CONTROLLED

Entergy	IPEC EMERGENCY PLAN IMPLEMENTING PROCEDURES	NON-QUALITY RELATED PROCEDURE	IP-EP-115 Revision 26
		REFERENCE USE	Page 1 of 7

Emergency Plan Forms

Prepared by: Lori Glander (Print Name) _____ (Signature) 5-12-10 (Date)

Approval: Brian Sullivan (Print Name) _____ (Signature) 5-25-10 (Date)

Effective Date: May 27, 2010

This procedure excluded from further LI-100 review

Information in this record was deleted in accordance with the Freedom of Information Act. Exemptions 7F FOIA/PA 2011-0181

C/4

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1.0 PURPOSE

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

2.0 REFERENCES

Indian Point Energy Center Emergency Plan

3.0 DEFINITIONS

NONE

4.0 RESPONSIBILITIES

4.1 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.

5.3.2 Attachment 9.1, Current List of Effective Forms will list all effective forms and the number of pages in each form.

6.0 INTERFACES

Attachment 9.1, 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 3

Form Number	Current Revision	Form Title (number of pages if > 1)	Interfacing Procedures
EP-1	Rev. 3	NYS Radiological Emergency Data Form, Part 1 (1 page)	IP-EP-250 IP-EP-210
EP-2	Rev. 3	NYS Radiological Emergency Data Form, Part 2 (1 page)	IP-EP-250 IP-EP-210
EP-3	Rev. 13	CCR NUE Notification Checklist (2 pages, used back to back)	IP-EP-250 IP-EP-210
EP-4	Rev. 12	CCR Initial Notification Checklist – Alert/SAE/GE (2 pages, used back to back)	IP-EP-250 IP-EP-210
EP-5	Rev. 10	Upgrade / Update Notification Alert/SAE/GE Checklist (2 pages, used back to back)	IP-EP-250 IP-EP-210
EP-6	Rev. 2	Emergency Exposure Authorizations (2 pages, used back to back)	IP-EP-250 IP-EP-230
EP-7	Rev. 3	EOF Staffing	IP-EP-250
EP-8	Rev. 0	Recovery Issues / Strategies Form	IP-EP-610
EP-9	Rev. 2	Essential Information Checklist	IP-EP-250 IP-EP-210 IP-EP-260
EP-10	Rev. 1	ERO Log Sheet	IP-EP-250 IP-EP-220
EP-11	Rev. 1	IPEC Manual Dose Assessment Worksheet / Estimating Containment Activity via R-25 / 26 (2 pages)	IP-EP-310
EP-12	Rev. 1	Estimated Total Population Dose (8 pages)	IP-EP-620
EP-13	Rev. 5	Manual Dose Assessment Worksheet (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	Response Check For Radioactive Airborne Concentration	IP-EP-330

Attachment 9.1
Current List of Effective Forms
Sheet 2 of 3

Form Number	Current Revision	Form Title (number of pages if > 1)	Interfacing Procedures
EP-16	Rev. 0	Determination Of Radioactive Airborne Concentration	IP-EP-330
EP-17	Rev. 3	IP-2 Manual Determination of Release Rate	IP-EP-310
EP-18	Rev. 2	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. 2	Turnover Sheet	IP-EP-250
EP-22	Rev 0	Media Briefing Issues Form	IP-EP-260
EP-23	Rev. 1	JIC Staffing Form	IP-EP-260
EP-25	Rev. 3	Written Statement Distribution Checklist (2 pages)	IP-EP-260
EP-26	Rev. 3	Information Distribution Guide	IP-EP-260
EP-27	Rev. 1	Media Monitoring Form	IP-EP-260
EP-28	Rev. 1	Joint Information Center Fax Cover Sheet	IP-EP-260
EP-29	Rev. 1	Individual Exposure Tracking Log	IP-EP-250
EP-30	Rev. 2	Monitoring Team Survey Data	IP-EP-250 IP-EP-320
EP-31	Rev. 1	Monitoring Team Sample Data	IP-EP-250 IP-EP-320
EP-32	Rev. 2	Determination of Radioactive Airborne Concentrations	IP-EP-250
EP-33	Rev. 0	Media Inquiry Log	IP-EP-260
EP-34	Rev. 1	Courtesy Call Guide	IP-EP-260
EP-35	Rev. 2	JIC Briefing Summary / Talking Points	IP-EP-260
EP-36	Rev. 2	Primary – ERO Activation Checklist	IP-EP-130
EP-37	Rev. 5	Backup – ERO Activation Checklist	IP-EP-130
EP-38	Rev. 1	Emergency Team Briefing Form (2 pages, Back to Back)	IP-EP-230
EP-39	Rev. 0	Task Assignment Log	IP-EP-230
EP-40	Rev. 0	Emergency Radiation Work Permit	IP-EP-230

Attachment 9.1
Current List of Effective Forms
Sheet 3 of 3

Form Number	Current Revision	Form Title (number of pages if > 1)	Interfacing Procedures
EP-41	Rev. 3	Normal IPEC OSC Staffing	IP-EP-230
EP-42	Rev. 0	ERO Tracking Log	IP-EP-230
EP-43	Rev. 2	Onsite ERO Shift Rosters	IP-EP-230
EP-44	Rev. 2	IPEC OSC Guidelines	IP-EP-230
EP-45	Rev. 2	Assembly Area Coordinator Instructions	IP-EP-230
EP-46	Rev. 3	Normal IPEC TSC Staffing	IP-EP-220
EP-47	Rev. 0	Accountability Roster	IP-EP-230 IP-EP-430
EP-48	Rev. 0	EOF Security Sign in Log	IP-EP-240 IP-EP-250
EP-49	Rev. 0	Containment Discharge Worksheet	IP-EP-250 IP-EP-310
EP-50	Rev. 1	Surface Contamination Check	IP-EP-320
EP-53	Rev. 0	Unit 2 Plant Parameters – 42a	IP-EP-210 IP-EP-220
EP-54	Rev. 0	Unit 2 Equipment Status – 42b	IP-EP-210 IP-EP-220
EP-55	Rev. 1	Unit 2 Radiological Data – 42c	IP-EP-210 IP-EP-220
EP-56	Rev. 1	Communications Message Form	IP-EP-220
EP-57	Rev. 0	Unit 3 Plant Parameters – 31a	IP-EP-210 IP-EP-220
EP-58	Rev. 1	Unit 3 Radiological Data – 31b	IP-EP-210 IP-EP-220
EP-59	Rev. 0	Unit 3 Equipment Status – 31c	IP-EP-210 IP-EP-220
EP-60	Rev. 0	Security Area Route Alerting	IP-EP-240
EP-61	Rev. 0	Decontamination Survey Sheet	IP-EP-350
EP-62	Rev. 0	Vehicle Contamination check	IP-EP-350
NRC 361	12-2000	Reactor Plant Event Notification Worksheet (NRC Form)	IP-EP-130

New York State

Indian Point Energy Center

RADIOLOGICAL EMERGENCY DATA FORM - PART 1 Notification # ____

This is the Indian Point Energy Center with a Part 1 Notification on: _____

1. Reactor Status:

This is an: EXERCISE ACTUAL EMERGENCY at: UNIT 2 UNIT 3 BOTH UNITS

Unit 2 Operational (Date) _____ (Time) _____ (24 hr clock)

Shutdown

Unit 3 Operational (Date) _____ (Time) _____ (24 hr clock)

Shutdown

2. The Emergency Classification is: A. Unusual Event B. Alert C. Site Area Emergency D. General Emergency E. Emergency Terminated

This Emergency Classification declared on: _____ (Date) at _____ (Time 24 hr clock)

3. EAL#: _____

4. Release of Radioactive Materials due to the Classified Event:

A. No Release B. Release BELOW Federal limits To Atmosphere To Water

C. Release ABOVE Federal limits To Atmosphere To Water D. Unmonitored release requiring evaluation

5. Wind Speed: _____ Meters/Sec at elevation 10 meters

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

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

8. The following Protective Actions are recommended to be implemented as soon as practicable:

A. NO NEED for PROTECTIVE ACTIONS outside the site boundary

B. EVACUATE and IMPLEMENT the KI PLAN for the following Sectors

C. SHELTER-IN-PLACE and IMPLEMENT the KI PLAN for the following Sectors

All remaining Areas MONITOR the EMERGENCY ALERT SYSTEM

2 miles around 5-miles downwind 5 miles around 10-miles downwind Entire EPZ

In the following Sectors: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

NOTE: OFFSITE AUTHORITIES SHOULD CONSIDER SHELTER-IN-PLACE + TAKE KI IF EVACUATION IS NOT FEASIBLE

9. Reported by – Communicator: _____ Telephone # _____

(Communicator's Name)

10. Emergency Director Approval: _____ Date/Time: _____

(Director's Name)

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

This is an: A. Exercise B. Actual Emergency

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

12. 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

13. 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*

14. Waterborne release information: As of Date _____ Time_____

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

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

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

Calculation is based on (circle one):

A. In plant 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			

16. 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: - To be completed by Shift Manager or Designee | **Time**

1. Contact opposite unit's Control Room and inform them of classification, time, EAL# and brief description. (b)(7)(F)
2. Coordinate the following with the opposite unit Control Room:
   a. Announce the following message over both Unit's P.A. systems three (3) times:
   "Attention all personnel an NUE has been declared. Staffing of facilities (is/is not) required"
   b. If staffing of facilities (EOF/OSC/TSC/JIC/AEOF) is required, state the following:
   "The following facilities are required to be staffed: _____ (fill in with appropriate facilities.)

