DISTRIBUTION CONTROL LIST

Document Name: EMER PLAN

CC_NAME	NAME	DEPT	LOCATION
2	EP/TRAINING ADMINISTRATOR	TRAINING (ALL EP'S)	#48
3	RES DEPARTMENT MANAGER	RES (UNIT 3/IPEC ONLY)	45-4-A
4	REFERENCE LIBRARY	REC/TRN(UNT 3/IPEC ONLY)	BLDG/17
9	JOINT NEWS CENTER	EMER PLN (ALL EP'S)	EOF
10	SHIFT MGR.(LUB-001-GEN)	OPS (UNIT 3/IPEC ONLY)	IP3
11	CONTROL ROOM & MASTER	OPS(3PT-D001/6(U3/IPEC)	IP3(ONLY)
14	EOF	E-PLAN (ALL EP'S)	EOF
16	AEOF/A.GROSJEAN(ALL EP'S)	E-PLAN (EOP'S ONLY)	WPO-12D
19	NUC ENGINEERING LIBRARY	DOC (UNIT 3/IPEC ONLY)	WPO/7A
21	TSC	RECORDS	45-3-F
22	RESIDENT INSPECTOR	US NRC(UNIT 3/IPEC ONLY)	45-2-B
23	SILK DAVID	NRC (ALL EP'S)	OFFSITE
24	SILK DAVID	NRC (ALL EP'S)	OFFSITE
25	DOCUMENT CONTROL DESK	NRC (ALL EP'S)	OFFSITE
28	AVRAKOTOS N	J A(UNIT 3/IPEC ONLY)	OFFSITE
29	E-PLAN STAFF	E-PLAN (ALL EP'S)	EOF
30	E-PLAN STAFF	E-PLAN (ALL EP'S)	EOF
31	BARANSKI J(VOLUME I ONLY)	ST. EMERG. MGMT. OFFICE	OFFSITE
32	SUTTON A -(VOLUME I ONLY)	DISASTER & EMERGENCY	WESTCHESTR
33	LONGO N (VOLUME I ONLY)	EMERGENCY SERVICES	ROCKLAND
34	GREENE D (VOLUME I ONLY)	DISASTER & CIVIL DEFENSE	ORANGE
35	RAMPOLLA M(VOLUME I ONLY)	OFFICE OF EMERG MANAGE	PUTNAM
41	SIMULATOR	TRAIN(UNIT 3/IPEC ONLY)	48-2-A
107	QA MANAGER	QA (UNIT 3/IPEC)	TRL #2A
319	C.STELLATO(NRQ-OPS TRN)	NRQ (UNIT 3/IPEC ONLY)	#48
354	L.GRANT(LRQ-OPS/TRAIN)	LRQ (UNIT 3/IPEC ONLY)	#48
376	E-PLAN STAFF	E-PLAN (ALL EP'S)	EOF
424	J.CHIUSANO(OPS INSTR)	(UNIT 3/IPEC ONLY)	#48
510	L.GRANT(LRQ-OPS/TRAIN)	LRQ (UNIT 3/IPEC ONLY)	#48
511	L.GRANT(LRQ-OPS/TRAIN)	LRQ (UNIT 3/IPEC ONLY)	#48
512	C.STELLATO(NRQ-OPS TRN)	NRQ (UNIT 3/IPEC ONLY)	#48
513	C.STELLATO(NRQ-OPS TRN)	NRQ (UNIT 3/IPEC ONLY)	#48
517	PLANT MANAGER'S OFFICE	ADMIN/(UNIT 2/IPEC ONLY)	IP2
518	DOCUMENT CONTROL	UNIT 2(UNIT 2/IPEC ONLY)	IP2
520	CONTROL ROOM (UNIT 2)	OPS (UNIT 2 & IPEC ONLY)	IP2
521	SIMULATOR	TRAIN (UNIT 2/IPEC ONLY)	IP2
522	NRC RESIDENT	US NRC(UNIT 2/IPEC ONLY)	IP2
523	ROBERT VOGLE (UNIT 2)	TRAIN/LIB (ALL EP'S)	TODDVILLE
524	JOHN MCCANN (UNIT 2)	NUC SAFETY/LIC(ALL EP'S)	IP2

A043

Entergy

Indian Point 3

AP-18.2
Revision 10

Attachment 1
Page 1of 1

	CONTROLLED DOCUMENT TRANSMITTAL FORM

TO: DISTRIBUTION **DATE 5/6/2003** **TRANSMITTAL NO: 28146**
FROM:IP3 DOCUMENT CONTROL GROUP **EXTENSION:** 2038

The Document(s) identified below are forwarded for use. In accordance with AP-18.2, please review to verify receipt, incorporate the document(s) into your controlled document file, properly disposition superseded, void, or inactive document(s). Sign and return the receipt acknowledgement below within fifteen (15) working days.

AFFECTED DOCUMENT : EMERGENCY PLAN IMPLEMENTING PROCEDURES: IPEC

DOC #	REV #	TITLE	INSTRUCTIONS

FOLLOW ATTACHED INSTRUCTIONS

*PLEASE NOTE EFFECTIVE DATES**

RECEIPT OF THE ABOVE LISTED DOCUMENT(S) IS HEREBY ACKNOWLEDGED. I CERTIFY THAT ALL SUPERSEDED, VOID, OR INACTIVE COPIES OF THE ABOVE LISTED DOCUMENT(S) IN MY POSSESSION HAVE BEEN REMOVED FROM USE AND ALL UPDATES HAVE BEEN PERFORMED IN ACCORDANCE WITH EFFECTIVE DATE(S) (IF APPLICABLE) AS SHOWN ON THE DOCUMENT(S).

NAME (PRINT) SIGNATURE DATE CC# 25

TO: **Nuclear Regulatory Commission** 25

FROM: **IPEC Emergency Planning** #28146

SUBJECT: **Emergency Planning Document Update**

Date: 05/05/03

Please update your controlled copy of the documents listed below as specified with the copy(s) attached.

Please sign this memo indicating that you have completed the update as specified and return to:

Entergy Nuclear
Indian Point Nuclear Generating Station
Records and Documents Department
Broadway & Bleakley Aves.
Buchanan, NY 10511
Attn: Document Custodian

Document #	Document Name	New Rev. #/ Date	Old Rev. #/ Date	Instructions
IPEC	**IPEC Emergency Plan**			
IP-EP-130	Emergency Notifications and Mobilization	0 5/5/03	New	Insert new procedure
TOC		05/05/03	03/06/03	Replace old with new
IP-EP-115	Emergency Plan Forms	2 05/05/03	1 03/06/03	Replace old with new

Update completed as specified: _____

Signature of Controlled Copy Holder Date

Indian Point Energy Center
Emergency Plan Implementing Procedures
Table of Contents

CONTROLLED

COPY # 25

Emergency Plan Forms

Prepared by:	C. Kelly Walker (Print Name)	C. Kell (Signature)	4/25/03 (Date)
Approval:	Frank Inzirillo (Print Name)	M.L. Meile for FI (Signature)	5/1/03 (Date)

Effective Date: May 5, 2003

Table of Contents

Emergency Plan Forms

1.0 PURPOSE

This procedure controls Forms used by the Emergency Response Organization during emergencies.

2.0 REFERENCES

NONE

3.0 DEFINITIONS

NONE

4.0 RESPONSIBILITIES

5.1 The Emergency Planning Department is responsible for maintaining forms used by the Emergency Response Organization in accordance with this procedure.

5.0 DETAILS

5.1 Use of Forms

5.1.1 The Implementing Procedure that calls for a form to be completed controls the actual use of forms.

5.1.2 Any needed instructions for form completion will either be on the form itself or in the procedure calling for its use.

5.2 Control of Forms

5.2.1 Forms are numbered sequentially as the need for them is defined by other implementing procedures.

5.2.2 Form numbers will be formatted as "Form EP-n Rev x", where n is the sequential number of the form and x is the current revision of the form.

5.3 Method of Placing Forms in this Procedure

5.3.1 Forms are attached as addendums to this procedure. They will appear formatted in the end use format. There will be no annotation on the addendums or actual forms showing addendum number or procedure page number.

6.0 INTERFACES

Attachment 1, Current List of Effective Forms contains interfacing documents to each form.

7.0 RECORDS

Forms become official records when completed during a declared emergency.

8.0 REQUIREMENTS AND COMMITMENT CROSS-REFERENCE

None

9.0 ATTACHMENTS

Attachment 9.1 Current List of Effective Forms

Attachment 9.1
Current List of Effective Forms
Sheet 1 of 2

Form Number	Current Revision	Form Title (number of pages)	Interfacing Procedures
EP-1	Rev. 1	NYS Radiological Emergency Data Form, Part 1 (1 page)	IP-EP-130 IP-EP-250 IP-1010 (Unit 2) IP-2001 (Unit 3)
EP-2	Rev. 1	NYS Radiological Emergency Data Form, Part 2 (1 page)	IP-EP-130 IP-EP-250 IP-1010 (Unit 2)
EP-3	Rev. 1	CCR NUE Notification Checklist (2 pages, used back to back)	IP-EP-130 IP-EP-250 IP-1010 (Unit 2) IP-2001 (Unit 3)
EP-4	Rev. 1	CCR Initial Notification Checklist – Alert/SAE/GE (2 pages, used back to back)	IP-EP-130 IP-EP-250 IP-1010 (Unit 2) IP-2001 (Unit 3)
EP-5	Rev. 1	Upgrade / Update Notification Alert/SAE/GE Checklist (2 pages, used back to back)	IP-EP-130 IP-EP-250 IP-1010 (Unit 2) IP-2001 (Unit 3)
EP-6	Rev. 0	Emergency Exposure Authorizations	IP-EP-250 IP-1023 (Unit 2)
EP-7	Rev. 0	EOF Staffing	IP-EP-250
EP-8	Rev. 0	Recovery Issues / Strategies Form	IP-EP-610
EP-9	Rev. 1	Essential Information Checklist	IP-EP-250 IP-1010 (Unit 2) IP-2001 (Unit 3)
EP-10	Rev. 0	ERO Log Sheet	IP-EP-250
EP-11	Rev. 1	IPEC Manual Dose Assessment Worksheet / Estimating Containment Activity via R-25 / 26	IP-EP-310
EP-12	Rev. 0	Estimated Total Population Dose (8 pages)	IP-EP-620
EP-13	Rev. 1	IPEC Manual Dose Assessment Worksheet/ TEDE Whole Body Exposure Calculations and TODE Thyroid Exposure Calculations (2 pages)	IP-EP-310
EP-14	Rev. 0	EOF Check Point Sign-In Log (2 pages, used back to back)	IP-EP-250
EP-15	Rev. 0	(un-assigned)	
EP-16	Rev. 0	(un-assigned)	
EP-17	Rev. 0	IP-2 Manual Determination of Release Rate	IP-EP-310

Attachment 9.1
Current List of Effective Forms
Sheet 2 of 2

Form Number	Current Revision	Form Title (number of pages)	Interfacing Procedures
EP-18	Rev. 0	IP-3 Manual Determination of Release Rate	IP-EP-310
EP-19	Rev. 0	IPEC Manual Dose Assessment Worksheet/Back Calculating Release Rate from Field Data	IP-EP-310
EP-20	Rev. 1	Emergency Director Turnover Sheet	IP-EP-250
EP-21	Rev. 0	Media Briefing Worksheet	IP-EP-260
EP-22	Rev. 0	Media Briefing Issues Form	IP-EP-260
EP-23	Rev. 0	JNC Staffing Form	IP-EP-260
EP-24	Rev. 0	Emergency Summary Sheet	IP-EP-260
EP-25	Rev. 1	Written Statement Distribution Checklist	IP-EP-260
EP-26	Rev. 2	Information Distribution Guide	IP-EP-260
EP-27	Rev. 0	Public Inquiry - Media Referral and Media Monitoring Form	IP-EP-260
EP-28	Rev. 0	Joint News Center Fax Cover Sheet	IP-EP-260
EP-29	Rev. 0	Individual Exposure Tracking Log	IP-EP-250
EP-30	Rev. 0	Monitoring Team Radiation Field Survey Data	IP-EP-250
EP-31	Rev. 0	Monitoring Team Sample Data	IP-EP-250
EP-32	Rev. 0	Determination of Radioactive Airborne Concentrations	IP-EP-250
EP-33	Rev. 0	Media Inquiry Log	IP-EP-260
EP-34	Rev. 0	Courtesy Call Guide	IP-EP-260
EP-35	Rev. 0	JNC Talking Points	IP-EP-260
EP-36	Rev. 0	Primary – ERO Activation Checklist	IP-EP-130
EP-37	Rev. 0	Backup – ERO Activation Checklist	IP-EP-130
NRC 361	12-2000	Reactor Plant Event Notification Worksheet (NRC Form)	IP-EP-130

