PROCEDURE INSTRUCTION MEMO
UNIT 1 PROCEDURES

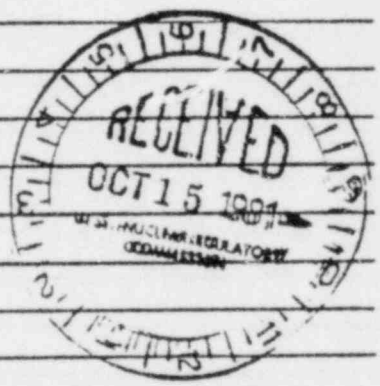
CORRECT ADDRESS IF NECESSARY → Office of Nuc. Reactor Reg.
Mr. R. Denton

RETURN TO: Betty Nash
Procedure Distribution Control
Room 130
Unit 2 Admin. Bldg.

Date 10-9-81

Please update your procedure file with the attached procedures listed below, destroy the superseded procedures, and post your Master Procedure Index accordingly. Also please sign the acknowledgment at the bottom of this memo and return to Betty Nash, at the above address.

Procedure No.	Rev. No.	PCR No.	Instructions/Comments
1004.2	5	1-81-0641	
1004.4	4	1-81-0643	
1004.6	1	1-81-0760,	1-81-0597 and 1-81-0551



ADDITIONAL INSTRUCTIONS/COMMENTS

X005
5 1/10

I hereby acknowledge receipt of the items above and have complied with the instructions.

_____ (Signature) _____ (Ext. No.) _____ (Date)

IMPORTANT TO SAFETY
NON-ENVIRONMENTAL IMPACT RELATED

THREE MILE ISLAND NUCLEAR STATION
UNIT NO. 1 EMERGENCY PLAN IMPLEMENTING PROCEDURE 1004.6
ADDITIONAL ASSISTANCE AND NOTIFICATION

Office of Nuc. Reactor Reg.

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Unit 1 Staff Recommends Approval

Approval NA Date ——
Cognizant Dept. Head

Unit 1 PORC Recommends Approval

[signature] Date 10/2/81
Chairman of PORC

Manager TMI I Approval

mob RJ Toole Date 10-5-81

QA Modifications/Operations Mgr

NA Date ——

Document ID: 0021W

THREE MILE ISLAND NUCLEAR STATION
UNIT NO. 1 EMERGENCY PLAN IMPLEMENTING PROCEDURE 1004.6
ADDITIONAL ASSISTANCE AND NOTIFICATION

1.0 PURPOSE

To provide the Emergency Director with a directory of additional emergency response personnel, organizations and agencies by organizational duties, responsibilities and disciplines.

The Emergency Director is responsible for implementing this procedure.

2.0 ATTACHMENTS

2.1 Attachment I - Unit 1 Onsite Emergency Response Directory.

2.2 Attachment II - Unit 2 Onsite Emergency Response Directory.

2.3 Attachment III - Offsite Emergency Response Directory.

2.4 Attachment IV - Emergency Response Assistance Checklist.

3.0 EMERGENCY ACTION LEVELS

3.1 This procedure shall be implemented with the declaration of any class of emergency when additional emergency response personnel, organizations or agencies than those listed on the appropriate Emergency Procedures are needed to assist TMI, or,

3.2 As requested by the Emergency Director.

4.0 EMERGENCY ACTIONS

4.1 In the event of a declared emergency at TMI that requires additional emergency response personnel, organizations or agencies, the following steps should be taken:

4.1.1 Determine the discipline of personnel or necessary equipment that will be needed for the class of emergency declared.

4.1.2 Refer to Attachment I, II, or III to find the appropriate discipline, choose the personnel, organization or agency wanted and telephone number of that organization.

4.2 When called party answers, provide the following message:

THIS IS _____ AT THE THREE MILE ISLAND NUCLEAR STATION UNIT 1
(name/title)

CALLING. WE HAVE DECLARED A _____ AT _____ HOURS.
(Type of emergency) (time)

TMI REQUESTS YOUR ASSISTANCE AS FOLLOWS: (State any assistance required using Attachment IV if applicable).

4.2.1 Identify existing problem and give brief description of problem.

4.2.2 Identify necessary personnel/equipment needed and request assistance.

4.2.3 Refer to Attachment IV for assistance to be provided.

4.3 If further assistance is required, repeat 4.1 and 4.2 as needed.

5.0 FINAL CONDITIONS

N/A

ATTACHMENT I

UNIT 1 ONSITE EMERGENCY RESPONSE DIRECTORY

NOTE: Numbers prefixed with 948 are site extensions.

OPERATIONS	WORK PHONE NO.
Ron Toole	948-8005
	948-8506
M. Ross	948-8015
	948-8202
EMERGENCY CONTROL CENTER (CONTROL ROOM)	
Shift Foreman's Office	948-8069
	948-8070
	948-8071
Control Room - Communications Console	944-0839
Control Room - Shift Foreman	948-8069
	948-8070
	948-8071
Control Room - Dose Assessment (RAC)	948-8069
	948-8070
	948-8071
	944-0839
Control Room Computer Area	948-8525

OPERATIONS SUPPORT CENTER

OSC Coordinator	948-8083
Radiological Controls Technicians	948-8082

UNIT 1 TECHNICAL SUPPORT CENTER

TSC Coordinator	948-8349
Engineers	948-8349

UNIT 1 INSTRUMENT SHOP

Shop Area	948-8214
Offices	948-8072
	948-8073
	948-8074
	948-8213

PROCESSING CENTER

Security - Duty Sergeant	948-8038

NRC

TMI Site Office	717-948-1120

ATTACHMENT II

UNIT 2 ONSITE EMERGENCY RESPONSE DIRECTORY

NOTE: Numbers prefixed with 948 are site extensions.

	WORK PHONE NUMBER
OPERATIONS	
John Barton	948-8326
	948-8327
Larry King	948-8426
Joe Chwastyk	948-8068
EMERGENCY CONTROL CENTER (CONTROL ROOM)	
Shift Foreman's Office	948-8068
Control Room-Communications Console	948-8066
	948-8067
Control Room-Shift Foreman	948-8066
	948-8067
Control Room-Dose Assessment	948-8066
	948-8067
Control Room-Computer Area	948-8067
OPERATIONS SUPPORT CENTER	
OSC Coordinator	948-8092
Radiological Control Technicians	948-8092

UNIT 2 TECHNICAL SUPPORT CENTER

TSC Coordinator	948-8352
Engineers	948-8352

UNIT 2 INSTRUMENT LABORATORY

Lab Area	948-8274
Offices	948-8156
	948-8272
	948-8273
	948-8155

TRAILER 214

Unit 2 Security Sergeant	948-8594

NRC

TMI Site Office	717-948-1120

ATTACHMENT III

OFFSITE EMERGENCY RESPONSE DIRECTORY

NEAR SITE EMERGENCY OPERATIONS FACILITY (OBSERVATION CENTER)

	9-944-0940
	9-944-0303
	9-944-1501
	9-367-0475
	9-367-0518
	9-367-0511

ALTERNATE EMERGENCY OPERATIONS FACILITY (CRAWFORD STATION)

Second Floor	First Floor	948-8535
944-2614 M and C	944-3858 Admin	9-944-4644
944-3668 M and C	944-4969 Admin	9-944-5111
944-2922 Radcon	944-5283 Admin	
944-2972 Radcon		

ENVIRONMENTAL ASSESSMENT COMMAND CENTER (OLMSTED AIRPORT)

General No.	9-944-3173
Bill Reithle	9-944-6709
Gary Baker	9-944-2648
William Ressler	9-944-3737

TECHNICAL FUNCTIONS PARSIPPANY

Group Leader Technical Support	74-1-201-299-2111
	74-1-201-299-2113
	74-1-201-299-2249
Commercial Number	1-201-263-6500

POLICE

Pennsylvania State Police (24 Hours)	9-234-4051
Pennsylvania State Police Helicopters (0815-1615) (M-F)	9-783-5511, 944-7149, 783-1691
Middletown Police Department (24 Hours)	9-944-4311
Police Forces in York County (24 Hours)	73-1-843-5111

FIRE

Londonderry Township Fire Department	9-911 or 9-236-7976
Middletown Fire Department - including:	9-911 or 9-944-6344
Union Hose Company	
Rescue Hose Company, No. 3	
Liberty Fire Company	
Bainbridge Fire Department (Lancaster Co.) (24 Hours)	9-911 or 73-1-653-2046
York County Fire Departments	9-911 or 73-1-843-5111

