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Thomas A. Marlow  
Director,  
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OCAN060601

June 7, 2006

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

**SUBJECT:** Response to Generic Letter 2006-03, Potentially Nonconforming Hemyc  
and MT Fire Barrier Configurations  
Plant Name Arkansas Nuclear One, Units 1 and 2  
Docket Nos. 50-313 and 50-368  
License No. DPR-51 and NPF-6

**REFERENCES** 1. NRC letter dated April 10, 2006, *Potentially Nonconforming Hemyc  
and MT Fire Barrier Configurations* (OCNA040602)

Dear Sir or Madam:

Per Reference 1, the NRC issued Generic Letter (GL) 2006-03 to request facilities to confirm compliance with existing applicable regulatory requirements, and if appropriate, take additional actions. Specifically, although Hemyc and MT fire barriers may be relied on to protect electrical and instrumentation cables and equipment that provide safe shutdown capability during a fire, 2005 NRC testing has revealed that both materials failed to provide the protective function intended for compliance with existing regulations. The requested information is being made under the requirements of 10 CFR 50.54(f).

The Arkansas Nuclear One, Unit 1 and Unit 2 (ANO) response to the requested information in GL 2006-03 is contained in the attachment to this submittal. Entergy is not making any commitments as a result of our response to this letter. If you have any questions or require additional information, please contact Stephenie Pyle at 479-858-4704.

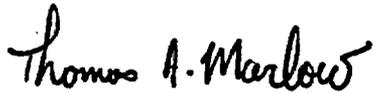
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I declare under penalty of perjury that the foregoing is true and correct.

Executed on June 7, 2006.

Sincerely,



TAM/SLP

Attachment: Response to Generic Letter 2006-03 for ANO-1 and ANO-2

cc: Dr. Bruce S. Mallett  
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U. S. Nuclear Regulatory Commission  
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**Attachment to**

**OCAN060601**

**Response to Generic Letter 2006-03 for ANO-1 and ANO-2**

**Response to Generic Letter 2006-03 for ANO-1 and ANO-2**

**Requested Information**

*Addressees are requested to determine whether or not Hemyc or MT fire barrier material is installed and relied upon for separation and/or safe shutdown purposes to satisfy applicable regulatory requirements. In addition, licensees are asked to describe controls that were used to ensure the adequacy of other fire barrier types, consistent with the assessment requested in GL 92-08.*

*Addressees that credit Hemyc or MT for compliance are requested to provide information regarding the extent of installation, whether the material complies with regulatory requirements, and any compensatory actions in place to provide equivalent protection and maintain safe shutdown function of affected areas of the plant in light of the recent findings associated with Hemyc and MT. Licensees are requested to provide evaluations to support conclusions that they are in compliance with regulatory requirements for the Hemyc and MT applications. Licensees that cannot justify their continued reliance on Hemyc or MT are requested to provide a description of corrective actions taken or planned and a schedule for milestones, including when full compliance will be achieved.*

*Compensatory measures and corrective actions must be implemented in accordance with existing regulations commensurate with the safety significance of the nonconforming condition. The NRC expects all licensees to fully restore compliance with 10CFR50.48 and submit the required documentation to the NRC by December 1, 2007.*

**NRC Request 1(a)**

*Provide a statement on whether Hemyc or MT fire barrier material is used 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).*

**ANO Response to Request 1(a):**

At ANO, Hymyc is used as a one hour rated barrier to meet 10CFR Appendix R separation requirements. ANO does not use the 3-hour fire rated MT configuration.

**NRC Request 1(b)**

*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. Addressees may reference their responses to GL 92-08 to the extent that the responses address this specific issues.*

**ANO Response to Request 1(b):**

In addition to Hemyc, ANO also uses Thermo-Lag 3 and Versa Wrap fire barrier types to meet 10CFR Appendix R separation requirements. These systems are qualified by various fire tests conducted by independent laboratories consistent with the guidance provided in Generic Letter 86-10, Supplement 1.

**NRC Request 2(a)**

*For those addressees that have installed Hemyc or MT fire barrier materials, discuss the extent of the installation (e.g., linear feet of wrap, areas installed, systems protected).*

**ANO Response to Request 2(a):**

Wrap	Unit	System Protected	Fire Zone	Approximate Linear Feet <sup>1</sup>
Hemyc	1	Emergency Diesel Generator	149-E	77
Hemyc	1	Primary Makeup	20-Y & 34-Y	110
Hemyc	1	Service Water	Intake, 34-Y, 40-Y & 73-W	451
Hemyc	1	Emergency Feedwater	38-Y	85
Hemyc	1	Power	98-J	79
Hemyc	2	Service Water	Intake & 2006-LL	102
Hemyc	2	Primary Charging	2040-JJ	40
Hemyc	2	Emergency Diesel Generator	2073-DD	55

<sup>1</sup> The total linear feet identified is the amount of wrap for the raceway protected and does not include any interferences or supports that had to be wrapped.

**NRC Request 2(b)**

*For those addressees that have installed Hemyc or MT fire barrier materials, discuss whether the Hemyc and/or MT installed in their plants is conforming with their licensing basis in light of recent findings, and if these recent findings do not apply, why not.*

**ANO Response to Request 2(b):**

Based on NRC testing, the Hemyc installed at ANO does not conform to the licensing basis and has been declared inoperable at this time.

**NRC Request 2(c)**

*For those addressees that have installed Hemyc or MT fire barrier materials, discuss the compensatory measures that have been implemented to provide protection and maintain the safe shutdown function of affected areas of the plant in light of the recent findings associated with Hemyc and MT installations, including evaluations to support the addressees' conclusions.*

**ANO Response to Request 2(c):**

In areas where operable fire detection has been verified, hourly fire watch patrols have been established where Hymec is credited as part of the 10CFR Appendix R compliance strategy. If fire detection should become inoperable in these areas, continuous fire watch patrols will be established.

**NRC Request 2(d)**

*For those addressees that have installed Hymec or MT fire barrier materials, provide a description of, and implementation schedules for, corrective actions, including a description of any licensing actions or exemption requests needed to support changes to the plant licensing basis.*

**ANO Response to Request 2(d):**

In correspondence dated November 2, 2005 (OCAN110502), ANO submitted a letter of intent to adopt NFPA 805 (Performance-Based Standard for Fire Protection for Light Water Reactor Generating Plants, 2001 Edition). The NRC approved the request for this transition to the performance based standard in correspondence dated January 31, 2006 (OCNA010613). The transition, which includes corrective actions to address Hymec configurations, will lead to the development of license amendment requests for both units. The transition has been initiated and will take approximately 36 months to fully implement.

**NRC Request 3**

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

**ANO Response to Request 3:**

The nonconforming Hymec conditions will not be addressed prior to the December 1, 2007 date requested. As stated in the response to Request 2(d), Hymec configurations will be addressed in the implementation of NFPA 805. To be effective, the implementation of NFPA 805 must be performed in an integrated fashion; therefore, it would not be practical to address the Hymec issue separately in advance of the project completion date. The ANO letter of intent indicated that the conversion to NFPA 805 would take approximately 36 months to implement. Therefore, complete resolution of this issue is not anticipated prior to December 2008.