New York State
Radiological Emergency Data Form
Indian Point Energy Center
Part I - General Information Instructions

Notification # ____

1. This message being transmitted on: _____ (Date) at: _____ (Time) ☐ AM ☐ PM VIA: A. RECS B. Other _____

2. This is... A. **NOT** an Exercise B. An Exercise

3. The Facility Affected is: A. Unit 2 B. Unit 3 C. Both

4. The Emergency A. Unusual Event B. Alert C. Site Area Emergency D. General Emergency E. Emergency Terminated F. Recovery G. Other

5. This Emergency Classification Declared on: _____ (Date) at: _____ (Time) ☐ AM ☐ PM

6. Release of Radioactive Materials due to the Classified Event:
A. No Release
B. Release **BELOW** federally approved operating limits (Technical Specifications) ☐ To Atmosphere ☐ To Water
C. Release **ABOVE** federally approved operating limits (Technical Specifications) ☐ To Atmosphere ☐ To Water
D. Unmonitored Release – requiring evaluation

7. Protective Action Recommendations:
A. No need for Protective Actions outside the site boundary.
B. **EVACUATE** and implement the KI plan for the following ERPAs:

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	47	48	49	50	51									

C. **SHELTER** all remaining ERPAs.

8. **EAL Number:** ☐
Brief _____
Event Description _____

9. The Plant status is: A. Stable B. Improving C. Degrading D. Hot Shutdown E. Cold Shutdown

10. Reactor Shutdown: A. Not Applicable B. _____ (Date) at: _____ (Time) ☐AM ☐PM

11. Wind Speed: _____ Meters/Second at elevation 10 meters.

12. Wind Direction: (From) _____ Degrees at elevation 10 meters.

13. Stability Class: A B C D E F G

14. Report By: _____ (Communicator's Name) at Telephone Number (914) ____-_____

Message Received by: _____ | Message Ended at: _____

Emergency Director Review and Approval: _____

New York State
Radiological Emergency Data Form
Indian Point Energy Center **Part II - Radiological Assessment Data**

This is: A. NOT an Exercise B. An Exercise

Message transmitted at: Date:_____ Time:_____ Location / Facility transmitted from: _____

16. General release information:

A. Event Release started Date _____ Time: _____

B. Event Release expected to end Date: _____Time: _____

C. Event Release ended: Date: _____Time: _____

D. Reactor Shutdown: N/A **OR** Date: _____Time: _____

Meteorological Data As of Date: _____ Time: _____

E. Wind Speed _____ *meters/second* At elevation: _____ *meters*

F. Wind Direction: _____ *degrees* At elevation: _____ *meters*

G. Stability class (Pasquill):A B C D E F G

17. Atmospheric release information: As of Date _____ Time_____

A. Release from: ☐ Ground ☐ Elevated D. Noble gas release rate: _____ *Ci/sec*

B. Iodine/Noble gas ratio: _____ E. Iodine release rate _____ *Ci/sec*
(Assumed OR Actual)

C. Total release rate: _____ *Ci/sec* F. Particulate release rate _____ *Ci/sec*

18. Waterborne release information: As of Date _____ Time_____

A. Volume of release _____ *gallons* C. Radiolnuclides in release: _____

B. Total concentration: _____ *µCi/ml* D. Total activity released _____ *Ci*

19. Dose calculations (based on a release duration of _____ *hours*)

Calculation is based on (circle one):

A. Inplant measurements B. Field Measurements C. Assumed source term

Table below applies to (circle one) A. Atmospheric release B. Waterborne release

DISTANCE	Xµ/Q	DOSE	
		TEDE (*Rem*)	TODE (*Rem*)
Site Boundary			
2 Miles			
5 Miles			
10 Miles			
____ Miles			

20. Field measurement of dose rates or surface contamination/deposition:

Mile/Sector **OR** Mile/Degrees	Location OR Sampling Point	Time of Reading	Dose Rate (*mR/hr*) **OR** Contamination ($\mu Ci/m^2$)

Emergency Director Review and Approval: _____

Control Room NUE Notification Checklist

Note: **Perform only circled items for NUE periodic Update Notifications**

Notify Protected Area Personnel:	**Time**
1. Contact opposite unit's Control Room and inform them of classification, time, EAL# and brief description. **IF** Unit 3 is the affected unit **THEN** request **Unit 2 Control Room to notify the ERO** per step 13 of this checklist. **Unit 2:** 734-5294 (5295) **Unit 3:** 736-8277 (8282) 2. Notify Security Shift Supervisor at 736-8067 (8068) and provide them with the affected unit, date/time of NUE classification. **IF** Unit 3 is declaring the event, **THEN** request an Offsite Communicator report to the Control Room.	

Notify State and Counties: (to be initiated within 15 min. of classification)

(3.) Pick up the RECS handset and depress the RECS ring button (for **V-Band** press the number "**7**" button on the keypad.)

(4.) When you hear the message "*You have initiated a conference ...*" state:
"This is to report an event at Indian Point Energy Center. Standby for roll call"

(5.) IF you did not hear the above message within 5 seconds of pressing the button THEN hang up (for **V-Band** press "**Clear**" to hang up), wait 5 seconds and repeat steps 3 and 4.

(6.) IF unable to contact any station via RECS THEN use Local Government Radio (LGR) (instructions on back). OR telephone (phone numbers on back), to contact Warning Point(s) for those stations not reached.

(7.) Enter time you are starting the initial roll call in the space provided below.

(8.) Initiate roll call by asking **"(*location title*) are you on the line?"** for each of the following stations, stopping after each name is read to allow station to identify itself. Check off "Initial Roll Call" for each location as they answer the roll call:

Time Initial Roll Call Started

Time Final Roll Call Completed

Location	Initial Roll Call	Final Roll Call
New York State	❑	❑
Westchester County	❑	❑
Peekskill City	❑	❑
Rockland County	❑	❑
Orange County	❑	❑
Putnam County	❑	❑
West Point	❑	❑

(9.) **SLOWLY** read all of the information from the completed and approved NYS Radiological Emergency Data Form Part I. After reading the form say **"Stay on line for final roll call."**

(10) Perform a final roll call by asking **"(*location title*) did you copy?"** for each location. Check off "Final Roll Call" for each location as they answer the roll call. IF any location did not copy the message THEN instruct them to call the State for clarification or, if requested, repeat the form information.

(11) End notification by saying **"Indian Point out at (*time*)"**. Enter final Roll Call time in the space provided above.

(12) IF any location did not answer the initial roll call THEN contact the missing location via telephone (telephone numbers on back of this form) and direct them to either call the State to obtain the notification information or read them the information over the telephone. Record the location and time of this notification in the comment section of this form.

Notify Emergency Response Organization: (Unit 2 Control Room activates DIALOGIC system)	**Time**
13. Ask the Shift Manger (Emergency Director) if Emergency Response Organization mobilization is needed or if Emergency Response Organization should receive Event Notification only. IF Unit 3 is the affected unit THEN contact the Unit 2 Control Room and direct notification by one of the following as appropriate: IF Emergency Response Organization mobilization is needed, THEN use **Envelope A** "IPEC ERO Mobilization" envelop to mobilize the ERO. (Form EP-36) IF event notification only, THEN use **Envelope B** "IPEC ERO Event Notification" envelop to contact the appropriate ERO members to notify them of the event. (Form EP-36) IF Emergency Response Organization mobilization is needed for a Security Event, THEN use **Envelope C** "IPEC ERO Mobilization to Backup Locations" envelop to mobilize the ERO. (Form EP-36) **Go to page 2 (back)**	

Control Room NUE Notification Checklist (cont)

Note: **Perform only circled items for NUE periodic Update Notifications**

Notify Media Relations:	**Time**
14. Call Indian Point Communications Representative at 914-271-7031 *Read the following statement to individual answering or into answering machine:* **"This is the Unit ___ Control Room, an Unusual Event was declared at _____ (time) on Emergency Action Level number _____" (EAL)** *Obtain and enter name of individual contacted:* _____	

Notify NRC: (to be initiated within 1 hr. of classification)	**Time**
15. **IF** it is during normal working hours **THEN** notify the affected unit(s) NRC Resident Inspector **Unit 2:** 739-9361 or x 5347 **Unit 3:** 739-8899 **IF** during off-hours **THEN** call or page the NRC Senior Resident Inspector using phone numbers provided in the Emergency Telephone Directory Provide the Inspector with Date/Time of NUE classification, EAL # and brief description of event.	
(16) Contact NRC by calling main number listed on ENS phone. (**IF** main number does not work **THEN** use 1st, 2nd or 3rd backup number, or region 4 alternate number listed.) Inform them that this is a 50.72 notification and provide them with Date/Time of emergency classification, EAL # and brief description of event. Complete NRC Form 361, if requested.	

(17) Record any Comments: _____

_____

(18) Date and sign this form	Date:	Signature:

(19) Inform the Shift Manager that you have completed NUE notifications.

(20) Fax copies of the NYS Radiological Emergency Data Form, Part I to State, counties, TSC, EOF, and JNC and provide originals to the Shift Manager.

Use of Local Government Radio or commercial telephone:

A. If using the LGR (for **V-Band** depress the **"LGR"** button on the communications console) verify power on and pickup the handset & depress the handset button. Conduct roll call (see step 7).

B. If using the commercial telephone, then dial the Warning Points phone numbers below.

C. Transmit the following: **"This is to report that an Unusual Event has been declared at Indian Point Energy Center. Stand by for a fax of the Part I form".**

D. Fax the Part I form to the State and Counties Warning Points and EOC's.

Warning Point and EOC phone numbers

Location	Warning Point Phone #	EOC Phone #
Westchester County	914-864-7890	914-995-3026 or -3027
Peekskill City	914-737-8000	914-737-8000
Rockland County	845-364-8600	845-364-8800 or 364-8900
Orange County	845-291-4033	845-291-3199
Putnam County	845-225-4300	845-225-3896 or 225-9376
West Point	845-938-8846	845-938-8846
New York State	518-457-2200 or 457-6811	518-457-9900

Control Room Initial Notification Checklist – Alert / SAE / GE

Notify Protected Area Personnel: | **Time**

Note: If the Shift Manager does not feel it is safe to relocate personnel at this time DO NOT sound the Site Assembly Alarm or call for personnel to report to the Assembly Areas.

1. Contact opposite unit's Control Room and inform them of classification, time, EAL# and brief description.
   Unit 2: 734-5294 (5295) **Unit 3:** 736-8277 (8282)
2. Coordinate the following with the opposite unit Control Room:
   a. Sounding of the Site Assembly Alarm for 30 seconds and,
   b. Announcing the following message over both Unit's P.A. Systems three (3) times:
   "Attention all personnel, a (*Alert / Site Area Emergency / General Emergency*) has been declared"
   "All Essential Personnel report to your assigned emergency facility"
   "All other personnel report to the (Energy Education Center [Unit 2])/ **(Training Center** [Unit 3])"
3. Notify Security Shift Supervisor at 736-8067 (8068) and provide them with the affected unit, date/time of classification. **IF** Unit 3 is declaring the event, **THEN** request an Offsite Communicator report to the Control Room

Notify Emergency Response Organization: (Unit 2 Control Room activates DIALOGIC system) | **Time**

4. Request direction from Shift Manger (Emergency Director) as to ERO mobilization needed utilizing the appropriate envelope. **IF** Unit 3 is the affected unit **THEN** contact the Unit 2 Control Room and direct notification by one of the following, as appropriate:
   - **IF** a Security Event, **THEN** use **Envelope C "IPEC ERO Mobilization to Backup Locations"** (Form EP-36, Primary – ERO Activation Checklist) to mobilize EROs to backup locations.
   - *Otherwise* use **Envelope A "IPEC ERO Mobilization"** (Form EP-36, Primary – ERO Activation Checklist) to mobilize EROs.