AMBULANCE

Londonderry Township Vol. Ambulance	9-911 or 9-236-7976
Middletown Ambulance Service	9-911 or 9-944-6344
Bainbridge Ambulance Service (Lancaster Co.) (24 Hours)	73-1-653-2001

STATION MEDICAL CONSULTANT

Dr. William Albright III	General 9-939-7831

HOSPITALS

Hershey Medical Center (Emergency Room)	9-534-8333
Harrisburg General Hospital	General 9-782-3131
	Emergency Room 9-782-3297

METROPOLITAN EDISON COMPANY AND GENERAL PUBLIC UTILITIES MANAGEMENT

Met-Ed - System Safety Director (0800-1700) (M-F)	73-1-215-921-6227
Met-Ed - Div. Safety Director (0800-1700) (M-F) Office	73-1-215-921-6024
Home	73-1-215-373-0307
Met-Ed - Dispatcher, Lebanon (24 Hours)	73-1-272-1281
	*73-1-272-5623

*During Duty Hours, Ask for Dispatch

Met-Ed - District Manager, Middletown	9-944-5111
General Public Utilities	
0830 - 1700	74-1-201-263-6500
after 1700	74-1-201-263-6111

GOVERNMENTAL AGENCIES

Dept. of Energy (24 Hours)	74-1-516-282-2200
NRC - Office of I and E, Region 1 (24 Hours)	73-1-215-337-5000
NRC - Middletown Office	717-948-1150
PA Dept. of Env. Res. (BRP)	9-787-2480
EPA - Region III Office (24 Hours) Emergency No.	73-1-215-597-9898

Civil Defense Organization (24 Hours)		
Pennsylvania Emergency Management Agency		9-783-8150
Dauphin Co.		9-911 or 9-236-7976
Lancaster Co. (24 Hours)		73-1-299-8373
York Co.		73-1-843-5111
Cumberland Co.		9-238-9676
Lebanon Co.	(0800-1630)	73-1-272-7621, 272-2296
U.S. Coast Guard (Harrisburg, PA)	(General)	9-782-3737
(Nights, Weekends) (24 Hours)		74-1-212-668-7055
National Weather Service		9-782-3927

PARSIPPANY TECHNICAL FUNCTIONS GROUP

Group Leader Technical Support	74-1-201-299-2111
	74-1-201-299-2113
	74-1-201-299-2249

METROPOLITAN EDISON COMPANY CONSULTANTS

Radiation Management Corp. (0800-1700)	Office	73-1-215-243-2950
Office Hours - Emergency		73-1-215-243-2990
Pickard, Lowe and Garrick Assoc. Washington, D.C.		74-1-202-296-8633
Gilbert Associates Inc., Reading, PA		73-1-215-775-2600
Teledyne Isotopes, Westwood, NJ		74-1-201-664-7070
Burns and Roe, Paramus, NJ		74-1-201-265-2000
MPR Associates Inc., Washington, D.C.		74-1-202-659-2320
Institute of Nuclear Power Operations (24 Hours-Emergency)		404-953-0904
Emergency Telecopier (24 Hours)		404-953-7526

DOWNSTREAM RIVER WATER USERS

Brunner Island (PP and L) (24 Hours)	73-1-266-3691
Wrightsville Water Supply Company	73-1-252-3711
or	
Mr. Miller, Mgr. of Water Co. (Unlisted)	9-564-8220
Columbia Water Company Plant (24 Hours)	73-1-684-2712
Lancaster Water Company (24 Hours)	73-1-684-5056
Safe Harbor Water and Power, Inc.	73-1-872-5441
	73-1-872-4697
	73-1-872-5442
	73-1-872-4698
	73-1-872-5443
Holtwood Generating Station	73-1-284-4101
Chester Water Authority (Exec. Manager)	73-1-215-876-8181, 8182
(24 Hours Ans. Svc.)	
Baltimore Water Supply Auth. Mr. Hudson (Bus. Hrs.)	74-1-301-396-1277
(Weekends, Holidays) (24 Hours)	74-1-301-396-5352
Emergency Room (Mr. Jones)	74-1-301-396-5352
(24 hours)	
or	
Water Facilities Division (Pumping and Purification)	74-1-301-396-6287
Walter Koterwas	

OTHER

Harrisburg International Airport Control Tower	9-944-4502
Middletown Line Department	8535 or 9-944-4621
York Company Office	73-1-846-7800

Lebanon Company Office	(Business Hours)	73-1-272-5661
	(Weekends, Holidays)	73-1-272-1281
Keystone Helicopter Corporation		212-644-4430
Capital Trailways Bus Company		9-233-7673
Conrail Railroad Train Movement Coordinator (24 hrs)		9-657-3552
		9-657-5414
Insurance - American Nuclear Insurers		74-1-203-677-7305
		or 9-1-800-243-3172/3173

UTILITIES

Pennsylvania Power and Light, Allentown, PA		73-1-215-770-5151
Philadelphia Electric - Peach Bottom (Gen.)		73-1-717-456-7014
	(Operations Dept.)	Ext 223 or 423
	(Whole Body Counting Dept.)	Ext 490 or 497 or 498
Baltimore Gas and Electric		74-1-301-234-5000
Dusquesne Light/Beaver Valley	(Control Rm.)	73-1-412-643-8002
Dusquesne Light	(Corporate)	73-1-412-456-6000
Nine Mile Point Unit 1	(Business Hours)	74-1-315-343-2110
	(Control Room)	74-1-315-342-3046
Power Authority State of NY (James A. Fitzpatrick Plant)		
	(General)	74-1-315-342-3840
	Control Room Ext. 311	
Oyster Creek	(Control Room)	74-1-609-693-6066
	(Main Gate Desk at Guard House)	74-1-609-693-6950

EMERGENCY RESPONSE ASSISTANCE CHECKLIST

ATTACHMENT IV

		OYS. CRK	SALEM	PCH BTM	BER-WICK	CALV. CLIFFS
A.	Personnel					
1.	H.P. Supervisors	2	2	5	2	3
2.	H.P. Techs	5	5	20	5	10
3.	Radio Chem Supervisors	0	0	2	0	2
4.	Radiochem Techs	3	2	2	1	2
5.	Engr-Effl. Ass.	0	0	1	1	1
6.	TLD Reader	0	1	1	1	1
7.	EE-RMS Spec.	1	0	1	0	1
8.	Security Sgt.	1		0		2
9.	Sec. Officers	8		0		1
B.	Radiaton Detection Equipment					
1.	Survey Meter-Hi	20	0	12	5	8
2.	Survey Meter Hi-Telescoping	4	5	0	4	1

		OYS. CRK	SALEM	PCH BTM	BER-WICK	CALV. CLIFFS
3.	Survey Meter-Lo	5	5	4	10	8
4.	SAM II	0	1	0	2	1
5.	Portable Geli	1	1	1	1NaI	0
6.	Shield for Geli	1	1	1	1	0
7.	Computer and Output for Geli	1	1	1	0	0
8.	uR/hr ratemeter and recorder	0	0	0	1	0
9.	RM-14 Frisker	15	10	15	5	3
10.	Air Sampler-lo vol.	5	3	6	2	2
11.	Air Sampler-hi vol.	10	5	3	2	2
12.	Gas Sampler (for later Geli Analysis	0	0	2	2	0
13.	Pocket Dosimeters	200	100	100	20	200

		OYS. CRK	SALEM	PCH BTM	BER-WICK	CALV. CLIFFS
14.	Proportional Count	0	0	1	0	1
15.	Liq. Scint.	1	0	0	0	0
16.	Scaler-Timer and Detector	1	1	0	1	1
17.	Shields for above	1	1	0	1	0
18.	Rad tads	0	0	24	0	0
19.	Ion Telemetry	0	0	1	0	0
C.	Vehicles					
1.	Station Wagon or Truck or Van for Survey Team	1	1	1	1	1
2.	110 generator	1	1	0	1	0
3.	Inverter for vehicle battery	0	1	0	1	1

	OYS. CRK	SALEM	PCH BTM	BER-WICK	CALV. CLIFFS
4. Geli Counting Lab Van	0	0	0	1	1
5. Beta Count Lab	0	0	0	0	1
6. Wind Speed and Direction Indic.	0	0	0	0	0
D. Supplies					
1. Coverall and Access. Set	2000	1000	500	500	0
2. Disposable coveralls	1000	1000	0	200	200
3. Rainsuits	500	50	200	250	10
4. Respirators	100	150	100	100	100
5. Respirator Cartridges	1000	500	400	200	100
6. Iodine Sampler Cartridges	500	200	200	250	100