Notify State and Counties: (within 15 minutes of classification) - to be completed by Offsite Communicator or Designee

3. Pick up the RECS handset
4. When you hear the message "Welcome to Wave. Please enter session ID". Depress the "7" button on the key pad.
5. **IF** you did not hear the above message after picking up handset **THEN** hang up, wait 5 seconds and repeat steps 3 and 4. **AFTER** 3 unsuccessful attempts, advise the Emergency Director and **PROCEED** to step 7.
6. You will hear two tones, wait 5 seconds and State **"This is to report an event at Indian Point Energy Center. Standby for roll call."**
7. **IF** unable to contact any station via RECS **THEN** use Local Government Radio (LGR) (instructions step 23). **IF** LGR is unavailable, **THEN** use the audio conference bridge (instructions step 24) to contact the Counties and State. **IF** audio conference bridge is unavailable, **THEN** contact Counties and State via the numbers on Form EP-5 Page 3 of 3 using a commercial telephone.
8. Enter time you are starting the initial roll call in the space provided below.
9. 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:

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

Time Initial Roll Call Started _____

Time Call Completed _____

Time acknowledged receipt of Email or FAX _____

10. State, **"An emergency has been declared at the Indian Point Energy Center. A Part I Notification # __ has been sent to you via Email and FAX."**
11. Announce, **"New York State, do you acknowledge receipt of an Email or FAX from IPEC."** [IF NYS does not acknowledge, **THEN** ask Westchester County for acknowledgement as the backup]. Mark time in box above. If neither location acknowledges receipt, proceed to step 13.
12. Announce **"IF any location did not receive Email or FAX or additional information is required, contact** (fill in with one below) **for assistance."**

    NYS at (b)(7)(F) or **Westchester County at** (b)(7)(F)
13. In the event that the electronic Email or FAX of the Part I Notification Form fails:
    - FAX a hard copy of the form via conventional FAX machine to all locations and (FAX #s programmed in FAX) or see page 3 of 3 of Form EP-5
    - verbally read the Part I Notification to all parties.
14. End notification by saying **"Indian Point out at (*time*)"**. Enter time in the space provided above.

NOTE

PERFORM ONLY CIRCLED ITEMS FOR NUE PERIODIC UPDATE NOTIFICATIONS

Ex. 7F

Ex. 7F

Control Room NUE Notification Checklist

Notify Emergency Response Organization:		Time
15	The Shift Manger (Emergency Director) determines if Emergency Response Organization mobilization is needed or if Emergency Response Organization should receive Event Notification only. Perform or direct notification by one of the following as appropriate: **IF ALL** Emergency Response Organization mobilization is needed, **THEN** use **Envelope A "IPEC ALL ERO Mobilization"** envelope to mobilize the ERO. **IF** event notification only, **THEN** use **Envelope B "IPEC ALL ERO Event Notification"** envelope to contact **ALL** ERO members to notify them of the event. **IF ALL** Emergency Response Organization mobilization is needed for a Security Event, **THEN** use **Envelope C "IPEC ALL ERO Mobilization to Backup Locations"** envelope to mobilize the ERO. **IF Partial** Emergency Response Organization mobilization is needed for **TSC/OSC activation only**, **THEN** use **Envelope D "IPEC TSC/OSC Mobilization"** envelope to mobilize specific ERO members. **IF Partial** Emergency Response Organization mobilization is needed for **TSC/OSC/EOF activation only**, **THEN** use **Envelope E "IPEC TSC/OSC/EOF Mobilization"** envelope to mobilize specific ERO members	
16	Notify Security Shift Supervisor of the affected unit and date/time of NUE classification. Call CAS at (b)(7)(F) and request to speak to SSS or leave a message.	
17	Call Indian Point Communications Representative at (b)(7)(F) a. 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) b. *If individual answers* **THEN** *obtain and enter name of individual contacted:* _____	

Notify NRC: (to be initiated within 1 hour of classification) **(within 15 minutes if required by 0-AOP-SEC-1)**		Time
18.	**IF** it is during normal working hours **THEN** notify the affected unit(s) NRC Resident Inspector (b)(7)(F) **IF** during off-hours **THEN** call 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.	
19.	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.	
20.	Record any Comments: _____ _____	
21.	Date and sign this form	Date: / Signature:
22.	Inform the Shift Manager that you have completed NUE notifications	

Use of Alternate Notification Methods

23 Use of Local Government Radio (LGR)

A. Depress **"LGR"** select call button on Zetron panel and depress the transmit button. Transmit the following: **"This is to report an event at Indian Point Energy Center. Stand by for roll call"**. Return to Step 8 and notify Westchester County of the event via phone at (b)(7)(F) (b)(7)(F)

24. Use of Conference Bridge:

The following will notify State and County Warning Points and EOC's to call into the Backup Conference Bridge.

A. Call (b)(7)(F)
NOTE: for steps B, C, and D you will be asked for a confirmation of the numbers you entered.

B. You will hear: ***"This is the remote activation module. Please enter your company ID number followed by the pound sign."*** **Enter** (b)(7)(F)

C. You will hear: *"Please enter your scenario activation passsword followed by the pound sign"* **Enter** (b)(7)(F)

D. You will hear ***"To start a scenario, enter ID followed by the pound sign, or press pound alone for more options."*** **Enter** (b)(7)(F)

E. You will hear ***"To listen to the current scenario message press 1, to re-record the scenario message press 2, start the scenario press 3, to return to the main menu press pound:*** **Press 3**

F. AFTER you hear: ***"The scenario is building"*** **HANG UP THE PHONE**

G. Using a regular telephone call into the conference bridge number by dialing the following (b)(7)(F) you will be asked to enter an access code, enter (b)(7)(F) You will be the host of this conference.

H. AFTER the tones: State the following: **"This is to report an event at the Indian Point Energy Center. Stand by for roll call."**

I. Return to step 8

Ex. 7F Ex. 7F Ex. 7F Ex. 7F

CCR Initial Notification Checklist – Alert/SAE/GE

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.

Notify Protected Area Personnel: - To be completed by Shift Manager or designee	Time
1. Contact opposite unit's Control Room and inform them of classification, time, EAL# and brief description. (b)(7)(F)	
2. Coordinate the following with the opposite unit Control Room:	
a. Sounding of the Site Assembly Alarm for 10 seconds and;	
b. Announce 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 response facility. All other personnel report to the Energy Education Center or Generation Support Building."**	
3. The Shift Manger (Emergency Director) determines what type of Emergency Response Organization mobilization is needed utilizing the appropriate envelope:	
a. **IF** a Security Event, **THEN** use **Envelope C "IPEC ALL ERO Mobilization to Backup Locations"**	
b. **Otherwise, use Envelope A "IPEC ALL ERO Mobilization"**	

Notify State and Counties: (within 15 minutes of classification) - To be completed by Offsite Communicator or designee.

4. Pick up the RECS handset

5. When you hear the message "Welcome to Wave. Please enter session ID", Depress the "7" button on the key pad.

6. **IF** you did not hear the above message after picking up handset **THEN** hang up, wait 5 seconds and repeat steps 4 and 5. **AFTER** 3 unsuccessful attempts, advise the Emergency Director and **PROCEED** to step 8.

7. You will hear two tones, wait 5 seconds and State **"This is to report an event at Indian Point Energy Center. Standby for roll call."**

8. **IF** unable to contact any station via RECS **THEN** use Local Government Radio (LGR) (instructions step 24). **IF** LGR is unavailable, **THEN** use the audio conference bridge (instructions step 25) to contact the Counties and State. . **IF** audio conference bridge is unavailable, **THEN** contact Counties and State via the numbers on Form EP-5 Page 3 of 3 using a commercial telephone.

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 the roll call:

Time Initial Roll Call Started

Time Call Completed

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

Time acknowledged receipt of Email or fax

11. State, **"An emergency has been declared at the Indian Point Energy Center. A Part I Notification # ___ has been sent to you via Email and Fax."**

12. Announce, **"New York State, do you acknowledge receipt of an Email or Fax from IPEC."** [**IF** NYS does not acknowledge, **THEN** ask Westchester County for acknowledgement as the backup]. Mark time in box on page 1. If neither acknowledges receipt, proceed to step 14.

13. Announce **"IF any location did not receive Email or Fax or additional information is required, contact** (fill in with one below) **for assistance"**

NYS at (b)(7)(F) or **Westchester County at** (b)(7)(F)

EX. 7E

EX. 7E

CCR Initial Notification Checklist – Alert/SAE/GE

Notify State and Counties (con't)

14. In the event that the electronic FAX or Email of the Part 1 Notification Form fails:

- FAX a hard copy of the form via conventional FAX machine to all locations. (numbers preprogrammed in FAX) or see page 3 of 3 of Form EP-5
- Verbally read the Part 1 Notification to all parties

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

16. Notify Security Shift Supervisor of the affected unit and date/time of Alert/SAE/GE classification. Call CAS at (b)(7)(F) and request to speak to SSS or leave a message.

17. Call Indian Point Communications Representative at (b)(7)(F)

a. Read the following statement to individual answering or into answering machine: **"This is the Unit ___ Control Room, and (Alert/Site Area Emergency/General Emergency) was declared at _____ (time) on Emergency Action Level number _____"**

b. If individual answers **THEN** obtain and enter name of individual contacted: _____

Notify NRC: (to be initiated within 1 hour of classification) (within 15 minutes if required by 0-AOP-SEC-1) — Time

18. **IF** it is during normal working hours **THEN** notify the affected unit(s) NRC Resident Inspector (b)(7)(F)

IF during off-hours **THEN** call the NRC Senior Resident Inspector using phone numbers provided in the Emergency Telephone Directory

Provide the Inspector with Date/Time of emergency classification, EAL # and brief description of event.

19. 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.

20. Record any Comments: _____

21. Date and sign this form — Date: | Signature:

22. Inform the Shift Manager that you have completed emergency notifications

Notify ANI, NYPSC, INPO, NEIL

23. 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.

