

IMMEDIATE
PRELIMINARY NOTIFICATION

April 8, 1979

PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE--PNO-79-67N

This preliminary notification constitutes summary information of an event of safety or public interest significance. The information presented is a summary of information as of 7:00 a.m. on 4/8/79.

Facility: Three Mile Island Unit 2
Middletown, Pennsylvania (DN 50-320)

Subject: NUCLEAR INCIDENT AT THREE MILE ISLAND

Plant Status

Bulk coolant inlet and outlet temperatures are about 281 degrees F. The average core thermocouple temperature is about 299 degrees F, and the higher thermocouple reading (8H) is about 442 degrees F.

At approximately 1955 hours, April 7, the licensee began lowering reactor coolant system pressure in 50 psi increments at a maximum rate of 5 psi per minute. This will continue until pressure reaches 500 psi, providing a 100 psi safety margin above saturation for the current temperature of the highest reading thermocouple. This is a step toward cold shutdown and includes degasification to prevent bubble formation as pressure and temperatures decrease.

During the initial pressure decrease to 700 psi, the auxiliary building stack monitors showed an increase of a factor of 10 at 2213 hours, April 7. Later information indicates that about 1400 gallons of borated water were added to the makeup tank during the initial pressure reduction, causing some gas to leak from the vent header. The ARMS helicopter reported a slight increase in readings downwind (south) of the site. Pressure was held steady for a short period and the auxiliary stack monitors decreased to the original readings. During the following pressure cycles there have been no increases in the radiation readings.

Hydrogen concentration in containment is about 1.9%.

At 2130 hours PST, April 7, airlifting of backup charcoal filters for the auxiliary building stack was initiated from Pasco, WA, to Harrisburg, PA.

The Unit 2 miscellaneous waste tank is being pumped to a bleed holdup tank in preparation for pumping the auxiliary building sump dry. IWTS discharge was stopped late on April 7 when the level reached 32%.

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Environmental Status

Offsite radiation levels identified by NRC survey teams continue to range between 0.01-0.1 mR/hr. These routine survey results were obtained on the east and west sides of the Susquehanna River at distances of 4 miles north and south of the site. Prevailing winds during April 7 were generally from about 320°.

ARMS surveys were performed on April 7 at 0600-0630 hours and 1800-1845 hours. The surveys identified a narrow plume in the 140°-150° sector during both flights. A maximum radiation level of 0.04 mR/hr at 1-10 miles was identified during the 0600-0630 hours flight. The 1800-1845 hours flight identified a maximum reading of 0.05 mR/hr at 1 mile from the site.

The following milk sample results were reported by the licensee.

<u>Location</u>	<u>Iodine Concentration (picocuries/liter)*</u>					
	<u>3/29</u>	<u>3/30</u>	<u>3/31</u>	<u>4/1</u>	<u>4/2</u>	<u>4/3</u>
1.1 miles east-northeast	< 1		8.5	4.5	3	1
1.6 miles southeast	< 1	-	21	-	4	2
2.7 miles west-northwest	< 3	-	4	-	3	2
control 12 miles north-northeast	< 1	-	< 1	< 1	< 1	< 1

*HEW Action Level: 12,000 picocuries/liter

The following table lists the composite results for milk samples collected by various agencies between 3/28/79 - 4/4/79.

<u>Description</u>	<u>STATE</u>	<u>FDA</u>	<u>EPA</u>
Number of analyses performed	133	84	4
Number of positive results	7	53	2
Average value of positive results (pCi/l)	15	19	17
Range of positive results (pCi/l)	11-20	9-41	10-24
Average MDA (pCi/l)	20	11	10

The following iodine-131 concentrations in air and water were identified by the licensee:

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a. <u>Air Samples</u>		<u>Results (picocuries per cubic meter)**</u>		
<u>Location</u>		<u>3/28-3/29</u>	<u>3/29-3/31</u>	<u>3/31-4/3</u>
0.4 mile north		0.47	22.6	0.11
2.3 miles south-southeast		< 0.2	22.1	1.39
0.4 " east		< 0.02	20.3	0.27
15 " northwest		< 0.03	1.83	< 0.024
9 " southeast		< 0.04	0.27	0.16
2.6 " north		0.08	12.7	0.051
1.6 " west-southwest		< 0.30	23.9	0.07
13 " south		< 0.02	0.14	0.36

**10 CFR 20 MPC: 100 picocuries/cubic meter

b. <u>Water Samples</u>		<u>Collected on 4/3/79</u>
<u>Location</u>		<u>Results***</u>
Swatara Creek (2.3 miles north)		< 0.2 pCi/l
Brunner Island (4.1 miles south-southeast)		"
Columbia water treatment plant (15 miles southeast)		"
York Haven (3 miles southeast)		"
York (15 miles southeast)		"

***10 CFR 20 MPC: 100 picocuries/liter

New data regarding dose rates in populated areas have not been processed.

Contact:

<u>Distribution:</u>	Transmitted H St <u>7:50</u>	
Chairman Hendrie	Commissioner Bradford	S. J. Chilk, SECY
Commissioner Kennedy	Commissioner Ahearne	C. C. Kammerer, CA
Commissioner Gilinsky		(For Distribution)
<u>Transmitted:</u>	MNBB <u>7:52</u>	
L. V. Gossick, EDO	P. Bldg <u>7:55</u>	J. G. Davis, IE
H. L. Ornstein, EDO	H. R. Denton, NRR	Region I <u>8:02</u>
J. J. Fouchard, PA	R. C. DeYoung, NRR	Region II <u>8:05</u>
N. M. Haller, MPA	R. J. Mattson, NRR	Region III <u>8:08</u>
R. G. Ryan, OSP	V. Stello, NRR	Region IV <u>8:15</u>
H. K. Shapar, ELD	R. S. Boyd, NRR	Region V <u>8:17</u>
	SS Bldg <u>7:58</u>	(MAIL)
	W. J. Dircks, NMSS	J. J. Cummings, OIA
	S. Levine, RES	R. Minogue, SD

IE (TMI) Site 8:22 (Provide copy to STATE)
White House Situation Room 9:30
EPA 9:25
FDA/BRH 9:18
DOE/EOC 8:35
FDDA/FEMA 9:18
BRP (State of PA) 10:30
DCPA 10:45
HEW _____

Handcarry (FAA)

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