		OYS. CRK	SALEM	PCH BTM	BER-WICK	CALV. CLIFFS
7.	Silver Zeolite Cartridges	0	200	0	0	0
8.	50 gal. plastic bags	5000	500	500	2000	1000
9.	Decon Kit (skin)	1	0	0	0	0
10.	Absolute Filter Vacuum Cleaner	2	1	0	1	0
11.	Filters for above	2	1	0	2	0
12.	Resp. Test Booth	0	0	0	0	0
13.	SCBA (4.5)	10	20	6	5	10
14.	SCBA Tanks	10	20	6	10	30
15.	Port. Air Comp.	0	1	0	0	0
16.	Glove Box for Sample Prep.	2	0	0	0	0
17.	Lead Bricks	0	20	0	100	500

	OYS. CRK	SALEM	PCH BTM	BER- WICK	CALV. CLIFFS
18. 1/4" Lead Sheet 4x4x1/4	50	10	10	20	100
19. Lead Blankets	0		25	15	100
20. Air Sample Papers	1000	200	200	500	10000
21. Radiacwash/gal	0	0	55	55	5
22. Rad. Cal. Source	0	0	0	2	0
23. Misc. Std. for Lab Equip.	1	0	0	1	0

IMPORTANT TO SAFETY
NON-ENVIRONMENTAL IMPACT RELATED

THREE MILE ISLAND NUCLEAR STATION
UNIT NO. 1 EMERGENCY PLAN IMPLEMENTING PROCEDURE 1004.2
ALERT

Office of Nuc. Reactor Reg.

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18.0	3						
19.0	3						
20.0	3						

Unit 1 Staff Recommends Approval

Approval NA Date ———
Cognizant Dept. Head

Unit 1 PORC Recommends Approval

M. A. Nelson Date 10/2/81
Chairman of PORC

Manager TMI I Approval

for R. J. Toole Date 10-5-81

QA Modifications/Operations Mgr

NA Date ———

THREE MILE ISLAND NUCLEAR STATION
UNIT 1 EMERGENCY PLAN IMPLEMENTING PROCEDURE 1004.2
ALERT

1.0 PURPOSE

The purpose of this procedure is to define the conditions that shall be regarded as an Alert for Three Mile Island Nuclear Station (Unit I) and to:

a. Ensure necessary actions are taken to protect the health and safety of the public.

b. Ensure necessary actions are taken to notify GPU-Nuclear management and offsite emergency response organizations.

c. Mobilize the appropriate portions of the emergency response organization to initiate appropriate emergency actions.

The Emergency Director is responsible for implementing this procedure.

NOTE: Emergency Director responsibilities that may not be delegated include:

a. Decision to notify offsite emergency management agencies.

b. Making protective action recommendations as necessary to offsite emergency management agencies.

c. Classification of Emergency Event.

d. Determining the necessity for onsite evacuation.

e. Authorization for emergency workers to exceed 10 CFR 20 radiation exposure limits.

2.0 ATTACHMENTS

2.1 Attachment I, Alert Notifications

2.2 Attachment II, Emergency Status Report

3.0 Emergency Action Levels

INITIATING CONDITION	INDICATION
3.1 Fuel cladding failure	As indicated by any one of the following. a. Reactor coolant activity $\geq$ 130 µCi/ml but < 300 µCi/ml as sampled and analyzed.* b. RM-L1 (High) reading $\geq$ 2.9×10^3 cpm but < 6.66×10^3 cpm. c. RM-L1 (Low) reading $\geq$ 1.65×10^5 cpm but < 3.81×10^5 cpm.
3.2 Primary to secondary leakage $\geq$ 1gpm but <50 gpm.	As indicated by valid high alarms on RM-A5 and/or the Steam Line Monitor* in conjunction with reactor coolant loss not otherwise identifiable as determined by daily leak rate test.
3.3 Primary coolant leak rate of greater than 50 gpm.	As indicated by increased makeup flow in excess of letdown flow by 50 gpm or makeup tank level decreasing at approximately 2 inches per minute.
3.4 Radiation levels or radioactive contamination which indicate a severe degradation in the control of radioactive materials.	As indicated by either: a. Valid, unanticipated high alarms on any two area and/or process radiation monitors (RMA, RML or RMG monitors) at the same time. b. Receipt of a validated report of airborne or waterborne contaminants as determined by sample and analysis or general radiation readings as determined by periodic survey to have increased by a factor of 1000 above normal.

3.5 Loss of all offsite power coincident with a loss of Diesel Generators for less that 15 minutes.	As indicated by a reactor trip caused by loss of power and trouble alarms on both Diesel Generators neither of which energizes the ID or IE 4 kV busses.
3.6 Loss of all onsite DC power for less than 15 minutes.	All Battery Voltmeters read zero and there is no light or control power available.
3.7 Reactor coolant pump locked rotor at power leading to fuel failure.	As indicated by both of the following: a. Receipt of a valid RCP Stator Temp High alarm (150°C) and decreasing flow in the affected loop. b. Reactor Coolant specific activity as determined by sample and analysis is ≥ 50 µCi/ml but <130 µCi/ml.
3.8 Complete loss of any function needed for plant cold shutdown.	As indicated by a total loss of any of the following: a. Source and intermediate range nuclear instrumentation. b. A loss of forced reactor coolant system flow (includes Decay Heat Removal Pumps, Reactor Coolant Pumps, etc.) coincident with total loss of ability to feed OTSG's.
3.9 Failure of the reactor protection system to initiate and complete a trip when required.	Any reactor trip setpoint being exceeded with no rod in limit lights.
3.10 Fuel damage accident with release of radioactivity to the containment of fuel building.	An accident occurs while handling spent fuel during refueling or while moving objects over the spent fuel pool which causes any one of the following: a. A valid High alarm on RM-A2. b. A valid Alert alarm on RM-A4.

		c. A valid Alert alarm on RM-A8. d. A valid High alarm on RM-A13. e. A valid High alarm on RM-G7. f. A valid High alarm on RM-G9. g. A valid increase by a factor of 100 of atmospheric activity as determined by sample and analysis.
3.11	Any fire jeopardizing the operability of any safety system	As judged by the Shift Supervisor.
3.12	Most or all annunciators lost which may involve an actual or potential substantial degradation of the level of safety of the plant.	As judged by the Shift Supervisor.
3.13	Radiological effluent activity exceed the Environmental technical specification instantaneous limits.	As indicated by any of the following validated by sample and analysis: a. RM-A8 (gas) $\geq 2.0 \times 10^4$ cpm (High alarm) but $< 1.0 \times 10^5$ cpm. b. RM-A9 (gas) $\geq 4.5 \times 10^4$ cpm (high alarm) but $<3.0 \times 10^5$ cpm. c. RM-A5 $\geq 1.0 \times 10^6$ cpm.* d. RM-A8 (iodine) increase $\geq 8.5 \times 10^2$ cpm/min but $< 4.5 \times 10^3$ cpm/min.* e. RM-A9 (iodine) increase $\geq 2.5 \times 10^3$ cpm/min but $< 1.2 \times 10^4$ cpm/min.* f. Offsite Radiological Monitoring Team report $\geq$ 10 mR/hr (gamma) but <50 mR/hr at any offsite location. g. RM-L7 $\geq 4.8 \times 10^5$ cpm (high alarm). h. RM-G8 $\geq 6.0 \times 10^3$ mR/hr.

3.14 Ongoing security compromise.	Shift Supervisors judgement, based on advice of Security Duty Sergeant.
3.15 Severe natural phenomenon being experienced.	As indicated by any one of the following: a. Valid alarm on PRF 1-3, "Operating Basis Earthquake". b. Actual river stage $\geq$ 302 feet but < 307 feet at the River Water Intake Structure. c. Any tornado striking facility. d. Hurricane winds $\geq$ 75mph as indicated on the Wind Speed Recorder (NDS-501).
3.16 Other hazards being experienced.	As indicated by any one of the following: a. Aircraft crash or other missile impact within the protected area or onto an permanent plant structure. b. Know explosion damage to any permanent plant structure. c. Release of toxic or flammable gasses into the plant which, in the judgement of the Shift Supervisor, affects the safe operation of the plant. d. Turbine failure resulting in casing penetration. e. Any fire in a permanent plant structure which requires offsite firefighting capability.
3.17 Non-isolable steam leak that results in a rapid depressurization of the steam system.	As indicated by a Steam Line Rupture System actuation (<600 psig) on the affected OTSG.
3.18 Evacuation of control room anticipated or required with control of shutdown systems established from local stations within 15 minutes.	Shift Supervisor's judgement.