(b)(7)(F)

Use of Alternate Notification Methods

24. Use of Local Government Radio (LGR):

A. Depress **"LGR"** select call button on Zetron panel and depress the transmit button. Transmit the following: **"This is to report an event at Indian Point Energy Center. Stand by for roll call".** Return to Step 11 and notify Westchester County of the event via phone at (b)(7)(F) (b)(7)(F)

25. Use of Conference Bridge:

The following will notify State and County Warning Points and EOC's to call into the Backup Conference Bridge.

A. Call (b)(7)(F)
NOTE: for steps B, C, and D you will be asked for a confirmation of the numbers you entered.

B. You will hear: *"This is the remote activation module. Please enter your company ID number followed by the pound sign."* Enter (b)(7)(F)

C. You will hear: *"Please enter your scenario activation password followed by the pound sign"* Enter (b)(7)(F)

D. You will hear: *"To start a scenario, enter the scenario ID followed by the pound sign, or press pound alone for more options."* Enter (b)(7)(F)

E. You will hear: *"To listen to the current scenario message press 1, to re-record the scenario message press 2, start the scenario press 3, to return to the main menu press pound"* **Press 3**

F. AFTER you hear: *"The scenario is building"* **HANG UP THE PHONE**

G. Using a regular telephone call into the conference bridge number by dialing the following: (b)(7)(F) you will be asked to enter an access code, enter (b)(7)(F) You will be the host of this conference.

H. AFTER the tones: State the following: **"This is to report an event at the Indian Point Energy Center. Standby for roll call."**

I. Return to step 9.

Ex. 7F Ex. 7F Ex. 7F Ex. 7F Ex. 7F Ex. 7F

Upgrade/Update Notification - Alert/SAE/GE Checklist

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.

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. Use the CCR Alert/SAE/GE Initial Notification Checklist (Form EP-4) for upgrade from NUE to Alert.

Notify Protected Area Personnel: **Time**

1. If a Site Area Emergency or General Emergency is declared and initial accountability has not been completed THEN: Call the unaffected unit control room (b)(7)(F) and Security Shift Supervisor at (b)(7)(F) and inform them of the new classification, 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 the classification is terminated THEN announce:
      "Attention all personnel the emergency has been terminated"

Notify State and Counties: (within 15 minutes of upgrade)

3. Pick up the RECS handset
4. When you hear the message "Welcome to Wave. Please enter session ID", Depress the "7" button on the key pad.
5. **IF** you did not hear the above message after picking up handset **THEN** hang up, wait 5 seconds and repeat steps 3 and 4. **AFTER** 3 unsuccessful attempts, advise the Emergency Director and **PROCEED** to step 7.
6. You will hear two tones, wait 5 seconds and State **"This is to report an event at Indian Point Energy Center. Standby for roll call."**
7. **IF** unable to contact any station via RECS **THEN** use Local Government Radio (LGR) (instructions step 21). **IF** LGR is unavailable, **THEN** use the audio conference bridge (instructions step 22) to contact the Counties and State. **IF** audio conference bridge is unavailable, **THEN** contact Counties and State via the numbers on Form EP-5 Page 3 of 3 using a commercial telephone.
8. Enter time you are starting the initial roll call in the space provided below.
9. 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 *Call Completed* _____

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

Time acknowledged receipt of Email or fax _____

10. State, **"An emergency has been declared at the Indian Point Energy Center. A Part I Notification # __ has been sent to you via Email and FAX."**
11. Announce, **"New York State, do you acknowledge receipt of an Email or FAX from IPEC."** [IF NYS does not acknowledge, **THEN** ask Westchester County for acknowledgement as the backup]. Mark time in box above. If neither location acknowledges receipt, proceed to step 13.
12. Announce **"IF any location did not receive Email or FAX or additional information is required, contact** (fill in with one below) **for assistance."**
    NYS at (b)(7)(F) or **Westchester County at** (b)(7)(F)
13. In the event that the electronic Email or FAX of the Part I Notification Form fails:
    - FAX a hard copy of the form via conventional FAX machine to all locations and (FAX #s programmed in FAX) or see page 3 of 3 of Form EP-5
    - verbally read the Part I Notification to all parties.
14. End notification by saying **"Indian Point out at *(time)*"**. Enter time in the space provided above.

EX 7F

EX 7F

Upgrade/Update Notification - Alert/SAE/GE Checklist

NOTE

USE THE CCR ALERT/SAE/GE INITIAL NOTIFICATION CHECKLIST (FORM EP-4) FOR UPGRADE FROM NUE TO ALERT.

Notify NRC: (to be initiated within 1 hour of classification) (within 15 minutes if required by 0-AOP-SEC-1)	Time
15. **IF** it is during normal working hours **THEN** notify the affected unit(s) NRC Resident Inspector (b)(7)(F) **IF** during off-hours **THEN** call the NRC Senior Resident Inspector using phone numbers provided in the Emergency Telephone Directory Provide the Inspector with Date/Time of 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.	

Notify ANI, NYPSC, INPO, NEIL

17. 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.

(b)(7)(F)

18. Record any Comments: _____

19. Date and sign this form — Date: | Signature:

20. Inform the Shift Manager that you have completed emergency notifications

Use of Alternate Notification Methods

21. **Use of Local Government Radio (LGR):**

A. Depress "**LGR**" select call button on Zetron panel and depress the transmit button. Transmit the following: "**This is to report an event at Indian Point Energy Center. Stand by for roll call**". Return to Step 8 and notify Westchester County of the event via phone at (b)(7)(F) (b)(7)(F)

22. **Use of Conference Bridge:**

The following will notify State and County Warning Points and EOC's to call into the Backup Conference Bridge.

A. Call (b)(7)(F)
NOTE: for steps B, C, and D you will be asked for a confirmation of the numbers you entered.

B. You will hear: "***This is the remote activation module. Please enter your company ID number followed by the pound sign.***" **Enter** (b)(7)(F)

C. You will hear: "*Please enter your scenario activation password followed by the pound sign*" **Enter** (b)(7)(F)

D. You will hear: "***To start a scenario, enter the scenario ID followed by the pound sign, or press pound alone for more options.***" **Enter** (b)(7)(F)

E. You will hear: "***To listen to the current scenario message press 1, to re-record the scenario message press 2, start the scenario press 3, to return to the main menu press pound***" **Press 3**

F. AFTER you hear: "***The scenario is building***" **HANG UP THE PHONE**

G. Using a regular telephone call into the conference bridge number by dialing the following: (b)(7)(F) you will be asked to enter an access code, enter (b)(7)(F) You will be the host of this conference.

H. AFTER the tones: State the following: "**This is to report an event at the Indian Point Energy Center. Standby for roll call.**"

I. Return to step 8.

EX. 7F EX. 7F EX. 7F EX. 7F

Upgrade/Update Notification - Alert/SAE/GE Checklist

County/State Agency Contact Numbers for use with Commercial Telephone / FAX System.

A. Dial the Warning Point numbers below and transmit **"This is to report that an event has been declared at Indian Point Energy Center. The Part I form has been sent via Email and Fax".** Place time first agency is contacted in "Time Initial Roll Call Started" box on Page 1 of applicable checklist.

B. Once last call is completed enter time in "Time Final Roll Call Completed" box on Page 1 of applicable checklist.

C. Return to applicable checklist to complete notifications:

- Step 15 - Initial NUE Checklist
- Step 19 - Update NUE Checklist
- Step 16 - Initial Alert/SAE/GE Checklist
- Step 15 - Upgrade/Update Alert/SAE/GE Checklist

Location	Warning Point Phone Number	Warning Point FAX	EOC Phone Number	EOC FAX
New York State	(b)(7)(F)			
Westchester County				
Peekskill City				
Orange County				
Putnam County				
Rockland County				
West Point				

Ex. 7E

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 (ED) or Emergency Plant Manager (EPM) / Plant Operations Manager (POM).
2. All individuals may be authorized up to **5 Rem per declared emergency**. This is exposure for a given emergency event historical occupational exposure is not totaled into this limit.
3. Volunteers may be authorized up to **10 Rem to protect valuable property**.
4. Volunteers may be authorized up to **25 Rem for life saving** or the protection of large populations.
5. Individuals may volunteer to receive greater than 25 Rem to save a life.
6. Procedures allow for the ED or EPM / POM to give a blanket authorization of up to 5 Rem emergency exposure for Alert or higher classifications. These authorization should be documented in position logs.
7. 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.
8. All emergency exposures are voluntary. – For higher doses individuals over the age of 45 are preferable.
9. Individuals shall be briefed that these exposures may increase their chances of cancer during their lifetime.
10. For any expected or actual Thyroid Exposure > 5 Rem CDE, the issuance of KI should be considered. The ED or EPM / POM authorize the use of KI

EMERGENCY EXPOSURES AUTHORIZATION

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)
1000 Rem to 5000 Rem	- Blisters form and break open (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	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	IT Support			
1	Information Liaison			
1	ICP			

* 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	

Essential Information Checklist

Affected or Lead Unit: ☐ Unit 2 ☐ Unit 3 ☐ Both
Status of Other Unit: ☐ At Power ☐ Shutdown ☐ See other Unit Checklist