Notify State and Counties: (to be initiated within 15 min. of classification)

5. Pick up the console handset and depress the **"RECS"** button **(If V-Band** press the number **"7"** button on the keypad.)
6. When you hear the message *"You have initiated a conference ..."* state:
   "This is to report an event at Indian Point. Standby for roll call"
7. **IF** you did not hear the above message within 5 seconds of pressing the button **THEN** hang up **(If V-Band** press **"Clear"** to hang up) , wait 5 seconds and repeat steps 5 and 6.
8. **IF** unable to contact any station via RECS **THEN** use Local Government Radio (LGR) (instructions on back) **OR** telephone (phone numbers on back), to contact Warning Point(s) for those stations not reached.
9. Enter time you are starting the initial roll call in the space provided below.
10. Initiate roll call by asking **"(*location title*) are you on the line?"** for each of the following stations, stopping after each name is read to allow station to identify itself. Check off "Initial Roll Call" for each location as they answer:

Time Initial Roll Call Started _____

Time Final Roll Call Completed _____

Location	Initial Roll Call	Final Roll Call
New York State	☐	☐
Westchester County	☐	☐
Peekskill City	☐	☐
Rockland County	☐	☐
Orange County	☐	☐
Putnam County	☐	☐
West Point	☐	☐

11. **SLOWLY** read all of the information from the completed and approved NYS Radiological Emergency Data Form Part I. After reading form say **"Stay on line for final roll call."**
12. Perform a final roll call by asking **"(*location title*) did you copy?"** for each location. Check off "Final Roll Call" for each location as they answer the roll call. **IF** any location did not copy the message **THEN** instruct them to call the State for clarification or, if requested, repeat the information.
13. End notification by saying **"Indian Point out at (*time*)"**. Enter the time above when final roll call is completed.
14. **IF** any location did not answer the initial roll call **THEN** contact the missing location via telephone and direct them to either call the State to obtain the notification information or read form information over the telephone. Record the location and time of this notification in the comment section of this form.

Go to page 2 (back)

CCR Initial Notification Checklist Alert/SAE/GE (cont)

Notify Media Relations:	Time
15. Call Indian Point Communications Representative at 914-271-7031 IF individual answers **THEN** read the following statement: **"This is the Unit __ Control Room, a(n) (** Alert/Site Area Emergency/General Emergency) *(circle proper classification)* **was declared at** _____ **on Emergency Action Level number** _____." (time) (EAL #) Obtain and enter name of individual contacted: _____ **OR** **IF** after 2-5 rings the machine picks up **THEN** read the above message into machine after beep.	

Notify NRC: (to be initiated within 1 hr. of classification)	Time
16. **IF** it is during normal working hours **THEN** notify the affected unit(s) NRC Resident Inspector **Unit 2:** 739-9361 or x 5347 **Unit 3:** 739-8899 **IF** during off-hours **THEN** call or page the NRC Senior Resident Inspector using phone numbers provided in the Emergency Telephone Directory Provide the Inspector with Date/Time of NUE classification, EAL # and brief description of event.	
17. Contact NRC by calling main number listed on ENS phone. (**IF** main number does not work **THEN** use 1st, 2nd or 3rd backup number, or region 4 alternate number listed.) *Inform them that this is a 50.72 notification and provide them with Date/Time of emergency classification, EAL # and brief description of event. Complete NRC Form 361, if requested.*	

18. Record any Comments: _____

_____

19. Date and sign this form	Date:	Signature:

20. Inform the Shift Manager that you have completed emergency notifications.
21. Fax copies of the NYS Radiological Data Form, Part I to State, counties, TSC, EOF and JNC and provide originals to the Shift Manager.

Use of Local Government Radio or commercial telephone:

A. If using the LGR (for **V-Band** depress the **"LGR"** button on the communications console) verify power on and pickup the handset & depress the handset button. Conduct roll call (see step 7). If using the commercial telephone, then dial the Warning Points phone numbers.
B. Transmit the following: **"This is to report that a (emergency classification) has been declared at Indian Point Energy Center. Stand by for a fax of the Part I form."**
C. Fax the Part I form to the State and Counties Warning Points and EOC's.

Warning Point and EOC phone numbers

Location	Warning Point Phone #	EOC Phone #
Westchester County	914-864-7890	914-995-3026 or 995-3027
Peekskill City	914-737-8000	914-737-8000
Rockland County	845-364-8600	845-364-8800 or 364-8900
Orange County	845-291-4033	845-291-3199
Putnam County	845-225-4300	845-225-3896 or 225-9376
West Point	845-938-8846	845-938-8846
New York State	518-457-2200 or 457-6811	518-457-9900

Update Notification (or upgrade from EOF) / Alert/SAE/GE Checklist

Upgrade notifications shall be made **within 15 minutes** of classification change. Periodic Update Notifications should be done **approximately every 30 minutes** or more frequent when conditions change.

Notify Protected Area Personnel:

1. IF a Site Area Emergency or General Emergency is declared and initial accountability has not been completed THEN notify the unaffected unit control room and coordinate the sounding or have both control rooms sound the Site Assembly Alarms
2. IF the emergency classification changes THEN perform the following:
   A. Announce (or have both CCRs announce) the applicable message over the P.A. Systems three (3) times:

   "Attention all personnel, a (*Site Area Emergency / General Emergency*) has been declared"

   OR if emergency classification is terminated THEN announce:

   "Attention all personnel, the emergency has been terminated"

   B. *Call the unaffected unit control room and Security Shift Supervisor and inform them of the new classification.*

Notify State and Counties: (to be initiated within 15 min. of upgrade)

3. Pick up the RECS handset and depress the RECS ring button (for **V-Band** press the number **"7"** button on the keypad.)
4. When you hear the message *"You have initiated a conference ..."* state:
   "This is to report an event at Indian Point Energy Center- Standby for roll call"
5. IF you did not hear the above message within 5 seconds of pressing the button THEN hang up (for **V-Band** press **"Clear"** to hang up) wait 5 seconds and repeat steps 3 and 4
6. IF unable to contact any station via RECS THEN use Local Government Radio (LGR) (instructions on back) OR *telephone (phone numbers on back), to contact Warning Point(s) or EOC(s) if activated for those stations not reached.*
7. Enter time you are starting the initial roll call in the space provided below.
8. Initiate roll call by asking **"(*location title*) are you on the line?"** for each of the following stations, stopping after each name is read to allow station to identify itself. Check off "Initial Roll Call" for each location as they answer the roll call:

Time Initial Roll Call Started

Time Final Roll Call Completed

Location	Initial Roll Call	Final Roll Call
New York State	❑	❑
Westchester County	❑	❑
Peekskill City	❑	❑
Rockland County	❑	❑
Orange County	❑	❑
Putnam County	❑	❑
West Point	❑	❑

9. **SLOWLY** read all of the information from the completed and approved NYS Radiological Emergency Data Form Part I. After reading form say **"Stay on line for final roll call."**
10. Perform a final roll call by asking **"(*location title*) did you copy?"** for each location. Check off "Final Roll Call" for each location as they answer the roll call. IF any location did not copy the message THEN instruct them to call the State for clarification or, if requested, repeat the form information.
11. End notification by saying **"Indian Point out at (*time*)"**. Enter final Roll Call time in the space provided above.
12. IF any location did not answer the initial roll call THEN contact the missing location via telephone and direct them to either call the State to obtain the notification information or read them the form information over the telephone. Record the location and time of this notification in the comment section of this form.

Go to page 2 (back)

Update Notification (or upgrade from EOF) / Alert/SAE/GE Checklist (cont)

Note: Use the CCR Alert/SAE/GE Initial Notification Checklist for upgrade from NUE to Alert.

Notify NRC: (to be initiated within 1 hr. of upgrade) **Time**

13. Contact NRC by calling main number listed on ENS phone. (**IF** main number does not work **THEN** use 1st, 2nd or 3rd backup number, or region 4 alternate number listed.)

    Inform them that this is a 50.72 notification and provide them with the facility, classification, date/time of classification, EAL # and brief description of event. Complete NRC Form 361, if requested.

Notify ANI, NYPSC, INPO, NEIL **Time**

14. **IF** the emergency is classified at an Alert or higher **THEN** notify the following via telephone (additional numbers may be in Emergency Telephone Directory). Provide the facility, classification, date/time of the classification, brief event description, and any other info requested. Update with each classification change.

    ANI (860) 561 - 3433
    NYPSC (Daytime) (518) 473 – 0763 (Off hours) (518) 674 - 8836
    INPO (800) 321 – 0614
    NEIL (302) 888 - 3000

15. Record any Comments: _____

_____

_____

16. Date and sign this form:

Date:	Signature:

17. Inform the Shift Manager that you have completed emergency notifications (CCR only).

18. Fax copies of the NYS Radiological Emergency Data Form (if completed) to State, Counties, TSC, EOF and JNC. Maintain originals and provide a copy to the Shift Manager (or EOF Manger).

Use of Local Government Radio or commercial telephone:

A. If using the LGR (for V-Band depress the **"LGR"** button on the communications console) verify power on and pickup the handset & depress the handset button. Conduct roll call (see step 8). If using the commercial telephone, then dial the Warning Points phone numbers. When the EOC's are manned, then dial the EOC phone numbers.
B. Transmit the following: **"This is to report that a (emergency classification) has been declared at Indian Point Energy Center. Stand by for a fax of the Part I form."**
C. Fax the Part I form to the State and Counties Warning Points and EOC's.

Warning Point and EOC phone numbers

Location	Warning Point Phone #	EOC Phone #
Westchester County	914-864-7890	914-995-3026 or 995-3027
Peekskill City	914-737-8000	914-737-8000
Rockland County	845-364-8600	845-364-8800 or 364-8900
Orange County	845-291-4033	845-291-3199
Putnam County	845-225-4300	845-225-3896 or 225-9376
West Point	845-938-8846	845-938-8846
New York State	518-457-2200 or 457-6811	518-457-9900

INDIVIDUAL EMERGENCY EXPOSURES AUTHORIZATION

NAME: _____ SOCIAL SECURITY NO.: _____

AGE: _____

Reason for exposure in excess of 5 Rem: (include tasks to be performed)

	ESTIMATE OF PLANNED DOSE	AUTHORIZED EMERGENCY DOSE
WHOLE BODY	_____ REM	_____ REM
EXTREMITY	_____ REM	_____ REM
THYROID	_____ REM	_____ REM

I have volunteered to perform the task(s) during which I will receive the emergency Exposure, and I understand the potential consequences of the proposed emergency from the attached summary.

Individual to Receive Exposure: _____ Date: _____
(Signature)

EPM/POM Or Emergency Director Approval: _____ Date: _____
(Signature)

WARNING

Emergency worker exposure limits are **NOT TO BE APPLIED** to minors or Fertile women

Emergency Exposure Guidelines:

1. All Emergency Exposures shall be authorized by the Emergency Director or Emergency Plant Manager.
2. All individuals may be authorized up to 5 Rem emergency exposure for a given emergency event. Historical occupational exposure is not totaled into this limit.
3. Procedures allow for the Emergency Director or Emergency Plant Manager to give a blanket authorization of up to 5 Rem emergency exposure for Alert or higher classifications.
4. Any emergency exposure greater than 5 Rem Whole Body, 50 Rem Extremities or 50 Rem Skin of Whole Body, shall be authorized on a individual basis for a specific task.
5. All emergency exposures are voluntary. – For higher doses individuals over the age of 45 are preferable.
6. Individuals shall be briefed that these exposures may increase their chances of cancer during their lifetime.
7. Volunteers may be authorized up to 10 Rem to protect valuable property.
8. Volunteers may be authorized up to 25 Rem for life saving or the protection of large populations.
9. Individuals may volunteer to receive greater than 25 Rem to save a life.
10. For any expected or actual Thyroid Exposure > 25 Rem CDE, the issuance of KI should be considered.

EFFECTS FROM HIGH LEVELS OF RADIATION EXPOSURE

Radiation injury depends on numerous factors such as the type of radiation, the parts of the body exposed, the rate and duration of exposure, the number of exposures, and the age and sex of the irradiated person. There are short and long term effects from high levels of radiation exposure.

Short Term Effects:

Whole Body Effects:

15 to 50 Rem – No symptoms, blood test may show some slight changes.

50 to 200 Rem – Some nausea, vomiting, and slight decrease in blood count, no deaths expected.

200 to 450 Rem – Most have nausea, vomiting, and feel flu symptoms. Most have hair loss, infection likely, 10-50% deaths.

450 to 600 Rem – Flu, bleeding from mouth and throat, infections likely, 50-90% deaths.

600 to 1000 Rem- Symptoms worse than above, 90-100% deaths.

Radiation Injury to the Skin:

Less than 1000 Rem	- First degree thermal burn (similar to sunburn)
to 5000 Rem	- Blisters form and break open
to 5000 Rem	- Similar to scalding or chemical burn
Over 5000 Rem	- Ulceration and major skin damage

Potential Long Term Effects: Based on information from the National Research Council (BEIR V).