3.19 Reactor Coolant System hot leg temperature is $\geq$ 620°F in either loop.	As read on Reactor Coolant Outlet Temperature indication.
3.20 Reactor Power to Flow to Imbalance outside of the Technical Specification Limit curves.	Any condition whereby the Technical Specification Safety Settings set forth in Figure 2.1-2 are exceeded without a reactor trip and confirmed by engineering analysis.
3.21 Reactor Building Pressure $\geq$ 4.0 psig, but <30 psig.	Reactor trip and ECCS initiation due to high Reactor Building pressure.
3.22 More than one control rod Stuck-Out, Stuck-In or Dropped requiring shutdown by Technical Specifications.	As indicated by a loss of the ability to meet any of the conditions of Technical Specification Limiting Condition for Operation 3.5.2.2 for more than one control rod.
3.23 Secondary system activity $\geq$ 1.0 µCi/ml (I-131 equivalent).	As indicated by sample and analysis.
3.24 Control Rod Ejection.	As indicated by a Reactor Trip due to high neutron flux in coincidence with loss of coolant indications.
3.25 Other plant conditions exist that warrant precautionary activation of Technical Support Center and placing near-site Emergency Operations Facility and other key emergency personnel on standby.	Whenever plant conditions warrant it, as judged by the Shift Supervisor/Emergency Director.

* These indications may be determined via instrumentation that will be installed or expanded as required by NUREG 0578 prior to restart.

4.0 EMERGENCY ACTIONS

Initials

___ 4.1 Upon recognition that any of the above action levels have been reached or exceeded, the Shift Supervisor/Duty Section

Superintendent assume the duties of the Emergency Director. (Event should be assessed and declared within 10 minutes of its occurrence.)

____4.2 Announce to Control Room personnel that _____ (name) has assumed the duties of Emergency Director

____4.3 Announce, or have announced, the following message over the public address system (merged): "ATTENTION ALL PERSONNEL; ATTENTION ALL RERSONNEL: AN ALERT HAS BEEN DECLARED IN UNIT 1. ALL MEMBERS OF THE ONSITE EMERGENCY ORGANIZATION REPORT TO YOUR STATIONS. ALL OTHER PERSONNEL AWAIT FURTHER INSTRUCTIONS." (If emergency is radiation-oriented add: "There will be No Smoking, Drinking, or Eating until further notice.") (Give a brief description of the event and repeat the announcement).

____4.4 If emergency is radiation-oriented, direct that the Radiation Emergency Alarm be sounded.

____4.5 Assign a Communications Assistant to make notifications to persons and/or agencies per Attachment I, Section I.

____4.6 Record the following message on the Code-A-Phone 700: "This is the Communications Assistant (identify by name). An Alert has been declared in Unit One. At the sound of the tone, leave your name and report to your assigned emergency station".

The Code-A-Phone 700 shall then be placed in the ANN-REC mode of operation.

____4.7 Contact the Duty Section Superintendent and discuss:

(a) Plant status

(b) Which members of the Duty Section are required to augment the Onsite/Offsite Emergency Organization.

____4.8 Assign a Communications Assistant and direct him to:

(a) Record message on Code-A-Phone answering machine in accordance with EPIP 1004.8 Attachment I.

(b) Notify the Public Affairs Representative.

(c) Call out the required Duty Section personnel in accordance with EPIP 1004.8

____4.9 Depending on the emergency action level which was reached or exceeded, ensure that the appropriate Emergency Operating Procedures have been implemented and/or the following Emergency Plan Implementing Procedures as required:

(a) Contaminated Injuries and Radiation Overexposure (1004.16).

(b) High Winds - Tornado/High Winds (1004.22)

____4.10 If local services (fire, ambulance, police) are required, direct the Communicator to notify Dauphin County Emergency Operations Center and request the appropriate assistance. Notify Security (N/S Gate) to begin preparations to expedite entry of responding emergency personnel (Police/Fire/Ambulance). Security should be advised to implement procedure 1004.19 Emergency Security/Dosimetry Badge Issuance.

____4.11 If changes in onsite or offsite radiation levels are expected, direct the Radiological Assessment Coordinator to:

(a) Dispatch offsite and/or onsite radiation monitoring teams in accordance with EPIP's 1004.10 and 1004.11.

(b) Implement Offsite Dose Projections procedure (1004.7).

____4.12 Activate the Technical Support Center, procedure (1004.28), and the Operations Support Center, procedure (1004.29).

____4.13 If additional resources or notifications are required, refer to Assistance and Notifications procedure (1004.6).

____4.14 If the emergency involves in-plant health physics problems, direct the Radiological Assessment Coordinator to implement Health Physics Controls During Emergencies (1004.9).

____4.15 Assign an individual to complete Attachment II, Section I and give it to the Radiological Assessment Coordinator to transmit to the Bureau of Radiation Protection.

____4.16 Direct the Radiological Assessment Coordinator to complete Attachment II, Section II to transmit to the Bureau of Radiation Protection if a radioactive release has occurred or is occurring.

____4.17 Stop all liquid and gaseous discharges that are in progress until an assessment of their impact is performed and specific approval is given to continue the release by the Emergency Director.

____4.18 Verify that communications and documentation are maintained per procedure Communications and Recordkeeping (1004.5).

____4.19 If applicable, direct the Operations Coordinator to dispatch Emergency Repair/Operations personnel to investigate the identified problem area in accordance with Emergency Repair/Operations procedure 1004.21.

____4.20 After 30 minutes, confirm that BRP verification has been made. If no verification, instruct the communicator to proceed to Attachment I Section 1.2 (d).

____4.21 Instruct the Radiological Assessment Coordinator to provide ongoing dose estimates for actual releases to the Bureau of Radiation Protection.

____4.22 If an accountability was required and a report of the accountability has not been received within 30 minutes from the time it was ordered, contact the Shift Sergeant/Security Coordinator at 8038, 8039, 8040 for a status report.

____4.23 If personnel are unaccounted for, direct the Radiological Assessment Coordinator to initiate Search and Rescue procedure (1004.18).

____4.24 Evaluate dose projections and estimates and if necessary, recommend protective actions to the BRP consistent with the guidelines in Attachment I, Section IV.

____4.25 Based upon assessment of plant conditions, either close out the Alert, escalate to a higher class of emergency or downgrade to a lower class.

____ (a) If Recovery Phase criteria have been met (see Recovery Procedure 1004.24), close out the Alert by performing the notifications in Attachment I, Section III. Implement the Recovery Procedure (1004.24).

____ (b) If Recovery Phase criteria have not been met, but Alert emergency action levels are no longer being exceeded,

de-escalate to an Unusual Event by notifying BRP on the Radiological Line and perform the remaining notifications in accordance with the Unusual Event procedure (1004.1).

____ (c) If emergency action levels exceed those for an Alert, escalate to a higher class, notify BRP on the Radiological Line and make the remaining notifications in accordance with the appropriate emergency procedure as specified in Step 5.1.

____4.24 If necessary, due to potential contamination of normally non-contaminated sumps and/or tanks, or the need to closely monitor liquid releases, initiate procedure (1004.14), Monitoring/Controlling Liquid Discharges.

5.0 FINAL CONDITIONS

____5.1 A higher class of emergency has been declared by the Emergency Director after meeting or exceeding an emergency action level of one of the higher classes and one of the following procedures is being implemented.

a. Site Emergency (1004.3)

b. General Emergency (1004.4)

____5.2 A lower class of emergency has been declared by the Emergency Director and Unusual Event procedure (1004.01) is being implemented.

____5.3 The Alert has been closed out since no recovery operations are required.

____5.4 The Alert can be shifted to a recovery mode by implementing the procedure Recovery Operations (1004.24).

_____ _____
DATE SIGNATURE OF PERSON RESPONSIBLE FOR IMPLEMENTING THE PROCEDURE

ATTACHMENT I

Section I

Initial Contact

The Communicator shall notify the following agencies and personnel and update the Attachment I, Section II checklist for each notification.