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

Security Issues: _____

_____

_____

Fission Product Barrier Status

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

Date / Time This Checklist was completed: _____ / _____

Other: _____

_____

Emergency Response Organization Log Sheet

ERO Position: _____ Name:	Date: _____

Time	Significant Events, Information or Communications

Signature: _____

Form EP-10 Rev 1

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					11	
1-3					109	
1-4					183	
1-5					343	
1-6					300	
1-7					1,322	
1-8					2,395	
1-9					7,460	
1-10					182	
				SECTOR TOTALS:		
2-1					0	
2-2					0	
2-3					314	
2-4					661	
2-5					1,716	
2-6					921	
2-7					1,044	
2-8					340	
2-9					838	
2-10					1,235	
				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) 2000 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					17	
3-2					3,439	
3-3					9,774	
3-4					4,510	
3-5					2,973	
3-6					3,823	
3-7					3,356	
3-8					1,760	
3-9					1,196	
3-10					1,097	
				SECTOR TOTALS:		
4-1					7	
4-2					1,653	
4-3					2,841	
4-4					3,238	
4-5					2,178	
4-6					3,683	
4-7					2,473	
4-8					4,797	
4-9					6,936	
4-10					6,915	
				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) 2000 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					334	
5-2					315	
5-3					24	
5-4					950	
5-5					594	
5-6					620	
5-7					1,545	
5-8					1,355	
5-9					3,224	
5-10					3,426	
				SECTOR TOTALS:		
6-1					251	
6-2					192	
6-3					757	
6-4					656	
6-5					918	
6-6					304	
6-7					75	
6-8					319	
6-9					626	
6-10					2,113	
				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) 2000 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					807	
7-2					922	
7-3					1,543	
7-4					2,490	
7-5					694	
7-6					4,590	
7-7					2,630	
7-8					3,004	
7-9					10,085	
7-10					6,9001	
				SECTOR TOTALS:		
8-1					435	
8-2					2,042	
8-3					868	
8-4					136	
8-5					217	
8-6					0	
8-7					90	
8-8					0	
8-9					3,864	
8-10					9,817	
				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) 2000 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					68	
9-2					541	
9-3					0	
9-4					0	
9-5					1,229	
9-6					5,661	
9-7					942	
9-8					4,716	
9-9					7,829	
9-10					7,358	
				SECTOR TOTALS:		
10-1					52	
10-2					604	
10-3					420	
10-4					2,853	
10-5					10,900	
10-6					5,970	
10-7					3,378	
10-8					3,778	
10-9					6,101	
10-10					10,856	
				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) 2000 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					0	
11-3					2,115	
11-4					2,486	
11-5					3,853	
11-6					626	
11-7					4,496	
11-8					3,090	
11-9					1,388	
11-10					2,955	
				SECTOR TOTALS:		
12-1					0	
12-2					457	
12-3					518	
12-4					628	
12-5					221	
12-6					433	
12-7					48	
12-8					134	
12-9					0	
12-10					5	
				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) 2000 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					295	
13-3					154	
13-4					0	
13-5					0	
13-6					0	
13-7					0	
13-8					0	
13-9					0	
13-10					20	
				SECTOR TOTALS:		
14-1					0	
14-2					0	
14-3					19	
14-4					0	
14-5					0	
14-6					0	
14-7					0	
14-8					0	
14-9					217	
14-10					1,633	
				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) 2000 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					0	
15-3					60	
15-4					0	
15-5					192	
15-6					0	
15-7					0	
15-8					0	
15-9					3	
15-10					1,204	
				SECTOR TOTALS:		
16-1					0	
16-2					0	
16-3					0	
16-4					0	
16-5					842	
16-6					734	
16-7					5	
16-8					0	
16-9					0	
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) 2000 Census

Manual Dose Assessment Worksheet - TEDE

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 Dose — Release Duration (RD): hrs

Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7 = Col. 2 x 3 x 4 x 6	Col. 8
Distance	NG Release Rate (Ci/sec)	Xu/Q (from tables)	$\frac{1}{WS}$ (M/sec)	$\frac{K1^{(1)}}{C^{(2)}}$	$K1 + C^{(2)}$	Dose Rate(DR) (mrem/hr)	Dose (mrem) (DR x RD)
Site Boundary			$\frac{1}{\quad}$			=	
2 Mile			$\frac{1}{\quad}$			=	
5 Mile			$\frac{1}{\quad}$			=	
10 Mile			$\frac{1}{\quad}$			=	

(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 (Child) 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 during dose assessment only if significant particulates are identified in the release (E.G., FSB Accident). Control Room Staff need not consider particulates.

Manual Dose Assessment Worksheet

CDE - 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) CDE – Thyroid Exposure Release Duration (RD)* = hrs.

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

Col. 1	Col. 2	Col. 3	Col. 4	Col. 5 = Col. 2 x 3 x 4	Col. 6
Distance	Xu/Q (from tables)	$\frac{1}{WS}$ (m/sec)	B (above)	Dose Rate (mrem/hr)	Dose (mrem) (DR X RD)
Site Boundary	X	$\frac{1}{\square}$	X (+) =	=	
2 Mile	X	$\frac{1}{\square}$	X (+) =	=	
5 Mile	X	$\frac{1}{\square}$	X (+) =	=	
10 Mile	X	$\frac{1}{\square}$	X (+) =	=	

* If the projected Release Duration (RD) is not known use four hours as a default value.

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.

RESPONSE CHECK FOR RADIOACTIVE AIRBORNE CONCENTRATION

INSTRUMENT TYPE: _____ **MODEL NO.**_____ **SERIAL NO.**_____ **CAL. DUE DATE:** _____

1GAMMA SOURCE: _____ **IDENTIFICATION NO.:**_____ **ACCEPTABLE RANGE:** _____

Tech.	Date	Time	Source	Background			Total Counts	Source		Net Counts	Circuit Check	Source Check	Remarks
				TOTAL COUNTS	COUNT TIME MIN.	COUNTS/ MIN.		COUNT TIME MIN.	COUNTS/ MIN.				

LOGGED BY:_____ **DATE:** _____

(Technician)

Form EP-15 Rev 0

DETERMINATION OF RADIOACTIVE AIRBORNE CONCENTRATION

SAMPLE LOCATION	SAMPLE TIME		SAMPLE DURATION (MINUTES)	START SAMPLE FLOW RATE (LPM)	END SAMPLE FLOW RATE (LPM)	AVERAGE FLOW RATE (LPM)	SAMPLE VOLUME (L)	TECHNICIAN
	START	STOP						

❑ *Breathing*

❑ *General Area*

COUNTER DATA:

*1. BETA COUNTER*_____ *Serial No.*_____ *MDC*_____ *Button Source Response* _____

2. CHARCOAL MODEL NO. MS-2 *Serial No.*_____ *MDC*_____ *Battery Test* _____

*3. AIR SAMPLER MODEL*_____ *Serial No.*_____ *3600 Cycle Test (AC only RM-14)* _____

SAMPLE DATE AND NUMBER	TYPE	TIME COUNT STARTED	TOTAL COUNTS	COUNT TIME (MINUTE)	GROSS CPM	BACKGROUND CPM	NET CPM	COUNT EFF.	CORR. FACT/S A	ACTIVITY uCi/cc	DAC		COUNTED BY
	SILVER ZEOLITE												
	BETA PART.												
	GAMMA CHAR.												
	SILVER ZEOLITE												
	BETA PART.												
	GAMMA CHAR.												
	SILVER ZEOLITE												
	BETA PART.												
	GAMMA CHAR.												

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 60,000 cfm

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

*** If actual value is unavailable, use 300 GPM

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

Steam Generator Safety Flow rate 7.60 E+5 lbm / hr / safety

#22 Auxiliary Feed water Pump 2.5×10^4 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)
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 =		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

*** If actual value is unavailable, use 300 GPM

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

Steam Generator Safety Flow rate 5.50 E+5 lbm / hr / safety

32 Auxiliary Feed water Pump Flow rate 4.00 E+4 lbm/hr.

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. JIC Actions:
   - G. OSC/TSC Status:
   - H. CSC (WPO):
   - I. Offsite Actions (ie: schools, facility activation, PARs, etc.)

5. Status of Offsite Notifications: ❑ None ❑ NYSEMO / 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 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:

JIC STAFFING FORM

Position	1st Shift Name (print)	Time Arrived	Time Departed	2nd Shift Name (print)	Time Arrived	Time Departed
JIC Director						
Company Spokesperson						
Technical Advisor						
JIC News Release Writer						
Radiological Advisor						
Com. Rep.						
Corporate Liaison						
Government Liaison						
Logistics Manager						
Documenter						
Media Room Liaison						
Entergy IT Support						
Support Services Staff						
Media Monitoring Coord.						
AV Production Manager						
AV / Graphics Support Staff						

Date: _____

Shaded positions entail functions that are required for activation

Written Statement Distribution Checklist

Follow each step below as assigned. Some steps are concurrent, as noted by the numbering. Logistics Manager is to confirm all steps are completed at conclusion.		Statement Number:	
Step #	**JIC Position Responsible**	Detail Description	Completed By (**Print**) and Time
1	Logistics Manager	Obtain "APPROVED WRITTEN STATEMENT/NEWS RELEASE" from JIC Writer and start distribution process: ❑ Have Company Spokesperson initial on back, notify Documenter of approval time ❑ Start a Written Statement Distribution Checklist and Fax Distribution Sheet in Position Binder. ❑ 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 with 2 copies (one for further copying and one for fax distribution described below) ❑ Provide original initialed copy back to Logistics Manager	
3a	Support Services Staff	*Make 25+ copies of final written statement/news releases and coordinate distribution with other Support Services Staff as follows:* ❑ 1 Copy **to** NYS 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.) ❑ 2 Copies **to** Media Monitoring Room Personnel ❑ 8 Copies **to** Entergy Work Room ❑ 1 Copy to Entergy JIC Government Liaison ❑ 1 Copy **to** Entergy Corporate Liaison ❑ Upon completion, provide this Distribution Checklist **to** Logistics Manager	

Written Statement Distribution Checklist

Follow each step below as assigned. Logistics Manager is to confirm all steps are completed.		Statement Number:	
3b	Support Service Staff i	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 fax machine ❑ Complete fax distribution to other emergency facilities and other Entergy locations . ❑ (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 Logistics Manager	
4	Logistics Manager	Provide **original (initialed)** statement; fax confirmation(s); and this Distribution Checklist to JIC 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 email or fax or from/via JIC Technical Advisor)	Entergy Work Room ❑ JIC Technical Advisor ❑ Company Spokesperson ❑ JIC Director ❑ Radiological Advisor ❑ JIC Documenter ❑ State PIO (Radiological Data Forms, Part 1 and 2 **ONLY**) ❑ NRC (if present) ❑ FEMA (if present)	
Written Statements, including news releases	Follow Written Statement Distribution Checklist form	
All Other Information Received (via fax or otherwise)	Request distribution instructions from the Logistics Manager and/or JIC Director	

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 JIC Government Liaison

Joint Information 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 #: _____	KI Issued: Date: Time:
Initial Exposure Limit:	WBC ❑ TRNG ❑ PHY ❑ RESP ❑ SCBA ❑	

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 normal occupational limit or 1000 mrem emergency limit 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.

