### EMERGENCY PLAN PROCEDURES CONTENTS

. .

### Procedure #

•

### Procedure Title

IP-1001	Discussion of the Determination of the Magnitude of
	Release
IP-1002	Determination of the Magnitude of Release
IP-1003	Obtaining Meteorological Data
IP-1004	Midas Computer System-Dose Assessment Models
IP-1005	Planned Discharge of Containment Atmosphere During Accident Conditions

## Environmental Monitoring

IP-1010	In-Plant/Site Perimeter Survey
IP-1011	Offsite Monitoring
IP-1017	Recommendation of Protective Actions for the Offsite
	Population
TP-1018	Post Accident Environmental Complian and Countries

IP-1018 Post Accident Environmental Sampling and Counting

### Personnel Injury

IP-1021	Radiological Medical Emergency
IP-1022	Transport of Contaminated Injured Personnel Between
TP-1023	Use and Set-Up of Unit 3 Personnel Decon Suite

### Damage Assessment

IP-1025	Repair an	d Corrective	Action	Teams
IP-1027	Emergency	Personnel E	xposure	

### Notification and Communication

IP-1030	Procedure for-Control Room: Emergency Notification, Communication and Staffing
IP-1031 IP-1038	Procedure for EOF Emergency Notifications & Communications Use of the Emergency Communications Systems
	(Radiological Emergency Data Forms, County Hot Line, Radio and NAWAS)

### Emergency Operation Facilities

IP-1040	Habitability of the Emergency Facilities
IP-1041	Personnel Monitoring of EOF, TSC and OSC Personne
IP-1045	Technical Support Center

IP-1047 Operations Support Center

### EMERGENCY PLAN PROCEDURES CONTENTS

Procedure #

Procedure Title

# Accountability and Evacuation

IP-1050	Accountability
IP-1053	Evacuation of Site
IP-1054	Search and Rescue Teams

## Non-Radiological Emergencies

IP-1055	Fire Emergency	
IP-1056	Directing Fire Fighting Personnel in Controlled Areas	
IP-1057	Tornado (Hurricane) Emergency	
IP-1058	Earthquake Emergency	
IP-1059	Air Raid Alert	

### HP Release Surveys and Decontamination

IP-1060	Personnel Radiolog	gical Check a	nd Deco	ontar	mination
IP-1063	Vehicle/Equipment	Radiological	Check	and	Decontamination

## Emergency Equipment and Maintenance

IP-1070	Periodic	Check	of	Emergency	Preparedness	Ecuipment
IP-1076	Beepers					

### Exercises, Drills and Training

IF-1080	Conduct o	f Emergency	Exercises	and	Drills
IP-1085	Emergency	Response T	raining		

Indian Point 3 Nuclear Power Plant P.O. Box 215 Buchanan, New York 10511 914 739.8200



EMERGENCY PLAN PROCEDURES

PROCEDURE	NO	IP-	Book II	REV. 9	
			And and a second s	THE R. LEWIS CO., LANSING MICH. 414 AND ADDRESS OF	-

TITLE" Book II

Organization Initiating Conditions NUE Alert Site Area Emergency General Emergency

The following pages are effected by this revision:

\*

0 - 2,3IC - 7,8 MUE - 1-3A - 3,4,7,9-13
SA - 1-4
GE - 1-3

WRITTEN BY: Caul 10. B	elf
REVIEWED BY:	
PORC REVIEW: 1450	DATE 9/21/50
APPROVED BY: John CBum	DATE 1/29/3-
EFFECTIVE DATE: 10/29/83	





-

0-2

### TABLE 5-2

#### INDIAN POINT EMERGENCY RESPONSE STAFFING

1. Emergency Director

Resident Manager Superintendent of Power Technical Services Superintendent Radiological & Environmental Services Superintendent Assistant to the Resident Manager Shift Supervisor

2. Plant Operations Manager

Superintendent of Power Operations Superintendent Technical Services Superintendent Shift Supervisor

3. Operations Support Center Supervisor

Maintenance Superintendent I & C Superintendent Assistant Maintenance Superintendent I & C General Supervisor

4. Technical Support Center Manager

Technical Services Superintendent Electrical Engineer Mechanical Engineer Reactor Engineer Performance & Reliability Supervisor Shift Technical Advisors

5. Radiological Assessment Team Leader

Radiological & Environmental Services Superintendent Senior Radiological Engineer Chemistry General Supervisor Radiological Engineer

6. Lead Accountability Officer

Office Manager Personnel Manager Security Shift Coordinator (off hours)

7. Security and Safety

Safety and Fire Protection Superintendent Security Supervisor Asst. Security and Safety Supervisor Security Shift Coordinator

#### TABLE 4-1

#### INITIATING CONDITIONS AND EMERGENCY ACTION LEVELS

	INITIATING CONDITIONS		POSSIBLE INDICATIONS TO OPERATORS	EMERGENCY CLASSIFICATION	REFERENCE PLANT EMERGENCY PROCEDURE	PROTECTIVE ACTIONS RECOMMENDATIONS*
v.	RADIOLOGICAL EFFLUENT MONITORING AND RADIATION MONITORING					
	<ol> <li>Instantaneous radiological effluent technical specification limits exceeded.</li> </ol>	۰.	Exceeds instantaneous setpoint of R-14	Notification of Unusual Event	PEP-RM-1	- Shelter to 10 miles - Evacuate as per IP-1017 Protective Action rate
	<ol> <li>Accidental release of waste liquid in excess of technical specification limits.</li> </ol>	a.	See technical specifications, Appendix B Section 2.4.1.	Notification of Unusua <sup>3</sup> Svent		comendations for actual release conditions.
	<ol> <li>Radiation Nevels of airborne contamination which indicate a severe degradation in the control of radioactive materials (e.g., increase of a factor of 1000 in direct radiation readings within facility)</li> </ol>	<b>a</b> .	Same as initiating condition	Alert (Radiological)		
	4. Rediclogical effluents greater than 10 times technical specification instantaneous limits (an instantaneous rate which if continued over 2 hours, would result in about 1 mR at the site boundary under average meteorological conditions)	•	Same as initiating condition {e.g., Noble Gas release in excess of $.2 \text{ Ci/sec}$ , Iodine release of $3.0 \times 10^{-5} \text{ Ci/sec}$ , check site boundary dose for actual dose for actual release and meteorological conditions prior to classifying emergency}.	Alert (Radiological)		
10-7	5. Effluent somitors (R-14, R-24 and R-24A, R-27) H.P. reading on plant vent detect levels corresponding to greater than 500 sR/hr for 5 hour or greater than 500 sR/hr WE for 2 minutes (or five times these levels to the thyroid) at the site boundary for <u>adverse meteorology</u> .	la *	<ul> <li>(Any one or more of the following conditions would be cause for a declaration of a Site Area Emergency)</li> <li>i. R-14 offscale for 5 hour Plant vent reading &gt;40 smR/hr on contact for 2 minutes. R-27 reads 1.20 2H6 uCi/cc for 5 hr R-27 reads 1.20 2H6 uCi/cc for sore than 2 minutes.</li> <li>ii. R-25, R-26 27.9 x 10<sup>5</sup> R/hr for 5 hr or R-25, R-26 27.9 x 10<sup>5</sup> R/hr for 2 min. c</li> <li>iii. R-10 Z310 mR/hr for 5 hour or more R-10 23100 eR/hr for 2 minutes or more</li> <li>iv. Site Boundary surveys detect:</li> <li>ws (1): &gt; 50 mR/hr for 5 hour sore to a solution of the solu</li></ul>	Site Area Emergency lg more ar more		

#### TABLE 4-1

#### INITIATING CONJITIONS AND EMERGENCY ACTION LEVELS

INITIATING CONDITIONS

#### IV. RADIOLOGICAL EFFLUENT MONITORING AND RADIATION MONITORING (CONT'D)

6. Effluent monitors, (R-14, 3-24 and R-24A, R-27, H.P. reading 14 on plant vent) detect levels corresponding to 1 R/hr WB or 5 R/hr thyroid at the Site Boundary under actual meteorological conditions or R-10, R-25, R-26 indicate levels corresponding to the above conditions and anticipated loss of containment integrity.

TO	OPERATORS	MERGENCY	CLASSIFICATIONS

Indications from effluent monitors 1. or Environmental survey results:

POSSIBLE INDICATIONS

General Emergency

PEP-RM-1

REFERENCE PLANT

-Shelter to 10 miles -Evacuate as per IP-1017. Protective Acti - Recommendations for actual release combitions. (Economical ERPA's)

PROTECTIVE ACTIONS

EMERGENCY PROCEDURE RECOMMENDATIONS\*

Noble Gas Dose rate >1 R/hr (limiting case) Iodine dose rate 25 R/hr (use chem sample ratio do not use assumed ratio).

11. Peadings on R-25, R-26 ≥ 2.06 x 10<sup>3</sup> Xu = R/hr Q (Site Boundary) and anticipated loss of containment integrity

iii. Reading on R-10 8.06 = mR/hr Xu/Q (Site Boundary) and anticipated loss of containment integrity

# NOTIFICATION OF UNUSUAL EVENT CLASSIFICATION

Unusual Events are situations in progress or ones which have occurred which indicate a potential degradation of the level of safety of the plant. No releases of radioactive material requiring offsite response or monitoring are expected unless further degradation of safety systems occur. In this classification, response may involve support from members of the plant staff

The Shift Supervisor or Senior Reactor Operator will declare an Unusual Event when any of the initiating conditions listed below exist, or at any time in his judgement plant status warrants such a

Initiating Conditions for Notification of an Unusual Event

- Emergency Core Cooling System (ECCS) initiated and discharged to vessel, with the respect to the following bonafide emergencies:
  - a) Loss of reactor coolant to containment
  - b) Exceeding primary/secondary leak rate technical specification
  - c) Steam break upstream of the main steam line isolation valves or feedwater break downstream of check valve
  - Main steam break downstream of the main steam line isolation valves
- a) Instantaneous radiological effluent technical specification limits exceeded
  - Accidental release of waste liquid in excess of technical specification limits
- a) Fuel damage indication from RCS activity samples in excess of technical specifications (e.g. chemist sample or failed fuel monitor reading)
  - b) High coolant activity sample (e.g. exceeding coolant technical specifications for iodine spike).
- kCS temperature and/or pressure exceeding technical specification limits or RCS pressure greater than 2735 psig
- Exceeding RCS leak rate technical specification limits of 10 gpm from a known source or 1 gpm from an unkown source.

a

- 6. Failure of safety or relief valve in a safety related system to close following reduction to applicable pressure.
- 7. Loss of offsite power or loss of onsite AC power capability
- Loss of containment integrity requiring shutdown by technical specifications
- 9. Loss of engineered safety feature or fire protection system function requiring shutdown by technical specifications

- 10. Fire within the plant not affecting safety systems that lasts greater than 10 minutes
- 11. Rod ejection
- 12. Rapid depressurization of PWR secondary side
- 13. Indications or alarms on process or effluent parameters not functional in control room to an extent requiring plant shutdown or other significant loss of assessment or communication ability
- 14. Security threat, attempted entry or attempted sabotage. (Bomb threats specifically threatening the physical safety of the Indian Point Station which result in the actual discovery of a bomb or which require use of offsite assistance are included in this classification)
- 15. Natural phenomenon, beyond usual levels, being experienced or projected (e.g. earthquake detected on station seismic instrumentation, hurricane, tornado, or flood)
- 16. Significant hazards being experienced or projected onsite or in close proximity to the site (e.g. aircraft crash, derailment of train onsite, near or onsite toxic or flammable gas release, near or onsite explosion, main turbine rotating component failure causing rapid plant shutdown)
- 17. Other plant conditions exist that warrant increased awareness on the part of NRC, State and Local offsite authorities or require plant shutdown under Appendix A Technical Specification Requirements or involve other than controlled shutdown or trip
- 18. Transportation of a radiologically contaminated injured individual from the site to an offsite hospital

### CONTROL ROOM

For Control Room activities, see IP-1030; the flowcharts and checklists.

#### POM CHECK LIST

Assign -

- Shift Supervisor
- ISC Manager - OSC Manager
- CR Communicator:
  - 1 direct line (TSC-OSC-EOF-CR)
    - 1 other as needed

Make recommendations:

- Technical/engineering
- Repair
- Corrective Action
- Recovery Center (RC) to investigate

- Procurement - guidance for RC through

12

14

E.D.

- Consider KI needs for emergency workers
- Check plant status against EAL's
- Assure CR Communicator gives Plant updates every 30 mins. on PA System
- Has EOF taken over 30 minute calls to NRC? If not, assure CR Comm. calls
- Do you know what offsite agencies are doing? Ask E.D.

### CONTROL ROOM

For Control Room activities, see IP-1030; the flowcharts and checklists.

### TECHNICAL ADVISOR

-	Review incoming Technical Data (EP Form #31 a,b,&c)
	Approve, question, change (via communicator if change or question)
	Send up for copy & transparency
	Log on flip charts
-	Fill out Notification Fact Sheet, Part III, Form 30c
-	Discuss plant conditions & prognosis with E.D.
-	Check EAL table for change in emergency classification

a

4

### Forms:

Plant	Status	Log	Part	I	31a
			Part	II	31b
			Part	III	31c

Notification Fact Sheet, Part III, plant parameters, Form 30c

#### DOSE ASSESSMENT H.P.

- HP-85
- Calculate
  - compare numbers to MIDAS
  - incorporate R/S & field team information
- Fill out Notification Fact Sheet Part II (30b) every 30 min.

Will receive: - Reuter Stokes (15 min)
 Class A&B data
 LCRISA (15 min)
 Offsite team data

- Discuss P.A.'s with RATL
- Have transparency of calculation forms made and posted
- Advise RATL as to what information (other than Part II) should be telecopied to the counties and state and/or provided to their reps. in the EOF.
- Discuss with Rad. Communicator forecast on plume, expected fields, offsite survey team results

9

#### Reference:

IP-1001, Discussion of the Determination of the Magnitude of Release IP-1002, Determination of the Magnitude of Release IP-1017, Recommendation of Protective Actions for Offsite Population

#### Flow Charts & Forms:

Determining Release Rate #1a Determining Dose #1b Manual Dose Assessment Worksheet #40 Dose Calculation Form #41 Onsite Recommended Protective Action Summary #43 Offsite Recommended Protective Action Summary #44

### MIDAS OPERATOR CHECK LIST

- Runs LCRISA (CTLV, ACL) immediately & each 15 min. & when requested
  - make run results available to RATL, DAHP & Rad. Communicator
  - record meteorology on board
  - place overlay on map table
  - \*\* Notify RATL when meteorology and/or overlay change (Announcement to Dose Assessment staff & upper gallery)
- Forecast (NRFP) record on board (noteworthy data to DAHP & RATL)
- Reuter Stokes RDMP f= 15 min.

- Give to: - Calculator (noteworthy doses RATL should be informed) - Rad Communicator

- ACRISO
- Class B DDPS

make run results available to DAHP & Rad. Comm.

#### EOF RADIOLOGICAL ASSESSMENT MONITOR

- If radiological concerns are present follow below if not, report to RATL for assignment.
- Responsible for accountability if clerks not present
- Place Halon system on Manual (real emergency)
- Start the 2 minute background on SAM-2 counter [use Con Ed Procedure IP-1020]
- Check radiation survey instruments and take initial survey of the EOF & hallway using EP Form #42

la

9

19

- Establish Control Point in hall.
  - stansions & rope
  - step off pads
  - plastic boots
  - frisker placement
- Lock upper EOF entrance, provide key to guard
- Start Triton Air Sampler [use Con Ed Procedure IP-1041]
- Set up Control Point dosimetry inside main dcor to EOF
   dosimetry
  - dosimeter charger
  - sign in & out
  - Post frisking instructions
- Post upstairs & down (tape to wall chest height) for EOF area monitoring. Film Badge (or TLD) Dosimeter
- Instruct security guard on his duties for issuing & logging dosimeter and personnel using frisker & step off pads.

