

U.S. NUCLEAR REGULATORY COMMISSION
NUCLEAR INFORMATION AND RESOURCE SERVICE
ALL NUCLEAR POWER PLANTS THAT USE HEMYC/MT FIRE BARRIERS
NOTICE OF ISSUANCE OF DIRECTOR'S DECISION UNDER 10 CFR 2.206

Notice is hereby given that the Director, Office of Nuclear Reactor Regulation, has issued a Director's Decision with regard to a petition dated May 12, 2005, filed by Paul Gunter on behalf of the Nuclear Information and Resource Service, Citizens Awareness Network, Indian Point Safe Coalition, North Carolina Waste Awareness and Reduction Network, Alliance fo Affordable Energy, and Blue Ridge Environmental Defense League, hereinafter referred to as the "petitioners." The petition was supplemented on June 1, 2005. The petition concerns the operation of all nuclear power plants that use Hemyc/MT fire barriers.

The petition requested that the U.S. Nuclear Regulatory Commission (NRC) engage in enforcement actions to modify and/or suspend operating licenses for Shearon Harris Nuclear Power Station Unit 1, H. B. Robinson Unit 2, McGuire Units 1 and 2, Catawba Units 1 and 2, Ginna, James A. Fitzpatrick, Indian Point Units 2 and 3, Vermont Yankee, Waterford Unit 3, and Arkansas Nuclear One Units 1 and 2.

As the basis for the requests, the petitioners cited a meeting on April 29, 2005, held by NRC with all stakeholders to discuss the performance of 1-hour (Hemyc) and 3-hour (MT) fire barriers for Electrical Raceways during full scale fire testing. In that meeting the NRC staff informed all stakeholders that the Hemyc/MT electrical raceway fire barrier system (ERFBS) failed to protect electrical cables for 1 hour/3 hours in fire tests that were performed to the American Society of Testing and Materials (ASTM) Standard E119. The petitioners' request was also based on the following conclusions made by the petitioners: (1) The same Hemyc/MT

fire barrier wrap systems as installed in the above nuclear plants fail to assure the protection of the control room operations for achieving safe shutdown of the reactor in the event of a significant fire, (2) NRC has not quantified the full extent of the amount of Hemyc/MT fire barrier material in terms of linear and/or square footage deployed per fire protection regulation, and NRC has not determined the safety significance of this deployment for safe shutdown systems that are not currently protected by these fire barriers, and (3) the petitioners believe that the above listed nuclear power stations are operating in violation of NRC fire protection requirements and in an unanalyzed condition resulting in a degradation of defense-in-depth fire protection and safe shut down in the event of a significant fire.

The petitioners requested that the NRC take the following actions:

- 1) Collect information through generic communications with nuclear industry and specifically with the named reactor sites to determine the extent of condition of the inoperable fire barriers; including the requirement that the licensees conduct a full inventory of the type Hemyc/MT to include the amount in linear and square footage, its specific applications, and the identification of safe shutdown systems, which are currently unprotected by the noncompliance and an assessment of the safety significance of each application;
- 2) The communication should require, at minimum that the above-named sites provide justification for operation in noncompliance with all applicable fire protection regulations; and
- 3) With the determination that any and/or all of the above-mentioned sites are operating in unanalyzed condition and/or that assurance of public health and safety is degraded, promptly order a suspension of the license or a power reduction of the affected reactors until such time as it can be demonstrated that the licensees are operating in conformance with all other applicable fire protection regulations.

In a letter dated June 27, 2005, the NRC informed the petitioners that the issues in the petition were accepted for review under Section 2.206 of the *Code of Federal Regulations* (10 CFR) and had been referred to the Office of Nuclear Reactor Regulation for appropriate action. A copy of the acknowledgment letter is publicly available in the NRC's Agencywide Documents Access and Management System (ADAMS) under Accession No. ML051740562. A copy of the petition is publicly available in ADAMS under Accession No. ML051440209.

The petitioners' representatives held a teleconference with the Petition Review Board to discuss the petition on June 1, 2005. The teleconference transcript was treated as a supplement to the petition and is publicly available in ADAMS under Accession No. ML051640452.

The NRC sent a copy of the proposed Director's Decision to the petitioners for comment on October 20, 2005 (Accession No. ML052630411). The NRC staff did not receive any comments on the proposed Director's Decision.

The Director of the Office of Nuclear Reactor Regulation has determined that, with regard to Request Nos. 1 and 2, the NRC staff has granted the petitioners' request through the generic communication process. Specifically, the NRC staff is planning to issue a Generic Letter (GL) to all licensees asking them to provide detailed information about the use of Hemyc/MT in their nuclear power plants. In response to Request No. 3, the NRC staff is planning to review all affected plants in detail and will take appropriate actions to resolve the issues with the use of Hemyc/MT material commensurate with the safety significance of the protected systems. The GL will be issued after the NRC's internal review process to consider comments received on the proposed GL is completed.

The reasons for these decisions are explained in the Director's Decision pursuant to 10 CFR 2.206 (DD-06-01), the complete text of which is available in ADAMS, and is available for inspection at the Commission's Public Document Room (PDR), located at One White Flint

North, Public File Area O1 F21, 11555 Rockville Pike (first floor), Rockville, Maryland, and from the ADAMS Public Library component on the NRC Web site, <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room). Persons who do not have access to ADAMS or who encounter problems in accessing the documents located in ADAMS should contact the NRC PDR reference staff at 1-800-397-4209 or 301-415-4737, or by e-mail to pdr@nrc.gov.

A copy of the Director's Decision will be filed with the Secretary of the Commission for the Commission's review in accordance with 10 CFR 2.206 of the Commission's regulations. As provided for by this regulation, the Director's Decision will constitute the final action of the Commission 25 days after the date of the decision, unless the Commission, on its own motion, institutes a review of the Director's Decision in that time.

Dated at Rockville, Maryland, this 9th day of January 2006.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/
J. E. Dyer, Director
Office of Nuclear Reactor Regulation