

November 26, 2003

Mr. Michael Mulligan  
5 Wood Lawn Lane  
Hinsdale, NH 03451

Dear Mr. Mulligan:

I am responding to your e-mails dated August 17, 2003, addressed to Ms. Mindy Landau of the Nuclear Regulatory Commission (NRC). Copies of your e-mails are enclosed for completeness, and are also available in the NRC's Agencywide Documents Access and Management System (ADAMS), under Accession Number ML032390297.

Your e-mails describe your concern about nuclear plants being forced to rely on emergency electrical power such as emergency diesel generators (EDGs) during the northeast blackout on August 14, 2003. You also questioned if the NRC should be granting notices of enforcement discretion (NOEDs) to allow licensees to extend the time that EDGs are permitted to be inoperable, considering that the grid appears to be less reliable than previously thought.

Commercial nuclear power plants in the United States are required to be able to cope for extended periods of time with the loss of offsite power. All of the nuclear plants have a minimum of two supplies of emergency electrical power available, typically EDGs, either of which is capable of supplying all the electrical power needed to maintain a nuclear plant in a safe shutdown condition. The plant Technical Specifications (TSs) require these EDGs to be operable, and also require corrective actions if one or more of the EDGs become inoperable (not able to perform its safety function).

During the northeast blackout on August 14, 2003, nine nuclear power plants in the United States lost offsite power. All the safety-related EDGs at these plants were operable and functioned as designed, and the nuclear plants were maintained in a safe shutdown condition. The Joint Task Force appointed by President Bush to investigate this event has released its initial report, which is available on the Department of Energy web site at [www.doe.gov](http://www.doe.gov). There were no issues with the response of the nuclear plants.

The NRC has tracked the reliability of the electrical grid for years. A recent NRC report dated April 29, 2003, "Operating Experience Assessment - Effects of Grid Events on Nuclear Power Plant Performance," concluded that the frequency of loss of offsite power events at nuclear power plants has decreased since deregulation (after 1996) compared with the period of 1985-1996. However, the average duration of the loss of offsite power has increased. This report is available in ADAMS under Accession Number ML031220116. The NRC has also kept the nuclear industry apprized of possible effects from reduced grid reliability. Some documents issued include Regulatory Issue Summary 00-024, "Concerns about Offsite Power Voltage Inadequacies and Grid Reliability Challenges Due to Industry Deregulation," dated December 21, 2000, and Information Notice 2000-006, "Offsite Power Voltage Inadequacies," dated March 27, 2000. These documents are available from the NRC web site, [www.nrc.gov](http://www.nrc.gov).

You stated in your e-mails that the NRC had granted NOEDs allowing EDGs to be inoperable for longer than allowed by the TSs. You stated there were four of these NOEDs in 2001, four in 2002, and two (so far) in 2003. The TSs already allow some out-of-service time for EDGs. The NRC NOEDs do not add significantly to the overall out-of-service time. The NRC monitors the EDG unavailability time using a performance indicator for each reactor. This is part of the reactor oversight program, is available on the NRC web site, and is updated quarterly. The performance indicator for emergency AC power is basically the average out-of-service percentage for each EDG. If the EDG out-of-service time increases above 2.5% (about 2.3 days per quarter), the performance indicator color code changes from green to white. The licensee is required to enter the degraded EDG performance in their corrective action program, and develop and implement actions to improve the performance. The NRC performs additional inspections to ensure the licensee is taking effective corrective actions. A quick review of the current performance indicators shows that the nuclear plants are averaging less than 2% EDG unavailability, and only two of 103 nuclear plants have a white performance indicator.

The NRC will continue to track grid reliability issues, and take corrective actions as needed. We take our responsibility to protect the public health and safety very seriously. We will continue to review your e-mail messages for issues that are within NRC jurisdiction and that warrant additional action on our part, in accordance with our processes and procedures. I trust that this response addresses your concerns.

Sincerely,

***/RA by JClifford for/***

Cornelius F. Holden, Director  
Project Directorate I  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Enclosure: As stated

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