Cancer Probability:	The normal chance of contracting fatal cancer for a group of people with no radiation exposure in the United States is 20%.If this group of people were exposed to 100 Rem, the chance of any person contracting fatal cancer would increase to 28%.
Genetic Effects:	A 100 Rem exposure to radiation is estimated to increase the chance of a genetic effect from 0.25% for the average person with no radiation exposure to 0.5%
Fertility Effects:	An exposure to the gonads of 250 Rem may cause reduced fertility, and an exposure of 600 Rem may cause permanent sterility.
Cateracts:	(Cloudiness or darkening in the lens of the eyes.) 200 Rem to the eyes may cause cataracts (ICRP 41).

EOF Staffing

No.	Positions	1st SHIFT	2nd SHIFT	
1*	Emergency Director			
1*	ED Technical Advisor			
1*	Offsite Radiological Manager			
1*	Offsite Communicator			
1	EOF Manager			
2**	Dose Assessor			
1	Radiological Communicator			
1	Field Team Coordinator			
6	Field Monitoring Team Members			
1	Admin & Logistics Manager			
3	EOF Clerical Staff			
1	Lead Offsite Liaison			
1	State Liaison			
1	Westchester County Liaison			
1	Rockland County Liaison			
1	Orange County Liaison			
1	Putnam County Liaison			
1	Equipment Operator			
1	Information Liaison			

* Minimum Staffing for facility activation

** Only one Dose Assessor required if determination is made there is limited offsite radiological concerns for event.

Recovery Issue / Strategies Form

Area	Owner	Safety Rel.	Priority	Duration	Man-hours

Description of Issue

Resources Needed

Use this form to document major items to be addressed during Recovery.

Area:	Onsite / Offsite / Public Information	
Owner:	Responsible individual or organization	
Safety Related:	Yes or No	
Priority:	1 = Immediate (24 hr.)	2 = Short Term (1 Week)
	3 = Intermediate (1 Month)	4 = Long Term (> 1 Month)
Duration:	Estimated Calendar Duration	
Man-hours:	Estimated Total Project Hours	

Form EP-8 Rev 0

Essential Information Checklist

Affected Unit: ❑ Unit 2 ❑ Unit 3 ❑ Both Status of Unaffected Unit:

Emergency Classification:

	Time:	EAL #:
❑ Unusual Event	_____	_____
❑ Alert	_____	_____
❑ Site Area Emergency	_____	_____
❑ General Emergency	_____	_____

Last Offsite Notification Completed _____

Reactor: ❑ **At Power** ❑ **Tripped**

RCS:

Temp: _____ **°F Pressure:** _____ **PSIG**

RVLIS / Pressurizer Level: _____

Subcooling: _____

Method of Core Cooling: ❑ **S/G** ❑ **Safety Injection** ❑ **RHR**

Electrical Power Supply: ❑ **138 KV** ❑ **13.8 KV** ❑ **#** ____ **Diesel Generators**

Event Description: _____

Major Equipment Problems:

Current Priorities:	High	Med	Low

❑ **No Release** ❑ **Release**

❑ Liquid ❑ Gaseous

Release Status:

❑ In Progress ❑ Expected

❑ Filtered ❑ Unfiltered

❑ Monitored ❑ Unmonitored

❑ Controlled ❑ Uncontrolled

Fission Product Barrier Status

Barrier	Intact	Challenged	Lost
Fuel Clad	❑	❑	❑
RCS	❑	❑	❑
Containment	❑	❑	❑

Wind Speed: _____ Wind Direction From: _____

Date / Time This Checklist was

Completed: _____ / _____

Other: _____

Emergency Response Organization Log Sheet

ERO Position: _____ Name:	Date: _____

Time	Significant Events, Information or Communications

Signature: _____

IPEC Manual Dose Assessment Worksheet

Estimating Containment Activity via R-25 / 26

Radiological Data		
R-25 / 26 Reading		Rem/hr
Dose Conversion Factor (from table below)		(μCi/cc) / (R/hr)

Time after Shutdown (hrs.)	Dose Conversion Factor (μCi/cc) / (R/hr)	
	< 1000 Rem/hr (Gap Release)	> 1000 Rem/hr (Fuel Overheat / Melt Release)
0	0.04	0.03
4	0.12	0.07
8	0.17	0.1
12	0.2	0.13
16	0.22	0.14
20	0.25	0.17
24	0.27	0.18

Vapor Containment Activity Calculation						
	×		×	7.4 E+10 cc	=	
R-25 / 26 Reading (R/hr)		Dose Conversion Factor		Containment Volume		Total VC Activity (μCi)

	x		=	
R-25/26 Reading (R/hr)		Dose Conversion Factor		Release Concentration (µCi/cc)

IPEC Manual Dose Assessment Worksheet

Estimating Containment Activity via R-25 / 26

Containment Data		
Containment Pressure		psig
Estimated Leak Rate (see table below)		(cc/sec) – cm^2
Estimated Leak Area		Cm^2 (leak area = πr^2)

Leak Rate per Cm^2			
VC Pressure	Leak Rate (cc/sec)	VC Pressure	Leak Rate (cc/sec)
1.0	8.34E+03	18.0	1.93E+04
1.5	9.96E+03	20.0	1.95E+04
2.0	1.12E+04	22.5	1.97E+04
2.5	1.22E+04	25.0	1.99E+04
3.0	1.31E+04	27.5	2.01E+04
4.0	1.44E+04	30.0	2.03E+04
5.0	1.55E+04	32.5	2.04E+04
6.0	1.63E+04	35.0	2.06E+04
7.0	1.69E+04	37.5	2.07E+04
8.0	1.74E+04	40.0	2.08E+04
9.0	1.78E+04	42.5	2.10E+04
10.0	1.81E+04	45.5	2.11E+04
12.0	1.86E+04	47.5	2.12E+04
14.0	1.89E+04	50.0	2.13E+04
16.0	1.91E+04		

Vapor Containment Release Rate Calculation							
	×		×		×	1.0E-06	=
VC Activity (µCi/cc)		Leak Rate (from Table)		Leak Area (Cm^2)		Conversion Factor	VC Release Rate (Ci/sec)

ESTIMATED TOTAL POPULATION DOSE

Sector/Zone	Ref. TLD mrem	Zone Corr. Factor (1)	Interpreted mrem (2)	Modifier (3)	Population (4)	Est. WB Rem
1-1					0	
1-2					55	
1-3					0	
1-4					20	
1-5					335	
1-6					350	
1-7					5,425	
1-8					5,935	
1-9					2,345	
1-10					990	
				SECTOR TOTALS:		
2-1					0	
2-2					40	
2-3					135	
2-4					140	
2-5					1,450	
2-6					1,065	
2-7					825	
2-8					695	
2-9					2,280	
2-10					1,370	
				SECTOR TOTALS:		

(1) Zone in question correction factor (Attachment 2 procedure IP-EP-620 or calculated from formula at bottom of Attachment2 and Xu/Q values)
(2) Multiply TLD mrem by Zone Correction Factor
(3) If no evacuation, modifier is 1.0
(4) 1990 Census

ESTIMATED TOTAL POPULATION DOSE

Sector/Zone	TLD mrem	Zone Corr. Factor (1)	Interpreted mrem (2)	Modifier (3)	Population (4)	Est. WB Rem
3-1					0	
3-2					4,480	
3-3					8,945	
3-4					3,520	
3-5					5,315	
3-6					3,660	
3-7					4,020	
3-8					1,175	
3-9					635	
3-10					1,455	
				SECTOR TOTALS:		
4-1					40	
4-2					2,715	
4-3					3,035	
4-4					1,990	
4-5					2,095	
4-6					2,725	
4-7					2,715	
4-8					5,140	
4-9					5,920	
4-10					4,475	
				SECTOR TOTALS:		

(1) Zone in question correction factor (Attachment 2 procedure IP-EP-620 or calculated from formula at bottom of Attachment2 and Xu/Q values)
(2) *Multiply TLD mrem by Zone Correction Factor*
(3) If no evacuation, modifier is 1.0
(4) 1990 Census

ESTIMATED TOTAL POPULATION DOSE

Sector/Zone	TLD mrem	Zone Corr. Factor (1)	Interpreted mrem (2)	Modifier (3)	Population (4)	Est. WB Rem
5-1					65	
5-2					505	
5-3					0	
5-4					230	
5-5					140	
5-6					235	
5-7					1,590	
5-8					1,155	
5-9					4,165	
5-10					3,450	
				SECTOR TOTALS:		
6-1					170	
6-2					375	
6-3					260	
6-4					730	
6-5					260	
6-6					675	
6-7					1,145	
6-8					415	
6-9					1,040	
6-10					1,740	
				SECTOR TOTALS:		

(1) Zone in question correction factor (Attachment 2 procedure IP-EP-620 or calculated from formula at bottom of Attachment2 and Xu/Q values)
(2) *Multiply TLD mrem by Zone Correction Factor*
(3) If no evacuation, modifier is 1.0
(4) 1990 Census

ESTIMATED TOTAL POPULATION DOSE

Sector/Zone	TLD mrem	Ratio Corr. Factor (1)	Interpreted mrem (2)	Modifier (3)	Population (4)	Est. WB Rem
7-1					555	
7-2					2,100	
7-3					980	
7-4					705	
7-5					420	
7-6					5,150	
7-7					3,340	
7-8					2,505	
7-9					2,010	
7-10					6,945	
				SECTOR TOTALS:		
8-1					105	
8-2					1,835	
8-3					1,295	
8-4					635	
8-5					85	
8-6					0	
8-7					0	
8-8					95	
8-9					5,020	
8-10					5,955	
				SECTOR TOTALS:		

(1) Zone In question correction factor (Attachment 2 procedure IP-EP-620 or calculated from formula at bottom of Attachment2 and Xu/Q values)
(2) Multiply TLD mrem by Zone Correction Factor
(3) If no evacuation, modifier is 1.0
(4) 1990 Census

ESTIMATED TOTAL POPULATION DOSE

Sector/Zone	TLD mrem	Zone Corr. Factor (1)	Interpreted mrem (2)	Modifier (3)	Population (4)	Est. WB Rem
9-1					465	
9-2					695	
9-3					25	
9-4					110	
9-5					1,110	
9-6					3,535	
9-7					3,090	
9-8					3,710	
9-9					5,235	
9-10					5,545	
				SECTOR TOTALS:		
10-1					150	
10-2					1,210	
10-3					1,145	
10-4					1,845	
10-5					8,260	
10-6					4,440	
10-7					2,345	
10-8					2,690	
10-9					6,320	
10-10					9,115	
				SECTOR TOTALS:		

(1) Zone in question correction factor (Attachment 2 procedure IP-EP-620 or calculated from formula at bottom of Attachment2 and Xu/Q values)
(2) Multiply TLD mrem by Zone Correction Factor
(3) If no evacuation, modifier is 1.0
(4) 1990 Census

ESTIMATED TOTAL POPULATION DOSE

Sector/Zone	TLD mrem	Zone Corr. Factor (1)	Interpreted mrem (2)	Modifier (3)	Population (4)	Est. WB Rem
11-1					0	
11-2					25	
11-3					1,505	
11-4					2,485	
11-5					2,220	
11-6					3,785	
11-7					2,830	
11-8					1,010	
11-9					3,045	
11-10					3,705	
				SECTOR TOTALS:		
12-1					10	
12-2					345	
12-3					125	
12-4					295	
12-5					160	
12-6					185	
12-7					80	
12-8					20	
12-9					155	
12-10					565	
				SECTOR TOTALS:		

(1) Zone in question correction factor (Attachment 2 procedure IP-EP-620 or calculated from formula at bottom of Attachment2 and Xu/Q values)
(2) Multiply TLD mrem by Zone Correction Factor
(3) If no evacuation, modifier is 1.0
(4) 1990 Census

ESTIMATED TOTAL POPULATION DOSE

Sector/Zone	TLD mrem	Zone Corr. Factor (1)	Interpreted mrem (2)	Modifier (3)	Population (4)	Est. WB Rem
13-1					0	
13-2					280	
13-3					200	
13-4					0	
13-5					0	
13-6					0	
13-7					0	
13-8					70	
13-9					440	
13-10					55	
				SECTOR TOTALS:		
14-1					0	
14-2					80	
14-3					65	
14-4					0	
14-5					25	
14-6					45	
14-7					20	
14-8					620	
14-9					320	
14-10					2,045	
				SECTOR TOTALS:		