NOTE: Guards should be posted outside main EOF door (unless conditions prohibit) and he should wear film badge/TLD & dosimeter at all times.

- Start a particulate, iodine air sample (Con Ed Procedure IP-1020)
- Complete set-up of SAM-2 counter (Con Ed Procedure IP-1020)
- Periodic surveys post results for EOF (Upper & lower)
- Count samples post results

- Be concerned with guards dose & dose to EOF personnel

 Call OSC Dosimetry for update on Dose Accountability Forms:
 EOF Radiological Survey #42
 EOF Dosimetry Record #45

#### EOF SECURITY GUARD

- Posted outside EOF main door
  - Restrict access to EOF lower & upper levels
    - Authorized personnel to have access only (EOF communicator can provide input on who's allowed in)
      - Use key provided by EOF monitor to allow access to upper EOF & lower EOF

34

- If radiological conditions are present:
  - sign out & in, film badge/TLD & dosimeters to personnel exiting controlled area. (these are inside EOF main door)
  - issue shoe covers to those exiting controlled area.
  - assure those entering controlled area frisk prior to entering & respect step off pads.
  - check personnel dosimetry periodically

#### Forms:

EOF Personnel Dosimetry Record #45

## EOF CLERKS

-	Accountability & EOF Who's Who - post transparency - call Lead Accountability Officer for accountability
-	Receive data from TSC (EP Form 31a,b,c) - send to Tech. Adv. to proofread
	Then: 1) make transparency & post 2) hard copy to State & County representatives upstairs
-	Receive (EP Form 30a,b,c) - Xerox, send original back to communicator
-	Telecopy out EP Form 30a,b,c - hard copy to State & Counties in upper gallery
-	Receive & post flip charts
-	EOF & Site dose transparencies
-	Offsite data transparencies - hand copy to State & Counties &, when necessary, telecopy to County Dose Assessment personnel.
Form	a 30a,b,c : copy to: Orange, Rockland, Putnam, Westchester, NYS, & Recovery
Hard	Center d Copy to State & County & NRC Representatives in the EOF d Original back to Communicator
Form	a 31a,b,c :
-	Receive by Telecopier from TSC
-	Send to lechnical Advisor to proof
	Make transportancies & post 31s b
-	Hard Copy a.b.c for FOF Reps.
-	Original back to Technical Advisor

#### SITE AREA EMERGENCY CLASSIFICATION

A Site Area Emergency is a class which involves events that are in process or have occured which involve actual or likely major failures of plant functions needed for protection of the public. Radiological conditions outside of the IP-3 protected area, but within the exclusion area could possibly present a radiological hazard to personnel and in this instance, the IP-3 Emergency Director may assume control of emergency actions on both sites, including shutdown and evacuation as required.

The Shift Supervisor or Senior "enctor Operator will declare a Site Area Emergency when any of the initiating conditions listed below exist, or at any time in his judgement plant status warrants such a declaration.

#### Initiating Conditions for a Site Area Emergency

- Loss of coolant accident that exceeds the capacity of the two operable charging pumps
- 2. Degraded core with possible loss of coolable geometry
- Rapid failure of steam generator tubes (greater than 200 gpm leakage) with loss of offsite power
- Main steam line break with greater than 50 gpm primary to secondary leak and indication of fuel damage

- Loss of offsite power and loss of onsite AC power for more than 15 minutes
- 6. Loss of all vital onsite DC power for more than 15 minutes
- Complete loss of any function needed for plant hot shutdown condition
- Transient requiring operation of shutdown systems with the failure of the Reactor to trip (continued power generation but no core damage immediately evident)
- a. Major damage to spent fuel in either the containment or fuel storage building (it will cause the plant vent radiation monitor (R-14) to peg offscale)
  - b. Loss of spent fuel coolant
- 10. Fire compromising the functions of safety systems
- 11. Most or all alarms (annunciators) lost and plant transient initiated or in progress

12. Effluent monitors (R-14, R-24/R-24A, R-27 or H.P. reading on plant vent) detect levels corresponding to greater than 500 mR/hr for ½ hour or greater than 500 mR/hr WB for 2 minutes (or five times these levels to the thyroid) at the site boundary for adverse meteorology. (Anyone or more of the following conditions would be cause for a declaration of a Site Area Emergency.)

14

9

- R-14 offscale for ½ hour Plant vent reading greater than 40 mR/hr on contact for 2 minutes R-24/R-24A onscale R-27 reads greater than 1.28 E+5 uCi/sec for ½ hr. R-27 reads greater than 1.20 E+6 uCi/sec for more than 2 mins.
- R-25, R-26 greater than or equal to 7.9 x 10<sup>4</sup> R/hr for
   <sup>1</sup>/<sub>2</sub> hr. or more
   R-25, R-26 greater than or equal to 7.9 x 10<sup>5</sup> R/hr for
   2 minutes or more
- c. R-10 greater than or equal to 310 mR/hr for ½ hour or more R-10 greater than or equal to 3100 mR/hr for 2 minutes or more
- d. Site Boundary surveys detect:

WB (Gamma): Greater than 50 mR/hr for ½ hr Greater than 500 mR/hr for 2 minutes Iodine : Greater than 250 mR/hr breathed for ½ hr (based

on dose projection) Greater than 2500 mR/hr breathed for 2 minutes (based on dose projection)

- Security threat involving the imminent loss of physical control of the plant.
- 14. Severe natural phenomena being experienced while plant is not in cold shutdown:
  - a) Earthquake greater than Design Basis Levels (0.15g horizontal and 0.10g vertical)
  - Flood greater than design levels (12.5 feet) causing loss of protection of vital equipment at lower levels
  - c) Winds in excess of design levels (200 mph)
- 15. Hazards being experienced or projected with plant not in cold shutdown:
  - a) Aircraft crash affecting vital structures by impact or fire
  - Severe damage to safe shutdown equipment from missiles or explosion
  - c) Entry of uncontrolled flammable gases into vital areas. Entry of uncontrolled toxic gases into areas where lack of access to the area constitutes a safety problem.

- 16. Evacuation of Control Room and control of shutdown systems established from local stations in 15 minutes
- 17. Any abnormal plant conditions which in the opinion of the Shift Supervisor warrants activation of the emergency facilities and monitoring teams or a precautionary notification to authorities near site

### CHECK OFF LISTS

See pages A-3 through A-13 for the SITE AREA emergency classification.

#### GENERAL EMERGENCY

A General Emergency is a class which involves events that are in process or have occurred which involve actual or imminent substantial core degradation or melting with potential for loss of containment integrity.

Thyroid and/or whole body doses outside of the protected area but within the exclusion area may present a radiological hazard to per,onnel, and in that instance the IP-3 Emergency Director may assume control of emergency actions on both the IP-3 and IP-2 sites, including shut down and/or evacuation as required.

The Shift Supervisor or Senior Reactor Operator will declare a General Emergency when any of the initiating conditions listed below exist, or at any time in his judgement plant status warrants such a declaration.

### Initiating Conditions for a General Emergency

 Effluent monitors, (R-14, R-24/R-24A, R-27, or HP reading on plant vent) detect levels corresponding to 1 R/hr WB or 5 R/hr thyroid at the Site Boundary under <u>actual meteorological</u> <u>conditions</u> OR Accident Monitor (R-10) or High Range Containment Monitors (R-25, R-26) indicate levels corresponding to the above and with an anticipated loss of containment integrity.

a

9

 Indications from effluent monitors or environmental survey results:

Noble Gas dose rate greater than or equal to 1 R/hr (limiting case) Iodine dose rate greater than or equal to 5 R/hr (use chem sample ratio do not use assumed ratio)

b. High Range Containment Monitor (R-25, R-26) (R/hr)

where R-25, R-26	Greater than or equal to	2.06 x 10 <sup>3</sup> Xu/Q site boundary	= R/hr <u>and</u> a	anticipated loss of containment integrity
Where R-10	Greater than or equal to	8.06 Xu/Q site boundary	= mR/hr <u>and</u>	anticipated loss of containment

- NOTE: Do not declare a General Emergency based on R-10 alone. It is necessary to confirm that reading with indications from R-2, R-7, R-25, R-26 or survey meters and anticipated loss of containment integrity.
- Loss of two out of three fission product barriers with a potential loss of the third barrier, (e.g., LOCA with substantial core damage and a potential loss of containment integrity).

3. Loss of physical control of the plant

- Other plant conditions exist, from whatever the source, that make the release of large amounts of radioactivity in a short period of time possible (e.g.,
  - a) Small and large LOCA's with failure of ECCS to perform, leading to severe core degradation or melt in from minutes to hours. Ultimate failure of containment likely for melt sequences (Several hours likely to be available to complete protective actions unless containment is not isolated.)
  - b) Any transient initiated by loss of feedwater and condensate systems followed by failure of auxiliary feedwater system for extended periods that makes the release of large amounts of radioactivity in a short period of time probable.
  - c) Transient requiring operation of shutdown systems with failure to trip which results in core damage or additional failure of core cooling and makeup systems (which could lead to core melt)
  - d) Any failure of offsite and onsite power along with total loss of auxilary feedwater for several hours. Would lead to eventual core melt and likely failure of containment.
  - e) Small LOCA and initially successful ECCS. (Subsequent failure of containment heat removal systems over several hours could lead to core melt and likely failure of containment.)
- 5. Fire which causes plant conditions that make the release of large amounts of radioactivity in a short period of time probable, or the loss of a physical control of the plant.
- Any major natural phenomenon that makes the release of large amounts of radioactivity in a short period of time probable.
- 7. Any major internal or external hazards which could cause massive common damage to plant systems resulting in plant conditions that make the release of large amounts of radioactivity in a short period of time probable.

## CHECK OFF LISTS

See pages A-3 through A-13 for the SITE AREA emergency classification.

1

.....

h

ŧ

# EMERGENCY PLAN PROCEDURES INDEX REV. 20

.

Procedure #	Procedure Title	Rev. #
IP-1001	Discussion of the Determination of the Magnitude of	
	Release	4
IP-1002	Determination of the Magnitude of Release	4
IP-1003	Obtaining Meteorological Data	4
IP-1004	Midas Computer System-Dose Assessment Models	3
IP-1005	Planned Discharge of Containment Atmosphere During Accident Conditions	2
Environmental	l Monitoring	
IP-1010	In-Plant/Site Parimeter Survey	4
IP-1011	Offsite Monitoring	4
IP-1017	Recommendation of Protective Actions for the Offsite	
	Population	2
IP-1018	Post Accident Environmental Sampling and Counting	2
Personnel In	ury	
IP-1021	Radiological Medical Emergency	8
IP-1022	Transport of Contaminated Injured Personnel Between	
	Unit 3 and 1	1
IP-1023	Use and Set-Up of Unit 3 Personnel Decon Suite	0
Damage Assess	ment	
IP-1025	Repair and Corrective Action Teams	3
IF-1027	Emergency Personnel Exposure	2
Notification	and Communication	
IP-1030	Procedure for Control Room: Emergency Notification,	
	Communication and Staffing	9
IP-1031	Procedure for EOF Emergency Notifications & Communications	1
IP-1038	Use of the Emergency Communications Systems (Radiological Emergency Data Forms, County Hot Line, Radio and NAWAS)	5
Emergency Ope	eration Facilities	
TP-1040	Hab sability of the Programmy Prodiction	e
TP-1040	Recommend Ward toring of FOF TEC and OCC Parameters	2
TP-1041	Technical Support Cantar	4
IP-1043	Operations Support Center	6

# EMERGENCY PLAN PROCEDURES INDEX REV. 20 (PAGE 2)

Procedure #	Procedure Title	Rev. #
Accountabilit	y and Evacuation	
IP-1050	Accountability	6
IP-1053	Evacuation of Site	2
IP-1054	Search and Rescue Teams	2
Non-Radiologi	cal Emergencies	
IP-1055	Fire Emergency	2
IP-1056	Directing Fire Fighting Personnel in Controlled Areas	ī
IP-1057	Tornado (Hurricane) Emergency	ī
IP-1058	Earthquake Emergency	5
IP-1059	Air Raid Alert	1
HP Release Su	rveys and Decontamination	
IP-1060	Personnel Radiological Check and Decontamination	2
1P-1063	Vehicle/Equipment Radiological Check and Decontamination	2
Emergency Equ	ipment and Maintenance	
IP-1070	Periodic Check of Emergency Preparedness Equipment	8
IP-1076	Beepers	4
Exercises, Dr	ills and Training	
IP-1080	Conduct of Emergency Exercises and Drills	5
IP-1085	Emergency Response Training	3

Indian Point 3 Nuclear Power Plant P.O. Box 215 Buchanan, New York 10511 914 739.8200



EMERGENCY PLAN FROCEDURES

PROCEDURE	NO	IP-	1001	REV. 4	
	1.42.46			water and the second se	-

TITLE" DISCUSSION OF THE DETERMINATION OF THE MAGNITUDE OF RELEASE

\*

WRITTEN BY: Caul	C. Bell
REVIEWED BY: Dennis 77.	Oni
PORC REVIEW: AS	DATE 9/29/53
APPROVED BY: John C.B.	DATE 9/29/83
EFFECTIVE DATE 10/2	3/83

#### IP-1001

#### DISCUSSION OF THE DETERMINATION OF THE MAGNITUDE OF RELEASE

#### 1.0 NEED FOR EARLY ASSESSMENT

In the event of an accidental release of radioactive material to the environment, it is important for the Shift Supervisor to assess the accident as soon as possible and to determine the exposure to the cff-site population. The exposure may be only to the whole body due to fields created by the noble gas cloud or it may include exposures to the thyroid from the radioiodines when they are present.

It is important to make this early assessment of potential exposure and have it available for the State and County Officials. This information will assist them in their decisions regarding protective actions for the public and in the most extreme case, to give guidance on the movement of the offsite population from the affected areas. This information will also be used by the onsite Emergency Director for establishing protective actions for onsite personnel.

#### 2.0 TYPES OF ACCIDENTS

 LOCA with no core damage Reactor coolant system (RCS) activity only

b. Clad failure - up to the entire gap activity could be released to VC (iodines and noble gases) (long lived gases)

c. Fuel melt in addition to Clad failure (iodines, noble gases, bromines and other moderately volatile nuclides; Sr-89, Ru-106, CS-137, Ce-144, Ba-140, Tellurium-132)

#### Monitor Response

-R-2/R-7/R-10/R-25/R-24 spike response with rapid decrease over 15-30 minutes -R-11 increases (probably offscale) with subsequent decrease -R-12 increases then rapidly decreases over 15-30 minutes -R-13/R-14/R-27 show increase only if VC isolation was not held -R-10 shows increase up to 65 mR/hr -R-2/R-7 read offscale -R-25/R-26 read up to 10" R/hr. -VC Iodine Monitor shows increase -R-27 indicates up to 50uCi/cc if releasing -R-14 offscale if releasing -R-10 increases up to 15 R/hr -R-2/R-7 read offscale -R-25/R-26 read up to 2x10<sup>6</sup> R/hr. -VC Iodine Monitor offscale -R-14 offscale due to high background through VC wall -R-27 increases if releasing

d. Fuel element damage in FSB ("long-lived" isotopes, as in clad failures, but on a smaller scale)

- e. Gas release from tank rupture in PAB (gas decay tank, VCT, CVCS tanks)
- Fuel melt, containment integrity does not hold

#### 3.0 RADIOLOGICAL ASSESSMENT

3.1 Approximate Time of Monitor and Assessment Availability

Immediate

15 minutes

25 minutes

30-45 minutes

1 - 11 hrs.

1 1/2 hrs.

-Magnitude of release and isotopic mix depend on decay time of fuel since its removal from the core.
-FSB Iodine Monitor may show increase
-FSB APD shows increase
-R-27 shows increase if releasing.
-R-14 offscale due to high background through FSB wall.