Initial

____1. Dauphin County Emergency Operations Center

(If this is a reclassification notification, first advise BRP via Radiological line then unaffected Control Room) go to Item 3.

a. Telephone: 9-911 or 9-236-7976

1) If not contact, activate Dauphin County radio system.

b. MESSAGE:

This is (name/Title) at the Three Mile Island Nuclear Station
(name/title)

Unit I calling. We have declared an Alert at (time) hours.
(time)

(Based upon Emergency Director judgment, deliver one of the following statements):

1) We have not had a radioactive release

OR

2) We have had a radioactive release, but do not expect this situation to result in detectable changes in offsite radiation levels,

OR

ATTACHMENT I

SECTION I

Initial Contact

Initial

3) We have had a radioactive release, but do not know if there will be a detectable change in offsite radiation levels. We will be keeping the Bureau of Radiation Protection informed of the results of our investigation, OR

4) We have had a radioactive release and expect to be able to detect changes in offsite radiation levels, but they are expected to be less than the levels calling for a Site Emergency. We will be keeping the Bureau of Radiation Protection informed.

c. Give a short non-technical description of the emergency and the extent of the radioactive release and the affected populations and area. _____

_____

_____

___ 2. Pennsylvania Emergency Management Agency (PEMA)

(If this is a reclassification notification, go to Item 3 Unaffected Control Room.)

ATTACHMENT I

Section I

Initial Contact

Initial

a. Telephone: 9-783-8150 (A diverter forwards this call to PEMA Duty Officer after working hours.)

NOTE

If not contact, proceed to step 2.d.

b. MESSAGE:

This is Three Mile Island Nuclear Station Unit 1 calling. We have an emergency. Give me the Operations Duty Officer.

(When Duty Office answers:)

This is (name/title) at the Three Mile Island Nuclear Station
(name/title)

Unit 1 calling. We have declared an Alert at (time) hours.
(time)

We request you contact Bureau of Radiation Protection. Bureau of Radiation Protection callback should be made on the Radiological Line or 948-8069, 948-8071 or 944-0839. (Based upon Emergency Director judgment, deliver one of the following statements):

1) We have not had a radioactive release,

OR

ATTACHMENT I

SECTION I

Initial Contact

2) We have had a radioactive release, but do not expe : this situation to result in detectable changes in offsite radiation levels,

OR

3) We have had a radioactive release, but do not know if there will be detectable changes in offsite radiation levels. We will be keeping the Bureau of Radiation Protection informed of the results of our investigation,

OR

4) We have had a radioactive release and expect to be able to detect changes in offsite radiation levels but they will be less than the levels calling for a Site Emergency. We will be keeping the Bureau of Radiation Protection informed.

c. Give a short non-technical description of the emergency, and any potentially affected populations and areas:

_____

_____

_____

ATTACHMENT I

SECTION I

Initial Contact

Initial

d. If PEMA is unable to be contacted, contact Dauphin County; advise them that PEMA cannot be contacted and direct them to notify PEMA, BRP, and Lancaster, York, Lebanon, and Cumberland counties.

___ e. Message verification:

Expect Bureau of Radiological Protection (BRP) contact after PEMA notification. If no BRP confirmation is received within 30 minutes, notify PEMA of the situation. If unable to contact PEMA (line busy) call Dauphin County and notify them that BRP has not verified initial contact. Request Dauphin County to contact PEMA and/or BRP.

___3. Unaffected Control Room

a. Telephone:8066, 8067, 8068 or inter Control Room Hot Line.

b. Message: Give a brief description of plant status to Shift Supervisor.

ATTACHMENT I

SECTION I

Initial Contact

Initial

4) Institute of Nuclear Power Operations

(Do not notify if this is a reclassification notification.)

a. Telephone: 404-953-0904

b. MESSAGE:

This is _____ at Three Mile Island
(name/title)

Nuclear Station Unit 1 calling. We have declared an Alert at _____ hours. (Give a brief description of
(time)

the emergency.)

_____

_____

_____

5) Notify the following personnel/agencies if the emergency situation is such that notification is deemed appropriate.

___ a. Hershey Medical Center 9-534-8333

Notification to be performed per procedure 1004.16.

ATTACHMENT I

SECTION I

Initial Contact

Initial

___ b. Pennsylvania State Police 9-234-4051

MESSAGE:

This is _____ at the Three Mile Island
(name/title)

Nuclear Station Unit I calling. We have declared an Alert at _____ hours. We _____ had a
(time) (have/have not)

radioactive release. We require assistance as follows: (State any assistance required.)

___ c. Radiation Management Corporation 73-1-215 243-2950. Emergency number 73-1-215-243-2990.

MESSAGE:

This is _____ at the Three Mile Island Nuclear
(name/title)

Station Unit I calling. We have declared an Alert at _____ hours. (Give a brief description of the
(time,

ATTACHMENT I

SECTION I

Initial Contact

Initial

emergency). We _____ had a radioactive
(have/have not)
release.

___ d. American Nuclear Insurers 74-1-203-677-7305

Message:

This is _____ at the Three Mile Island Nuclear
(name/title)
Station Unit I calling. We have declared an Alert
at _____ hours (Give a brief description of the
(time)
emergency).
We _____ had a radioactive release.
(have/have not)

_____ _____ _____

DATE TIME OF COMPLETION COMPLETED BY

ATTACHMENT I

SECTION I

Initial Contact

Initial

___ 4. Nuclear Regulatory Commission (NRC) - Bethesda, MD.

(Continuous communications with the NRC will be maintained following contact.)

a. Telephone: NRC Emergency Notification System (ENS)

(RED PHONE)

b. MESSAGE:

This is _____ at the Three Mile Island Nuclear Station
(name/title)

Unit I calling. We have declared an Alert at _____ hours.
(time)

(Based upon Emergency Director judgment, use one of the following statements):

1) We have not had a radioactive release

OR

2) We have had a radioactive release but do not expect this situation to result in detectable changes in offsite radiation levels.

OR

ATTACHMENT I

SECTION I

Initial Contact

Initial

3) We have had a radioactive release but do not know if there will be a detectable change in offsite radiation levels. We will be keeping the Bureau of Radiation Protection informed of the results of our investigation.

4) We have had a radioactive release and expect to be able to detect changes in offsite radiation levels but they will be less than the levels calling for a Site Emergency. We expect the levels to be <50mRem/hr (gamma). We will be keeping the Bureau of Radiation Protection informed. (Give a short non-technical description of the emergency and the extent of the radioactive release, if appropriate)._____

_____

_____

ATTACHMENT I

SECTION II

NOTIFICATION CHECKLIST

AGENCY	TIME OF INITIAL NOTIFICATION OR ESCALATION				TIME OF DE-ESCALATION OR CLOSE OUT			
	UNUSUAL EVENT	ALERT	SITE EMERGENCY	GENERAL EMERGENCY	UNUSUAL EVENT	ALERT	SITE EMERGENCY	GENERAL EMERGENCY
Dauphin County								
PEMA								
Unit 2 Control Room								
INPO								
NRC								
Hershey Medical Center	*	*	*	*				
State Police	*	*	*					
RMC	*	*	*	*				
ANI	*	*						
B & W	N/A	N/A						
Conrail	N/A	N/A	N/A					
5 Affected Counties	N/A	N/A	N/A					

* Optional

ATTACHMENT I

SECTION III

Secondary Contact

Initial

The Communicator shall notify the following agencies and personnel and update the Attachment I, Section II checklist for each notification.

___ 1. Bureau of Radiation Protection

a. Telephone: Radiological Line

b. MESSAGE:

This is _____ at the Three Mile Island Nuclear Station
(name/title)

Unit 1. We have closed out the Alert at _____ hours and
(time)

initiated recovery operations. Please notify PEMA, Dauphin, Lancaster, York, Lebanon and Cumberland counties.

___ 2. Unaffected Control Room

a. Telephone:8066, 8067, 8068

b. Message: Notify Shift Supervisor of CLose out of the Alert.

___ 3. Nuclear Regulatory Commission Office - Bethesda, Md.

a. Telephone: Emergency Notification System (ENS)

(RED PHONE)

ATTACHMENT I

SECTION III

Secondary Contact

Initial

b. MESSAGE:

This is _____ ____ at the Three Mile Island Nuclear
(name/title)

Station Unit 1. We have closed out the Alert at _____ hours
(time)

and initiated recovery operations.