Form EP-29 Rev 1

MONITORING TEAM SURVEY DATA LOG

Team Name:_____ Date:_____

Team Member Names:_____

Count Rate Meter, Model#: **E-140N** Serial#:_____ **Ion Chamber,** Model#: **R-02** Serial#:_____

SURVEY LOCATION (Sector/Mile, Street/Intersection/mi. to Int.)	TIME (HH:MM) [1]	(CPM) [2][4]	OW (mR/hr) [3]	CW (mR/hr) [3]	(OW-CW) X2 (mrad/hr) [3]	REMARKS

NOTES: [1] 24-hr clock
[2] E-140N, Count Rate Meter data.
[3] RO-2, Ion Chamber data.
[4] 1000 CPM = 0.1mR/hr (OW)

Monitoring Team Sample Data

Team Name: _____ **Date:** _____

Team Member Names: _____

Sample Location:

Sector: _____ Mile: _____

County: _____ Atlas Key Map #: _____ Grid: _____

Street: _____ Nearest Intersect: _____ Mi. to Intersect.: _____

Air Sampling:

Air Sampler, Model #: **H-809V-1** Serial #: _____

Particulate Filter: Y N Iodine (C): Y N Iodine (AgZ): Y N

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 #: **E-140N/RM14** 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

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

Where: Vol[1] is in liters (Liters = 28.32 x FT^3)
Efficiency[2] is 0.1 for particulate, 0.0034 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

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 Communications Representative.

I'm calling to inform you that...

_____
_____
_____
_____
_____
_____

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 Com Rep: _____

Time Calls Completed: _____

JIC 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):**
IP2: _____ IP3: _____ Site: _____	
RADIOLOGICAL CONDITIONS:	**KEY MESSAGES/EMPATHY:**

GRAPHICS NEEDED:

QUESTIONS REQUIRING FOLLOW-UP:

RUMORS TO ADDRESS:

Primary - ERO Activation Checklist

Dialogic Notification System Activation

1. Verify that the Shift Manager has determined that ERO mobilization or notification is needed.
2. Turn on Control Room Pagers.
3. Call (b)(7)(F)

NOTE: for steps #4, #5, and #6 you will be asked for a confirmation of the numbers you entered.

4. You will hear: "***This is the remote activation module. Please enter your company ID number followed by the pound (#) sign.***" (b)(7)(F)
5. You will hear: "**Please enter your scenario activation password followed by the # sign**" _ _ _ _ _ #
6. You will hear: "***To start a scenario, enter the scenario ID followed by the # sign, or press pound alone for more options.***" _ _ _ _ _ #
7. You will hear: "***To listen to the current scenario message press 1, to re-record the scenario message press 2, to start the scenario press 3, to return to the main menu press #***" **PRESS 3**
8. AFTER you hear: "***Scenario is building***" HANG UP THE PHONE. **HANG UP**
9. Enter the time you completed Dialogic activation. **Time:**

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

10. Verify the notification system successfully activated by either Control Room pager activating.
    IF neither pager activates within 5 minutes, THEN go to Step 13.
11. Inform the Shift Manager that you have completed ERO activation or notification.
12. Date and sign this form when complete. **Date:** **Signature:**

Continue ONLY if Control Room Pagers Did Not Activate.

13. (b)(7)(F)
14. IF Security pager activated THEN go to step 11.
15. IF Security pager did not activate THEN repeat steps 3 through 8 a second time.

    IF during the 2nd attempt, on step 8, you hear: "***The scenario is currently active. Do you wish to stop the scenario?***" THEN **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: #**
16. 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 located in the folder presently being used.

EX. 7F EX. 7F

EX. 7F

Backup - ERO Activation Checklist

Backup Notification System Activation

1. Use the Backup Notification System ONLY if the Primary Dialogic System fails to activate.
2. Verify Control Room Pagers ON.
3. Call (b)(7)(F)

NOTE: for steps 4, 5, and 6 you will be asked for a confirmation of the numbers you entered.

4. You will hear: "***This is the remote activation module. Please enter your company ID number followed by the pound sign.***" (b)(7)(F)
5. You will hear: "**Please enter your scenario activation password followed by the pound sign**" _ _ _ _ _ #
6. You will hear: "***To start a scenario, enter the scenario ID followed by the pound sign, or press pound alone for more options.***" _ _ _ _ _ #
7. You will hear: "***To listen to the current scenario message press 1, to re-record the scenario message press 2, to start the scenario press 3, to return to the main menu press pound***" **PRESS 3**
8. AFTER you hear: "***The scenario is building***" HANG UP THE PHONE. **HANG UP**
9. Enter the time you completed Dialogic activation. **Time:**

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

10. Verify the Backup notification system successfully activated by either Control Room pager activating. IF neither pager activates within 5 minutes, THEN go to Step 13.
11. Inform the Shift Manager that you have completed ERO activation or notification.
12. Date and sign this form when complete. **Date:** **Signature:**

Continue ONLY if Control Room Pagers Did Not Activate.

13. (b)(7)(F)
14. IF Security pager activated THEN go to step 11.
15. IF Security pager did not activate THEN repeat steps 3 through 8 a second time.
    IF during the 2nd attempt, on step 8, you hear: "***The scenario is currently active. Do you wish to stop the scenario?***" THEN **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 #**
16. IF a Control Room or Security pager does not sound after the 2nd attempt THEN activate ERO pagers using Microsoft Outlook E-mail as follows: Create a new message and type in the following address: (b)(7)(F)
    a. Type in the pager event code from the label of the envelope being used. (b)(7)(F)
    b. Type in the emergency classification (NUE, Alert, SAE, GE)
    c. Type in Report to Facility or Report to Backup Facility.
    d. Send message. Verify pagers activate (approx. 3-5 min). If not activated, call Security at 5330 and ask if their pager activated. If pagers did not activate, recheck address and resend.

Emergency Team Briefing Form

Team Number:

Lead Briefer:
☐ I&C ☐ Rad ☐ Main
☐ Ops ☐ Chem ☐ Sec

Date: _____
Time:

Location of Work:

Task: _____

Expected Hazard: _____

Attach any additional supporting documentation

Tools, Keys, Equipment and/or Supplies:

	Name/ Avail Dose	Name/ Avail Dose
Team Members: *	_____	_____
	_____	_____
	_____	_____

* Designate one member as the Team Leader

Rad. Brief: ☐ Complete ☐ **N/A** **Estimated Dose:** _____

ERWP: ☐ N/A **or #**_____

Contact Numbers:
_____

Primary Method(s) of Communications: ☐ **Radio** ☐ **Phone** ☐ **Other:**

Recommended Route to Work:

Time Release to Field: **Expected Duration:**

Status / Debrief Items: ☐ Completed **Debriefer:** _____

Emergency Team Briefing Form

Team Dispatch Guidelines:

1. Do they know the **Scope of Job & Approximate Duration** ❑
2. **Technical Briefing Complete,** including scope of job ❑
3. **Radiological Briefing Complete,** ❑
4. Do they have **HP Coverage**, if needed ❑
5. Tell them their **Available Dose,** available dose on form ❑
6. Tell them about non-radiological **Safety Issues,** electrical, confined space, lighting, chemical, falls, fire, other work in area, running equipment. ❑
7. Assign and tell team their **Team Number** and list it on form ❑
8. Do they know the **Location of Job and Route,** is it listed on form ❑
9. Do they have their **Tools, Needed Keys and/or Parts** ❑
10. Give them Coordinators **Phone Numbers** ❑
11. Tell them to **Report Back Every 20 - 30 Minutes** ❑
12. Have them perform a **Radio Check** when they get in the field ❑
13. Provide team leader with copy of Team Briefing form ❑

Team Check-In Guidelines: (completed by Team Coordinator)

1. Ensure **All Team Members Returned** ❑
2. Record **Dose Received** ❑
3. Ask about **Job Status** ❑
4. Have them **Return Radio to Charger** ❑
5. Tell them to **Report to Lead Coordinator for Debriefing** ❑

Team Debriefing Guidelines: (completed by Lead Coordinator) Yes

1. Are there any outstanding safety issues to address? ❑
2. Were any Non-Quality or Non-Standard Parts used? ❑
3. Were any Temporary Facility Changes made? ❑
4. Was any excess torque or force applied to components? ❑
5. Was any valve position or equipment status changed? ❑
6. Was any work performed which would normally require follow-up Testing ❑

Attach further details as needed to ensure outstanding issues can be addressed during Recovery Phase.

Task Assignment Log

Task Description / Lead Coordinator		Date/ Time Assigned	Date/ Time Competed
_____ _____			
Priority	**Lead Coordinator**		
_____ _____			
Priority	**Lead Coordinator**		
_____ _____			
Priority	**Lead Coordinator**		
_____ _____			
Priority	**Lead Coordinator**		
_____ _____			
Priority	**Lead Coordinator**		

Priorities:

High (H): The mission is necessary to protect the immediate health and safety of the public and/or plant personnel.

Medium (M): Any task that requires action by the OSC and should be worked on at the immediate time period, but does not fit the criteria of a health and safety of the public related mission.

Low (L): Any mission which can be worked on when resources permit.