-R-27 indicates up to 10'uCi/sec. -R-14 offscale -PAB APD may show increase

-R-14 off scale
-R-10 off scale (greater than1000R/hr)
-R-25/R-26 read up to 2x10° R/Hr.
-R-27 shows increase
-ARMS in RAMS and Admin.
Bldg. show increase.

#### Monitors and Surveys

R-10 R-14<sub>4</sub>(low) less than 5.0 x 10<sup>4</sup>uCi/cc R-27 APD's and Iodine Monitors R-25/R-26

Vent monitor (R-24 and R-24A in PAB) 7.5 to 7.5x10<sup>4</sup> uCi/cc Reuter Stokes offsite monitors

Plant vent (HP tech reading) 1.0 x 10 to 3.0 x 10 uCi/cc 11

Beta, Gamma readings at site boundary

Isotope analysis (chem. sample of stack air) Iodine sample in field

4

### 3.2 Initial Steps For Assessment (Reference IP-1002)

- 1. R-14 on scale
  - a. Estimate offsite dose from reading on R-14
  - b. Send chemist for sample of stack (normal method)
- 2. R-14 off scale

b.

- a. Primary Method
  - i. Evaluate R-27 (uCi/cc and uCi/sec)
  - 11. Send chemist for stack sample (emergency method, RSCS-042)
  - Count total iocine first, then noble gas and particulates. Backup Method
  - Send H.P. Tech to read R-24 and R-24A high range plant vent monitor in PAB.
    - If Offscale low,

Send H.P. Tech to plant vent to obtain uCi/cc and release rate per HPI-12.4

- Send chemist for stack sample (emergency method, RSCS-042). Count total iodines first, then noble gas and particulates.
- 3. Send H.P. Tech to site boundary sample points (IP-1010)
- 4. Send offsite monitoring teams to do offsite surveys (IP-1011).
- 5. Request Reuter Stokes monitor readings.
- 6. When chemist has results from stack sample, develop the ratio of total Iodines to Noble Gas.

#### 4.0 METHOD OF ASSESSMENT

In order to determine what the actual or potential offsite exposure to the population is, it is necessary to evaluate the accident relative to the source term, release rate (actual or potential), meteorological conditions (wind speed, wind direction, and Pasquill Stability Category), concentration (noble gas and radioiodines) at the environmental point of interest (site boundary, etc.) and the relationship of the concentration to whole body and thyroid exposure in mRem./hr. The basic steps followed in IP-1002 to accomplish this radiological assessment are:

- a. Determine Release Rate
- b. Determine the Site Boundary Concentration
- c. Determine the Site Boundary Dose: Whole Body and Thyroid
- d. Determine Point of Interest Dose: Whole Body and Thyroid
- NOTE: An estimate of the duration of the release should be obtained from the Emergency Director. If unavailable, use <u>4 hours</u> as the first estimate.
- NOTE: The HP-85 computer program or the MIDAS computer program (in the EOF) can be used as an alternate to the manual method of calculation outlined in IP-1002.

#### 5.0 10 MILE AREA AND SECTOR MAP

The 10 mile area sector map is to be used in conjunction with the "Indian Point Station Radioactive Release Overlays". The map's center point is the Indian Point superheater stack, and it extends from there out to 10 miles. The map is radially sectioned off into 16 equal sections, each of 22 1/2°. Each of the 16 sectors is further subdivided into 10 more sections by 1 through 10 mile concentric rings with the origin at the superheater stack. This results in a total of 160 "mile zone/sectors" which will be used when identifying areas for recommending protective actions.

Within each sector are:

- Sites with dose integrating devices (TLD's) (located on the map by red dots).
- b. Emergency sampling sites (located on the map by yellow dots). These are predetermined locations at which the offsite monitoring teams are to sample.
- c. Fixed air sampling sites with continuously running samples (located on the map by green dots). Charcoal and millipore filters are changed weekly.
- Reuter Stokes instruments, gamma exposure, real time readings or accumulated dose. (located on the map by blue dots) A wind-set is also installed at each Reuter Stokes providing wind speed and direction at that point.

#### 6.0 OVERLAY DESCRIPTION

- 6.1 The diffusion overlays are in the file "Indian Point Station Radioactive Release Overlays", and were prepared for the Indian Point site using data collected from an NYU study which calculated dispersion patterns for the Indian Point area of the Hudson Valley. Indian Point is situated in an area which is significantly influenced by topographic features which create a channeling effect for the air along the river valley with low wind speeds; the channeling effect is negated for high wind speeds. (greater than 4m/sec)
- 6.2 The overlays have isopleths of normalized concentration Xu/Q, where Xu/Q is a relative measurement of how the plume is spreading in the horizontal and vertical directions with a given atmospheric stability.

X = concentration Ci/m<sup>3</sup> or uCi/cc

u = windspeed m/sec

3 = source strength (release rate) Ci/sec

Normalized concentration means that the effects of windspeed and source strength have been assumed to be 1; to get an <u>actual</u> concentration, you must multiply  $\frac{Xu}{2}$  times  $\frac{0}{x} = X$ 

#### 7.0 OVERLAY PLACEMENT

- 7.1 Meteorological data: wind speed, wind direction, and the Pasquill category is obtained from the Control Room meteorological display panel, or via backup methods as outlined in IP-1003. Using this data in conjunction with Figure 1, Flowchart for Overlay Selection and Placement, the proper diffusion overlay can be found.
  - Ex. 1. windspeed 3m/sec, wind direction 110°, Pasquill C: Overlay is yellow C.
  - Ex. 2. windspeed 5m/sec, wind direction 200°, Pasquill B: Overlay is red B
- 7.2 The position of this overlay is described here as well as in Figure 1.
  - For downvalley (blue) or upvalley flow (yellow), align the E-W, N-S positions parallel to those on the map orientation point.
    - a. Downvalley (blue) overlays should be placed so that the plume is traveling south.
    - b. Upvalley (yellow) overlays should be placed so that the plume is traveling north.
  - For crossvalley flow (red), align the overlay origin so that the plume is traveling in the direction of the wind.

The placement of the overlay on the 10 mile area map, a.) indicates the plume travel direction; b.) normalized concentrations Xu/Q, within the area of the plume.

NOTE: Wind direction is always from (180° = wind from the south).

7.3 <u>Table 1</u>, IP-1002 has been compiled in a similar way as the diffusion curves. Using site meteorology, the user is able to determine the dispersion factor (Xu/Q) for the site boundary. This table acts in place of choosing the site boundary location from the 10 mile area sector map and picking the dispersion factor off the overlay. Table 1 will also give guidance to the Emergency Director as to where to deploy the onsite monitoring teams.

#### 8.0 DOSE ASSESSMENT

This section <u>briefly</u> outlines radiological dose assessment: the onsite and offsite field surveys and how to use their results in determining the projected dose to onsite and offsite individuals.

8.1 Gamma Assessment (Whole Body exposure)

Gamma measurements are indicative of whole body exposures received from a radiological release.

IP-1001/4

FIGURE 1



4

8.1.1 Using gamma survey instruments: ā.

### Portable gamma instrumentation:

Gamma mR/hr will give the Whole Body exposure rate at the survey location. Multiplying gamma mR/hr by the duration of stay will give the Whole Body exposure in mR.

b. Reuter Stokes

> Gamma readout is in mR/hr. Multiplying gamma mR/hr by the duration of stay will give the whold body exposure in mR.

8.1.2 TLD Sites

> Within the 5 mile radius surrounding the Indian Point site there are IP designated TLD Sites which integrate gamma dose. These are changed monthly. In the event of an radiological accident, these must be collected and sent for processing. TLD's may provide estimates of whole body exposure.

#### 2.1.3 Whole Body exposure guidelines as per EPA PAG's are:

Projected Dose (Rem) to the Population	Recommended Actions
Whole Body less than 1 re	<ul> <li>Mo protective action required</li> <li>State may issue an advisory to seek shelter and await further instructions or to voluntarily evacuate.</li> <li>Monitor environmental radiation levels.</li> </ul>
Whole Body 1 to 5 rem	<ul> <li><u>Seek shelter</u> and wait further instructions</li> <li>Consider evacuation particularly for children and pregnant women</li> <li>Monitor environmental radiation levels.</li> <li>Control Access.</li> </ul>
Whole Body greater than S	<ul> <li>5 rem . Conduct mandatory evacuation of populations in the predetermined area</li> <li>Monitor environmental radiation levels and adjust area for mandatory evacuation based on these levels.</li> </ul>

#### 8.2 Beta Assessment

Beta surveys are helpful in assessing the location of the plume or plume deposition. If you are in the plume, a beta - gamma survey instrument will indicate a significant beta reading; however, if you were not in the plume or near a contaminated surface, the beta reading will be low or nil. (Beta's are short range emmitting particles traveling only several meters in air)

8.2.1 Beta gamma readings taken in the environment may be affected by various sources. The following table describes the effects on the open window/closed window (OW/CW) ratio when using a beta-gamma survey instrument (e.g. RO-2, E-530)

#### Sources of Radiation

OW/CW ratio (B+07 8)\*

at least 2.0

- a. Contained source of activity 1.0 or slightly greater (e.g. radioactive gases in V.C.) than 1.0
- b. Plume (reading taken <u>near</u> plume 1.0 or slightly greater but not in plume) than 1.0
- c. Plume (Reading taken in plume)
- d. Deposition on ground from particulates in plume

Near ground, at least 2.0
Above ground, instrument pointed upward, ratio lower that at ground level.

- \* The ratios given above are approximate and can be affected by a combination of sources.
- 8.2.2 Protective actions for beta exposure would be to remove persons from the plume by sheltering or evacuation. Sheltering is effective because beta particles are not penetrating and will not travel through walls.
# 8.3 Iodine Assessment

Radioiodines released as a result of a radiological emergency are thyroid "seekers". These icdines whether ingested or breathed travel to the thyroid gland and remain there as any other iodine would. The radioactive properties of the radioiodines would cause damage to the thyroid gland.

As the mass of the thyroid decreases, the doses from radioactive iodine increase. Consequently for infant or child thyroid the dose is greater than would be for an adult breathing the same air. It is for this reason that the child becomes the limiting case, and protective actions for the general population are determined from child thyroid doses. Taking breathing rates into consideration it is estimated the child thyroid dose from inhalation is greater than the adult dose by a factor of two.

# 8.3.1 Field Samples:

(CR, TSC, EOF, Site Boundary, Fixed and emergency offsite monitoring locations and/or requested locations both in-plant and offsite)

 a) Charcoal and millipore filters or silver zeolite cartridges analyzed by the <u>SAM-2</u> to determine I-131 activity (uCi/cc)

I-131 (uCi/cc) X 1.6 X  $10^9$  = child thyroid dose rate (mR/hr breathed)

 b) Concentrations taken in Field using an <u>HP-210</u> probe (ccunts total Iodines)

Concentration x DCF = Dose rate child thyroid

 $\frac{uCi}{cc} \qquad \frac{mRem}{hr} / \frac{uCi}{cc} = mRem/hr$ 

- NOTE: multiplying the child thyroid dose rate by hours breathed will give the Iodine dose received to the child thyroid.
- NOTE: Dose Conversion Factors (DCF) can be found in Table 3 of IP-1002

#### 8.3.2 Gamma Dose Rate to Thyroid Dose Conversion

The gamma dose rate (mR/hr) can be used to make an <u>initial</u> estimate of thyroid dose rate due to radioiodines (this method can be used prior to the counting of iodine sampling filters)

a. Assuming a (Total I/NG) ratio of 10<sup>-4</sup>:

Gamma mR/hr x .15 = Child thyroid dose rate (mR/hr breathed)

14

b. If the assumed (Total I/NG) ratio of 10<sup>-4</sup> is used and then the actual (Total I/NG) ratio becomes available, the thyroid dose rate would be calculated using the following equation:

actual (Total I/NG) ratio x .15 x Gamma mR/hr = mR/hr breathed 10<sup>-4</sup> child thyroid

Multiplying the thyroid dose rate obtained in a or b by the actual hours breathed will give an estimated iodine exposure received by the child thyroid.

8.3.3 Thyroid exposure guidelines as per EPA PAG's:

Projected Thyroid Dose (Rem) to the Population	Recommended Actions				
Thyroid less than 5 rem	<ul> <li>No protective action required</li> <li>State may issue an advisory to seek shelter and await further instructions or to voluntarily evacuate.</li> <li>Monitor environmental radiation levels.</li> <li>Consider issuance of KI to workers if greater than 1 rem</li> </ul>				
Thyroid greater than 5 to 25 rem	<ul> <li>Seek shelter and wait further instructions</li> <li>Consider evacuation particularly for children and pregnant women</li> <li>Monitor environmental radiation levels.</li> <li>Control access.</li> <li>Issue KI to workers</li> </ul>				
Thyroid greater than 25 rem	<ul> <li>Conduct mandatory evacuation of populations in the predetermined area.</li> <li>Monitor environmental radiation levels and adjust area for mandatory evacuation based on these levels.</li> <li>Control access.</li> <li>Issue KI to workers.</li> </ul>				

The recommendations above should be taken only if there is a good probability of preventing a substantial portion of the projected dose. For example, evacuation would probably <u>not</u> be recommended for a projected thyroid dose of less than 25 Rem for a puff (short-term) release.

4

# 9.0 THYROID BLOCKING USING POTASSIUM IODIDE (KI)

The National Council on Radiation Protection and Measurements (NCRP) in Report No. 65 recommends that "individuals who have had an accidental occupational exposure to radioiodine, regardless of the route of exposure should immediately be given a 300 mg potassium iodide or sodium iodide tablet. Daily administration of 300 mg potassium iodide tablet should be continued for 7 to 14 days.

The purpose of using potassium indide (KI) is to saturate the thyroid gland with stable iodine so the radioactive iodine will be "blocked". Studies indicate that iodine has approximately a 6 hour half time of uptake, so the stable KI can be given up to several hours after exposure to radioiodine and it will still have some thyroid blocking effect. Preferably, KI should be given prior to exposure to radioiodine.

- 9.1 When an indication arises that workers will potentially receive a thyroid dose due to radioiodine exposure of 5 Rem or greater, the Emergency Director or appropriate designee shall authorize the issue of KI to those workers. Consideration should be given to issuance of KI at lower projected doses. (about 1 Rem thyroid).
- 9.2 KI is located in the emergency lockers of the Control Room, Technical Support Center, Operations Support Center, Emergency Operation Facility and the Alternate Emergency Operation facility. Emergency Directors have been issued bottles of KI, and there is a well stocked supply of KI at the Con Ed Service Center building.
- 9.3 The following page is the insert as well as new instructions for KI at Indian Point.
- 9.4 Instructions for use, as recommended by the NCRP are:

Take 2 tablets per day for 7 to 14 days.

#### **10.0 SITE PROTECTIVE ACTIONS**

For a Site Area or General Emergency, sheltering for site personnel is accomplished by assembly in designated areas.

For releases with iodine doses to the site population, issuance of potassium iodide may be considered. (Sheltering would also reduce the dose received from radioiodines). For a General Emergency with radiological consequences, issuance of KI to site personnel should be considered.

The decision to evacuate the site should be based on the estimated or actual release time, expected outdoor exposures, the fact that evacuation may cause more harm to personnel being outside, as well as the confusion of an evacuation rather than remaining indoors with proper sheltering. Patient Package Insert For

# THYRO-BLOCK"

(POTASSIUM IODIDE) (pronounced poe-TASS-e-um EYE-oh-dyed) (abbreviated: KI) TABLETS and SOLUTION U.S.P.

TAKE POTASSIUM IODIDE ONLY WHEN PUBLIC HEALTH OFFICIALS TELL YOU. IN A RADIATION EMERGENCY, RADIOACTIVE IODINE COULD BE RELEASED INTO THE AIR POTASSIUM IODIDE (A FORM OF IODINE) CAN HELP PROTECT YOU.

IF YOU ARE TOLD TO TAKE THIS MEDICINE, TAKE IT ONE TIME EVERY 24 HOURS. DO NOT TAKE IT MORE OFTEN. MORE WILL NOT HELP YOU AND MAY IN-CREASE THE RISK OF SIDE EFFECTS. DO NOT TAKE THIS DRUG IF YOU KNOW YOU ARE ALLERGIC TO IODIDE. (SEE SIDE EFFECTS BELOW.)