4. If applicable, notify the following persons and/or agencies of close out of the Alert:

____ a. Hershey Medical Center: 9-534-8333

____ b. Pennsylvania State Police: 9-234-4051

____ c. Radiation Management Corporation (RMC):

____ 73-1-215-243-2950 or 73-1-215-243-2990

____ d. American Nuclear Insurers: 74-1-203-677-7305

____ e. Others - as directed by the Emergency Director.

_____ _____ _____ _____

DATE TIME OF COMPLETION COMPLETED BY

ALERT

ATTACHMENT I SECTION IV

PROTECTIVE ACTION RECOMMENDATION GUIDELINES

THESE RECOMMENDATIONS MAY BE DELIVERED ONLY BY THE EMERGENCY DIRECTOR

1. Consideration shall be given to sheltering if:

   a. Release time is expected to be short (Puff release, <2 hours)

   and

   b. Evacuation could not be well underway prior to expected plume arrival due to short warning time, high wind speeds, and/or foul weather.

2. Consideration shall be given to evacuation if:

   a. A release is expected to occur with projected doses approaching or exceeding:

      1 Rem Whole Body and/or

      5 Rem Child Thyroid

      and

   b. Release time is expected to be long (>2 hours)

      and

   c. Evacuation can be well underway prior to plume arrival for above release, based upon wind speed and travel conditions.

ATTACHMENT II

EMERGENCY STATUS REPORT

Section I

1. Description of emergency: _____

_____

_____

_____

2. Has the Reactor tripped Yes/No

3. Did the Emergency Safeguards Systems actuate Yes/No

   If so, which ones

   (a) High Pressure Injection Yes/No

   (b) Low Pressure Injection Yes/No

   (c) Core Flood Yes/No

   (d) 4 No. Reactor Building Isolation Yes/No

   (e) Reactor Building Cooling Yes/No

4. What is the status of the plant

   (a) At power

   (b) Hot Standby

   (c) Hot Shutdown

   (d) Cooling Down

   (e) Reactor Pressure _____ psig

   (f) Reactor temperature _____ °F

ATTACHMENT II

EMERGENCY STATUS REPORT

Section I

5. Is offsite power available Yes/No

6. Are both diesel generators operable Yes/No

7. Have any personnel injuries occurred Yes/No

   (a) If so, is the injured person(s) contaminated Yes/No

      (1) What are the approximate radiation and/or contamination levels

      _____ mR/hr

      _____ DPM/100 cm^2

8. Are these excessive radiation levels and/or contamination Levels Yes/No

   (a) If so, List below:

      (1) Radiation Levels (Whole Body) _____

      (2) Contamination levels ____ DPM/100 cm^2

      at location: _____

_____ _____ _____

DATE TIME COMPLETED BY

ATTACHMENT II

EMERGENCY STATUS REPORT

Section II

Fill out if a release has (is) ocurring. Provide BRP all available information for verification call.

1. What is the approximate radioactive source term discharge rate from the plant (As determined by the Projected Dose Calculation procedure (1004.7).)

   (a) Noble gases _____ Ci/sec

   (b) Iodine _____ Ci/sec

2. What is the approximate meteorology

   (a) Wind speed ____ mph

   (b) Wind direction _____

   (c) Stability Class-Stable/Neutral/Unstable

3. What is the projected whole body dose rate and iodine concentration at the nearest offsite downwind point

   (a) _____mR/hr

   (b) _____uCi/cc Iodine

   (c) _____(Location)

4. Estimated duration of the release

ATTACHMENT II

EMERGENCY STATUS REPORT

Section II

(a) If the release is terminated:

Start Time _____ Stop Time _____

Duration _____

(b) If the release is still in progress:

Start Time _____ Estimated duration _____ (hrs/min/sec)

5. (a) Based on projected dose rates, iodine concentration and duration or estimated duration (if still in progress) of the release, will the lower limits of the EPA Protective Action Guides be exceeded (i.e., 1 Rem Whole Body, 5 Rem Child Thyroid.

Yes/No

(b) If yes, estimate time to exceeding PAG: _____ hours

IMPORTANT TO SAFETY
NON-ENVIRONMENTAL IMPACT RELATED

THREE MILE ISLAND NUCLEAR STATION
UNIT NO. 1 EMERGENCY PLANNING IMPLEMENTING PROCEDURE 1004.4
GENERAL EMERGENCY

Office of Nuc. Reactor Reg.

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20.0	2						

Unit 1 Staff Recommends Approval

Approval NA Date _____
Cognizant Dept. Head

Unit 1 PORC Recommends Approval

M. J. Nelson Date 10/2/81
Chairman of PORC

Manager TMI I Approval

for R. J. Toole Date 10-5-81

QA Modifications/Operations Mgr

NA Date _____

DOCUMENT ID: 0029W

THREE MILE ISLAND NUCLEAR STATION
UNIT 1 EMERGENCY PLANNING IMPLEMENTING PROCEDURE 1004.4
GENERAL EMERGENCY

1.0 PURPOSE

The purpose of this procedure is to define the conditions that shall be regarded as a General Emergency for Three Mile Island Nuclear Station (Unit 1) and to:

a. Ensure necessary actions are taken to protect the health and safety of the public.

b. Ensure necessary actions are taken to notify GPU-Nuclear management and offsite emergency response organizations.

c. Mobilize the emergency response organizations to initiate appropriate emergency actions.

The Emergency Director is responsible for implementing this procedure.

NOTE: Emergency Director responsibilities that may not be delegated include:

a) Decision to notify offsite emergency management agencies.

b) Making protective action recommendations as necessary to offsite emergency management agencies.

c) Classification of Emergency Event.

d) Determining the necessity for onsite evacuation.

e) Authorization for emergency workers to exceed 10 CFR 20 radiation exposure limits.

INITIALS

2.0 ATTACHMENTS

2.1 Attachment I, General Emergency Notifications

2.2 Attachment II, Emergency Status Report

3.0 EMERGENCY ACTION LEVELS

	INITIATING CONDITIONS	INDICATION
3.1	Actual or projected doses at the Exclusion Area boundary in excess of 1/10 of the lower limit EPA Protective Action Guidelines.	As determined by: a. A projected dose calculation of $\geq$ 100mR/hr whole body using actual meteorology and Reactor Building design leakrates (includes a Waste Gas Tank Rupture containing the high limit content of 8800 µCi). b. A projected child thyroid dose calculation of $\geq$ 500 mR/hr in one hour using actual meteorology and Reactor Building design leakrate. c. Offsite radiological monitoring reports of $\geq$ 100mR/hr (gamma) at any offsite location.
3.2	Significant levels of radiation in the reactor containment building and potential loss of containment integrity.	As indicated by either: a. Dose rate on RM-G8 $\geq$ 2.8 x 10^4 mR/hr and a Reactor Building pressure $\geq$ 30 psig.* b. Dose rate on RM-G8 $\geq$ 2.8 x 10^4 mR/hr and a Reactor Building hydrogen concentration $\geq$ 3 Percent by volume.
3.3	Loss of physical control of the facility.	Shift Supervisor's judgment, based on advice of the Security Duty Sergeant.
3.4	Other plant conditions exist, from whatever source that make release of significant amounts of radioactivity in a short time possible.	Whenever plant conditions warrant it, as judged by the Shift Supervisor/Emergency Director.

* These indications may be determined via instrumentation that will be installed or expanded as required by NUREG 0578 prior to restart.

4.0 EMERGENCY ACTIONS

INITIALS

____ 4.1 Upon recognition that any of the above action levels have been reached or exceeded, the Shift Supervisor/Duty Section Superintendent shall assume the duties of the Emergency Director. (Event should be assessed and declared within 10 minutes of the occurrence.)

____ 4.2 Announce, or have announced, one of the following messages over the public address system (merged):

ATTENTION ALL PERSONNEL; ATTENTION ALL PERSONNEL: A GENERAL EMERGENCY IN UNIT I HAS BEEN DECLARED. ALL NON-ESSENTIAL PERSONNEL IN UNITS I AND II PROCEED TO (500 KV SUBSTATION/MIDDLETOWN SUBSTATION) (Depending on plume pathway). UPON ARRIVAL, ALL SUPERVISORS WILL ASSEMBLE and LOG THEIR PERSONNEL. PERSONNEL IN H.P. CONTROLLED AREAS REPORT TO ACCESS CONTROL POINTS. ALL MEMBERS OF THE EMERGENCY ORGANIZATION REPORT TO YOUR STATIONS. THERE WILL BE NO SMOKING, DRINKING, OR EATING UNTIL FURTHER NOTICE. (Repeat message slowly)

____ 4.3 Announce to Control Room Personnel that _____
(name)
has assumed the duties of Emergency Director.

____ 4.4 Direct the sounding of the Radiation Emergency Alarm.

____ 4.5 Assign a Communications Assistant to make notifications to persons and/or agencies per Attachment 1, Section 1.

____ 4.6 Assign a Communications Assistant and direct him to:

(a) Record message on Code-A-Phone answering machine in accordance with EPIP 1004.8 attachment 1.