(1) Zone in question correction factor (Attachment 2 procedure IP-EP-620 or calculated from formula at bottom of Attachment2 and Xu/Q values)
(2) Multiply TLD mrem by Zone Correction Factor
(3) If no evacuation, modifier is 1.0
(4) 1990 Census

ESTIMATED TOTAL POPULATION DOSE

Sector/Zone	TLD mrem	Zone Corr. Factor (1)	Interpreted mrem (2)	Modifier (3)	Population (4)	Est. WB Rem
15-1					0	
15-2					20	
15-3					105	
15-4					180	
15-5					45	
15-6					0	
15-7					20	
15-8					305	
15-9					25	
15-10					1,055	
				SECTOR TOTALS:		
16-1					0	
16-2					70	
16-3					0	
16-4					95	
16-5					1,635	
16-6					235	
16-7					0	
16-8					35	
16-9					25	
16-10					0	
				SECTOR TOTALS:		

(1) Zone in question correction factor (Attachment 2 procedure IP-EP-620 or calculated from formula at bottom of Attachment2 and Xu/Q values)
(2) Multiply TLD mrem by Zone Correction Factor
(3) If no evacuation, modifier is 1.0
(4) 1990 Census

Manual Dose Assessment Worksheet

TEDE Whole Body Exposure Calculations

Date:	Time	Name:

Meteorology

Wind Direction (from):		Downwind Sector:		WS = Wind Speed (m/sec):	

Pasquill Category: ❑ A ❑ B ❑ C ❑ D ❑ E ❑ F ❑ G

TEDE – Whole Body Exposure — Release Duration (RD): hrs

Distance	NGRR (Ci/sec)	Xu/Q (from tables)	$\frac{1}{WS}$ (M/sec)	K1[1] + Constant[2]	Dose Rate(DR) (mrem/hr)	Dose (mrem) (DR x RD)
Site Boundary		X X	1 / [ ]	X (+) =	=	
2 Mile		X X	1 / [ ]	X (+) =	=	
5 Mile		X X	1 / [ ]	X (+) =	=	
10 Mile		X X	1 / [ ]	X (+) =	=	

(1) Obtain K1 value from table below.

(2) Constant for MSL & SGBD is 3.3E+05, for all others use 3.3E+03 (Constant includes Iodine CEDE)

K1 Whole Body @ Time After Shutdown for Noble Gas DDE TAS = _____ hours.		K2 Thyroid For Iodine CDE	
4.7E+5	0 – 1.5 Hours	Iodine Mix	8.0E+8
2.8E+5	1.5 – 2.5 Hours	I-131	2.6E+9
2.3E+5	2.5 – 3.5 Hours	I-132	1.5E+7
2.0E+5	3.5 – 4.5 Hours	I-133	4.4E+8
1.7E+5	4.5 – 6.5 Hours	I-134	2.6E+6
1.2E+5	6.5 – 12.5 Hours	I-135	7.6E+7
5.8E+4	> 12.5 Hours		

NOTE:
Particulate Dose Conversion Factor (DCF) for TEDE is 2.7E+07. This DCF should be used applied during dose assessments performed in the EOF or AEOF only if significant particulates are identified in the release (E.G., FSB Accident). Control Room Staff need not consider particulates.

Form EP-13 Rev.1

IPEC Manual Dose Assessment Worksheet

TODE Thyroid Exposure Calculations

Date:	Time	Name:

Meteorology

Wind Direction (from):		Downwind Sector:		WS = Wind Speed (m/sec):	

Pasquill Category: ❑ A ❑ B ❑ C ❑ D ❑ E ❑ F ❑ G

NOTES:

For **Less Than** 24 hours use Iodine Mix K2 (8.0 E+8)

For **Greater Than** 24 hours, only use I-131 K2 value when using isotopic analysis. (2.6 E+9)

Isotope I-131 (or Total Mix) TODE – Thyroid Exposure Release Duration (RD)= [ ] s.

NGRR _____ X K1 _____ = A _____ | $RR_{(I\text{-}131 \text{ or Total})}$ _____ X K2 _____ = B _____

Distance	Xu/Q (from tables)	$\frac{1}{WS}$ (m/sec)	A + B (above)	Dose Rate (mrem/hr)	Dose (mrem) (DR X RD)
Site Boundary	X	$\frac{1}{[\ ]}$	X (+) =	=	
2 Mile	X	$\frac{1}{[\ ]}$	X (+) =	=	
5 Mile	X	$\frac{1}{[\ ]}$	X (+) =	=	
10 Mile	X	$\frac{1}{[\ ]}$	X (+) =	=	

Form EP-13 Rev. 1

EOF Check Point Sign In Log

EOF Registration Assistant: (print name)		Date:	

Print Name	Time In / Out	Time In / Out	Organization
			❑ Indian Pt. FFD* Yes: ❑ No: ❑ ❑ Other ______
			❑ Indian Pt. FFD* Yes: ❑ No: ❑ ❑ Other ______
			❑ Indian Pt. FFD* Yes: ❑ No: ❑ ❑ Other ______
			❑ Indian Pt. FFD* Yes: ❑ No: ❑ ❑ Other ______
			❑ Indian Pt. FFD* Yes: ❑ No: ❑ ❑ Other ______
			❑ Indian Pt. FFD* Yes: ❑ No: ❑ ❑ Other ______
			❑ Indian Pt. FFD* Yes: ❑ No: ❑ ❑ Other ______
			❑ Indian Pt. FFD* Yes: ❑ No: ❑ ❑ Other ______
			❑ Indian Pt. FFD* Yes: ❑ No: ❑ ❑ Other ______
			❑ Indian Pt. FFD* Yes: ❑ No: ❑ ❑ Other ______
			❑ Indian Pt. FFD* Yes: ❑ No: ❑ ❑ Other ______
			❑ Indian Pt. FFD* Yes: ❑ No: ❑ ❑ Other ______
			❑ Indian Pt. FFD* Yes: ❑ No: ❑ ❑ Other ______

* If NO, THEN report to EOF Manager for further evaluation.

EOF Check Point Sign In Log

EOF Check Point Instructions:

1.0 Set up a EOF Checkpoint at the entrance to the EOF.

NOTES:

IF there is any question if an individual should be allowed to enter the EOF **THEN** request clearance from the Emergency Director or the EOF Manager.

Individuals entering the EOF during emergencies must be screened in accordance IPEC Fitness for Duty procedures. The Emergency Director may authorize individuals not meeting these requirements into the EOF.

1.1 Have all individuals entering EOF complete sign in log.

1.2 Request the Admin & Logistics Manager draft someone to take sign in log around to individuals who may have entered facility before check point was set up.

2.0 Allow only the following personnel into the EOF:

A. Indian Point Emergency Response Organization Personnel, as listed in the Emergency Telephone Directory,

B. Indian Point Corporate Officers,

C. State and County Officials,

D. Federal Officials from the Nuclear Regulatory Commission and Federal Emergency Management Agency;

E. Individuals authorized by the Emergency Director or the EOF Manager.

NOTE:

IF individuals are only going to another room within the Buchanan Service Center (offices across the hall or men's rest room) **THEN** it is not necessary to log them in and out each time they leave the EOF.

3.0 Maintain a "EOF Check Point Sign in Log" complete with names of all personnel within the EOF.

IP-2 Manual Determination of Release Rate

Determine Noble Gas & Radioiodine Release Rates

Date:	Time:	Name:

Plant Vent Release Rate Calculations (use only one vent monitoring method)

R-27 Wide Range		X	X 4.7E-04	=	
	(µCi/cc)	(Plant Vent CFM)*	(Constant)		(NGRR Ci/sec)
R-44 Low / Mid Range		X	X 4.7E-04	=	
	(µCi/cc)	(Plant Vent CFM)*	(Constant)		(NGRR Ci/sec)
Vent Contact Reading		X	X	X 4.7E-04	=
	(mR/hr)	(Conv. Factor)	(Plant Vent CFM)*	(Constant)	(NGRR Ci/sec)

Time After Shutdown Conversion Factors for Contact Reading	TAS (hr)	Factor	TAS (hr)	Factor
	0 - 2	2.8E-04	6 - 8	4.9E-04
	2 - 4	3.4E-04	8 - 12	6.1E-04
	4 - 6	4.1E-04	12 - 24	7.6E-04

Plant Vent Chemistry Sample		X	X 4.7E-04	=	
	(µCi/cc)	(Plant Vent CFM)*	(Constant)		(NGRR Ci/sec)
Air Ejector (AE)					
Air Ejector R-45		X	X 4.7E-04	=	
	(µCi/cc)	(AE CFM)**	(Constant)		(NGRR Ci/sec)
Main Steam Line (MSL)					
R-28, R-29 R-30, R-31	X 2.7E-03	X	X 4.9 E-06	=	
	(CPM)	(MSL Conv. Factor)	(lbm/hr)***	(Constant)	(NGRR Ci/sec)
Steam Generator Blowdown (SGBD)					
Chemistry Sample		X	X 6.3E-05	=	
	(µCi/cc)	(GPM)**	(Constant)		(NGRR Ci/sec)

Total Noble Gas Release Rate: Add Plant Vent + AE + MSL + SGBD	Total NGRR Ci/sec	

Determine Radioiodine Release Rate (RR) In Curies/Second

1. MSL NG RR + SGBD NG RR =	X .1.0E-02 =	
2. Plant Vent NG RR + AE NG RR =	X 1.0E-04 =	
Total Radioiodine Release Rate (Add 1 + 2 to Obtain)	Total IRR (Ci/sec) =	

* If actual flow rate is unavailable, use 70,000 cfm

** If actual flow rate is unavailable, use 20 cfm

*** Steam Generator Atmospheric Flowrate 3.50 E+5 lbm / hr / atmospheric

Steam Generator Safety Flowrate 7.60 E+5 lbm / hr / safety

#22 Auxiliary Feedwater Pump 2.5 x 10^4 lbm / hr

IP-3 Manual Determination of Release Rate

Determine Noble Gas & Radioiodine Release Rates

Date:	Time:	Name:

Plant Vent Release Rate Calculations (use only one vent monitoring method)

R-27 Wide Range		X 1.0E-06	=		
	(µCi/sec)	(Ci/µCi)*			(NGRR Ci/sec)
R-14 Low / Mid Range		X	X 4.7E-04	=	
	(µCi/cc)	(Plant Vent CFM)*	(Constant)		(NGRR Ci/sec)
Vent Contact Reading (Contact / 6 Ft)		X	X	X 4.7E-04	=
	(mR/hr)	(Conv. Factor)	(Plant Vent CFM)*	(Constant)	(NGRR Ci/sec)

Time After Shutdown Conversion Factors for Contact Reading	TAS (hr)	Contact Factor 6 ft		TAS (hr)	Contact Factor 6 ft	
	0 - 2	6.0E-04	2.5E-03	6 – 12	2.8E-03	9.5E-03
	2 - 4	1.2E-03	3.8E-03	12 – 24	5.5E-03	1.6E-02
	4 - 6	1.6E-03	5.5E-03	24 – 2 Wk	6.5E-03	2.0E-02

Plant Vent Chemistry Sample		X	X 4.7E-04	=	
	(µCi/cc)	(Plant Vent CFM)*	(Constant)		(NGRR Ci/sec)
Air Ejector (AE)					
Air Ejector R-15		X	X 4.7E-04	=	
	(µCi/cc)	(AE CFM)**	(Constant)		(NGRR Ci/sec)
Main Steam Line (MSL)					
R-62A, R-62B R-62C, R-62D		X	X 3.2 E-06	=	
	(µCi/cc)	(lbm/hr)***	(Constant)		(NGRR Ci/sec)
Total Noble Gas Release Rate: Add Plant Vent + AE + MSL + SGBD			Total NGRR Ci/sec		

Determine Radioiodine Release Rate (RR) In Curies/Second

1. MSL NG RR =		X 1.0E-02 =	
2. Plant Vent NG RR + AE NG RR =		X 1.0E-04 =	
Total Radioiodine Release Rate (Add 1 + 2 to Obtain)		Total IRR (Ci/sec) =	

* If actual flow rate is unavailable, use 70,000 cfm

** If actual flow rate is unavailable, use 20 cfm

*** Steam Generator Atmospheric Flowrate 6.30 E+5 lbm / hr / atmospheric

Steam Generator Safety Flowrate 5.50 E+5 lbm / hr / safety

IPEC Manual Dose Assessment Worksheet

Back Calculating Release Rate from Field Data

Administrative Data	
Field Reading Location	
Field Reading Mileage	Miles
Field Reading Sector	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