Emergency Radiation Work Permit

ERWP Number: _____	**Written By:** _____
Date:	**Approved By:** _____ (RP Coordinator)

Work Area: _____

_____

Radiation Readings: ☐ Based on recent survey (post emergency) **SurveyTime:** _____

☐ Based on Old Surveys & Plant Conditions (update as soon as possible)

High General Area Reading: _____ **mR/Hr** **Updates:** _____ **mR/Hr** _____ **mR/Hr**

High Equipment Contact Readings: _____/_____ **mR/Hr** **On:** _____

Surface Contamination Levels: _____ **DPM/100CM^2** _____ **DPM/100CM^2**

Internal System Contamination Expected: ☐ **Yes** ☐ **No** **Airborne Levels*:** ☐ **Yes** ☐ **No**

* Attach Sample Results -- Consider giving KI prior to dispatching teams IF thyroid dose is expected to be > 25 Rem

Recommended Respirator Protection: _____

To be Worn When:

Dosimetry Required: ☐ **TLD** ☐ **SRD Range(s)** ☐ **Alarming Set At:**

Recommended Protective Clothing: _____

_____

Hold Radiation Limit: _____ **mR/Hr** _____ **mrem**

Turn Back Radiation Limit: _____ **mR/Hr** _____ **mrem**

RP Technician Required: ☐ **No** ☐ **Until on location (survey)**

☐ **Self Monitoring** ☐ **Continuously** ☐ **To Open System**

Other Instructions: _____

_____

Normal IPEC OSC Staffing

At least 2 individuals shall be members of the First Aid Team

No.	Positions	Number Present	Number Needed	Called
1	OSC Manager			
1	Team Coordinator			
2	Accountability Clerks			
1	Rad Protection Team Leader			
1	Chemistry Team Leader			
1	Operations Team Leader			
1	Maintenance Team Leader			
1	Security Team Leader			
1	I&C Team Leader			
2	I&C Technicians			
1	Chemistry Technician			
2	Electrical Technicians			
2	Mechanical Technicians			
4	HP Technicians			
-	Operations Personnel			
-	Other			
21	Total number of individuals assigned to OSC			

OSC Manager should enter number of each positions needed based on event.

Team Coordinator: _____ **ERO Tracking Log** Date: _____

Team #	Location / Task	Time Out	Due Back	Time In	Team Member Names	Avail. Exposure	Dose Rec	New Avail Exposure	Job Status
		Lead Coordinator							
		Lead Coordinator							
		Lead Coordinator							
		Lead Coordinator							

NOTES:

1. Use this form (or similar electronic spreadsheet) to track individuals located outside the TSC/OSC Complex, CR or Security Posts
2. Individual emergency exposures should be tracked on Individual Exposure Tracking Log (Form EP-29)

Onsite ERO Shift Rosters

EOF POSITION	Shift 1 Individual(s)		Shift 2 Individual(s)	
Emergency Director				
EOF Manager				
ORM				
Dose Assessor				
ED Technical Advisor				
EOF Information Liaison				
Offsite Communicator				
Field Team Communicator				
Equipment Operator				
EOF Lead Offsite Liaison				
State EOC Technical Liaison				
Westchester EOC Technical Liaison				
Putnam EOC Technical Liaison				
Rockland EOC Technical Liaison				
Orange EOC Technical Liaison				
Admin and Logistics Manager				
Offsite Field Monitoring Teams				
EOF Admin Support (3)				

Onsite ERO Shift Rosters				
TSC POSITION	**Shift 1 Individual(s)**		**Shift 2 Individual(s)**	
Emergency Plan Manager				
TSC Manager				
Technical Assessment Coordinator				
Operations Advisor				
Reactor Engineer				
Mechanical Engineer				
Elec / I&C Engineer				
SAMG Evaluator				
TSC IT Support				
TSC Communicator				
TSC Clerical Staff (2)				
Others				

Onsite ERO Shift Rosters

OSC POSITION	Shift 1 Individual(s)		Shift 2 Individual(s)	
OSC Manager				
Team Coordinator				
Operations Team Leader				
RP Team Leader				
Maintenance Team Leader				
I&C Team Leader				
Security Team Leader				
Accountability Clerk				
HP Technicians				
Chemistry Team Leader				
Chemistry Technicians				
I&C Planner				
I&C Technicians				

Onsite ERO Shift Rosters

OSC POSITION	Shift 1 Individual(s)		Shift 2 Individual(s)	
Mechanical Supervisor				
Mechanical Planner				
Electrical Planner				
Mechanical / Electrical Technicians				
Material Storekeeper				
Others				

Notes:

1. Call the EOF Admin Staff and or Fax them the EOF Section of this form to obtain names of individuals filling EOF positions on the first shift
2. Call individuals filling Misc. positions outside the EOF,TSC or OSC
3. With the Support of the facility clerical staffs use Emergency Telephone Book to call in individuals to fill second shift.

Onsite ERO Shift Rosters

CCR POSITION	Shift 1 Individual(s)		Shift 2 Individual(s)	
Plant Operations Manager				
CCR Facility Communicator				
CCR Admin Support				
Others				

Notes:

IPEC OSC Guidelines

General Guidelines	*BE CAREFUL*
1. Always ensure you card into the Accountability Card Reader or sign in on an Accountability Roster when you arrive at the Operations Support Center.	
2. Maintain a quiet professional manner throughout the event.	
3. Pay attention to the facility briefings and maintain awareness of conditions and events.	
4. **DO NOT** leave the TSC/OSC Complex without checking out with the Team Coordinator. or the Accountability Clerk **NOTE**: The restrooms at the top of the stairs are still within the TSC/OSC Complex, but you should inform a coworker when going there.	

• **Team Dispatch**	*WORK SAFE*
1. When selected to perform a task in the field, receive job briefing from the Team Leader (Operations, Maintenance, I&C or Radiation Protection) for your assigned task. **IF** the job involves possible radiological exposures **THEN** the Radiation Protection Coordinator or an HP Supervisor will provide a you with a radiological briefing. *These briefs should be conducted in one of the briefing rooms.* The Lead Coordinator will give you the Team Briefing Form when you are being dispatched after completion of briefing.	
2. **ALWAYS** check out with the Team Coordinator prior to leaving TSC/OSC Complex to perform a task – Always take a radio and test it before going out into the field unless directed otherwise by the Team Coordinator. Give the Team Coordinator the Team Briefing Form when you are checking out.	
3. Maintain communications with the Team Coordinator while in the field. Report any unexpected conditions or events immediately.	
4. **ALWAYS** check in with the Team Coordinator and report any exposure you received IMMEDIATELY upon your return to the TSC/OSC Complex after performing a task. **REPORT** any safety concerns which may be important for future work or to teams currently in the field The Team Coordinator will return the Team Briefing Form to you after you have checked in with him/her.	
5. Report to the Lead Briefer (Operations, Maintenance, I&C or Radiation Protection) for a de-briefing after you have completed checking in with the Team Coordinator. Report: Status of the assigned task Any deviations taken from normal work practices or quality control processes Any follow-up task(s) you feel are needed to ensure assignment goal is completed	
6. After the team de-briefing return to the pool area and await further assignment. Brief other Technicians in the pool on tasks you performed and conditions in the field.	

Assembly Area Coordinator Instructions

Instructions	Notes
1. Review any special instructions with OSC Manager and insure you have a full understanding of priorities Record OSC Manager Contact Number: _____	
2. Assume the duties of the Energy Education Center (EEC) or Generation Support Building (GSB) Assembly Area Coordinator. (or Indian Point Training Center (IPTC) Assembly Area Coordinator if needed). A. Report to the EEC or GSB (or IPTC if needed) B. Establish telephone communications with the OSC Manager, i. Call the OSC Manager to inform them you are in place, provide them with phone number at your location. ii. Draft an individual to remain at phone and communicate messages to you as necessary. iii. In the EEC, set up, or direct assistance to set up, the PA System, stored in the security area behind the access control desk. In the IPTC, ensure that the installed PA System is working.	
3. Draft at least 3 Management personnel to assist in controlling personnel located at the Assembly Area. Have them direct assembled personnel to form groups by disciplines and stand by for further information and instructions.	
4. Do not allow personnel to leave the Assembly Area until you have verified with the OSC Manager that there has been no release of Radioactive Materials.	
5. Periodically (~every 30 min) contact the OSC Manager for brief overview of events and plant conditions.	
6. Periodically (~every 30 min) brief personnel in the Assembly Area on events and plant conditions.	
7. Locate and dispatch additional personnel to respond inside the Protected Area or to the EOF as needed.	
8. When directed by the OSC Manager either: A. Dismiss Individuals from the Site B. Release individuals back to work C. Direct individuals to a designated location (on or offsite)	
9. IF directed by Offsite Radiological Manager (ORM), distribute KI to personnel in the assembly areas.	
10. When all personnel have departed from the Assembly Area A. Return Portable PA System to it's storage location. B. Return Assembly Area Phone to it's storage location. C. Document any problems with equipment, personnel or procedures observed during event.	

Normal IPEC TSC Staffing				
No.	**Positions**	**Number Present**	**Number Needed**	**Called**
1	Emergency Plant Manager			
1	TSC Manager			
1	Technical Assessment Coordinator			
1	Operations Advisor			
1	Reactor Engineer			
	Electrical / I&C Engineer			
1	Mechanical Engineer			
1	TSC IT Support			
1	TSC Communicator			
2	TSC Clerical Support			
1	SAMG Evaluator			
10	Total number of individuals assigned to TSC			

TSC Manager should enter number of each position needed based on event.