(b) Notify the Public affairs representative.

(c) Call out the onsite Duty Section personnel in accordance with EPIP 1004.8.

(d) Call out the offsite Duty Section personnel in accordance with EPIP 1004.8.

____ 4.7 Contact the Duty Section Superintendent, and discuss plant status and that the on-site and off-site duty section personnel are being called.

____ 4.8 Depending on the emergency action level which was reached or exceeded, ensure that the appropriate Emergency Operating Procedures have been implemented.

____ 4.9 If local services (fire, ambulance, police) are required, direct the Communicator to notify Dauphin County Emergency Operations Center and request appropriate assistance. Notify security (N/S Gate) to begin preparations to expedite entry of responding emergency personnel (Police/Fire/Ambulance). Security should be advised to implement procedure 1004.19 Emergency Security/Dosimetry Badge Issuance.

____ 4.10 Direct the Radiological Coordinator to:

a. Dispatch off-site and/or on-site radiation monitoring teams in accordance with Offsite Radiation Monitoring procedure (1004.11) and Onsite Radiation Monitoring procedure (1004.10).

b. Implement Offsite Dose Projections procedure (1004.7).

____ 4.11 Activate the Technical Support Center (1004.28) and the Operations Support Center (1004.29).

____ 4.12 If additional resources or notifications are required, refer to Assistance and Notification procedure (1004.6).

____ 4.13 If the emergency involves in-plant health physics problems, direct the Radiological Assessment Coordinator to implement Health Physic Controls During Emergencies procedure (1004.9).

____ 4.14 Assign an individual to complete Attachment II, Section I and give it to the Radiological Assessment Coordinator to transmit to the Bureau of Radiation Protection.

____ 4.15 Direct the Radiological Assessment Coordinator to complete Attachment II, Section II to transmit to the Bureau of Radiation Protection.

____ 4.16 Stop all liquid and gaseous discharges that are in porgress until an assessment of their impact is performed and specific approval is given to continue the release by the Emergency Director.

____ 4.17 Verify that communications and documentation are maintained per Communications and Recordkeeping procedure (1004.5).

____ 4.18 If applicable, direct the Operations Coordinator to dispatch Emergency Repair/Operations Personnel to investigate the identified problem areas(s) in an accordance with Emergency Repair/Operations procedure 1004.21.

____ 4.19 After 30 minutes, confirm that BRP verification has been made. If no verification, instruct the Communicator to proceed to Attachment I, Section 1,2.e.

____ 4.20 Instruct the Radiological Assessment Coordinator to provide ongoing dose estimates for actual releases, to the Bureau of Radiation Protection.

____ 4.21 If a report of Accountability has not been received within 30 minutes from the time it was ordered, contact the Shift Sergeant/Security Coordinator at 8038, 8039, 8040 for a status report.

____ 4.22 If personnel are unaccounted for, direct the Radiological Assessment Coordinator to initiate Search and Rescue procedure (1004.18).

____ 4.23 Evaluate dose projections and estimates and, if necessary, recommend protective actions to the BRP, consistent with the guidelines in Attachment I, Section IV.

____ 4.24 Based upon assessment of plant conditions, the Emergency Director shall either close out the General Emergency and enter the Recovery Phase or downgrade to a lower class as follows:

a. If Recovery Phase criteria have been met (see procedure 1004.24),

b. If Recovery Phase criteria have not been met, but General Emergency Action levels are no longer being exceeded, de-escalate to a lower emergency class by notifying BRP on the Radiological Line and perform the remaining notifications in accordance with the applicable emergency procedure as specified in Step 5.1.

____ 4.25 If necessary, due to potential contamination of normally non-contaminated sumps and/or tanks, or the need to closely monitor liquid releases, initiate procedure 1004.14 (monitoring/controlling liquid discharges).

5.0 FINAL CONDITIONS

____ 5.1 A lower class of emergency has been declared by the Emergency Director and one of the following procedures is being implemented:

a. Site Emergency (1004.3)

b. Alert (1004.2)

c. Unusual Event (1004.1)

____ 5.2 The General Emergency has been closed out with the concurrence of the Emergency Support Director, since no recovery operations are required.

____ 5.3 The General Emergency has been shifted to a recovery mode by implementing the procedure Recovery Operations (1004.24).

FOR USE IN UNIT I ONLY

ATTACHMENT I SECTION I

INITIAL CONTACT

INITIALS

The Communicator shall notify the following agencies and personnel, and update the Attachment 1, Section 11 checklist after each notification.

____ 1. Dauphin County Emergency Operation Center

(If this is a reclassification, go to Item 3, Unaffected Control Room).

a. Telephone: 9-911 or 9-236-7976

(1) If no contact, activate the Dauphin County Radio System.

b. MESSAGE:

This is _____ at the Three Mile Island Nuclear
(name/title)
Station Unit 1 calling. We have declared a General Emergency at _____ hours. (Based upon Emergency Director judgement,
(time)
use one of the following statements):

1) We have not had a radioactive release, however we have the potential for a significant radioactive release

OR

2) We have had a radioactive release and offsite radiation levels are expected to be > 100 mRem per hour (gamma). We will be keeping the Bureau of Radiological Protection informed.

INITIALS

(Give a short non-technical description of the emergency, the extent of the radioactive release, and potentially affected populations and areas:)_____

_____

_____

___ 2. Pennsylvania Emergency Management Agency (PEMA)

(If this is a reclassification notification, go to Item 3, Unaffected Control Room.)

NOTE: Where offsite protective actions are to be recommended, the Emergency Director should refer to the contents of Attachment I Section IV.

a. Telephone: 9-783-8150

(A diverter forwards this call to a PEMA Duty Officer after working hours).

1) If no contact, proceed to Step 2.d.

___ b. MESSAGE: ASK FOR THE DUTY OFFICER

This is _____ at the Three Mile Island Nuclear
(name/title)

Station Unit I calling. We have declared an Emergency. Give me the Operations Duty Officer. (When Duty Officer answers): This is _____ at the Three Mile Island
(name/title)

Nuclear Station Unit 1 calling. We have declared a General Emergency at_____ hours. We request that you contact the
(time)

INITIALS

Bureau of Radiation Protection. Bureau of Radiation Protection call back should be made on the Radiological Line or 948-8069, 948-8071, 944-0839. (Based on Emergency Director's judgement, deliver one of the following statements):

1) We have not had a radioactive release, however, we have the potential for significant radioactive release.

   OR

2) We have had a radioactive release and offsite radiation levels are expected to be > 100 mRem/hour (gamma). We will be keeping the Bureau of Radiation Protection informed.

___ c. Give a short, non-technical description of the emergency and the extent of the radioactive release, and potentially affected populations and areas: _____

_____

_____

_____

_____

___ d. If PEMA was unable to be contacted, contact Dauphin County; advise them that PEMA cannot be contacted and direct them to notify PEMA, BRP, and Lancaster, York, Lebanon and Cumberland counties.

___ e. Message verification:

Expect Bureau of Radiation Protection (BRP) contact after PEMA notification. If no BRP confirmation is received

INITIALS

within 30 minutes, notify PEMA of situation. If unable to contact PEMA (line busy), call Dauphin County and notify them that BRP has not verified initial contact. Instruct Dauphin County to contact PEMA and/or BRP.

___ 3. Unaffected Control Room

a. Telephone: Use 8066, 8067 or 8068 or inter-control Room Hot-Line.

___ b. MESSAGE:

Give a brief description of plant status to Shift Supervisor

_____

_____

_____

4. Parent and Four affected Counties

a. Telephone each county separately and deliver the message

1. Dauphin - 911 or 9-236-7976
2. York - 73-1-843-5111
3. Lancaster - 73- 1-299-8373
4. Lebanon - 73-1-272-2025
5. Cumberland - 9-238-9676

b. MESSAGE:

This is _____ at the Three Mile Island Nuclear
(name/title)

INITIALS

Station Unit 1 calling. We have declared a General Emergency at _____hours. (Give a brief description of the (time)

emergency.) _____

_____

_____

_____

NOTE: Each county must be notified independently and the message transmitted.

