mecatiss<sup>®</sup> has been used as a cable tray 1-hour fire wrap in one fire zone to achieve compliance with 10 CFR 50, Appendix R, Section III.G.2(b). With support provided by Brand Fire Protection Services, Mecatiss<sup>®</sup> was installed in accordance with a Brand Fire Protection Services manual. Fire test reports supporting the CNP application are identified in the manual.

Thermo-Lag material is used as a fire-rated barrier to provide separation between fire areas in the Unit 1 and Unit 2 hot shutdown panel enclosures. This use of Thermo-Lag material was qualified with an application specific evaluation that was supported by field testing. This use of Thermo-Lag material is documented in References 1 and 2. Additionally, Thermo-Lag material in the Unit 1 CD Diesel Generator Room and the Unit 2 AB Diesel Generator Room, in conjunction with the existing fire detection and fire suppression system, has been evaluated to credit the current barrier configuration for compliance with 10 CFR 50, Appendix R, Section III.G.2(c).

The Darmatt, Mecatiss<sup>®</sup>, and Thermo-Lag applications are inspected every 24 months to ensure continued compliance.

CNP is transitioning to 10 CFR 50.48(c), NFPA 805 Standard. During this transition, CNP intends to re-establish the compliance of the Thermo-Lag, Darmatt, and Mecatiss<sup>®</sup> fire wraps through the application of technical evaluations that consider potential adverse effects, risk, defense-in-depth, and safety margins.

#### ***NRC Request 2***

*For those licensees that have installed Hemyc of MT fire barrier materials, discuss the following in detail:*

*[Items not repeated as this request is not applicable to CNP.]*

#### **I&M Response to 2**

This item is not applicable because neither Hemyc nor MT fire barrier materials are installed at CNP.

***NRC Request 3***

*No later than December 1, 2007, addresses that identified in 1.a Hemyc and/or MT configurations are requested to provide a description of actions taken to resolve the nonconforming conditions described in 2.d.*

**I&M Response to 3**

This item is not applicable because neither Hemyc nor MT fire barrier materials are installed at CNP.

**References**

1. Letter from E. E. Fitzpatrick, I&M, to NRC Document Control Desk, "Donald C. Cook Nuclear Plant Units 1 and 2, Response to Generic Letter (GL) 92-08, 'Thermo-Lag 330-1 Fire Barriers,'" AEP:NRC:0692DB, dated December 27, 1996.
2. Letter from John F. Stang, Jr., NRC, to Robert P. Powers, I&M, "Completion of Licensing Action for Generic Letter 92-08, 'Thermo-Lag 330-1 Fire Barriers,' Dated December 17, 1992 for Donald C. Cook Nuclear Power Plant, Unit Nos. 1 and 2, TAC Nos. M85538 and M85539," dated August 27, 1998.