#### INDICATIONS

THYROID BLOCKING IN A RADIATION EMERGENCY ONLY.

DIRECTIONS FOR USE Use only as directed by State or local public health authorities in the event of a radiation emergency.

DOSE

#### ADULT

DOSAGE: TWO (2) TABLETS DAILY FOR SEVEN (7) TO FOURTEEN (14) DAYS.

Store at controlled room temperature between 15° and 30°C (59° to 86°F). Keep container tightly closed and protect from light. Do not use the solution if it appears brownish in the nozzle of the bottle.

#### WARNING

Potassium iodide s'ouid not be used by people allergic to iodide. Keep out of the reach of children. In case of overdose or allergic reaction, contact a physician or the public health authority.

#### DESCRIPTION

Each THYRO-BLOCKTM TABLET contains 130 mg of potassium indida.

#### HOW POTASSIUM IODIDE WORKS

Certain forms of iodine help your thyroid gland work right. Most people get the iodine they need from foods, like iodized sait or fish. The thyroid can "store" or hold only a certain amount of iodine.

In a radiation emergency, radioactive iodine may be released in the air. This material may be breathed or swallowed. It may enter the thyroid gland and damage it. The damage would probably not show itself for years. Children are most likely to have thyroid damage.

If you take potassium iodide, it will fill-up your thyroid gland. This reduces the chance that harmful radioactive iodine will enter the thyroid glan 1.

#### WHO SHOULD NOT TAKE POTASSIUM IODIDE

The only people who should not take potassium iodide are people who know they are allergic to iodide. You may take potassium iodide even if you are taking medicines for a thyroid problem (for example, a thyroid hormone or antithyroid drug). Pregnant and nursing women and babies and children may also take this drug.

#### HOW AND WHEN TO TAKE POTASSIUM IODIDE

Potassium Icdide should be taken as soon as possible after public health officials tell you. You should take one dose every 24 hours. More will not help you because the thyroid can "ho d" only limited amounts of iodine. Larger doses will increase the risk of side effects. You will prohably be told not to take the drug for more than 10 days.

#### SIDE EFFECTS

Usually, side effects of potassium iodide happen when people take higher doses for a long time. You should be careful not to take more than the recommended dose or take it for longer than you'are told. Side effects are unlikely because of the low dose and the short time you will be taking the drug.

Possible side effects include skin rashes, swelling of the salivary glands, and "iodism" (metallic taste, burning mouth and throat, sore teeth and gums, symptoms of a head cold, and sometimes stomach upset and diarrheat.

A few people have an allergic reaction with more serious symptoms. These could be fever and joint pains, or swelling of parts of the face and body and at times severe shortness of breach requiring immediate medical attention.

Taking iodide may rarely cause overactivity of the thyroid giand, undersculvity of the thyroid giand, or emiargement of the thyroid giand (goiter).

#### WHAT TO DO IF SIDE EFFECTS OCCUR

If the side effects are severe or if you have an allergic reaction, stop taking potassium iodids. Then, if possible, call a doctor or public health authority for instructions.

#### HOW SUPPLIED

THYRO-BLOCKTM TABLETS (Potassium Iodids, U.S.P.) bottles of 14 tablets (NDC 0037-0472-20.) Each white, round, scored tablet contains 130 mg potassium iodids. Indian Point 3 Nuclear Power Plant P.O. Box 215 Bucharian, New York 10511 914 739.8200



EMERGENCY PLAN PROCEDURES

PROCEDURE NO IP- 1011

REV. 4

TITLE" OFFSITE MONITORING

.\*

WRITTEN BY:	bank & "	Seif
REVIEWED BY:	Damis M. Q	uni
PORC REVIEW:_	JASchmin	DATE 1/2+/53
APPROVED BY:	John CB	DATE 9/29/27
EFFECTIVE DAT	10/28/8.	3

## IP-1011

#### OFFSITE MONITORING

#### 1.0 INTENT

This procedure addresses the various methods of offsite monitoring which are available within the plume exposure pathway.

# 2.0 DISCUSSION

A combination of these methods of offsite monitoring should give an idea of the radiological conditions of the environment within a 10 mile radius of Indian Point.

Various methods of offsite monitoring are:

# 2.1 Offsite monitoring teams:

A. Beta and Gamma surveys:

- 1. Survey results
- 2. TLD's
- B. Air Sampling (Iodine & Particulate):
  - 1. Continuous Sampling
  - 2. Emergency Locations

# 2.2 Reuter Stokes:

- A. Gamma monitoring
- Meteorological monituring (wind speed & direction)

# 3.0 PROCEDURE FOR OFFSITE MONITORING TEAM MONITORING

- 3.1 Offsite monitoring locations have been predetermined and locations are listed on Table 1 of this procedure. To determine which locations should be monitored, use the overlays, 10 mile sector map and Table 1. The types of monitoring would include:
  - A. Iodine Sampling:
    - 1. From fixed sample locations (continuous air sampling)
    - 2. Emergency Sampling Sites
  - B. Whole Body dose:
    - 1. TLD's at Fixed Locations
- 3.2 Members of the offsite monitoring teams are Con Edison NEM personnel.

1 02 9

# 3.3 CONTROL ROOM ACTIONS:

- A. Control Room personnel should request offsite monitoring team assistance immediately upon declaration of a Site Area or General Emergency, and in certain cases during an Alert (radiological in nature).
- B. The IP-3 Control Room personnel should telephone the Unit No. 2 Watch Foreman:
  - 1. Request offsite monitoring team assistance
  - 2. Direct the teams to the Emergency Operation Facility (EOF)
- C. Ready yourselves to receive information via the Con Edison frequency radio, using EP-Form #4 and EP-Form #5.

## 3.4 OFFSITE MONITORING TEAM:

- A. Are made up from Con Edison NEM personnel
- B. Are to follow the Con Edison Procedure IP-1015

#### 3.5 RADIOLOGICAL ASSESSMENT TEAM:

- A. Determine which offsite monitoring locations the offsite teams should be sent to.
  - 1. Using overlays
  - 2. Using Table 1 of this procedure
- B. Instruct the offsite monitoring team(s) to appropriate sample locations:
  - 1. Predetermined Emergency Sampling Locations
  - 2. Continuous Air Sampling Locations
  - 3. TLD sites
- C. Discuss the need for KI with the Emergency Director and Monitoring Teams. Issue if appropriate.
- D. Receive information via the radio:
  - 1. Monitoring team location(s)
  - 2. Sampling results (Using forms EP-Form #4, and EP-Form #5)
    - Beta and gamma field readings obtained while proceeding to the site.
    - Beta-gamma field readings obtained at the sample point.
    - c) Concentration of radioactivity on the particulate filters. Also report the sample CPM, the instrument background CPM, the sample volume in ft, and the counter efficiency.

d) Concentration of Iodines on the charcoal or silver zeolite filter. Also report the sample CPM, the instrument background CPM and the sample volume in ft, and the counter efficiency.

# 4.0 PROCEDURE FOR REUTER STOKES INTERPRETATION

- 4.1 Reuter Stokes monitors are located in each of the 16 sectors within a 3 mile radius of Indian Point. Real time Whole Body dose rates, integrated dose. (Gamma) and meteorological (wind speed & direction) information can be remotely interrogated using the Reuter Stokes Sentrii 1011 System and the MIDAS computer.
- 4.2 RADIOLOGICAL ASSESSMENT TEAM:
  - A. Using MIDAS, obtain Reuter Stokes data.

#### 5.0 RECORD RENTENTION

5.1 The Radiological Communicator is responsible for retaining all data sheets, forms, and plots pertaining to ofisite Radiological Assessment.

	TABLE 1			IP-1011/4			
LOCATION NAME	SECT	MILE	CAS	EAS	<u> 8/s</u>	<u>TLD</u>	
Roa Hook Rd Sanatation Garage	1	2	CAS	EAS		TLD	
(Cortlandt) Rear Mtn. Rd. near Old Stone on Hudson	1	2			9/6		
Rte. 9D Garrison	1	ŝ			A/ 5	TLD	
Rte. 9D St. Francis Retreat (Garrison)	1	7		EAS			
St. Basils Academy	1	9				TLD	
Rte. 9D Derham Cross Rd. (Cold Spring)	1	10		EAS			
Old Pemart Ave. (Peekskill)	2	2		EAS		TLD	
Annsville Circle, Texaco Station	2	2.5			R/S		
Troop K St. Police, Annsville Circle	2	3					
Highland Ave. & Sprout Brook Rd.	2	3		ZAS			
Gallows Hill Rd.	2	6				TLD	
Canopus Hollow Rd. & Old Albany Post Rd	2	6		EAS			
Canopus Hollow Rd. & Bell Hollow Rd.	2	10		EAS		TLD	
North Fast Corner (site)	2	5					
Louisa St. & R.R. Bridge	3	1		FAC		1	
Lower South St. & Bay St.	3	1.5		with 0		TLD	
Peekskill Gas Holder	3	2	CAS				
Hudson St. & RR Street (Peekskill)	3	2			R/S		
(Carbones Rest.)							
Hamilton St.	3	3				TLD	
Hillcrest School (Peekskill)	3	3		EAS			
Peekskill Police Dept.	3	3					
Oregon Road Substation	3	4	CAS				
Westbrook Dr.	3	6				TLD	
Oregon Corners (Putnam Valley)	3	0		EAS			
Peekskill Hollow Rd. & Tinker Hill Rd.	3	10		EAS		TLD	
Lents Cove	4	5				77.0	
Standard Brands	4	1	CAS			TTD	
Old Dump	4	i	JAD			TLD	
Lower South St., Merle Corp. (Peekskill)	4	1		EAS			
Lower South St. near West. Iron	4	1			R/S		
Lower South St. & Louisa St.	4	1.5				TLD	
Centennial House F.D.	4	2					
Maple Ave. Entrance to Mt. Florence School	4	3		Eł.ś			
Pine Rd.	4	5				TLD	
Lexington Ave. & Townsend Rd. (Cortlandt)	4	6		EAS			
Mohegan F.D Jefferson Valley	4	10					
Companya Bi & Compil Ch. (Womberson)		10					

4

4

LOCATION NAME	SECT.	MILE	CAS	EAS	<u>R/S</u>	TLD
Bleakley & Broadway	5	.5	CAS			TLD
Lower S. St. near By Pass Diner	5	1			R/S	
Welcher Ave. & McKinely School Playground	5	1.5				TLD
McKinley St. & Welcher Ave. (Peekskill)	5	2		EAS		
Maple Ave. & Furnace Woods Rd. (Cortlandt)	5	4		EAS		
Mohegan F.D Furnace Dock	5	5				
Crcton Ave.	5	6				TLD
Hunterbrook Rd. @ CoAx Sta. #571 (Yorktown)	5	7		EAS		
Yorktown Police Dept.	5	9				
Moseman Rd. & St. Patricks School (Yorktown)	5	10		EAS		TLD
Simulator Building	6	.5				TLD
Broadway, between Bleakley & Service Center	6	.5			R/S	
Tensolite Corp. Rt. 9A (Buchanan)	6	1		EAS		
Factory St.	6	1.5				TLD
Watch Hill Rd & Mt. Side Trail (Cortlandt)	6	3		EAS		
Colabaugh Pond Rd.	6	6				TLD
Rte. 129 @ Hunterbrook Bridge(Yorktown)	6	7		EAS		
Wiltwyck School	6	8				
Millwood Sub. Sta.	6	10				
Rts. 100 & Rte. 134	6	10		EAS		TLD
Water Meter House	7	.5				TLD
Broadway, at Service Center Gate	7	.5			R/S	
Serv. Ctr. Guard House	7	.5				
Buchanan Police Dept.	7	1				
Buchanan Village Hail	7	1	CAS			TLD
Westchester Ave. & First St. (Buchanan)	7	1		EAS		
Furnace Dock	7	4	CAS			TLD
Watch Hill Rd. & Westminister Dr. (Cortlandt)	7	4		EAS		
Mt. Airy & Winsor Rd	7	5				TLD
Croton Police Dept.	7	6				
Cleveland Dr. & Hughes St. (Croton)	7	6		EAS		
Ossining Police Dept.	7	9				
North State Rd. & Ryder Ave.	7	10		EAS		TLD

LOCATION NAME	SECT	MILE	CAS	EAS	<u>R/S</u>	TLD
Environmental Lab	8	.5	CAS			TLD
Service Building	8	.5	CAS			TLD
Broadway, S.W. of Sub Station	8	.5			R/S	
Westchester Ave. & School Exit (Buchanan)	8	1		EAS		
Tate Ave.	8	1.5				TLD
Crugers R.R. Station (Cortlandt)	8	3		EAS		
Croton Point & Sample Site	8	7	CAS	EAS		TLD
Liberty St. & Hudson St. (Ossining)	8	10		EAS		TLD
Westch. Co. O.D.E.S.	8	20				
South East Corner (site)	9	1				TLD
14th St. Between Broadway & West. Ave.	9	1		EAS		
Broadway at St. Mary's Cemetary	9	1			R/S	
Montrose Marina	9	2				TLD
Montrose Pt. Rd. (Cortlandt)	9	3		EAS		
Warren Ave. Haverstraw	9	S		Lato		TID
Rowline Plant	à	5				100
Bre OU & So Mt Bd (Short Cove)	9			FAC		
(Claskstern)	,			EAS		
Kings Highway & Old Mill Rd. (Clarkstown)	9	10		EAS		TLD
Onsite Pole	10	.5				TLD
N.Y.U. Tower	10	1	CAS			TLD
11th St. & Highland Ave. (Verplanck)	10	1		EAS		
11th St. & Highland (Con Ed Property)	10	1			R/S	
Verplanck	10	1.5				TLD
Grassy Point	10	4	CAS			TTD
Stony Pt. Police Den	10	4	0.00			
Beach Rd. & Grassy Pt. Rd. (Stony Pt.)	10	4		FAS		
Pailroad Ave & Pre QU	10	5		uno		TID
Halan Haves Hosnital	10	e e				100
Little Tor 2d & Couth Mt Dd	10	7		TAC		
(Clarkstern)	10			240		
Packland Co. Fire Train Ctr	10	0				
Rockland Co. Fire Itain Str.	10	0				
Nockland Co. Sheriff Hadtes,	10	10		PAG		TTD
Overpass (Clarkstown)	10	10		E40		160
White Beach Texas Inst. (Verplanck)	11	1		EAS		
Algonquin Gas Line Crossing	11	1	CAS			TLD
Trap Rock at end of 9th Ave.	11	1			R/S	1.1
(White Beach)	11	2				
Cilmons Dr. & Mars Dr. (Charse Dr. )	11	2		210		
Gilmore Dr. & Adams Dr. (Stony Pt.)	11	3		LAS		
WILLOW Grove Rd. & Birch Dr.	11	2				TED
Willow Grove Rd. & Knapp Rd. (Haverstraw)	)11	0		ZAS		
Haverstraw Rd. (Rte. 202) & Wilder Rd.	11	10		EAS		TLD

15

\*

4

4

LOCATION NAME	SECT	MILE	CAS	EAS	<u>R/S</u>	TLD			
Gays Hill Rd. (south end) & Rte. 9W	12	2		EAS	R/S	TLD			
Lovett Plant	12	2	CAS						
Frank Rd. & Bulson Town Rd. (Stony Pt.)	12	4		EAS					
Palisades Pkwy. (sign going So., NY&NJ)	12	5				TLD			
Lake Welch Pkwy. & Sewage Plant (Harrison)	12	7		EAS					
Lake Welch Pkwy. & 7 Lakes Pkwy. (Harrison)	12	10		EAS		TLD			
Gays Hill Rd. (north end) & Rte. 9W	13	2		EAS	R/S	TLD			
Mott Farm Rd. @ Entrance to Camp Addison Boyce (Tuxedo)	13	3		EAS					
Palisades Pkwy. (Sc. of Gas Station)	13	5				TLD			
Arden Valley & Lake Cohasset	13	9		EAS		TLD			
Dock (Onsite)	14	.5				TLD			
Rte. 9W at Pirates Cove Rest. (Stony Pt.)	)14	2		EAS	R/S	TLD			
Anthony Wayne Park	14	5				TLD			
Rte. 6, 1 mi. West of Palisades Pkwy.	14	6		EAS					
County Rte. 9 @ Thruway (Woodbury)	14	10		EAS		TLD			
Orange County N.Y.S. Police, Monroe, NY	14	11							
Rte. 9W & Anchor Monument (Stony Pt.)	15	1		EAS					
Rte. 9W So. of Ayers Rd.	15	1				TLD			
9W & 202 (Pole # NYT #225)	15	1			R/S				
Front Entrance Bear Mt. Inn	15	4		EAS					
Palisades Pkwy. (Lake Welch Exit going South)	15	5				TLD			
Mine Rd. & Weynants Rd. (Highland)	15	6		EAS					
Mineral Springs Rd. & County Rte. 34	15	10		EAS		TLD			
Ayers Rd., Jones Point (Stony Pt.)	16	1		EAS	3/5	TLD			
Bear Mt. Bridge West End	16	4		EAS					
Fort Montgomery	16	5				TLD			
0.4 mi West. Junction Rts. 9W & 218	16	6		EAS					
Rte. 9W & Rte. 293 (Highland)	16	9		EAS		TLD			
SECT: Sector									
CAS: Continuous Air Sampling Site	(Green	dots)							
EAS: Emergency Air Sampling Site	Emergency Air Sampling Site (Yellow dots)								
R/S: Reuter Stokes (Blue dots)	Reuter Stokes (Blue dots)								
TLD: TLD (Red dots)		-							
Mile determinations are made in this man Miles are determined by the mile s	nner: ector w	which encom	npasses	ít.					
Example: If site is between sector	1 & 2,	it will b	e refer	red to a	s mile 2	•			

.

