



EVENT DESCRIPTION (continued)

and reactor power was reduced to clear the alarms. After the alarms had cleared, power was slowly increased until 0450 hours, when an apparent off-gas explosion occurred. Reactor power was further reduced to approximately 360 MWe. Standby steam jet air ejector (SJAE) "3A" was placed in service. However, further investigation indicated that the rupture diaphragm in both SJAE's had been damaged, and a unit shutdown was initiated and completed by 1038 hours. Off-gas system explosions have occurred previously on both units 2 and 3. Corrective action implemented was replacement of the failed diaphragms and the "3B" off-gas filter. (050-249/76-7)

CAUSE DESCRIPTION (continued)

The explosion apparently failed both SJAE diaphragms at the same time. It is assumed that the pressure wave failed the rupture diaphragms in both the operating SJAE "3B" and the standby SJAE "3A" due to leakage through the discharge valve. Although personnel on shift at the time reported hearing two explosions, no evidence could be found to support this theory. The "3B" off-gas filter in service at the time of the explosion was damaged and subsequently replaced. Prior to the unit startup, both filters were tested and off-gas system valve lineups were verified to be correct.

An investigation of this and other previous off-gas explosions has been initiated. The investigation will address the origin and prevention of off-gas system explosions.



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BBS Ltr. #412-76

May 27, 1976

Mr. James G. Keppler, Regional Director  
Directorate of Regulatory Operations -Region III  
U. S. Nuclear Regulatory Commission  
799 Roosevelt Road  
Glen Ellyn, Illinois 60137

Enclosed please find Reportable Occurrence number 50-249/1976-7.  
This report is being submitted to your office in accordance with the  
Dresden Nuclear Power Station Technical Specifications, Section 6.6.B.

*for* *Arthur M Roberts*  
B. B. Stephenson  
Station Superintendent  
Dresden Nuclear Power Station

BBS:smp

Enclosure

cc: Director of Inspection & Enforcement  
Director of Management Information & Program Control  
File/NRC



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