Meteorology	
Wind Speed (at time of release)	meters/sec
X_μ / Q	

Radiological Data	
Field Reading (clsd window or Reuter Stokes)	mrem / hr
Noble Gas DCF (from table below)	(mr/hr) / (μCi/cc)

Time after Shutdown (hrs.)	Dose Conversion Factor (mr/hr) / (μCi/cc)
0 - 1.5	4.70 E+5
1.5 – 2.5	2.80 E+5
2.5 – 3.5	2.30 E+5
3.5 – 4.5	2.00 E+5
4.5 – 6.5	1.70 E+5
6.5 – 12.5	1.20 E+5
> 12.5	5.80 E+4

Release Rate Calculation

(	×	)	÷	(	×	)	=	
Field Reading (mr/hr)		Wind Speed (m/sec)		X_μ / Q		Noble Gas DCF		NGRR (Ci/sec)

Turnover Sheet

Date:	Time:
Outgoing:	Relieving:

Discuss the following items:

1. Emergency Classification: ❑ GE ❑ SAE ❑ Alert ❑ Unusual Event
   EAL:

2. Initiating Event:

3. Current Status of:

   A. Personnel Safety:

   B. Plant Safety:

   C. Release of Non-Essential Personnel:

   D. Accountability:
   Missing Persons:
   Search and Rescue:

   E: Radiological Conditions:

   F. WPO/JNC Actions:

   G. OSC/TSC Status:

   H. Offsite Actions (ie: schools, facility activation, PARs, etc.)

5. Status of Offsite Notifications: ❑ None ❑ NYS / Counties ❑ NRC (headquarters and Residents ❑ INPO ❑ ANI

6. Corrective Actions:
   Teams Out:

7. Actions Underway:
   Priorities:

8. Actions that need to be Initiated:

9. Prognosis:

Media Briefing Worksheet

Date: _____	**Briefing #:** _____
Time: _____	**Briefing Announced:** ☐ Yes ☐ No

Reason for Briefing:

- ☐ Initial Briefing
- ☐ Emergency Classification Change
- ☐ EAS Broadcast
- ☐ Periodic Update / Other

	Points to be Covered	Order
Entergy		
Westchester County		
Rockland County		
Putnam County		
Orange County (confirm if via PictureTel or teleconference)		
State of NY		
Public Inquiry Feedback		
Media Monitoring Feedback		

Graphic Changes Needed:	
Graphics / Visual Requests:	

Media Briefing Issues Form

Time Noted:	Noted By:

Type of Issue: ❑ Incorrect Information ❑ Additional Information Needed
❑ Clarification Requested ❑ Unanswered Question

Issue:

Type of Resolution: ❑ Provide Information to Media Rep. ❑ Include in Written Statement
❑ Include in Next Media Briefing ❑ Brief Spokesperson(s) ❑ Other

Resolution Details:

JNC STAFFING FORM

Position	1st Shift Name (print)	Time Arrived	Time Departed	2nd Shift Name (print)	Time Arrived	Time Departed
JNC Director						
Company Spokesperson						
JNC Technical Advisor						
Technical Briefer						
Agency Liaison						
Support Services Manager						
Media Room Manager						
Media Room Liaison						
JNC Writer						
JNC Documenter						
Audiovisual Coordinator						
AV / Graphics Staff (2 minimum for activation, may include Audiovisual Coordinator)						

Date: _____

Shaded positions entail functions that are required for activation

JNC STAFFING FORM

Position	1st Shift Name (print)	Time Arrived	Time Departed	2nd Shift Name (print)	Time Arrived	Time Departed
Public Inquiry Coordinator						
Media Monitoring Staff						
Media Referral Staff Member(s)						
Public Inquiry Staff (as required)						

Date: _____

Shaded positions entail functions that are required for activation

JNC STAFFING FORM

Position	1st Shift Name (print)	Time Arrived	Time Departed	2nd Shift Name (print)	Time Arrived	Time Departed
Support Services Staff						
Registration Coordinator						
Registration Coordinator						
IT Representative						
Radiological Advisor						
JNC Access Control						
IP Communications Representative						
Government Liaison Rep						
Government Liaison Rep						
Government Liaison Rep						

Date: _____

Shaded positions entail functions that are required for activation

Emergency Summary Sheet

Indian Point Energy Center

Time: _____

Date: _____

1. This is a Drill ☐

   This is an Actual Event ☐

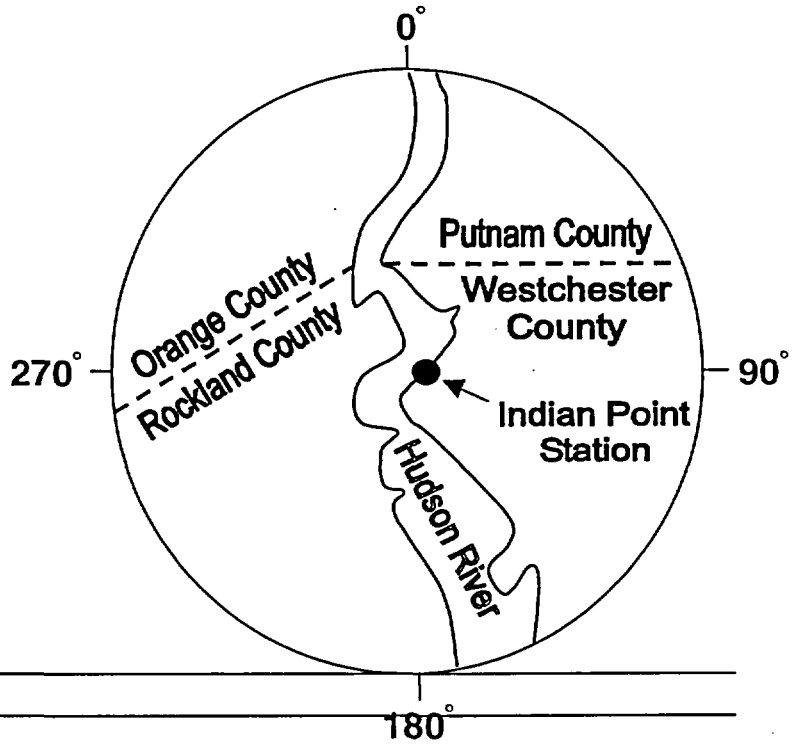
2. **Emergency Classification:**

   Unusual Event ☐

   Alert ☐

   Site Area Emergency ☐

   General Emergency ☐



3. **Event Description:**

_____

_____

4. **Radiological Conditions:**

Release of Radioactive Materials due to the classified event.

☐ No Release

☐ Release **BELOW** federally approved operating limits (Technical Specifications)
   ☐ To Atmosphere ☐ To Water

☐ Release **ABOVE** federally approved operating limits (Technical Specifications)
   ☐ To Atmosphere ☐ To Water

☐ Unmonitored Release – Being Evaluated

5. **Meteorological Conditions:**

Wind Speed: _____ MPH Wind Direction (from): _____

General Weather Conditions: _____

_____

_____

(To convert Meters / sec to Miles / Hr divide by .46)

Written Statement Distribution Checklist

Follow each step below as assigned. Some steps are concurrent, as noted by the numbering. Support Services Manager is to confirm all steps are completed at conclusion.		Statement Number:	
Step #	**JNC Position Responsible**	Detail Description	Completed By **(Print)** and Time
1	Support Services Manager	Obtain "APPROVED WRITTEN STATEMENT/NEWS RELEASE" from JNC Writer and start distribution process: ❑ Have Company Spokesperson initial, notify Documenter of approval time ❑ Start a Written Statement Distribution Checklist and Fax Distribution Sheet (in Position Binder and file cabinet) ❑ Record Statement Number above ❑ Give Original statement with Distribution Checklist and Fax Distribution sheet to Support Services Staff to make initial copies.	
2	Assigned Support Services Staff Person	❑ Make 2 copies of statement ❑ Provide Support Services Staff in fax/copy room with 2 copies (one for further copying and one for fax distribution described below) ❑ Provide original initialed copy back to Support Services Manager	
3a	Support Services Staff assigned to Copy area	*Make 48+ copies of final written statement/news releases and coordinate distribution with other Support Services Staff as follows:* ❑ 16 Copies to Public Inquiry Coordinator ❑ 12+ Copies to the Media Room Liaison for media (Coordinate number needed with Media Room Liaison. Copies to Media may take priority depending on timing.) ❑ 4 Copies to Media Monitoring Room Personnel ❑ 8 Copies to Entergy Rooms A/B ❑ Post 1 Copy on Bulletin Board near JNC Writer ❑ 7 (or 14—2 each) copies to each work room (State, Westchester, Rockland, Putnam, Orange, NRC and FEMA) ❑ Upon completion, provide this Distribution Checklist to Support Services Manager	

Written Statement Distribution Checklist

Follow each step below as assigned. Support Services Manager is to confirm all steps are completed.			Statement Number:	
3b	Support Service Staff in Fax/Copy Room	Concurrently, ensure statement is faxed to locations indicated on the Fax Distribution Form. DO NOT SEND FAX DISTRIBUTION FORM IN OUT-GOING FAX TRANSMISSION, Include Fax Cover Sheet ❑ Complete fax distribution to media on one fax machine ❑ Complete fax distribution to other emergency facilities and other Entergy locations on another fax machine (follow Fax Distribution Form) ❑ Review Fax Confirmation sheets to ensure they state that all transmissions were successfully completed (the text of the confirmation will read OK) Upon completion, provide fax confirmation sheet(s) to Support Services Manager		
4	Support Services Manager	Provide original (initialed) statement; fax confirmation(s); and this Distribution Checklist to JNC Documenter for log keeping		

Information Distribution Guide

(Follow the priority order noted)

Type of Information	**Recipient** (follow order for distribution, if possible)	**Distribution Completed By (Print)**
Plant Status, including PICS or EDDS data sheets, Forms and plant parameters (received via fax or from/via JNC Technical Advisor)	Utility Room A & B ❑ JNC Technical Advisor (& Radiological Advisor) ❑ Company Spokesperson ❑ JNC Director ❑ Agency Liaison ❑ JNC Documenter ❑ State/County PIOs (Radiological Data Forms, Part 1 and 2 **ONLY**)	
EAS Statements (provided by State or via Agency Liaison)	ALL Locations/All positions ❑ Public Inquiry Room & Media Monitoring Room *(20+ copies)* ❑ Entergy Rooms A & B *(9+ copies)* ❑ State, County and Federal Work Rooms ❑ Media Briefing Room (at assigned time provided by State or Agency Liaison)	
Written Statements, including news releases	Follow Written Statement Distribution Checklist form	
All Other Information Received (via fax or otherwise)	Request distribution instructions from the Support Services Manager and/or JNC Director	

PUBLIC INQUIRY - MEDIA REFERRAL - MEDIA MONITORING FORM

Type of call: (Public Inquiry) (Professional Inquiry) (Media Inquiry) (Media Monitor Report)

Date of call/broadcast: _____ Time of call/broadcast: _____

Name of responder/monitor: _____

Media Name/Location: _____

Caller's/Reporter's name: _____ Phone: (____)____-_____

Question(s) asked/Inaccurate Information: _____

_____

_____

_____

Response given/Correct Information and Source: _____

_____

_____

_____

Is call back required: (___) Yes (___) No Call Back Number (_____)_____-_____

If yes, call back completed at: _____ By:_____

Was the call referred: (___) Yes (___) No If yes, to whom? _____

Further action required: (__) Yes (__) No

Was this action completed? (___) Yes (___) No By: _____

Reported to Public Inquiry Coordinator at: _____

Public Inquiry Coordinator Notes: _____

_____

Return completed form to Public Inquiry Coordinator:

Joint News Center
Fax Cover Sheet

FROM: _____

DATE: _____ **TIME:** _____

Number of Pages (including cover):_____

☐ **WIRE SERVICES**

AP/NYC
AP/WESTCHESTER
CNN
REUTERS AMERICA
GANNET SUBURBAN NEWS/WHITE PLAINS
BLOOMBERG NEWSWIRE
NEW YORK TIMES NEWS SERVICE

☐ **IP EOF** **OR** ☐ **IP AEOF**

☐ **ENTERGY MEDIA RELATIONS**

☐ **LOCAL OFFICIALS**

☐ **Other**

Individual Exposure Tracking Log

Name:				TLD #_____ Employee #: _____	
Location / Team / Times		Available Exposure (mrem)	Time of Reading	Dosimeter Reading	Emergency Exposure (mrem)
_____					
Team:					
Time Out:					
Time In:					
_____					
Team:					
Time Out:					
Time In:					
_____					
Team:					
Time Out:					
Time In:					
_____					
Team:					
Time Out:					
Time In:					
_____					
Team:					
Time Out:					
Time In:					

NOTES:

1. Use this form to track individual's exposure of ERO members dispatched from EOF/OSC/TSC and
2. Initial Exposure Limit will be 1000 mrem for duration of emergency. ED or EPM may authorize more exposure.
3. If Form is filled transfer Name, TLD # and remaining available exposure to new form and staple this completed form to it.

