



Regulatory

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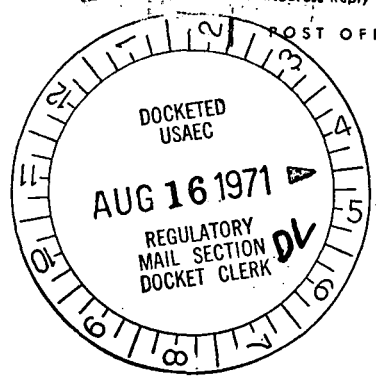
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Commonwealth Edison Company

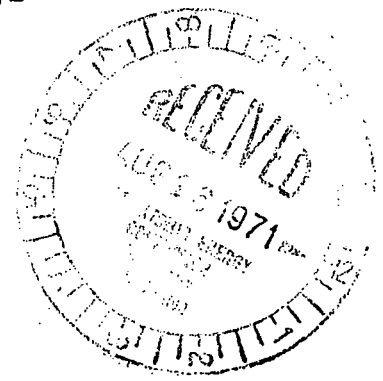
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Dresden Nuclear Power Station
R. R. #1
Morris, Illinois 60450
August 13, 1971



Dr. Peter A. Morris, Director
Division of Reactor Licensing
U. S. Atomic Energy Commission
Washington, D. C. 20545

**SUBJECT: LICENSE DPR-19 & 25, DRESDEN NUCLEAR POWER STATION UNITS 2 & 3
SECTION 6.6.B.3 OF THE TECHNICAL SPECIFICATIONS**

Dear Dr. Morris:

This is to report a condition relating to the operation of the Station from 12:30 a.m., March 2, 1971, to 12:35 a.m., March 4, 1971, when the Station exceeded the Unit 2/3 ventilation stack release limit for halogens and particulates with half lives greater than eight days as specified in Section 3.8.A.2.C. of the Technical Specifications.

Problem and Investigation

Both Unit 2 and 3 reactors were shutdown at the time of the incident. Unit 2 reactor had been shutdown since 9:30 p.m. on February 26, 1971, for refueling and Unit 3 reactor was still in its initial fuel loading phase. Unit 1 was base loaded at 140 MWe.

In early August, while auditing the monthly maximum gaseous release rates for the Semi-Annual Report, as required by the Technical Specifications, it was discovered that the release limit for long-lived halogens and particulates had been exceeded on March 2 and 3, 1971. During this period, essentially all of the halogen-particulate activity released from the Unit 2/3 ventilation stack was due to Iodine-131. This iodine was released to the Unit 2 and 3 refueling floor elevation from the primary coolant when the Unit 2 reactor head was lifted from the reactor vessel.

The pathway from the refueling floor elevation to the common Unit 2/3 ventilation stack was through the ventilation exhaust ducts in both reactor buildings. The Iodine-131 and particulate release rates during the period of the occurrence were as follows:

Location	Date	$\mu\text{Ci/sec.}$	
		I-131	Particulate
*Unit 1 chimney	3/2	0.016	0.003
*Unit 1 chimney	3/3	0.070	0.011
*Unit 2/3 chimney	3/2	0.025	Hkgd.
*Unit 2/3 chimney	3/3	0.148	< 0.001
**Unit 2 rx bldg vent	3/2-3/3	0.079	0.006
**Unit 3 rx bldg vent	3/2-3/3	0.070	0.006

* 24 hour samples

** 48 hour samples

Since the iodine-particulate radioactivity release rate is determined separately in each reactor building exhaust duct, the results of each must be summed in order to be representative of the total release rate from the Unit 2/3 ventilation stack. Although neither reactor building discharged halogens and particulates in excess of the Technical Specification requirements at the time of the incident, their combined release rate was 136% of the Technical Specification limits on March 2 and 142% of these limits on March 3, 1971.

Corrective Action

As stated previously, it was not recognized that the Technical Specification (DPR-19 and DPR-25) iodine-particulate release limit had been exceeded until early August. We have since initiated a routine whereby the percent of the limit released is calculated on a daily basis and we are investigating a method which will permit us to ventilate the reactor head prior to removal. Additionally, prior to head removal we will decrease the temperature of the primary coolant to minimize iodine release from the water surface and initiate the standby gas treatment system until it is determined that the airborne activity is within the Technical Specification limits.


H. K. Hoyt
Superintendent

HKH:LDB:ls