

No: PH-NRC-I-38  
Date: 3/28/79

## PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE

This preliminary notification constitutes EARLY notice of events of POSSIBLE safety or public interest significance. The information presented is as initially received without verification or evaluation and is basically all that is known at the time of this notification. IT SHOULD BE SPECIFICALLY NOTED THAT THIS NOTIFICATION MAY CONTAIN INFORMATION THAT LATER MAY BE DETERMINED TO BE INACCURATE OR INCONSISTENT.

Facility: Three Mile Island Unit 2  
Middletown, Pennsylvania  
(Docket No. 50-320)

Subject: NUCLEAR INCIDENT AT THREE MILE ISLAND - UNIT 2

The licensee notified Region I at approximately 7:45 AM of an incident at TMI-2 which occurred at approximately 4:00 AM at 98% power when the secondary feed pumps tripped due to a feedwater polishing system problem. This resulted in a turbine trip and subsequent reactor trip on High Reactor Coolant Pressure. A combination of Feed Pump Operation and Pressurizer Relief - Steam Generator relief valve operation caused an RCS cooldown. At 1600 psig, Emergency Safeguards Actuation occurred. All ECCS components started and operated properly. Water level increased in the Pressurizer and Safety Injection was secured manually approximately 5 minutes after actuation. It was subsequently resumed. The Reactor Coolant Pumps were secured when low net positive suction head limits were approached.

About 7:00 AM, high activity was noted in the RCS Coolant Sample Lines (approximately 600 mr/hr contact readings). A Site Emergency was then declared. At approximately 7:30 AM, a General Emergency was declared based on High Radiation levels in the Reactor Building. At 8:30 AM site boundary radiation levels were reported to not be significant (less than 1 mr/hr). The source of activity was stated to be failed fuel as a result of the transient, and due to a known previous primary to secondary leak in Steam Generator B.

Contact: D. Haverkamp                      R. Keimig                      E. J. Brunner 5240  
Prepared by                      Ext.                      Section Chief                      Ext.                      Branch Chief                      Ext.

Distribution:

Dudley Thompson, Executive Officer for Operations Support, HQ  
N. C. Moseley, Director, Division of Reactor Operations Inspection, HQ  
G. Klingler, PH Coordinator

Transmitted to HQ 11:57 am 3/28/79  
(TIME)

Transmitted to Other Regions \_\_\_\_\_  
(TIME)

PN-NRC:1-38  
3/28/79

2

The Region RI Incident Response Center was activated at 8:10 AM and direct communications with the licensee and IE:Headquarters was established. The Response Team was dispatched at 8:45 AM and arrived at the site at 10:05 AM.

At 10:45 AM the Reactor Coolant System Pressure was being held at 1950 psig with temperature at 250°F in the cold leg. By 10:45 AM, Iodine-131 levels as high as  $1.25 \text{ E-8}$  uc/ml and radiation levels of 3 mr/hr had been detected offsite.

There is significant media interest at the present time because of concern about potential offsite radiation/contamination. The Commonwealth of Pennsylvania and EPA have been informed. Press contacts are being made by the licensee and NRC.