MONITORING TEAM RADIATION FIELD SURVEY DATA

Team Name:_____ **Date:**_____

Team Member Names:_____

Count Rate Meter, Model#: _____ Serial#: _____ **Ion Chamber,** Model#: R-02 Serial#: _____

SURVEY LOCATION (Sector/Mile, Street/Intersection/mi. to Int.)	TIME (HH:MM) [1]	(CPM) [2]	OW (mR/hr) [3]	CW (mR/hr) [3]	(OW-CW)X2 (mrad/hr) [3]	REMARK #
Remarks:						

NOTES: [1] 24-hr clock
[2] Count Rate Meter data or conversion from Dose Rate Meter 1000 CPM = 0.1mR/hr (OW).
[3] RO-2, Ion Chamber data.

Form EP-30, Rev.0

MONITORING TEAM SAMPLE DATA

Team Name: _____ **Date:** _____

Sample Location:

Radiation Field Measurements (may be recorded on separate form):

Ion Chamber, Model #: _____ Serial #: _____ Time: _____

@ 3 in. above ground:	**@ 3 ft. above ground:**
Opened Window (OW) (mR/hr): _____	Opened Window (OW) (mR/hr): _____
Closed Window (CW) (mR/hr): _____	Closed Window (CW) (mR/hr): _____
	(OW-CW) X 2 (mrad/hr): _____

Air Sampling:

Air Sampler, Model #: _____ Serial #: _____

Particulate Filter: _____ Iodine (C): _____ Iodine (AgZ): _____

Sampling Start: Time (HH:MM): _____ Flow (CFM): _____

Sampling Stop: Time (HH:MM): _____ Flow (CFM): _____

Duration (MM) _____

Average Flow (CFM): _____

Sample Volume (CF): _____

Air Sample Counting:

Count Rate Meter, Model #: _____ Serial #: _____ Time: _____

Part Filter, Bkgd (CPM): _____ Gross (CPM): _____ Net (CPM): _____

Iodine (C), Bkgd (CPM): _____ Gross (CPM): _____ Net (CPM): _____

Iodine (AgZ), Bkgd (CPM): _____ Gross (CPM): _____ Net (CPM): _____

Determination of Radioactive Airborne Concentrations

$$\mu Ci/cc = \frac{A = \text{Net CPM} \times 1.0E\text{-}09}{B = 2.2 \times \text{Vol} \times \text{Eff.} \times \text{CCF}}$$

Where: Vol[1] is in liters (Liters = 2.832 x FT^3)
Efficiency[2] is 0.1 for particulate, 0.2 for iodine
CCF[3] is .95 for Charcoal, 1.0 for AgZ / Paper

Sample Location:				☐ Particulate ☐ Iodine
Sample Time:			Team:	
Sample Net CPM	Constant		A ⇩	
X	1.0E-09	=		
Sample Volume in Liters[1]	Efficiency [2]	Constant	CCF [3]	B ⇩
X	X	2.2 X	=	
µCi/cc = A / B	=		µCi/cc	

Calculated by: Time:

Sample Location:				☐ Particulate ☐ Iodine
Sample Time:			Team:	
Sample Net CPM	Constant		A ⇩	
X	1.0E-09	=		
Sample Volume in Liters[1]	Efficiency [2]	Constant	CCF [3]	B ⇩
X	X	2.2 X	=	
µCi/cc = A / B	=		µCi/cc	

Calculated by: Time:

Sample Location:				☐ Particulate ☐ Iodine
Sample Time:			Team:	
Sample Net CPM	Constant		A ⇩	
X	1.0E-09	=		
Sample Volume in Liters[1]	Efficiency [2]	Constant	CCF [3]	B ⇩
X	X	2.2 X	=	
µCi/cc = A / B	=		µCi/cc	

Calculated by: _____ Time: _____

MEDIA INQUIRY LOG

DATE: _____ TIME: _____

NAME OF REPORTER: _____

AFFILIATED WITH: _____

PHONE NUMBER: _____

INQUIRY: _____

_____

_____

RESPONSE: _____

_____

_____

_____

_____

RESPONSE PROVIDED BY: _____

COMMENTS: _____

_____

_____

_____

Courtesy Call Guide

1. EVENT SUMMARY *(from IP Communications Representative)*

Indicate Emergency Classification Level (ECL), EAL/Time

Unusual Event	Alert	Site Area Emergency	General Emergency
_____	_____	_____	_____

Plant Status/Information/Radiological Conditions *(notes)*:

_____
_____
_____
_____

2. Script for Courtesy Calls

"Hi, my name is _____.

I'm representing the Indian Point Energy Center as a Government Liaison Representative.

I'm calling to inform you that....(*provide the event information obtained from the IP Communications Representative*)....

_____
_____
_____
_____
_____
_____

This is all the information that I have at this point. Entergy will be issuing a news release regarding the event *(give timeframe, e.g. within the next 30 minutes).*

Should I continue to call you at this number if I need to contact you again?"

Name of GLR: _____

Time Calls Completed: _____

JNC BRIEFING SUMMARY/TALKING POINTS

BRIEFING # _____ DATE:_____

TIME: Start: _____ End: _____

Indian Point Energy Center declared a _____ at _____ (time). The event was declared as a result of _____.

PLANT STATUS/EVENT INFORMATION:	RESPONSE (SITE, CORPORATE):
RADIOLOGICAL CONDITIONS:	**EMPATHY:**

QUESTIONS REQUIRING FOLLOW-UP:

RUMORS TO ADDRESS:

Primary - ERO Activation Checklist

Dialogic Notification Systems Activation:

1. Verify that Shift Manager has determined that ERO mobilization or notification is needed.
2. Verify Control Room Pagers are on.
3. Call: **9-788-7771**
4. You will hear: "*This is the remote activation module. Please enter scenario activation password followed by the pound (#) sign.*"
5. **Enter Activation Password** and **Press #:** _ _ _ _ _ #
6. After entering the activation password you will hear the following message: "*To start a scenario, enter the scenario ID number followed by the pound (#) sign, or press pound alone to enter more options.*"
7. **Enter Scenario Number** and **Press #:** _ _ _ _ _ #
8. After entering the Scenario Number you will hear: "*The pager event code is* (three digit number). *Press 1 to change the pager event code. Press 2 to continue.*"

NOTE: Do NOT change the three digit event code regardless of what code is given. **Press:** 2

9. After entering "2" you will hear: "*To start the scenario, press 3, followed by the pound sign (#).*

Press: 3 #

10. **WHEN** you hear: "*Goodbye*" **THEN** Hang-up.
11. Enter the time you completed Dialogic activation. **Time:**

NOTE: Continue on with offsite notifications while waiting for verification of pager activation

12. Verify the notification system successfully activated by either Control Room pager sounding. **IF** neither pager activates within 3 minutes, **THEN** go to Step 15.
13. Inform the Shift Manager that you have completed ERO activation or notification.
14. Date and sign this form when complete: **Date:** | **Signature:**

Continue ONLY if Control Room Pagers Did Not Activate

15. Contact Security SAS at **734-5330** and ask if the Security pager activated.
16. **IF** Security pager activated **THEN** go to step 13.
17. **IF** Security pager did not activate **THEN** repeat steps 3 through 10 one additional time.

    IF during the 2nd attempt, on step 8, you hear: *"The scenario is currently active. Do you wish to stop the scenario."* **THEN** do not stop the scenario. **Press: 6** You will then hear: "*To start a scenario press 1, to stop a scenario press 2, to check scenario information press 3, to enter a different scenario activation password press 4, to end this call press pound (#).* **Press: #**

18. **IF** a Control Room or Security pager does not sound after the 2nd attempt **THEN** activate the Backup Notification System per Form EP-37, Backup - Emergency Response Organization Activation Checklist.

Backup - ERO Activation Checklist

A. Backup Notification System Activation:

1. Use the Backup Notification System ONLY if the Primary Dialogic system fails to activate.
2. Verify Control Room Pagers are on.
3. Call: **9-1-866-521-7099**
4. Upon hearing the following message: *"This is the DCC Service Bureau. Please enter your company ID number followed by the pound (#) sign."*
5. **Enter Company ID** and **Press #:** — **4732 #**
6. Upon hearing the following message: *"Please enter Scenario Activation Password followed by the pound (#) sign."*
7. **Enter Activation Password** found in Dialogic Envelope and **Press #:** — _ _ _ _ _ _ #
8. After entering the Activation Password you will hear the following message: *"To start a scenario, enter the Scenario ID Number followed by the pound (#) sign, or press pound alone for more options."*
9. **Enter Scenario ID Number** found in Dialogic Envelope and **Press #:** — _ _ _ _ _ _ #
10. After entering the Scenario ID Number you will hear the following message: *"To start a scenario press 1, to stop a scenario press 2, to check scenario information press 3, to enter a different scenario activation password press 4, to end this call press pound (#).* **Press:** — **3 #**

    NOTE: Press pound (#) to end the call.
11. **WHEN** you hear the following message: *"Goodbye"* **THEN** Hang-up.
12. Enter the time you completed Dialogic activation. — **Time:**

    NOTE: Continue on with offsite notifications while waiting for verification of pager activation
13. Verify the backup notification system successfully activated by either Control Room pager sounding. **IF** the pager did not activate, **THEN** go to Part B.
14. Inform the Shift Manager that you have completed ERO activation using the Backup System.
15. Date and sign this form when complete:

Date:	**Signature:**

Continue ONLY If Control Room Pagers Did Not Activate

16. Contact Security SAS at **734-5330** and ask if the Security pager activated.
17. **IF** Security pager activated **THEN** go to step 14.
18. **IF** Security pager did not activate **THEN** repeat steps 3 through 11 one additional time.

    IF during the 2nd attempt, on step 10, you hear: *"The scenario is currently active. Do you wish to stop the scenario."* **THEN** do not stop the scenario. **Press: 6** You will then hear: *"To start a scenario press 1, to stop a scenario press 2, to check scenario information press 3, to enter a different scenario activation password press 4, to end this call press pound (#).* **Press: #**
19. **IF** a Control Room or Security pager does not sound after the 2nd attempt **THEN** manually activate the Group Page using Part B of this form.

Backup - ERO Activation Checklist

B. Manual Group Page Activation:

1. Use the Manual Group Page Activation ONLY if the Primary AND Backup Dialogic systems both fail to activate.
2. Request direction from Shift Manger (Emergency Director) as to ERO mobilization needed: Unit 2, Unit 3 or Station activation (Unit 2 and Unit 3).
3. Depending on mobilization needed, call each Group Page phone number:
4. To Activate UNIT 2 ERO:
   Dial Unit 2 Plant Group Page number: 9-1-917-457-8432
   Enter Event Code ___ (In Dialogic Envelop)
5. To Activate UNIT 3 ERO:
   Dial Unit 2 Plant Group Page number: 9-1-800-436-2732
   Enter PIN number 714 1973
   Enter Event Code ___ (In Dialogic Envelop)
6. To Activate JNC ERO (JNC is activated for either Unit 2 or Unit 3 Event):
   Dial JNC ant Group Page number: 9-1-917-649-1901
   Enter Event Code ___ (In Dialogic Envelop)
7. Upon hearing one or more beeps, enter the three digit Pager Event Code number found in the Dialogic Envelop. **Press:** ___ #
8. Upon entering the three digit Event Code you will hear a series of short, rapid beeps, indicating that the message has been sent. Hang up.
9. Enter time you completed activating pagers **Time:**
10. Verify that the correct message was sent by confirming the pager message received on the Control Room or Security pager is same as the three digit Event Code.
11. **IF** the Event Code is incorrect on the Control Room pager **THEN immediately** call the Group Page Phone Number (above) and send the "Disregard Last Message" code as listed below. **Press:** 999 #
12. Upon entering the three digit Event Code you will hear a series of short, rapid beeps, indicating that the message has been sent. Hang up
13. **IF** Control Room and Security pagers fail to activate **THEN** inform Shift Manager that you are unable to mobilize the ERO.

