

Union of Concerned Scientists

May 26, 2000

Mr. Hubert J. Miller
Regional Administrator
United States Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406-1415

SUBJECT: NRC DAILY EVENT REPORT 37034, HOPE CREEK GENERATING STATION

Dear Mr. Miller:

According to NRC Daily Event Report (DER) No. 37034, all four of the operating Filtration, Recirculation, and Ventilation System (FRVS) fans tripped on May 25, 2000. The report stated:

"Investigation into the cause of the fan trips has identified a manual damper in the ventilation system ductwork that failed to the closed position. This manual damper is normally open during power operation. This damper is repositioned closed during refueling outages to redistribute ventilation through the Secondary Containment. Immediate actions were taken to return the damper to the open position. Recirculation fans have been returned to service and are operating satisfactorily.

"The ventilation system ductwork was reviewed to identify other manual dampers that could have the same or similar affect on system operation. Two other dampers were identified, their positions have been verified to be correct."

Thus, it appears that the single failure of one manual damper completely stopped all of the operating FRVS fans.

Section 6.8 of the Hope Creek Updated Final Safety Analysis Report (UFSAR) covers the FRVS. Section 6.8.1.3 stated:

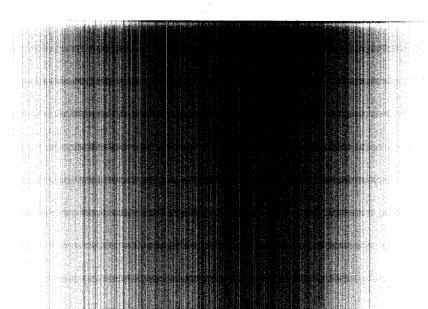
"The FRVS Recirculation System is designed to filter contaminated air in the Reactor Building following a postulated accident or abnormal occurrence that could result in high airborne radiation in the Reactor Building. ... Redundant components are provided to ensure that a single failure does not impair or preclude system operation and performance."

It is not clear how a safety system that is purportedly designed to be single-failure proof could be incapacitated by a single failure.

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The failure mode and effect analysis for the FRVS that was documented in Table 6.8-3 of the Hope Creek UFSAR seems to have been demonstrated to be deficient by this event.

Based upon our review of this DER and of the Hope Creek UFSAR, UCS has the following questions:

- 1. How did a single failure incapacitate a single-failure proof system?
- 2. Will the failure mode and effect analysis for the FRVS as documented in the Hope Creek UFSAR be updated to reflect the failure modes identified by this event?
- 3. What measures have been taken by NRC and/or Hope Creek's owner to determine if the FRVS failure mode and effect analysis was the only one that failed to properly consider all failure modes?

Sincerely,

David A. Lochbaum Nuclear Safety Engineer

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