Accountability Roster

Facility: ❑ TSC / OSC Complex ❑ Control Room ❑ Command Guard House

Unit: ❑ Unit 2 ❑ Unit 3

Security Badge #	Print Name (Last / First)	Location (If known)	Verified to be ok (√)

Accountability checked by: _____ on _____ at _____
(Signature) (Date) (Time)

EOF Security Sign In Log

Security Officer: (print name)		Date:	

Print Name	Time In / Out	Time In / Out	Organization
			❑ Indian Pt. ❑ State ❑ County ❑ NRC ❑ FEMA ❑ Other
			❑ Indian Pt. ❑ State ❑ County ❑ NRC ❑ FEMA ❑ Other
			❑ Indian Pt. ❑ State ❑ County ❑ NRC ❑ FEMA ❑ Other
			❑ Indian Pt. ❑ State ❑ County ❑ NRC ❑ FEMA ❑ Other
			❑ Indian Pt. ❑ State ❑ County ❑ NRC ❑ FEMA ❑ Other
			❑ Indian Pt. ❑ State ❑ County ❑ NRC ❑ FEMA ❑ Other
			❑ Indian Pt. ❑ State ❑ County ❑ NRC ❑ FEMA ❑ Other
			❑ Indian Pt. ❑ State ❑ County ❑ NRC ❑ FEMA ❑ Other
			❑ Indian Pt. ❑ State ❑ County ❑ NRC ❑ FEMA ❑ Other
			❑ Indian Pt. ❑ State ❑ County ❑ NRC ❑ FEMA ❑ Other
			❑ Indian Pt. ❑ State ❑ County ❑ NRC ❑ FEMA ❑ Other
			❑ Indian Pt. ❑ State ❑ County ❑ NRC ❑ FEMA ❑ Other

Form EP-48 Rev 0

Containment Discharge Worksheet

Date: Time: Name:

VC Activities	Noble Gas	Particulates	Radioiodines
µCi/cc			

Estimated Begin Release Time:	hr.	
Estimated End Release Time	hr.	
Estimated Release Duration:	hrs.	
Estimated Plant Vent Flow Rate	CFM	
Estimated Plant Vent Noble Gas Reading		µCi/cc
Estimated Release Rate	Noble Gas	Ci/sec
	Radioiodines	Ci/sec
	Particulates	Ci/sec
Wind Speed	m/s	
Wind Direction	Degrees	
Pasquill Category	(A-G)	
Forecasted Weather:		

Projected Exposure:	TEDE – Whole Body (REM)	TODE – Thyroid (REM)
S.B		
2 Mile		
5 Mile		
10 Mile		

Emergency Director Concurrence	☐ Received	_____ Print Name
Nuclear Regulatory Commission Concurrence	☐ Received	_____ Print Name

Notifications: ☐ NYS ☐ Westchester ☐ Rockland ☐ Putnam ☐ Orange

Containment Discharge Worksheet

Date: Time: Name:

Date @ Start of Release:	Time @ Start of Release:	
Date @ End of Release:	Time @ End of Release:	
Release Duration:	hrs.	
Total Volume Released:	ft^3	
Average Reading – Plant Vent Monitor for the Release		µCi/cc
Total Release	Noble Gas	Curies
	Radioiodines	Curies
	Particulates	Curies

Plant Vent Samples

Isotope	µCi/cc	Time of Sample	Isotope	µCi/cc	Time of Sample

SURFACE CONTAMINATION CHECK

Date_____ Instr. Model _____

Field Team Member_____ Instr. Number _____

LOCATION	TIME	SURFACE SMEARED	SMEAR + BKGD CPM	BKGD CPM	SMEAR CPM	EQUIVALENT DPM/100cm^2 *

* Multiply the smear CPM by 10 to ascertain equivalent DPM/100cm^2

Form EP-50, Rev 1

Unit 2 Equipment Status – 42B

Parameter		Time				Parameter		Time			
Offsite Pwr. Avail	138KV					Service Water Pumps	#21				
	13.8KV						#22				
6900 Volt	BUS NO. 1						#23				
	BUS NO. 2						#24				
	BUS NO. 3						#25				
	BUS NO. 4						#26				
	BUS NO. 5					Circ Water Pumps	#21				
	BUS NO. 6						#22				
480 Volt	BUS NO. 2A						#23				
	BUS NO. 3A						#24				
	BUS NO. 5A						#25				
	BUS NO. 6A						#26				
Emergency D/Gs	#21					Condensate Pumps	#21				
	#22						#22				
	#23						#23				
Gas Turbines	GT-1					Comp Cool Heat Exch	#21				
	GT-2						#22				
	GT-3					RHR Heat Exch.	#21				
SIS Pumps	#21						#22				
	#22					Fan Cooler Units	#21				
	#23						#22				
RHR Pumps	#21						#23				
	#22						#24				
Charging Pumps	#21						#25				
	#22										
	#23					VC Isol. Phase A	(Y/N)				
Rx Coolant Pumps	#21					VC Isol. Phase B	(Y/N)				
	#22					VC Isol. Vent.	(Y/N)				
	#23										
	#24					Exceptions					
Component Cool Pumps	#21										
	#22										
	#23					Hi Hd SIS Flow	#21 (GPM)				
Aux Comp Cool Pumps	#21						#22 (GPM)				
	#22						#23 (GPM)				
Aux Feed Water Pumps	#21						#24 (GPM)				
	#22					Lo Hd SIS Flow	#21 (GPM)				
	#23						#22 (GPM)				
Cont Spray Pumps	#21						#23 (GPM)				
	#22						#24 (GPM)				
Recir Pumps	#21					Accumulator Level	#21 (%)				
	#22						#22 (%)				
							#23 (%)				
							#24 (%)				

S = Stand By O = Operating OS = Out of Service

Unit 2 Radiological Data 42C

Parameter		Time	Time	Time	Time	Time	Time	Time
R-5987 MCC 98'	mR/hr							
R-1 CCR	mR/hr							
R-2 VC 80'	mR/hr							
R-4 Charging Pump	mR/hr							
R-5 F.S.B.	mR/hr							
R-6 Sample Room	mR/hr							
R-7 VC Seal Table	mR/hr							
R-41 VC Part.	µCi/cc							
R-42 VC Gas	µCi/cc							
R-43 Vent Part.	µCi/cc							
R-44 Vent Gas	µCi/cc							
"R-44 VENT I-131	µCi/cc							
R-45 Air Ejector	µCi/cc							
R-46 F.C. Water	µCi/cc							
R-47 Comp. Cool.	µCi/cc							
R-48 Liq. Waste	µCi/cc							
R-49 S/G B.D.	µCi/cc							
R-53 F.C. Water	µCi/cc							
R-25 VC Hi-Rge.	R/hr							
R-26 VC Hi-Rge.	R/hr							
"R-27 Vent Monitor	µCi/cc							
"R-27 Vent Flow Rate	CFM							
R-27 Vent Disch. Rate	µCi/sec							
R-28 Main Steam Rad Mon.	CPM							
R-29 Main Steam Rad Mon.	CPM							
R-30 Main Steam Rad Mon.	CPM							
R-31 Main Steam Rad Mon.	CPM							
"Vent Flow Rate	CFM							
"Main Steam Exh.	Lbs/hr							
"Air Ejector (meas. Value)	CFM							
Wind Speed	m/sec							
Wind Direction	(0-360)							
Pasquill Category	(A-G)							

** Manual entry in EDDS & Proteus

Communications Message Form

From: _____	**Route To:**
To: _____	❑ Emergency Director (ED)
Date: _____	❑ Plant Operations Manager (POM)
Time: _____	❑ Emergency Plant Manager (EPM)
	❑ Offsite Radiological Manager (ORM)
Message:	❑ TSC Manager
	❑ OSC Manager
	❑ Other:

Comments:	Signature:

Unit 3 Plant Parameters – 31A

Monitor	Units	Status	Time	Time	Time
Incore T/C Time Avg	DegF				
Highest CET	DegF				
RCL Avg Tave	DegF				
RCL Hot Avg T	DegF				
RCS Pressure Loop 1	PSIG				
RCS Pressure Loop 4	PSIG				
RCS Sat Mar Low	DegF				
CET Temp Sat Max	DegF				
RCP Running	#				
Pzr Lvl 1/2/3/ Ave	PCT				
Charging Pump Disc	GPM				
SG # 31 WR Lvl	PCT				
SG # 32 WR Lvl	PCT				
SG # 33 WR Lvl	PCT				
SG # 34 WR Lvl	PCT				
SG A Stm P	PSIG				
SG B Stm P	PSIG				
SG C Stm P	PSIG				
SG D Stm P	PSIG				
Cnmt P 1/2/3 Avg	PSIG				
Aux FD to SG # 31	GPM				
Aux FD to SG # 32	GPM				
Aux FD to SG # 33	GPM				
Aux FD to SG # 34	GPM				
CST Lvl LT-1128	FT				
CST Lvl LT-1128a	FT				
Cnmt Avg Temp	DegF				
Cnmt Sump LT-1255	FT				
Cnmt Sump LT-1256	FT				
Recirc Sump LT-1251	FT				
Recirc Sump LT-1252	FT				
RWST Lvl	FT				
CSAT Lvl	FT				
Cnmt H2 Conc A	PCT				
Cnmt H2 Conc B	PCT				
RVLIS Dyn Head Lvl A	PCT				
RVLIS Dyn Head Lvl A	PCT				
RVLIS Full Rng A	PCT				
RVLIS Full Rng B	PCT				
Src Rng Det N31	CPS				
Src Rng Det N32	CPS				
Int Rng Det N35	AMPS				
Int Rng Det N36	AMPS				
WR Start-Up, High	DPM				
Power Rng Det Avg	PCT				