7 of 9

# EP-Form #4

# MONITORING TEAM FIELD SURVEY

Instrument Model No. \_\_\_\_\_ Serial Number\_\_\_\_\_

.

Individuals Name\_\_\_\_\_ Date\_\_\_\_\_

.

Survey Location or Site Perimeter Sector Number	Time	B + ð mR/hr	∛ mR/hr	[(B + ¥)-¥]4 mrad/hr	Remarks
	1. E				

EP-Form + 5

	ENVIRONMENTAL	TLD AND	AIR SAMPLE READOUT	
Prior to Discharge	1		After Discharge	
Sample Pickup - Date	Tim	e	Indiv.	
Sample Process - Dat	eTim	e	Indiv.	

TI	D	AIR SAMPLE					
Sector Mile Zone	mRem	Sector Mile Zone	Iodine Part.	uCi Char.	Thy. Rem*		

Note: 1 uCi of Iodin on filter (Part. or char.) is approximately equal to 1 Rem exposure to the adult thyroid.

Page 9 of 9

Indian Point 3 Nuclear Power Plant P.O. Box 215 Buchanan, New York 10511 914 739.8200



EMERGENCY PLAN PROCEDURES

PROCEDURE NO IP- 1021

REV. 8

18

-

TITLE" RADIOLOGICAL MEDICAL EMERGENCY

WRITTEN BY: David Q. BL	4
REVIEWED BY: Ilali	
PORC REVIEW: ASchuin	DATE 10/4/57
APPROVED BY:	DATE
EFFECTIVE DATES 10/25/83	

3

#### IP-1021

#### RADIOLOGICAL MEDICAL EMERGENCY

#### 1. INTENT

To describe the procedure to be followed when an individual is injured and contaminated.

#### 2. DISCUSSION

This procedure is to be used as guidance when an individual is injured and contaminated at IP-3. In all such instances, it should be the guiding rule that required medical attention must take precedence over decontamination whenever the injured's life is considered to be endangered. In such instances, the prompt treatment of the injury must take first consideration. However, when contamination does occur, radiological hazards cannot be ignored and should be dealt with as feasible while the medical condition is being treated.

Rescue teams should make every attempt to stabilize the patient. If the patient is stabilized and there is no threat to life, the patient should be decontaminated (to the level normally allowed for release, ie. with a maximum of 200 cpm above background) prior to transporting to a hospital. If the patient is not stabilized or his medical condition warrants immediate transportation to the hospital, initial attempts must be made at decon, or at a minimum to remove the contaminated protective clothing and/or wrap him in a blanket to minimize the spread of contamination.

- NOTE: The transportation of a contaminated injured individual to the hospital requires notification as per the Emergency Plan classification, Notification of Unusual Event. Reportable as per IP-1030, i.e. within 15 minutes after the departure of the patient from the site to the offsite hospital.
- NOTE: Applicable telephone numbers are found on Attachment 1 of this procedure.

Locations of first-aid supplies are found on Attachment 2 of this procedures.

#### 3.0 PROCEDURE

- 3.1 AN EMPLOYEE ARRIVING AT THE SCENE OF THE ACCIDENT WILL:
  - Immediately render lifesaving aid to the best of his ability to the injured individual.
  - b) Notify (or cause to be notified) the Control Room.
  - c) The patient should not be moved until a first aider arrives, unless conditions in the area jeopardize the patient's life.
  - d) The time the patient is left alone should be minimized until the first aider(s) arrive.

- 3.2 THE CONTROL ROOM OPERATOR WILL:
  - a) Page and have report to the accident scene:
    - 1. Nurse (Normal Work Hours)
    - 2. First Aider
    - 3. H.P. Technician
    - 4. Shift Supervisor
    - 5. NPO Rover
  - b) Ensure notification of the above by making follow-up phone calls to their work areas on a line other than the page line.

The follow-up call to the HP should be made to the HP Control Point.

- c) Call IP-3 Security:
  - i) Give the location of the accident.
  - Request that they stand-by to escort ambulance to closest access point to patient and be on stand-by to bring protective clothing package to ambulance workers (found in the Security Emergency Locker).
- Call the Radiological & Environmental Services Superintendent to advise of the situation.
- 3.3 AT THE ACCIDENT SCENE:
  - a) The Nurse/First Aider will render life saving aid, making every effort to stabilize the patient.
  - b) The Health Physics Technician will:
    - Immediately establish the safety of the area, Set up a buffer zone with step-off pad, and assist the Nurse/First Aider.
    - Respond with the Decontamination kit and continue with its use until arriving at the hospital (if required).
  - c) All nonessential personnel in the immediate area should be instructed to leave.
  - d) The Shift Supervisor should be in frequent contact with the Control Room, and coordinate the Medical Emergency Response from the accident scene.
- 3.4 THE PATIENT'S CONDITION WILL DETERMINE ONE OF THE FOLLOWING:
  - The need to transport directly to the hospital with initial attempts at decon.
  - b) The need to decontaminate at the Unit 3 decon suite (See IP-1023).

- 3.5 IF AND WHEN TRANSPORTATION TO THE HOSPITAL IS REQUIRED. The Control Room shall:
  - a) Call the Verplanck Ambulance
  - b) Call Peekskill Hospital to alert them of the ambulance arrival of a contaminated or possibly contaminated individual.
  - c) Call Security:
    - i) Notify IP-3 Security of the ambulance's need for access.
    - ii) Instruct security to direct the ambulance to the closest vehicle access to the injured individual.
    - iii) Instruct security to bring protective clothing packages and yellow herculite for ambulance attendents use (found in Security Emergency Locker).
  - d) Make the required notification under the Emergency Action Level Notification of Unusual Event, within 15 minutes after the Ambulance leaves the site.
  - e) After being advised by <u>Security</u> that the patient has left for the hospital, again call the Peekskill Hospital to advise them of the patients condition upon departure from the site.
  - f) A Medical Respresentative should be notified as to the patients condition and need to transport to the hospital. (If the patients life is at risk transport 1<sup>st</sup> and make notification to the Medical Representative 2<sup>nd</sup>)
- 3.6 In addition, in any case where transportation to the hospital is required for an injured-contaminated individual:
  - a) The IP-3 staff shall bring the patient to the ambulance.
  - Ambulance attendents should be provided with protective clothing & dosimetry.
  - c) Ambulance driver should not touch patient and should be given dosimetry. Protective clothing is not required.
  - d) An H.P. Technician will accompany the injured to the hospital with a dosimeter charger and dosimeters for Ambulance and hospital personnel. The Decon kit should be used in transport to the hospital if warranted. He will remain with the patient surveying and monitoring as required. He will monitor the Hospital Room before and after the patient's arrival, and advise hospital personnel of the necessary H.P precautions.
- 3.7 The Control Room is to be notified by Security as soon as the patient has left for the hospital.

- 3.8 If the decision is made to transport the patient to a facility other than the Peekskill Community Hospital, the Medical Support Staff and Radiological and Environmental Services Superintendent will decide the mode of transportation to be used, and will make the necessary arrangements.
- 3.9 General Instructions on pages 5-9 are provided for the following personnel.
  - a. Control Room
  - b. Nurse
  - c. First Aid
  - d. Health Physics
  - e. Security

#### RESPONSIBILITY OF CONTROL ROOM

- Page Nurse, First Aider, H.P., N.P.O. Rover & S.S. to accident scene. (Follow-up with call to individuals' work areas to ensure notification)
- 2. Call H.P. Control Point and have the Watch H.P. report to accident scene.
- 3. Call RESS to advise of situation.
- Call Ambulance and Hospital advising them of patients possible contaminated condition. (Call hospital again upon departure of ambulance to advise of patient's updated condition)
- Call Security and advise them of the ambulance's arrival, and have Security direct the ambulance to the closest vehicle access to the patient. Have Security bring protective clothing package to ambulance attendents.
- 6. Call Medical Representative for IP-3 to notify of the transport of a contaminated individual offsite.
- 7. Make required Emergency Plan Notifications under Notification of Unusual Event.
  - NOTE: If necessary in the case of multiple contaminated patients, arrange for the Unit 3 - Unit 1 transportation routes to be opened (IP-1022).

## RESPONSIBILITY OF THE FIRST AID TEAM

- 1. Respond to call of Control Room to designated location with a first aid kit (and stretcher).
- Obtain emergency equipment and Anti-C clothing from the emergency cabinet in the Control Room or from the normal supply at the Control Point. Don coveralls before entering the Controlled Area.
- Render immediate care under Health Physics direction. (Move victim from highly contaminated area or away from source only when it is definite that this will not create any further injury).
- If necessary, move the victim to the Unit 3 Decon Suite (and the Unit 1 Decontamination Room in the event of multiple victims).
- 5. Assist in decontamination of the victim.
- 6. Decontaminate self, if necessary.
- 7. Assist with the delivery of victim to ambulance.
- 8. Assist transfer of victim from ambulance to hospital.
- 9. Assist Hospital Radiation Casualty team as needed.

# RESPONSIBILITY OF HEALTH PHYSICS PERSONNEL

- Specify Anti-C Clothing and monitoring equipment for team members. As a minimum, all personnel responding to a First Aid call in the Controlled Area shall don coveralls before entering.
- 2. Respond to scene with proper survey instruments.
- Respond with Decontamination Kit and continue using this kit while in transit to the hospital.
- 4. Direct all non-injured to safe area.
- 5. Measure and evaluate fields.
- 6. Identify contaminated areas on victim and mark them.
- 7. Direct initial decontaminated procedures.
- 8. Restrict access to area as necessary.
- 9. Discuss with the RESS, or Shift Supervisor or Medical Representative the route to Decontamination Area, either on or offsite. (If necessary in the event of multiple victims, use IP-1022 for specific requirements to transport to IP-1 Decon Suite).
- Accompany the injured to Decontamination Suite and remain with him including his transportation and decontamination at the hospital or until relieved by another H.P.
- 11. Follow procedures as outlined for First Aid Team.
- 12. The N.P. will be responsible to advise Medical personnel as long as any radiation hazard exists to rescue personnel. The H.P. will monitor and advise of allowable working time, exposure limits and shielding.
- 13. Accompany the patient to hospital providing dosimeters for the drivers (the ambulance driver should remain behind the wheel and not come in contact with the patient. (Dosimeter charger should be brought). Provide dosimeters for hospital personnel.
- 14. Survey hospital room before and after victim is treated. Assure all unnecessary major hospital equipment is out of room. (The Power Authority is responsible for all contaminated equipment replacement).
- 15. Inventory and bag all hospital equipment for future pick up and disposal.

#### RESPONSIBILITY OF NURSE

- 1. Respond to the Control Room's call to report to the accident scene or decontamination room with emergency bag.
- Put on protective clothing and dosimetry which are necessary for Controlled Area entry.
- 3. In the event of mass casualties, initiate Triage procedure.
- 4. Evaluate the patients condition and:
  - a) Render emergency care as necessary.
  - b) Request emergency transport if needed.
- 5. Provide gross decontamination.
- 6. Remove the patient to the Decontamination Suite Unit 3.
- 7. In the Decontamination Suite, evaluate the patients condition so that you can describe findings to a consulting physician.
- 8. Contact consulting physician.
- 9. Start medical decontamination procedure, utilizing H.P. for continuous monitoring of contaminated areas.
- -10. If considered necessary; collect all urine, stool, vomitus, etc. and label.
- 11. If necessary; draw 1 tube blood for C2C (lavender top) mixing well, 1 full clot tube (red top) for chemistries, being careful to obtain from noncontaminated area. Specimens should be drawn prior to starting any I.V. fluids.
- 12. Start I.V. if medically indicated.
- 13. When the patient is stabilized and decontaminated as much as possible, decontaminate self and prepare to go with the patient to the hospital, maintaining life support as required.
- 14. Provide medical report form radiation casuality and accompany patient to the hospital, retain duplicate copies.

# SECURITY RESPONSIBILITY

- 1. Direct the ambulance to closest vehicle access point to injured.
- 2. Bring protective clothing package and yellow herculite for ambulance attendents use.
- 3. Notify the Control Room when the ambulance leaves the site.

IP-1021 Attachment I

# This page left blank intentionally

(Contains phone numbers)

IP-1021 ATTACHMENT 2

.

# FIRST AID SUPPLIES

Locations of first Aid lockers and/or kits:	<ul> <li>a) 33' elevation First Aid Room</li> <li>b) Security Building</li> <li>c) S.S. Office</li> <li>d) H.P. Control Point</li> <li>e) Outside Nuclear NPO Office</li> </ul>
Locations of Stretchers:	<ul> <li>a) Outside H.P. Control Point</li> <li>b) Decon Room</li> <li>c) 33' Elevation First Aid Room</li> <li>d) Outside Nuclear NPO Office</li> </ul>
Locations of oxygen:	<ul> <li>a) S.S. Office</li> <li>b) Security Building (Security Shift Coordinators offices)</li> <li>c) Security Vehicle</li> <li>d) H.P. Control Point</li> <li>e) Outside Nuclear NPO Office</li> </ul>

In the Safety & Security Super-visors possession a)

In the Safety & Security Supera) visors possession

Resuscitator:

C

4

4

Medical Response Kit:

Indian Point 3 Nuclear Power Plant P.O. Box 215 Buchanan, New York 10511 914 739.8200

.1

. .

.

.

0



.

EMERGENCY PLAN PROCEDURES

PROCEDURE NO IP-		IP-	10	30		REV.	9		
TITLE"	PROC	ED	URE	FOR	CONTROL	ROOM:	EMERGENCY	NOTIFICATION,	COMMUNICATION
		-				1.00			

AND STAFFING

WRITTEN BY:	David Ber	
REVIEWED BY:	Demis M. Que	· · · · · · · · · · · · · · · · · · ·
PORC REVIEW:	Whill	DATE /40033
APPROVED BY:_	John Burn	DATE 10/10/03
EFFECTIVE DAT	E. 10/25/83	

# IP-1030 Procedure for Control Room: EMERGENCY NOTIFICATION, COLMUNICATION AND STAFFING

### 1.0 INTENT

To describe the process for the notification and associated communications required when any of the four Emergency classes is declared, as well as the methods which will mobilize the IP-3 Emergency Response Organization.