FACSIMILE of NRC FORM 361
(12-2000)

U.S. NUCLEAR REGULATORY COMMISSION
OPERATIONS CENTER

REACTOR PLANT
EVENT NOTIFICATION WORKSHEET EN#

NRC OPERATION TELEPHONE NUMBER: PRIMARY - 301-816-5100 or 800-532-3469*, BACKUPS -- [1st] 301-951-0550 or 800-449-3694*, [2nd] 301-415-0550 and [3rd] 301-415-0553 *Licensees who maintain their own ETS are provided these telephone numbers.

NOTIFICATION TIME	FACILITY OR ORGANIZATION	UNIT	NAME OF CALLER	CALL BACK #

EVENT TIME & Zone	EVENT DATE	POWER/MODE BEFORE	POWER/MODE AFTER

EVENT CLASSIFICATIONS		1-Hr. Non-Emergency 10 CFR 50.72(b)(1)					(v)(A) Safe S/D Capability	AINA
☐	GENERAL EMERGENCY	GEN/AAEC	☐	TS Deviation		ADEV	(v)(B) RHR Capability	AINB
☐	SITE AREA EMERGENCY	SIT/AAEC		4-Hr. Non-Emergency 10 CFR 50.72(b)(2)			(v)(C) Control of Rad Release	AINC
☐	ALERT	ALE/AAEC	☐	(i) TS Required S/D		ASHU	(v)(D) Accident Mitigation	AIND
☐	UNUSUAL EVENT	UNU/AAEC	☐	(iv)(A) ECCS Discharge to RCS		ACCS	(xii) Offsite Medical	AMED
☐	50.72 NON-EMERGENCY	(see next columns)	☐	(iv)(B) RPS Actuation (scram)		ARPS	(xiii) Loss Comm/Asmt/Resp	ACOM
☐	PHYSICAL SECURITY (73.71)	DDDD	☐	(xi) Offsite Notification		APRE	60-Day Optional 10 CFR 50.73(a)(1)	
☐	MATERIAL/EXPOSURE	B???		8-Hr. Non-Emergency 10 CFR 50.72(b)(3)			Invalid Specified System Actuation	AINV
☐	FITNESS FOR DUTY	HFIT	☐	(ii)(A) Degraded Condition		ADEG	Other Unspecified Requirement (Identify)	
☐	OTHER UNSPECIFIED REQMT.	(see last column)	☐	(ii)(B) Unanalyzed Condition		AUNA		NONR
☐	INFORMATION ONLY	NNF	☐	(iv)(A) Specified System Actuation		AESF		NONR

DESCRIPTION

Include: Systems affected, actuations and their initiating signals, causes, effect of event on plant, actions taken or planned, etc. *(Continued on back)*

NOTIFICATIONS	YES	NO	WILL BE
NRC RESIDENT			
STATE(s)			
LOCAL			
OTHER GOV AGENCIES			
MEDIA/PRESS RELEASE			

ANYTHING UNUSUAL OR NOT UNDERSTOOD? ☐ YES (Explain above) ☐ NO

DID ALL SYSTEMS FUNCTION AS REQUIRED? ☐ YES ☐ NO (Explain above)

MODE OF OPERATION UNTIL CORRECTED:	ESTIMATED RESTART DATE:	ADDITIONAL INFO ON BACK ☐ YES ☐ NO

RADIOLOGICAL RELEASES: CHECK OR FILL IN APPLICABLE ITEMS *(specific details/explanation should be covered in the event description)*

	LIQUID RELEASE		GASEOUS RELEASE		UNPLANNED RELEASE		PLANNED RELEASE		ONGOING		TERMINATED
	MONITORED		UNMONITORED		OFFSITE RELEASE		T.S. EXCEEDED		RM ALARMS		AREAS EVACUATED
	PERSONNEL EXPOSED OR CONTAMINATED				OFFSITE PROTECTIVE ACTIONS RECOMMENDED				* State release path in description		

	Release Rate (Ci/sec)	% T. S. Limit	HOO GUIDE	Total Activity (Ci)	% T. S. Limit	HOO GUIDE
Noble Gas			0.1 Ci/sec			1000 Ci
Iodine			10 uCi/sec			0.01 Ci
Particulate			1 uCi/sec			1 mCi
Liquid *(excluding tritium and dissolved noble gases)*			10 uCi/min			0.1 Ci
Liquid (tritium)			0.2 Ci/min			5 Ci
Total Activity						

	PLANT STACK	CONDENSER/AIR EJECTOR	MAIN STEAM LINE	SG BLOWDOWN	OTHER
RAD MONITOR READINGS					
ALARM SETPOINTS					
% T. S. LIMIT *(if applicable)*					

RCS OR SG TUBE LEAKS: CHECK OR FILL IN APPLICABLE ITEMS: *(specific details/explanations should be covered in event description)*

LOCATION OF THE LEAK *(e.g., SG #, valve, pipe, etc.)*

LEAK Rate	UNITS: gpm/gpd	T. S. LIMITS	SUDDEN OR LONG-TERM DEVELOPMENT
LEAK START DATE	TIME	COOLANT ACTIVITY AND UNITS: PRIMARY	SECONDARY

LIST OF SAFETY RELATED EQUIPMENT NOT OPERATIONAL

EVENT DESCRIPTION (Continued from front)

CONTROLLED

COPY # 25

Emergency Notification
and
Mobilization

Prepared by:	C.K.WALKER Print Name	C.K. Signature	4/25/03 Date
Approval:	M.L.MIELE Print Name	M.L.Miele Signature	5/1/03 Date

Effective Date: 5/5/03

Table of Contents

EMERGENCY NOTIFICATION AND MOBILIZATION

1.0 PURPOSE

To prescribe the responsibilities and methods for:

1.1 Initial notification and periodic updates made from the Indian Point Energy Center Control Rooms (CR) in the event of a declared emergency at Indian Point Energy Center.

1.2 Completion of checklists for the performance of notifications and activation of the Emergency Response Organization.

2.0 REFERENCES

2.1 Indian Point Energy Center Emergency Plan

2.2 SMM-EP-101, "Emergency Plan Program Responsibilities"

2.3 SMM-EP-102, "Emergency Response On-Call Responsibilities"

3.0 DEFINITIONS

None

4.0 RESPONSIBILITIES

4.1 Following initial declaration of an emergency, the Shift Manager (SM) shall designate a CR Communicator.

4.1.1 For Unit 2, an on-shift Operations staff member (NPO) normally performs this function. Station Security performs this function as back up.

4.1.2 For Unit 3, an assigned shift Security Officer normally performs this function. An on-shift Operations staff member performs this function as back up.

4.2 The CR Offsite Communicator shall perform duties in the Control Room (or alternate location if uninhabitable) under the Shift Manager's direction. These duties shall entail implementing the notification checklists (Forms EP-3, 4 or 5) and use of RECS, radio, telephones and other communication equipment to notify on-site personnel as well as the off-site authorities of the accident conditions and to pass along directions and recommendations as appropriate from the Shift Manager. The CR Communicator shall also remain ready to supply updates to the off-site authorities.

4.3 Notifications made from the Unit 2 Control Room are further described in IP-1010, Unit 2 Control Room.

4.4 Notifications made from the Unit 3 Control Room or alternate locations are further described in IP-2001, Emergency Director, Plant Operations Manager, Shift Manager Procedure.

4.5 Notifications made from the EOF are further described in EP-IP-250, Emergency Operations Facility.

4.6 Initial and Upgrade notifications to the State and counties shall be initiated within 15 minutes of the emergency classification declaration.

4.7 Periodic Update Notifications should be performed approximately every 30 minutes or more frequent when conditions change. Time interval may be lengthened with concurrence of offsite agencies.

4.8 Initial and Upgrade notifications to the NRC shall be initiated within 1 hour of the emergency classification.

4.9 The Unit 2 Control Room activates the DIALOGIC system to activate or notify the Emergency Response Organization, regardless of which Unit is the affected Unit. For events declared by the Unit 3 Shift Manager, the Unit 2 Control Room must be contacted and requested to notify or mobilize the IPEC Emergency Response Organization through activation of the DIALOGIC System.

4.10 At the Notification of Unusual Event classification level, normally the Emergency Response Organization is notified only, with no personnel response necessary. However, at the discretion of the Emergency Director (Shift Manager), the Emergency Response Organization may be fully or partially mobilized to respond to the event.

4.11 At an Alert or higher classification, the entire IPEC Emergency Response Organization is mobilized.

5.0 DETAILS

NOTES:

1. All forms such as EP-3 can be found in IP-EP-115, Emergency Plan Forms
2. All phone numbers not provided within the Notification Checklists (Forms EP-3, 4 or 5) can be found in the Emergency Telephone Directory.
3. The Radiological Emergency Communications System (RECS) is the primary means of emergency notification to off-site authorities.
   IF RECS is inoperable **THEN**:
   a. Use the Local Government Radio (see Notification Checklists for guidance).
      OR
   b. Use regular telephone lines (see Notification Checklists for numbers).

5.1 Notification of Unusual Event Initial Notification - CR Communicator

5.1.1 Obtain the completed and approved Radiological Emergency Data Form PART I (Form EP-1) from the Shift Manager.

A. Review form for completeness.

B. Determine if the Shift Manager wants full ERO activation at the NUE level (not normally needed) or event notification only.

5.1.2 Start the initial notification roll call to state and counties within 15 minutes of the declaration of an Unusual Event.

5.1.3 Use a Control Room NUE Notification Checklist, (Form EP-3) to make and document the initial notifications.

5.2 NUE Update Notifications - CR Communicator

NOTE:
The time interval for periodic updates may be lengthened by the Emergency Director (Shift Manager) with concurrence of offsite agencies.

5.2.1 Make periodic updates approximately every 30 minutes throughout the event.

5.2.2 Obtain the completed and approved Radiological Emergency Data Form PART I (Form EP-1) from the Shift Manager and review form for completeness

5.2.3 Use a Control Room NUE Notification Checklist, (Form EP-3) and perform **ONLY the circled items**, to make the periodic Update Notifications.

NOTE:
The Control Room Alert/ SAE/GE Initial Notification Checklist (Form EP-4) is used only once. After initial notifications are completed using this form, all subsequent upgrade and update notifications shall be made using the Upgrade/Update Notification Alert/SAE/GE Checklist (Form EP-5).

5.3 Alert, Site Area AND General Emergency Initial Notification – CR Communicator

5.3.1 Use a Control Room Initial Notification Checklist Alert/SAE/GE, (Form EP-4) to make and document the initial notifications.

5.3.2 Obtain the completed and approved Radiological Emergency Data Form PART I from the Shift Manager.

A. Review form for completeness.

B. Verify that the Shift Manager wants the Assembly Alarm Sounded

5.3.3 Start the initial notification roll call to State and counties within 15 minutes of the declaration of an Alert, Site Area Emergency (SAE) or General Emergency (GE).

5.4 Alert / SAE / GE Upgrade/Update Notifications – CR/EOF Communicator

5.4.1 Upgrade/Update notifications are made for EAL upgrades and for periodic updates during an Alert, Site Area Emergency (SAE) or General Emergency (GE).

5.4.2 Use an Upgrade/Update Notification Alert/SAE/GE Checklist, (Form EP-5) to make and document the emergency classification upgrade or update notifications.

5.4.3 Obtain the completed Radiological Emergency Data Form Part I from the Shift Manager/Emergency Director AND notify NY State and counties within 15 minutes of any emergency classification change or approximately every 30 minutes otherwise.

6.0 INTERFACES

6.1 SOP-CG-7-1, "Notification During Nuclear Emergency Involving IP No. 2"

6.2 IP-EP-110, "Concept of Operations"

6.3 IP-EP-115, "Emergency Plan Forms"

6.4 IP-EP-250, "Emergency Operations Facility"

6.5 IP-1010, "Unit 2 Control Room" [Unit 2]

6.6 IP-2001, "Emergency Director, Plant Operations Manager, Shift Manager Procedure" [Unit 3]

7.0 RECORDS

NONE

8.0 REQUIREMENTS AND COMMITTMENTS

NONE

9.0 ATTACHMENTS

Attachment 1, Local Government Radio System Locations & Call Letters

[Proprietary Information]

Attachment 9.1

Local Government Radio System Locations & Call Letters

Sheet 1 of 1

LOCAL GOVERNMENT RADIO [45.16 MHZ]

Base Station Location	Call Letters
CR, EOF, AEOF	[KNFM-394]
State (So. Dist. Office)	[WZM-947]
Westchester W.P.	[WRU-873]
Orange W.P.	[WAU-720]
Rockland W.P.	[KRH-269]
Putnam W.P.	[KFC-781]
Peekskill W.P.	(NONE)