___ 5. Institute of Nuclear Power Operations

(Do not notify if this is a reclassification notification).

a. Telephone : 404-953-0904

b. MESSAGE:

This is _____ at the Three Mile Island Nuclear
(name/title)

Station Unit 1 calling. We have declared a General Emergency at _____ hours. (Give a brief description
(time)

of the of the emergency.) _____

_____

_____

_____

_____

___ 6. Pennsylvania State Police 9-234-4051

INITIALS

MESSAGE:

This is _____ at the Three Mile Island Nuclear
(name/title)

Station Unit 1 calling. We have declared a General Emergency at _____ hours. We have/have not had a radioactive
(time)

release. We require immediate traffic control assistance in the vicinity of the (North/South) gate.

___ 7. Conrail Railroad 9-255-1414

MESSAGE:

This is _____ at the Three Mile Island Nuclear
(name/title)

Station Unit I calling. We have declared a General Emergency at _____ hours. We require immediate restriction of
(time)

railway traffic at the Station.

___ 8. Radiation Management Corporation

73-1-215-243-2950

73-1-215-243-2990 Emergency Number

MESSAGE:

This is _____ at the Three Mile Island Nuclear
(name/title)

Station Unit I calling. We declared a General Emergency at _____
time

hours. (Give a brief description of the emergency.)

INITIALS

We _____ had a radioactive release. We _____
(have/have not) (do/do not)
require assistance at this time. (Describe the assistance required if any.)

___ 9. American Nuclear Insurers 74-1-203-677-7305

MESSAGE:

This is _____ at the Three Mile Island Nuclear
(name/title)
Station Unit 1 calling. We have declared a General Emergency at _____ hours. (Give a brief description of the
(time)
emergency.) We _____ had a radioactive release.
(have/have not)

___ 10. Babcock and Wilcox 74-1-804-384-3413

MESSAGE:

This is _____ at the Three Mile Island Nuclear
(name/title)
Station Unit 1 calling. We have declared a General Emergency at _____ hours. (Have a prepared Attachment II available
(time)
for reference while giving a brief description of the emergency).

NOTE: From 0900 to 1700 the B and W trunk of the Operations Line may be used. (See Communications Plan)

___ 11. If medical assistance is required, notify the following agency:

INITIALS

a. Hershey Medical Center 9-534-8333

Notification to be performed in accordance with procedure 1004.16.

12. Nuclear Regulatory Commission (NRC) - Bethesda, MD

(Communications with NRC will be continuously maintained following contact.)

a. Telephone: NRC Emergency Notification System (ENS)
(RED PHONE)

___ b. MESSAGE:

This is _____ at the Three Mile Island
(name/title)

Nuclear Station Unit 1 calling. We have declared a General Emergency at _____ hours. (Based on Emergency Director
(time)

judgement, issue one of the following statements):

1) We have not had a radioactive release, however, we have the potential for Significant radioactive release.

OR

2) We have had a radioactive release and offsite radiation levels are expected to be >100 mRem/hour (gamma). We will be keeping the Bureau of Radiation Protection informed.

c. Give a short non-technical description of the emergency and the extent of the radioactive release, and the potentially affected populations and areas.

_____

_____

_____

FOR USE IN UNIT I ONLY

ATTACHMENT I

SECTION II

NOTIFICATION CHECKLIST

AGENCY	TIME OF INITIAL NOTIFICATION OR ESCALATION				TIME OF DE-ESCALATION OR CLOSE OUT			
	UNUSUAL EVENT	ALERT	SITE EMERGENCY	GENERAL EMERGENCY	UNUSUAL EVENT	ALERT	SITE EMERGENCY	GENERAL EMERGENCY
Dauphin County								
PEMA								
Unit 2 Control Room								
INPO								
NRC								
Hershey Medical Center	*	*	*	*				
State Police	*	*	*	*				
RMC	*	*	*	*				
ANI	*	*						
B&W	NA	NA						
ConRail	NA	NA	NA					
5 Affected Counties	NA	NA	NA					

*Optional

ATTACHMENT I SECTION III

SECONDARY CONTACT

INITIALS

The Communicator shall notify the following agencies and personnel and update the Attachment I, Section II checklist after each notification.

___ 1. Bureau of Radiation Protection

a. Telephone: Radiological Line

b. MESSAGE:

This is _____ ___ at the Three Mile Island Nuclear
(name/title)
Station Unit 1 calling. We have closed out the General Emergency at _____ hours and initiated recovery operations.
(time)

Please notify PEMA, Dauphin, Lancaster, York, Lebanon and Cumberland counties.

___ 2. Unaffected Control Room

a. Telephone: 8066, 8067, 8068

b. Message:

Notify Shift Supervisor of close out of the General Emergency.

___ 3. Nuclear Regulatory Commission Office- Bethesda, Md.

a. Telephone: Emergency Notification System (ENS)
(RED PHONE)

INITIALS

b. MESSAGE:

This is _____ at the Three Mile Island Nuclear
(name/title)
Station Unit 1 calling. We have closed-out the General Emergency at _____ hours and initiated recovery
(time)
operations.

___ 4. If applicable, notify the following persons and/or agencies of the close-out of the General Emergency:

a. Hershey Medical Center: 9-534-8333

b. Pennsylvania State Police: 9-234-4051

c. Radiation Management Corporation (RMC)
73-1-215-243-2950 or 73-1-215-243-2990

d. American Nuclear Insurers: 74-1-203-677-7305

e. Babcock and Wilcox: 74-1-804-384-3413

f. Conrail: 9-255-1414

g. Others: As directed by the Emergency Director

_____	_____	_____
DATE	TIME COMPLETED	COMPLETED BY

ATTACHMENT I SECTION IV

PROTECTIVE ACTION RECOMMENDATION GUIDELINES

THESE RECOMMENDATIONS MAY BE DELIVERED ON BY

THE EMERGENCY DIRECTOR

1. Consideration shall be given to sheltering if:

   a. Release time is expected to be short (Puff release, <2 hours)

   (AND)

   b. Evacuation could not be well underway prior to expected plume arrival due to short warning time, high wind speeds, and/or foul weather.

2. Consideration shall be given to evacuation if:

   a. A release is expected to occur with projected doses approaching or exceeding:

      1 Rem Whole Body and/or

      5 Rem Child Thyroid

   (AND)

   b. Release time is expected to be long (>2 hours)

   (AND)

   c. Evacuation can be well underway prior to plume arrival for above release, based upon wind speed and travel conditions.

ATTACHMENT II

EMERGENCY STATUS REPORT

SECTION I

1. Description of Emergency: _____

_____

_____

_____

2. Has the Reactor tripped Yes / No

3. Did the Emergency Safeguard Systems actuate Yes / No

   If so, which ones

   a. High Pressure Injection Yes / No

   b. Low Pressure Injection Yes / No

   c. Core Flood Yes / No

   d. 4 No. Reactor Building Isolation Yes / No

4. What is the status of the plant

   a. At power

   b. Hot standby

   c. Hot shutdown

   d. Cooling down

   e. Reactor Pressure _____ psig

   f. Reactor Temperature _____ °F

5. Is offsite power available Yes / No

6. Are both diesel generators operable Yes / No

7. Have any personnel injuries occurred Yes / No

   If so, is the injured person(s) contaminated Yes / No

   What are the approximate radiation and/or contamination levels

   _____ mR/hr

   _____ DPM/100 cm2

8. Are there excessive radiation levels and/or contamination

   Levels Yes / No

   If so, list below:

   a) Radiation levels: (Whole body) _____

   b) Contamination levels _____ DPM/100 cm2

      At location: _____

_____ _____ _____

DATE TIME COMPLETED BY

ATTACHMENT II

EMERGENCY STATUS REPORT

SECTION II

Fill out if a release has (is) occurring. Provide BRP all available information for verification call.

1. What is the approximate radioactive source term discharge rate from the plant (As determined by the Projected Dose Rate Calculation procedure 1004.7).
   a) Noble gases _____ Ci/sec
   b) Iodine _____ Ci/sec

2. What is the approximate meteorology
   a) Wind speed _____ mph
   b) Wind direction _____
   c) Stability class - Stable/Neutral/Unstable

3. What is the projected whole body dose rate and the iodine concentration at the nearest offsite downwind point
   a) _____ mR/hr
   b) _____ uCi/cc Iodine
   c) _____ (Location)

4. Estimated duration of the release
   a) If the release is terminated:
      Start time _____ Stop time _____ Duration

b) If the release is still in progress:

Start time _____

Estimated duration _____(hrs/min/sec)

5. a) Based on projected dose rates, iodine concentration and duration or estimated duration (if still in progress) of the release, will the lower limits of EPA Protective Action Guides be exceeded (i.e., 1 Rem whole body, 5 Rem Child Thyroid) Yes / No

b) If yes, estimate time to exceeding PAG: _____ hours