#### 2.0 DISCUSSION

After the declaration of an Emergency (Notification of Unusual Event, Alert, Site Area or General), the Shift Supervisor (Emergency Director) will initiate and insure this procedure is implemented until he is relieved from the responsibility of Emergency Director. NYPA and NRC notifications should be made simultaneously followed by notification of Offsite Agencies within 15 minutes of the declaration of an emergency classification.

Persons who must (may) be notified of an Emergency Condition include:

NRC

PASNY

\*N.Y.O. Duty Officer

\*\*Emergency Response Personnel

\*Resident Manager \*Superintendent of Power \*Operations Superintendent \*Information Officer

\*Resident Inspector \*Headquarters OFFSITE

\*Con Edison \*Westchester County \*City of Peekskill \*Rockland County \*Orange County \*Putnam County \*NTS Dept. of Health \*Con Rail Corporation \*\*Metro North Railroad \*\*\*ANI

\* Persons or agencies who must always be notified (NUE, Alert, Site Area, General)

\*\* Only notified under the appropriate circumstances as per procedure.

\*\*\* ANI (American Nuclear Insurers) must be notified at the Alert classification and above. The Recovery Center (RC) will take the responsibility for updating ANI after RC activation.

NYPA maintains staffing levels consistent with NRC requirements, i.e.:

Onshift Staffing - supplied by the Watch Organization with additional personnel available through the Con Ed Sr. Watch Supervisor.

Minimum Staffing - designated individuals (Roster II) who are available within 30-60 minutes from time of notification.

Additional Staffing - available as needed by Shift Supervisor or Emergency Director (See Roster III).

NOTE: Off hours call in of Emergency personnel is performed by Security.

1

1 9

# 3.0 PROCEDURE - Notification of Unusual Event/Alert (non-radiological) (EP Flowchart #2)

- 3.1 Shift Supervisor
  - a) Designate a communicator
  - b) Determine which support centers should be activated, and during off hours initiates the call-in of Emergency Response Personnel as necessary.
- 3.2 Communicator
  - a) Fill out the Emergency Notification Fact Sheet, EP-Form #30a. (Have Shift Supervisor review and approve)
  - b) Assure the notification of the Resident Manager, Superintendent of Power, Operation Superintendent, Information Officer and the NYO Duty Officer using Part I of the Emergency Notification Fact Sheet (EP-Form #30a) and Roster I :

Normal Hours: Via Resident Manager's Secretary Off Hours: Via Security

- c) Notify NRC Headquarters using the ENS direct line telephone
- d) Notify the USNRC Resident Inspector
- e) Call Con Edison Unit 2 Control Room: Alert them to IP-3 conditions Off Hours: Request 1 RO immediately if needed and if needed HP, Chem, I&C or Maintenance Techs. to report to the IP-3 Control Room.
- f) Notify offsite agencies within 15 minutes of declaration of the emergency using the Radiological Emergency Communication System (RECS) Hot Line and Part I of the Emergency Notification Fact Sheet (EP-Form #30a).
- \* g) Notify ANI at the Alert Classification and above.
  - h) Using the Emergency Notification Fact Sheet, keep authorities (b,c,d,e,f & g\*) informed of significant changes (approximately every 30 minutes) until the EOF is staffed and has taken over responsibility for offsite communications.
  - Notify authorities (0,c,d,e,f & g\*) of a reduction or escalation in the Emergency Classification or Recovery Intention.
  - j) Closeout to authorities (b,c,d,e,f & g\*).
- \* NOTE: The Recovery Center (RC) will take over this ANI function after RC activation.

# 3.3 Personnel or Support Center Activation

- 3.3.1 Page: "Shift Technical Advisor report to the Control Room"
- 3.3.2 For an Alert:

Normal Hours: use PA:

- a) "All Technical Support Center personnel report to the Technical Support Center".
- b) "Shift Technical Advisor report to the Control Room".
- c) "Operations Support Center Personnel Report to the Operations Support Center".
- d) "All other personnel remain at your work locations".

Off Hours: Instruct Security:

a) Call in all personnel from Roster II

4

13

1 24

# 4.0 PROCEDURE - Alert (radiological)/Site Area/General (EP Flowchart #3)

- 4.1 Shift Supervisor
  - a) Designate a communicator
  - b) Initiate sounding of Site Assembly Alarm and activation of support centers. (Call Con Ed and notify of intent to sound Site Assembly Alarm).
  - c) Initiate calculations for dose projection as necessary (IP-1001, 1002)
  - d) Dispatch onsite & offsite monitoring teams as necessary (IP-1010, 1011)
  - e) Consider Repair & Corrective Action teams as necessary (IP-1025)

# 4.2 Communicator

- a) Fill out the Emergency Notification Fact Sheet, EP-Form #30a. (Have Shift Supervisor review and approve)
- b) Assure the notification of the Resident Manager, Supt. of Power, Operations Superintendent, Information Officer and the NYO Duty Officer using Part I of the Emergency Notification Fact Sheet (EP-Form #30a) and Roster I:

Normal Hours: Via Resident Manager's Secretary Off Hours: Via Security (see also e. below)

- c) Notify NRC Headquarters using the ENS direct line telephone
- d) Notify the USNRC Resident Inspector
- e) Call IP-3 Security:

Alert them of emergency status
 Direct them to restrict access to the site

- f) Call Con Edison Unit 2 Control Room:
  - Alert them to IP-3 conditions (and intention to sound Site Assembly Alarm)
  - Request offsite monitoring teams to report to the Emergency Operation Facility if needed.
  - iii. Request 1 RO immediately if needed and H.P., Chem, I&C or Maintenance Techs. as required to report to the IP-3 Control Room.
- g) Notify offsite agencies within 15 minutes of declaration of the emergency using the RECS Hot Line and Part I of the Emergency Notification Fact Sheet (EP-Form #30a).

a

- \* h) Notify ANI
  - Notify Rail lines if emergency is radiological in nature and will impact east or west side of river railroad traffic.
  - j) Using the Emergency Notification Fact Sheet, keep authorities (b,c, d,e,f,g,h\* & i) informed of significant changes (approximately every 30 minutes) - until the EOF is staffed and has taken over responsibility for offsite communications.
  - k) Notify authorities (b,c,d,e,f,g,h\* & i) of a reduction or escalation in the Emergency Classification or Recovery Intention.
  - 1) Closeout to authorities (b,c,d,e,f,g,h\* & i).
- \* NOTE: The Recovery Center will take over this ANI function after Recovery Center activation.
  - 4.3 Sounding the Site Assembly Alarm and Support Center Activation
    - 4.3.1 Sounding Site Assembly Alarm results in:
      - . Shift Technical Advisor reporting to the Control Room
      - . Watch H.P. & Chemist, contingency I&C & Maintenance and spare operations personnel reporting to the Control Room.

And during Normal Hours:

- . Emergency Director & Assessment Team reporting to the Emergency Operation Facility
- . Technical Support Center personnel reporting to the Technical Support Center
- . Operations Support Center personnel reporting to the Operations Support Center.
- 4.3.2 Announce over PA:

"A emergency has been declared. All non-watch personnel report to your Assembly Area. Contingency workers and spare operations personnel report to the Control Room". (repeat)

- 4.3.3 Additionally Off Hours:
  - a) Instruct Security to call-in all Personnel from Roster II
  - b) If the Emergency Director determines additional staffing other than NYPA personnel is necessary, he may request Con Edison personnel by calling the Unit 2 Watch Supervisor.
- 4.4 Begin Dose Projection Calculations
  - a) Refer to IP-1002

- 4.5 Prepare to dispatch on & offsite monitoring teams (control of these teams will be taken over by the EOF when staffed)
  - 4.5.1 Onsite team: (IP-1010)
    - a) Should consist of one H.P. or other so qualified individual and one other person sent to survey site boundary (instruct as to which Site Perimeter locations). Report results via radio (Con Ed frequency) picked up at security command post.

NOTE: Consider the use of KI for this team.

- 4.5.2 Offsite team: (IP-1011)
  - a) If not done already, call Unit 2 Control Room and request assistance of offsite monitoring teams.
  - b) When these teams arrive, they will report to the EOF if staffed or call in to the Unit 3 control room by radio.
  - c) Instruct which offsite locations to monitor. (NOTE: Consider whether or not KI should be taken by this team.)
- 4.6 Consider Reapir & Corrective Action Teams: (IP-1025)
  - a) Team to consist of 1 H.P. tech and other workers as necessary.
  - b) Consider need of KI for these teams.

NOTE: There are 3 call-in rosters:

Roster I, NYPA Notification Telephone Numbers is a listing of those people to be called (notified) in the event of any Emergency Plan Emergency. This should be used in conjunction with the Emergency Notification Fact Sheet.

Roster II, sections A & B are the minimum staff personnel required within 30-60 minutes of being notified of the Emergency. This Roster contains Department Heads, HP, Chem., Rad. Assessment, Technical Support Center, Emergency Operations Facility, Operations, Maintenance and I&C personnel.

Roster III is a listing of NYPA personnel by department available for Call-in.

Roster II should be initiated if a <u>Unit 2 emergency</u> is declared and the Con Edison Watch Supervisor requests additional non-watch personnel from the NYPA Shift Supervisor. (This does not include those NYPA watch personnel who will be sent to Unit 2 immediately upon request; 1RG, 1 Maintenance person, 1 I&C Tech, 1 H.P. or Chem. Tech.)

1.4

#### 5.0 CONTROL ROOM COMMUNICATOR CHECKLIST

- When emergency is initially declared, complete Part I of EP-Form #30 (30a) Notification Fact Sheet with Shift Supervisor - Have him initial. Serialize all Fact Sheets.
- Notify Roster I (via Resident Manager's Sec. during day, Security during off hours)
- 3) Call Con Ed CCR and advise. (Request one RO and additional personnel as needed during off hours. Request offsite teams to report to EOF if at SAE or GE. Request onsite teams if needed).
- 4) Call NYPA Security and have them restrict access to site if at SAE or GE.
- 5) Notify NRC Headquarters using ENS direct line.
- 6) Notify NRC Resident Inspector
- 7) Notify offsite agencies with 15 mins. of declaration of emergency using RECS Hotline or County Radio if Hotline not working (must make separate call to State if County Radio used).
- 8) Notify ANI at Alert level or above.
- 9) Keep all groups and agencies updated every ½ hr. or sooner if change in status or Emergency Classification until EOF assumes this responsibility.
- 10) At Alert stage & above, make P.A. announcements to staff TSC/OSC and EOF
- Make P.A. announcements every ½ hr. to advise plant personnel of current status.
- 12) Have Security use Roster II to call needed personnel during off hours.
- 13) When EOF is staffed, transfer offsite communications responsibilities to them. Let them know what Notification Fact Sheet # to use next. Continue communications with EOF and continue making ½ hour P.A. announcements.
- 14) When EOF is staffed, transfer responsibility for site perimeter teams and offsite teams to Radiological Communicator in EOF.

# THINGS WHICH SHOULD CONTINUE DURING THE COURSE OF THE EMERGENCY:

- 15) Make P.A. announcements every ½ hour to update plant personnel as to current status. (This assumes evacuation has not occured) (Check w/POM for information to be transmitted).
- 16) Maintain communications with POM, TSC, OSC, EOF and keep them updated of Control Room conditions & receive updates from them.
- 17) Be ready to assume communications if EOF is moved to AEOF.
- NOTE: Remain on direct line communication link (CR. TSC, OSC, EOF), monitor communication on that line, update and report as necessary, log appropriate communications and filter to CR staff.

•	. <u>EMERGENCY NOTIFICATI</u>	ON FA	CT SI	<u>HEET</u> IP-1030/9
EP- 1. (a 1.	Porm #30a <u>PART I - GENERAL I</u> a) Notification #A Message transmitted: /  Date Time(24 hr. clock) Magility providing information.	NFORM	ATION	WestPeekskill RockOrange PutnamNY State Con EdMetro North ANINRC Con Rail RC/Duty Officer
4.	A Indian Point No. 2 B Indian Point No. 3	9.	The	release is:
3.	Reported By: Name Title			continuing. terminated. intermittent. NOT applicable.
4.	This         A       is an exercise         B       is NOT an exercise	10.	Pro	tective Actions:
5.	Emergency Classification		B	tive Actions outside the site boundary. Protective Actions are under
6.	<ul> <li>B Alert</li> <li>C Site Area Emergency</li> <li>D General Emergency</li> <li>E Transportation Incident</li> <li>F Other</li> <li>This classification declared at:</li> </ul>		C	Consideration. Recommended Protective Action: <u>ERPA for SHELTERING</u> 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46
7.	DateTime Brief Event Description/Initiating Condition:			ERPA for EVACUATION 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46
		11.	Wea	ther
			A	Wind speedmiles per hour ormeters per second. Direction(from)degrees.
8.	As ofhours there has:		C	Stability class (A-G/or stable, unstable, neutral)
	B been a release of radio- activity to the ATMOSPHERE C been a release of radio-		D	General Weather Condition (if applicable)
	activity to a BODY OF WATER D been a GROUND SPILL release of radioactivity			

rm#3	05	EMERGENCY NOTIFIC PART II - RADIOLOGICA	CATION FACT SHE	ET ATA	Date:			
12.	Prognosis for Worsening or Termination of the Emergency:							
13.								
14.	Utility Off-Site Emergency Response Action Underway:							
	15 Release Information Design							
	13.	A ATMOSPHERIC RELEASE	Actual	110160	tou_			
		Date and Time Release Started						
		Duration of Release	hrs		hrs			
		Noble Gas Release Rate	Ci/sec		Ci/sec			
		Elevated or Ground Release Inplant Monitors			Ci/sec			
	B	WATERBORNE RELEASE						
		Date and Time Release Started						
		Duration of Release	hrs		hrs			
		Volume of Release	gal		gai			
		Total Badioactivity Concentration (gross)	uCi/ml		uCi/ml			
		Radionuclides in Release	uCi/ml		uCi/ml			
			uCi/ml		uCi/ml			
		Basis for release data e.g. effluent monito	ors, grab sampie, con	nposi e sample and sar	mple			
	16.	Dose and Measurements and Projections	<u>Actual</u>	Project	ted_			
		Whole Body Dose Rate	mR/hr		mR/hr			
		duration above)			Rem			
		Thyroid Dose Commitment (1 hour						
		exposure) Thyroid Dose (total commitment)	mRem		mRem Rem			
	В	PROJECTED OFFSITE	2 Miles	5 Miles	10 Miles			
		Whole Body Dose Rate (mR/hr)						
		Whole Body Dose (Rem)						
		Thyroid Dose Commitment (I hr						
		exposure - mRem)		the second second				
		( Tyrolo Dose ( rotal Commitment-Nem)						
17	Protec	tive Action Recommendations and the Ba	sis for the Recomme	ndations:				
PR-Form#30c ENERCENCY NOMIFIC	IP-1030/9							
---	--							
PART ITT - TD-3 PLA	NT PARAMETER DATA Notification#C							
	Date:							
	Time:							
1AJOR PARAMETERS								
18 RCS pressure	STATUS OF ENGINEERED SAFEGUARDS EQUIP							
10 BCS temperature	(Circle those in use)							
20. Reactor Shutdown (V/N)	37. Containment Spray							
21. Natural/Forced circulation	Recirculation Mode							
22. Pressurizer level	38. Containment Fan Cooler units -							
23. S/G levels #31 % #33 %	31, 32, 33, 34, 35							
#32 % #34 %	39. Auxiliary Feed Pumps - 31, 32, 33							
24. Off-site/On-site power available:	40. VC Phase A Isolation Complete YES/NO							
25 Containment Pressure	41. VC Phase B Isolation Complete YES/NO							
26. Containment Temperature	42. VC Ventilation Isolation Complete							
27. RCS Subcooled/Saturated	43 CP Ventilation Teolation Complete							
psig Subcooled	YES/NO							
28. VC Sump Level	44. Emergency Diesel Generators							
29. RWST Level	Check Status 31 32 33							
30. CST Level	Load/Running Unloaded/Standby							
MODES OF SAFETY INJECTION	Out of Service							
(Circle modes in use)	RADIOLOGICAL MONITORS							
31. Passive Injection - Accumulators	Plant Vent:							
32. High Head Injection	45. R-13 (particulate) CPM							
33. Low Head Injection	46. R-14 (gaseous)CPM							
	47. R-27 (gaseous)uCi/co							
MODES OF RECIRCULATION	Area Monitors.							
(circles modes in use)	48. R-2 ContainmentmR/hr							
24 Low Hand Designaulation - Design Dumps	49. R-7 ContainmentmR/hr							
- RHR Pumps	50. R-10 Accident Monitor (Steamline penetration)							
35. High Head Recirculation - - Recirc Pumps to S.I. Pumps	51. Containment High Range Monitor (R-25/R-26)							
- RHR Pumps to S.I. Pumps	R/hr							
36. How Leg Recirculation - Recirc Pumps	PLANT VENT FLOW RATE:CFM							
- KRK PUMps	백양이 집에 많은 것이 없는 것이 같은 것이 같은 것이 같은 것이 같이 많을까?							