O_S = Out of Service U = Bad Data / Out of Range A = Alarm

S = Out of Scan X = Out of Alarm

Unit 3 Radiological Data – 31B

			Time	Time	Time
Monitor	Units	Status			
R-01	mR/hr				
R-02	mR/hr				
R-04	mR/hr				
R-05	mR/hr				
R-06	mR/hr				
R-07	mR/hr				
R-08	mR/hr				
R-11	µCi/cc				
R-12	µCi/cc				
R-14	µCi/cc				
R-15	µCi/cc				
R-16A	µCi/cc				
R-16B	µCi/cc				
R-17A	µCi/ml				
R-17B	µCi/ml				
R-18	µCi/cc				
R-19	µCi/cc				
R-23	µCi/cc				
R-25	R/hr				
R-26	R/hr				
R-27	µCi/sec				
Y9051A	KCFM				
R-59	µCi/cc				
R-62A	µCi/cc				
R-62B	µCi/cc				
R-62D	µCi/cc				
R-63A	µCi/cc				
R-63B	µCi/cc				
R-64	mR/hr				
R-65	mR/hr				
R-66	mR/hr				
R-67	mR/hr				
R-68	mR/hr				
R-69	mR/hr				
R-70	mR/hr				

OS = Out of Service
S = Out of Scan
U = Bad Data / Out of Range
X = Out of Alarm

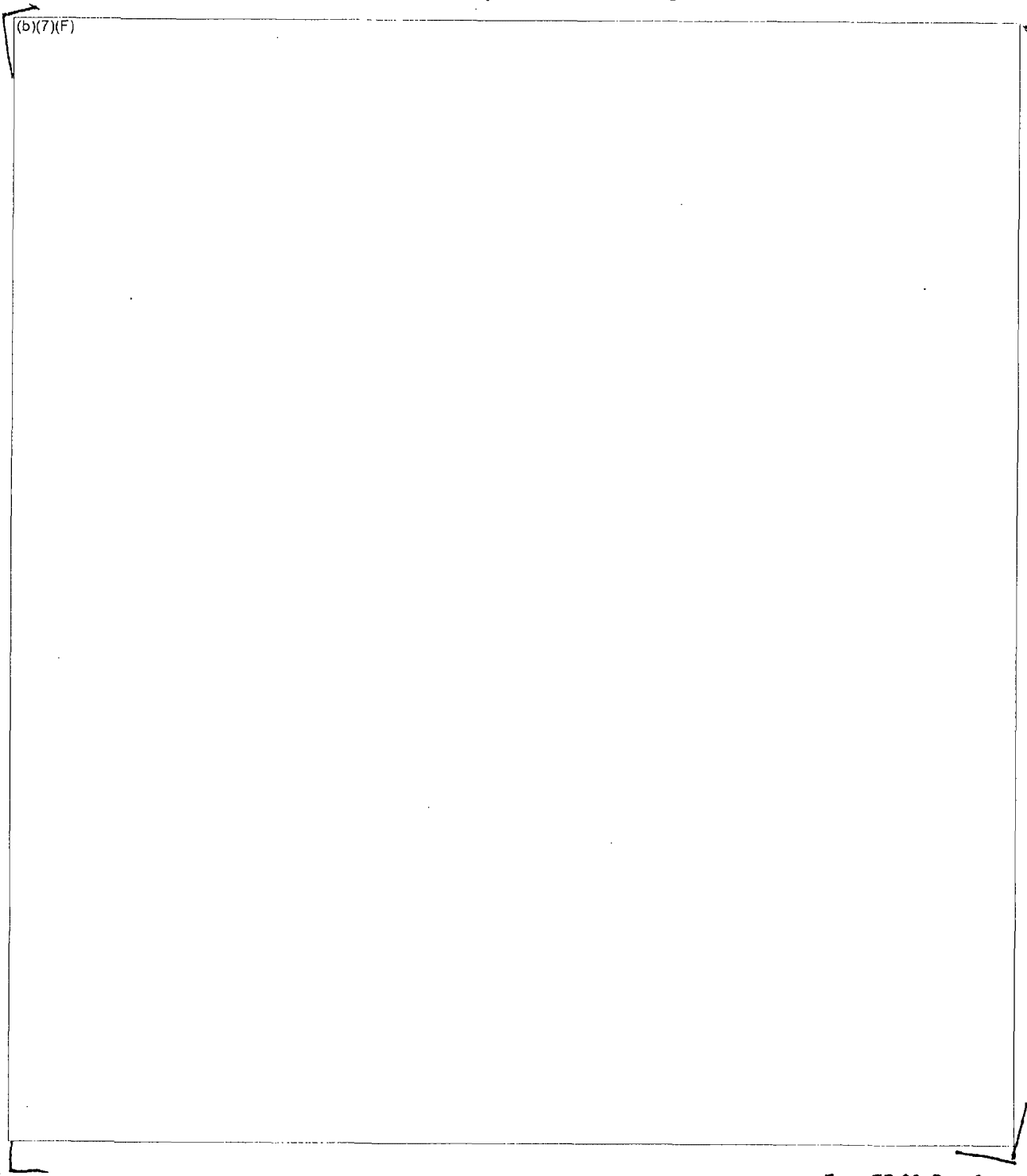
Unit 3 Equipment Status – 31C

		Time	Time	Time			Time	Time	Time
	Bus					Bus			
Reactor Coolant Pumps	31-1				RHR Pumps	31			
	32-4					32			
	33-3				CCW HXs (gpm)	31			
	34-2					31			
Emer. D/Gs	31-2A				H2 RcmBnrs	31-2A			
	32-6A					32-6A			
	33-5A				Fan Cooler Units	31-5A			
Offsite Power (Kv)	138					32-2A			
	13.8					33-5A			
Gas Turbines	GT-1					34-3A			
	GT-2					35-6A			
	GT-3				Aux Blr Feed Pump	31-3A			
SIS Pumps	31-5A					32			
	32-2A					33-6A			
	33-6A				Cnmt Spray Pumps	31-5A			
High Head SIS Flow (gpm)	31					32-6A			
	32				Charging Pump Breakers	31-5A			
	33					32-3A			
	34					33-6A			
RHR Pumps	31-3A				Comp Cooling Pumps	31-5A			
	32-6A					32-2A			
Recirc Pumps	31-3A					33-6A			
	32-6A				Aux Comp Cooling Pumps	31-5A			
Low Head SIS Flow (gpm)	31					32-6A			
	32					33-5A			
	33					34-6A			
	34				App R	D/G			
Accum Level (pct)	31								
	32								
	33								
	34								
Service Water Pumps	31-5A								
	32-2A								
	33-6A								
	34-5A								
	35-3A								
	36-6A								

On = Equipment Operating, Off = Off / Available, OS = Out of Service

Security Route Alerting

(b)(7)(F)



(b)(7)(F)

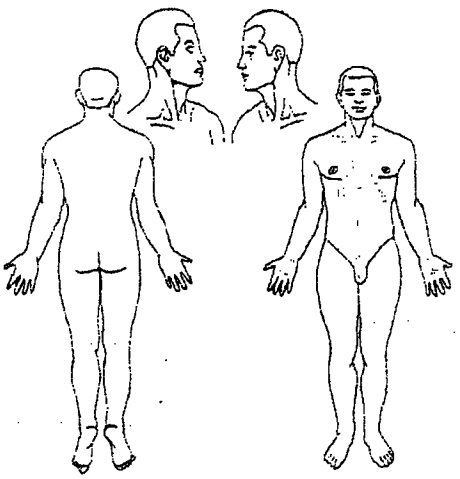
DECONTAMINATION SURVEY SHEET

SURVEYSKIN/CLOTHING (cross out one)

(JOB COMPLETED BY H.P. TECH)

Name _____ Date/Time _____

Denote Contaminated Areas Numerically



Initial		Decon #1	Decon #2	Decon #3	
Whole Body	Time * / CPM mrad/hr				
1	Time * / CPM mrad/hr				
2	Time * / CPM mrad/hr				
	Time * / CPM mrad/hr				1
4	Time * / CPM mrad/hr				
5	Time * / CPM mrad/hr				
6	Time * / CPM mrad/hr				

Method of Decon (* Indicate Applicable Letter)

A. Soap & Water shower **B**. Soap Shampoo **C**. Water Flush **D**. Tape Lift **E**. Soap & Water Wash

F. 50% Cornmeal/50% Detergent Paste G._____

Meter Type/Serial No./Calib Due Date/Probe Type Meter Type/Serial No./Calib Due Date/Probe Type

Health Physics, Medical and Supervisory Personnel Present or Consulted During Decon.

_____ _____ _____

Remarks_____

I understand the decontamination results and the actions required of me (if any) to complete this investigation.

Individual_____/ Date _____

Hot Particle Detected ☐ NO ☐ YES If yes, initial simplified Dose Assessment_____mRad

Decon Performed by : _____
H.P. Technician

Reviewed by:_____
R. P. Supervisor

DECONTAMINATION SURVEY SHEET

Sheet 2 of 2

9.1.4 BODY ORFICES & SKIN DECONTAMINATION RECORDS

Name: _____ _____
(Last) (First) (Initial) (Social Security Number)

_____ _____ _____
(Date) (Time of Contamination) Technician

How & where it occurred _____

Max. Initial Contam. Levels - With Anti-C _____ Without Anti-_____

Body Orifices - Swabs or Smears - Counting Instr. Used _____

	1		2		3		4		5	
	Time	CPM	Time	CPM	Time	CPM	Time	CPM	Time	CPM
Eye										
Ear										
Nose										
Mouth										
Other										

Time Decontamination Step Begins	Skin Area Contaminated	Decontamination Agents Used	Contamination Level After Decontamination	Skin Condition
Time Decontamination Completed:		Decontamination Done by:		

Vehicle Contamination Check

Sheet 1 of 1

Date:_____ Instr. Model: _____

Technician:_____ Instr. Number: _____

Vehicle Lic. Plate Number:_____

LOCATION	10.0 TIME	SURFACE SM CAR CD	SMCAR + BKGD CPM	BKGD CPM	SMCAR CPM	EQUIV. DPM/100cm^2

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 (b)(7)(F)

(b)(7)(F)

*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	

ADDITIONAL INFORMATION

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)