1

ADDITIONAL MONITORS OF IMPORTANCE

EF Flowchart #2

NOTIFICATION - COMMUNICATION - STAFFING





IP-1030 Attachment 1

C.C. C. Statement

The second se

the second of the second second

------

a management of the state of the state

الا المحمد العام المحمد العام المحمد العام المحمد العام العام العام العام العام العام العام العام الع

aya in hilan manna ar man

a an an an an branch

- And the second s

and a second of the second of the

This page left blank intentionally

(Contains phone numbers)

and marine marine

and the second second

-----

a second and the second s

and the second sec

it present and the second second

IP-1030 Attachment 2

This page left blank intentionally

( Contains phone numbers)

Indian Point 3 Nuclear Power Plant P.O. Box 215 Buchanan, New York 10511 914 739.8200



EMERGENCY PLAN PROCEDURES

PROCEDURE	NO	IP-	1031	

REV. 1

TITLE" PROCEDURE FOR EOF EMERGENCY NOTIFICATIONS AND COMMUNICATIONS

.

WRITTEN BY:	Canel D. r	self
REVIEWED BY:	Dennis M. C	min
PORC REVIEW:	ASel	DATE 9/24/83
APFROVED BY:	the Bion	DATE 9/39/8-
EFFECTIVE DATE	10/28/	83

#### IP-1031

### PROCEDURE FOR EOF EMERGENCY NOTIFICATIONS AND COMMUNICATION

## 1.0 INTENT

To outline the communications necessary to be established from the EOF during the course of emergency conditions which require the staffing of the EOF.

#### 2.0 DISCUSSION

Initial notification and communication to on and offsite authorities will be directed and accomplished by the Control Room. Notification and communication turn over to the EOF will be accomplished when the EOF is staffed and ready to assume control of the emergency. At that time, the EOF communicator should receive a briefing from the CR communicator on the status of emergency notifications and communications.

If the decision is made to relocate to the Alternate Emergency Operation Facility (AEOF), the Emergency Director will notify the Control Room and request that the Plant Operations Manager assume Emergency Director control and communication activities. The Plant Operation Manager, after assuming the role of the ED, should then assure the following positions are assigned: Communicator and Radiological Assessment Team Leader. The checklists for communicators found in IP-1031 should be followed during this transition period. When the AEOF has been established and can resume these responsibilities, the Emergency Director at the AEOF will notify the Control Room (POM) and will again assume ED control and communication activities.

# 3.0 THREE COMMUNICATORS MAY BE AVAILABLE AT THE EOF

a. Onsite (including Recovery Center and Con Edison)

b. Offsite

c. Radiological

The following checklists represent the communication responsibilities of these individuals.

1.

#### COMMUNICATOR'S CHECKLIST

#### OFFSITE

- Assume communication responsibility from Control Room after being briefed by CR communicator as to notification and communication status. Also find out which serial number was last used on Form 30a.
- Approximately each 30 minutes:
  - a. Passout forms 30a,b, and c (Notification Fact Sheet). Be sure you serialize all sheets
    - You fill out 30a and have ED initial it. 30b goes to Rad. Assessment Team 30c goes to Technical Advisor
    - ii. Go out over hotline with 30a.
    - iii. Collect 30 b & c and have clerks send 30 a, b, & c out over telecopiers.
  - b. NRC ENS Communication
- NOTE: If emergency status changes, go out over line immediately. Advise them you will follow-up with Fact Sheet shortly.
- In addition to the above, notify Con Rail and/or Metro North if radiological conditions involve or may involve them.
- If: Significant Plant Status Change Reduction or escalation in emergency class Close out

Notify:

Offsite State and Counties NRC Con Rail, Metro North, Adjacent Business (as necessary)

- Notify below if support or assistance is required
  - a. INPO
  - b. Brookhaven National Laboratory
- Have Recovery Center assume communications with ANI and INPO

1

## RECOVERY INTENTION:

Prior to declaring or entering the Recovery phase, offsite officials should be notified and conferred with to assure all parties agree on the appropriateness of entering the long term recovery phase.

## CLOSEOUT:

insure you close out emergency to all parties involved.

NOTE:

Use ODP (County) radio if the RECS Hotline is not working. You must call NYS separately with the microwave link when using the ODP radio.

### COMMUNICATOR'S CHECKLIST

## ONSITE

- Receive incoming calls

Filter as necessary to E.D./RATL etc.

- Receive all (in-house) direct line phones including Recovery Center Communications.
- Approximately every 30 minutes:

Brief OSC/TSC, CR, LAO, Security & Con Ed & RC re: plant status

- Go out with change in emergency status immediately to above
- Talk with TSC, OSC, CR, RC, Accountability, Security as directed
- Use Con Ed radio (frequency #1) if communication goes out -

location of f-1 -

- TSC/OSC - CR
- Off & Onsite Monitoring Teams will be on f-l also.

### RADIOLOGICAL COMMUNICATOR

- Review and talk with DAHP. Recommend to RATL need for On & Offsite teams to take KI (including security personnel)
- When ready, assume responsibility for onsite and offsite teams by radio. Tell them to report results to you. Call CR, tell them you've assumed control.
- Responsibilities regarding On & Offsite teams: (IP-1010, IP-1011)
  - Dispatch
  - Keep in constant contact
  - Advise to check dosimetry
  - Keep teams informed of plant status, emergency classification, plume direction and location by meteorology & calculations
  - Know where they are & don't forget them!
- Keep track of plume location & don't let security stand in plume.
- Instruct teams to:

locate plume & define edges
(do not have them traverse plume unrecessarily)

- Keep map of location & plume definition
- Publish & inform DAHP & RATL of off and onsite data for utility & county use (transparency) & by phone to county EOC's D.A. or county upper people for transmission
- Contact EOC's for information regarding county and state monitoring team data.
- Notify RATL & DAHP of results
- Receive Reuter-Stokes info. from MIDAS man
- Receive input from DAHP.
- See prints from MIDAS regarding plume locations

Indian Point 3 Nuclear Power Plant P.O. Sox 215 Buchanan, New York 10511 914 739.8200

New York Power Authority

EMERGENCY PLAN PROCEDURES

PROCEDURE NO IP- 1047

REV. 6

TITLE" OPERATIONS SUPPORT CENTER

\*

WRITTEN BY:	David Der	Reep
REVIEWED BY:	Damis In. O.	ui
PORC REVIEW:	ASchie	DATE 9/29/53
APPROVED BY:	The CBins	DATE 9/29/2-
EFFECTIVE DATE	10/28/8	73

t.

#### IP-1047

## OPERATIONS SUFPORT CENTER (OSC)

#### 1.0 INTENT

The intent is to establish a procedure for the activation and operation of the Operations Support Center (OSC). The OSC will be activated at the Alert, Site Area or General Emergency level.

2.0 DISCUSSION

The OSC is the central area from which personnel are assigned, scheduled and dispatched to perform a variety of emergency tasks. The location of the OSC is on the west side of the second floor of the Administration Building across from the lunchroom and adjacent to the Turbine Building. The OSC is provided with a dedicated ventilation system which filters outside intake air and recirculation facility air through a prefilter and a series of HEPA filters.

### 3.0 REFERENCES

- 3.1 IP-1040, Habitability of the Emergency Facilities
- 3.2 IP-1041, Personnel Monitoring for EOF, TSC and OSC Personnel
- 3.3 IP-1025, Repair and Corrective Action Teams
- 3.4 IP-1027, Emergency Personnel Exposure
- 3.5 IP-1070, Periodic Check of Emergency Preparedness Equipment

#### 4.0 ACTIVATION

4.1 The OSC is activated and staffed as follows:

- 4.1.1 At the Unusual Event or Alert level, required personnel will be called or paged to report to and staff the OSC.
- 4.1.2 At the Site Area or General Emergency level, the Site Assembly Alarm will be sounded. Personnel whose primary assembly area is the OSC will report to the OSC if they are inside the plant. Otherwise, they will report to the nearest assembly area as an "other". They should then inform the area accountability officer that he/she must report to the OSC as soon as a safe route to get there is established. (During off hours, OSC personnel will be called in from Roster II)

4.1.3 If additional personnel are needed, they can be requested from the Assembly Areas and Department Supervisors.

4.2 The OSC will remain operational until instructed by the Emergency Director to deactivate.

### 5.0 EQUIPMENT

- 5.1 Emergency equipment lockers are located in the TSC/OSC. Equipment available is listed in IP-1070 and is checked monthly in accordance with 3PT-M40.
- 5.2 The following communications equipment is present in the OSC:

Outside line dial telephones Direct line telephones NYPA extensions Handy talkie radios (NYPA Emerg. Plan Freq. #2 and Con Ed Freq. #1) Portable base station radio (NYPA Freq. #1 and #2) Plant paging system Intercoms

#### 6.0 STAFFING AND RESPONSIBILITIES

- 6.1 Operations Support Manager (OSM)
  - 6.1.1 Determined by following hierarchy:
    - Maintenance Superintendent
    - I&C Superintendent
    - Asst. Maintenance Superintendent
    - I&C General Supervisor
    - As assigned by Plant Operations Manager or Emergency Director
  - 6.1.2 The OSM reports to the Plant Operations Manager
  - 6.1.3 Responsibilities are found on the following checklists.
- 6.2 Operations Support Center Team Leaders
  - 6.2.1 Senior members of the HP, Chemistry, Maintenance, I&C, and Operations Groups shall be designated by the OSM as Team Leaders. The Team Leaders report to the OSM.
  - 6.2.2 Team Leader responsibilities are found on the following checklists.

5

### OSC MANAGER

- Call CR and have them send spare operations and contingency personnel from CR and Assembly Areas to the OSC.
- Assign:
  - Communicator (direct line)
  - Communicator telephones & radios
  - Team Leaders (HP, Chem., I&C, Maintenance, Operations)
  - Accountability Officer
  - Clark(s)
- Fill out personnel status board
- Let POM, EOF, TSC, CR, know when OSC is operational
- Assure Accountability is being accomplished
- Prioritize work
- Work closely with Team Leaders & Communicators
- Assure a supplement of Repair & Corrective Action Team workers is available.
- Schedule shifts (thru OSC accountability officer)
- Know status of all plant teams
- Supply people to other areas as needed
- Dispatch teams under guidance of IP-1025 (Repair & Corrective Action Teams)
- Coordinate development of adhoc repair and corrective actions with TSC Manager & POM.
- Assure OSC activities are reported to the appropriate individuals (thru OSC direc: line communicator)
- Update OSC personnel often
- Assure POM, TSC, CR, and EOF are aware of current repair status (thru communicator)
- Assure OSC Emergency Briefing Form is completed for each team dispatched. (See Attachment 1)

## OSC COMMUNICATOR (direct line)

- Test CR, TSC, EOF, OSC Direct Line

1

1.41

- Test Con Ed radio frequency #1 (backup to direct line)
- Remain on direct line. Monitor all communication updates and report on line as warranted re: team dispatch, repair status, team return.
- Log all appropriate communications
   Use communications routing sheets where necessary
- Screen information on direct line and report to OSC as applicable.

## OSC COMMUNICATOR

- Test: telephones intercoms PA base station & radios (NYPA frequency 2)
- Issue radios to repair teams

· · · ·

- Monitor radio communication with teams
- Screen information and report to OSC Manager & Team Leaders if warranted.
- Pay particular attention to H.P. team members
   Advise H.P. Team Leader of radiological concerns
- Log team activities, using communication routing forms where necessary.
- Screen information to OSC as applicable.

P

### TEAM LEADERS

- Keep in constant contact with OSM
- Call-in personnel from accountability areas as necessary
- Select individuals for mission teams
- Assure pre-mission briefings consist of:
  - Compliance with IP-1025
  - ALARA

\*

1.

- Projected Radiological Conditions
- Best route
- Tools
- Mock-ups, simulations
- Diagrams, visual aids
- Radio
- Task understanding
- Keep in communication with dispatched teams through communicator
- Report results of teams to OSM

#### H.P. TEAM LEADER

Assign: TSC/OSC Monitor Control Point Monitor Dosimetry Officer Control Room Monitor

- Assure the following items are brought to the OSC from the 4<sup>th</sup> floor Control Point:

Badge racks TLD reader Emergency Plan H.P. procedures Tally book Margin check Supply of Anti-C's survey equipment, and respirators Modem and CRT to access H.P. 1000 computer

- Check on site perimeter teams discuss dispatch with CR or EOF if not sent out yet. (EP Form #4 IP-1010)
- Assign HP members for Repair teams
- Discuss Radiological conditions with HP members of Repair & Corrective Action Teams and assure they brief other members of team.
- Obtain overexposure power of signature from ED (go thru direct line communicator) (EF Form #7)
- Consider possibility of: Assembly Area Monitoring

Evacuation Support Equip Decon & Contamination Support (EP Form #16&17) Fire Support (EP Form #13) Personnel & Skin Decon (EP Form #14& 15)

- Check on dose accountability with Dosimetry Officer & Control Point
- Assure OSC Emergency Briefing Form is completed for each team dispatched. (See Attachment 1)

#### Forms

Monitoring Team Survey #4 Emergency Exposure Authorizations #7 Fireman Exposure Record #13 Personnel Contamination Check #14 Skin Decon/Anatomical Man #15 Vehicle Contamination Check #16 Equipment Contamination Check #17 OSC Emergency Briefing Form #18 e.

16

# OSC ACCOUNTABILITY OFFICER

- Conduct Accountability

100

.

- Ee cognizant of who's where and what tasks are going on.
- Assure team status board is updated & recorded on hard copy
- Remind Team Leaders to pull people from assembly areas. Call assembly areas for those requested.
- Schedula shifts (assisted by Team Leaders & OSM)

	<u>09</u>	C EMERGENCY EP FOI	BRIEFING FORM M #18		P-1047/6 TTACHMEN	5 VT 1	1.
TEAN NUMBERT				<u>5412/111</u>	-		
ESTINATION: ASK:	(see reverse	e side for ma	(g)				
	PERSONAL P	ROTECTIVE CLOTH	ING AND EQUIPM	IENT REQUIREME	NTS		
HEAD	BODY	FEET	HANDS	DOSIME	TRY	RESP	RATORY
SURGEONS CAP HOOD WATERPROOF COVER FACE SHIELD GOGGLES	C 1 PR. COVERALLS 2 PR. COVERALLS LAB COAT DISP. COVERALLS CACOVERALLS WATERPROOF OUTER LAYER NO PERSONAL OUTER CLOTHING	AUGUER BOOTS PVC BOOTS SHOECOVERS HIGH PLASTIC COTTON 1PR., 2PR. PVC 1PR. 2PR.	COTTON INSE COTTON GLO WATERPROOF GLOVES RUSSER GLO SURCEONS G	ATS UNHOLE B VES EXTREMIN VES DO-200MA LOVES DO-200MA DO-18 DOS DO-18 DOS DO-18 DOS DO-100 R	ODY TLD ITY TLD IDDY TLD DN SENS. DOSI. IMETER IMETER IMETER DOSI. DOSI.	DHALF	PACE FACE INE MASK UPPLY HOOD CONTAINED 31 OCK
ADGE NA	ME :	AVAIL DOS DOSE REC	BADGE	NAME	A D	VAIL DOSE	DOSE RECD
instrument M Communicatio	odel/Serial No	o	<u>_</u>				1

Team Briefing Conducted By: \_\_\_\_\_ Team Leader: \_\_\_\_\_

am Debriefing Conducted By: \_\_\_\_\_\_ H.P. Tech:

Indian Point 3 Nuclear Power Plant P.O. Box 215 Buchsnan, New York 10511 914 739.5200

.

. •



EMERGENCY PLAN PROCEDURES

PROCEDURE NO IP- 1053

REV. 2

TITLE" EVACUATION OF SITE

This procedure has been extensively revised.

..

WRITTEN BY:	David D. 1	Seif
REVIEWED BY:	inthe Manne	-
PORC REVIEW:	4SQ	DATE 4/1/83
APPROVED BY:	-h-CBros	DATE 7/1/83
EFFECTIVE DATE	10/28/8.	3

#### IP-1053

#### EVACUATION OF SITE

#### 1.0 INTENT

To provide criteria for determining if site evacuation is necessary and to describe the actions to be followed when a site evacuation has been announced.

#### 2.0 DISCUSSION

In the event of an emergency, the Emergency Director (ED) and/or the Radiological Assessment Team Leader (RATL) shall determine if evacuation of the site is required using the criteria below as guidance.

- Alert Emergency with potential for radioactive airborne releases
- Site Area Emergency
- General Emergency
- Any other condition which in the opinion of the ED or RATL warrants an evacuation

If any of these criteria are met, evacuation of all non-essential site personnel should be conducted as soon as possible following completion of the accountability process. This assumes that evacuation is the protective action which will result in the lowest personnel exposure, and should be done prior to, or following a release if possible.

#### 3.0 PROCEDURE

Once the site accountability process has been completed and an evacuation has been deemed necessary, the following steps will be taken to assure a safe and orderly evacuation of site personnel.

- 3.1 The ED will determine if evacuees can be dismissed directly to their homes or if they must reassemble at the Con Edison Service Center (west store room area) for contamination checks and decontamination. (See Attachment 1 for Service Center layout). He must also determine what mode of transportation can be used to leave the site. The following options should be considered in making these decisions. (Other options could also be available depending on the situation).
  - 3.1.1 If there has been no release, evacuees should be dismissed directly to their homes using private vehicles.
  - 3.1.2 If there has been a release with onsite contamination only, private vehicles and the route onsite should be monitored. (See 3.3 below)
    - 3.1.2.1 If vehicles and route are not contaminated, evacuees should be dismissed directly to their homes using private vehicles.

#### IP-1053/2

- 3.1.2.2 If vehicles, and/or the onsite route, are contaminated, evacuees should drive their private vehicles to the Service Center for decontamination before leaving the site. If decon is not feasible or unsucessful, outside transportation assistance can be obtained by contacting the Con Ed Westchester Emergency Supervisor No. 9 (914-997-6205 or 6221).
- 3.1.3 If there has been a release with offsite as well as onsite contamination, private vehicles can be released offsite without going to the Service Center for decon first. Outside transportation assistance could also be requested if needed.
- 3.2 The onsite evacuation route will be determined by the ED using wind direction as the decluing factor. (See Attachment 2 for map of routes).
  - 3.2.1 Wind from the South (upvalley flow) use the southerly route and enter the Service Center area by way of the Con Ed maintained gate if instructed to report to the Service Center.
  - 3.2.2 Wind from the North (downvalley flow) use the northerly route passing through the Con Ed river front Security gate and up to the Service Center if instructed to report there.
  - 3.2.3 For a cross valley wind, the ED must decide which route (north or south) to take or to have personnel remain at their assembly areas.
  - NOTE: Onsite Evacuation Route Maps are posted throughout the site. Evacuation Routes are ind: cated along the site roadways by orange signs with a blue arrow indicating the direction to take.
- 3.3 If an airborne radioactive release has occurred, is occurring, or is imminent, the RATL must contact the USC to have an H.P. team dispatched to the assembly areas as they are released. The H.P. team will check for contamination of personnel and vehicles and advise the RATL of any contamination found. If evacuees are to reassemble at the Service Center, the H.P. monitors will accompany them and notify the ED upon their arrival.
- 3.4 The ED should have the Communicator contact the Westchester County EOC to discuss the proposed evacuation route offsite with the Director of the Office of Disaster and Emergency Services in order to assure that movement from the site is coordinated with the County plans and actions.
- 3.5 The Communicator must call the Unit 2 Control Room to advise them of the impending evacuation, and to have them open any gates necessary for evacuation.
- 3.6 The ED will call the Lead Accountability Officer (LAO) and advise him/her that evacuation is to take place and what instructions are to be provided to personnel in the assembly areas.

### 3.7 The LAO will:

- Call Security to advise them that evacuation of the assembly areas is to begin.
- Call the Accountability Officers at the Assembly Areas and advise them of the route to take, mode to use and whether evacuaes can go home or chould reassemble at the Con Ed Service Center for contamination checks, decon, and/or outside transportation offsite. These calls should be staggered so as to maintain an even flow of personnel from the site.
- Call the ED when evacuation of the site is complete.





IP-1053 ATTACHMENT 1 IP-3 ASSEMBLY AREA . EVACUATION ROUTES



Indian Point 3 Nuclear Power Plant P.O. Box 215 Buchanan, New York 10511 914 738.8200



EMERGENCY PLAN PROCEDURES

PROCEDURE NO	The second	1037
--------------	------------	------

REV. 1

TITLE" Tornado Emergency

WRITTEN BY:_	figuel inse	4
REVIEWED BY:	Aller	
PORC REVIEW:	1A Schuin	DATE 10/4/83
APPROV SEL	Jehn CPm	DATE 10/1/53
EFFECTIVE DAT	TE: 10 25 83	

### IP-1057

## TORNADO EMERGENCY

### (HURRICANE EMERGENCY)

#### 1.0 DISCUSSION

The Tornado Emergency Plan describes the procedures which will be followed in the event of a tornado watch or tornado warning at the Indian Point Site. Meteorological conditions that could result in a tornado would be determined by the National Weather Service. Notification of a tornado watch would come from NAWAS. Marcy Operations, or the Unit 2 Control room. For further information, the National Weather Service can be called directly - (See IP-1003 for additional numbers).

- Tornado watch: meteorological conditions are favorable for the formation of a tornado.
- (2) Tornado warning: a tornado had been sighted in the area of the plant.

#### 2.0 RESPONSIVE ACTIONS

2.1 The immediate protective actions taken by the watch force are as follows:

### Control Room Operators

- 1. Notify the Shift Supervisor
- 2. Contact Con Edison U2, to ensure gas turbines are in service.

#### Shift Supervisor

- 1. Assign station personnel to look and listen for a tornado.
- If a tornado warning has been received, order all fuel handling operations in the fuel handling building halted. If a fuel handling cask is suspended from the crane at this time, order that it be set down. Order all other nonessential plant operations halted.
- Following the notification of a tornado or hurricane warning, evaluations will be made as to operating conditions for the plant.
- 4. Make appropriate notifications is per Emergency Plan Classifications.

#### Operating Personnel

- 1. Maintain a watch to listen for and lock for a tornado.
- 2. If a tornado is sighted, notify Control Room Operators immediately.

Nuclear Power Plant P.O. Bcx 215 Buchanan, New York 10511 914 739.9200

1. 10



\* ....

EMERGENCY PLAN PROCEDURES

PROCEDURE NO IP- 1059

TITLE" Air Raid Alert

14

WRITTEN BY: Acuil Con	Seif
REVIEWED BY: Alla	<u></u>
PORC REVIEW: ASchin	DATE 10/4/50
APPROVED BY: Lin C. Bun,	DATE 10/11/53
EFFECTIVE DATE:	

REV. 1

#### IP-1059

## AIR RAID ALERT

## 1.0 INTENT

To outline a procedure to be used when an Air Raid Alert is received by the Control Room Operator.

#### 2.0 DISCUSSION

An Air Raid Alert may be received from Con Edison Unit 2 Control Room, NYPA System Operator at Marcy or from the New York State Office of Disaster Preparedness via the NAWAS system.

## 3.0 RESPONSIVE ACTIONS

- 3.1 Control Room Operators don hard hats and
  - a) Upon receipt of an AIR RAID ALERT, sound the steady tone for 10 second's duration and announce the alert three (3) times over the public address system.
- 3.2 Watch Personnel don hard hats and
  - a) Remain at their assigned posts or work areas.
  - b) The SS will direct Watch personnel to close all outside doors.
- 3.3 All Other Employees, Contractors and Visitors don hard hats and
  - 3.3.1 Proceed to designated shelter areas as follows:
    - Employees, contractors and visitors working in the conventional areas shall go to the conventional building basement.
    - Personnel in Administration Service Building shall go to ground floor elevation.
    - Personnel working in the Controlled Area who are not assigned to an operating post shall go to the bottom elevation of their respective building locatior.
    - All employees and contractors on site, outside the buildings, shall go to the Admin. Service Building, lst floor.

Indian Point 3 Nuclear Power Plant P.O. Box 215 Buchanan, New York 10511 914 739.8200

1



EMERGENCY PLAN PROCEDURES

PROCEDURE	NO	IP-	1076	REV	· <u> </u>
-----------	----	-----	------	-----	------------

TITLE" Beepers

-

WRITTEN BY: Coud D Bel	•
REVIEWED BY: Alle	
FORC REVIEW: A Schuris	DATE 10/4/53
APPROVED BY: June Burn	DATE 10 41/83
EFFECTIVE DATE / 10125153	

#### IP-1076

### BEEPERS

## 1.0 INTENT

To outline the procedure for Beeper page units used to contact NYPA personnel for emergency notification as well as non-emergency paging.

#### 2.0 DISCUSSION

The paging service used for Indian Point No. 3 is the Radiofone Corporation. The band used is VHF and towers are located throughout the area which transmit the tone signal to the paging units. An area map is shown on Page 3 which depicts the service and reception areas for the paging units. The Beacon-Newburgh area is a recognized "dead-spot" (40-50% reliability) and there may be other areas not covered by tower transmission due to terrain.

## 3.0 PRECAUTIONS AND OPERATION

- 3.1 Beepers are fragile and should be handled carefully
- 3.2 Beepers should be worn or carried when you are away from your home telephone, office telephone or plant paging system.



### 3.3 Pager 1. ormation:

Figure 1

Install the battery and check the unit for proper operation as outlined below.

## INSTALLING THE BATTERY (Figure 1)

The "Metrx" pager is powered by a single AA-size aikaline battery. Using a coin or screwdriver, turn the locking device on the bottom of the pager counter-clockwise to release the toring-loaded battery compartment door on the side of the unix. Observe the battery polarity markings stamped into the sides of the door guides and install the battery, positive end first, corresponding to the markings. Close the battery compartment door and turn the locking davice clockwise to secure.

#### OPERATION (Figure 2)

STANDARD OPERATIONMove the switch on the top of the pager from the "off" (black dot! to the "on" (orange dot) position. The pager should emit an alerting tone which indicates that the battery is good. If no alert tor.a is heard, or if a high-low "battery warning" tone is heard, the battery is weak and should be replaced. These alerting tories can be stopped by simply decreasing the switch.



Figure 2

When in the "on" position, the pager will emit the alerting tone each time a correct page is received.

For pagers equipped with the "manualreservanty" capability, the elerting tone continues to sound until the switch is depressed.

"MEM-CLERT" OPERATION- This feature allows you to defer hearing an alert tone until a more convenient time. To do this, move the switch to the center (\*) position. Any page received will now be stored until the unit is interrogated by depressing and holding down the switch. The pager then emits the alerting tone.

#### NOTE

Do not move the switch from the "Mem-O-Lert" position without first interrogating the unit. If the switch is indevertently depressed while switching, the stored information will be erased.

#### BATTERY INFORMATION

TYPE- The "Metrx" pager is designed to operate with an inexpensive, throweway, AA-size, alkaline bittery readily available at local stores. The Mailory type MN1500 has been tested by Motorola for life and leakage characteristics and is recommended. Size AA batteries from other manufacturers may give comparable performance. However, life or leakage characteristics of other batteries have not been testad by Montorola.

LIFE. The life of a disposable battery depends on several variables, including the type of battery and the number of pages you receive. Alkaine batteries on the average provide approximately 3 to 4 months of service (1.5 to 2 months for pagers equipped with the "monuli-restonly" capability). When the pattery soltage drops near its end-ot-life point, the pager automatically produces a special warning alert consisting of high-low alternating tones. This warning alert indicates that the pattery should be replaced within an 3-hour period to maintain optimum performance. 3.4 Missing or defective beepers should be reported to the RES Depaitment Office.

## 4.0 PROCEDURE

- 4.1 Establish the necessity to use beeper paging, ie. No answer at home phone, office phone or plant paging.
- 4.2 Security will be responsible for beeper paging individuals. If you wish to have someone paged, call security and request the name of the person to be beeper paged. Give decurity the message for when the individual calls back. Attachment 1 will be used by Security to record the message.
- 4.3 Security shall dial the seven-digit paging number. (Numbers found in Attachment 2 of this procedure or App. C.)
- 4.4 The telephone should ring two times. The caller should then hear a series of short beeps. Hang up. (NOTE: If the telephone rings more than five times, hang up and dial again.)
- 4.5 The individual carrying the beeper should hear his/her unit beep within 30-60 seconds.
- 4.6 When the pager goes off, call <u>Security</u>, for your message.

## 5.0 TESTING

- 5.1 The beepers shall be tested every other month to insure their operability and use.
- 5.2 Each beeper holder will test his/her own beeper.
- 5.3 A letter will be distributed to all beeper holders notifying them of the test and the dates of the testing periods. Attachment'3 will be used to record the results of the beeper test.
- 5.4 To test your beeper:
  - a. Turn your beeper on (orange dot)
  - b. Dial your seven-digit paging number.
  - c. The telephone should ring twice, followed by a series of short beeps. Hang up. (NOTE: If the telephone rings more than five times, hang up and dial again.)
  - d. 30-60 seconds later you should receive a paging tone on your beeper.

## BEEPER PAGING RECEPTION AREA



---- The Beacon/Newburg area has -40-60% reliability for paging because of the mountainous terrain.

NOTE: Paging should originate from IP-3 SECURITY,

3 df 3

IP-1076 ATTACHMENT 1

## PAGING MESSAGES (FOR SECURITY USE)

Name of	Individual:	Date:
Message:		
Name of Message:	Individual:	Date:
Name of Message:	Individual:	Date:
Name of Message:	Individual:	Date:
Name of Message	Individual:	Date:
Name of Message	Individual:	Date:
Name of Message	Individual:	Date:

100
IP-1076 Attachment 2

and the second s

and an end of the second of the second

a construction and an an an and a second sec

and the court of the contraction and the second of the second of the second of

a a serie a conservation de la cons La conservation de la conservation d

a second a second constrained to be assessed to compare the

and a second second

and the second second second second

a service and the second second second second

a in a constant constant of a set

------

This page left blank intentionally

the set was an an and the

Construction and the second

man and the second s

and a second second second second

an anna 1999 an anna an an an

a fill and the sea in the second

in the second constant of the

and and raise the condition of the second second of the second second second second second second second second

-----

and a serie and a second se

( Contains phone numbers)

IP-1026 Attachment 3 This page left blank intentionally ( Contains phone numbers)