DISTRIBUTION CONTROL LIST

•- .

Document Name: EMER PLAN

| CC_NAME | NAME | DEPT | LOCATION |
|----------|--|--|-------------------|
| 2 | EP/TRAINING ADMINISTRATOR | TRAINING (ALL EP'S) | #48 |
| 3 | RES DEPARTMENT MANAGER REFERENCE LIBRARY JOINT NEWS CENTER | RES (UNIT 3/IPEC ONLY) | 45-4-A |
| 4 | REFERENCE LIBRARY | REC/TRN (UNT 3/IPEC ONLY) | BLDG/17 |
| 9 | JOINT NEWS CENTER | EMER PLN (ALL EP'S) | EOF |
| 10 | SHIFT MGR. (LUB-001-GEN) | OPS (UNIT 3/IPEC ONLY) | IP3 |
| 11 | CONTROL ROOM & MASTER | OPS(3PT-D001/6(U3/IPEC) | IP3 (ONLY) |
| 14 | EOF AEOF/A.GROSJEAN(ALL EP'S) NUC ENGINEERING LIBRARY | E-PLAN (ALL EP'S) | EOF |
| 16 | NUC ENGINEERING LIBRARY | DOC (UNIT 3/IPEC ONLY) | WPO-12D |
| | TSC | · · · · | 45-3-F |
| 21 | DECIDENT INCREATOR | ILE NEC (INTER 2 / TEC ONLY) | 43-3-F 45.2 D |
| 22 | RESIDENT INSPECTOR SILK DAVID | US NRC(UNIT 3/IPEC ONLY) NRC (ALL EP'S) NRC (ALL EP'S) NRC (ALL EP'S) | 45-2-6 OFFSITE |
| 24 | STLK DAVID | NRC (ALL EP'S) | OFFSITE |
| 25 | DOCUMENT CONTROL DESK | NRC (ALL EP'S) | OFFSITE |
| <u>^</u> | | NRC (ALL EP'S) J A (UNIT 3/IPEC ONLY) | OFFSITE |
| 29 | E-PLAN STAFF | E-PLAN (ALL EP'S) | EOF |
| 30 | E-PLAN STAFF E-PLAN STAFF | E-PLAN (ALL EP'S) | EOF |
| 31 | BARANSKI J (VOLUME I ONLY) | | |
| 32 | SUTTON A ~ (VOLUME I ONLY) | DISASTER & EMERGENCY | WESTCHESTR |
| 33 | LONGO N (VOLUME I ONLY) | EMERGENCY SERVICES | ROCKLAND |
| | GREENE D (VOLUME I ONLY) | | |
| | RAMPOLLA M(VOLUME I ONLY) | | |
| | SIMULATOR | TRAIN (UNIT 3/IPEC ONLY) | 48-2-A |
| 107 | QA MANAGER | QA (UNIT 3/IPEC) NRQ (UNIT 3/IPEC ONLY) | TRL #2A |
| | C.STELLATO (NRQ-OPS TRN) | NRQ (UNIT 3/IPEC ONLY) | #48 |
| | L.GRANT (LRQ-OPS/TRAIN) E-PLAN STAFF | LRQ (UNIT 3/IPEC ONLY) | #48 DOD |
| | | E-PLAN (ALL EP'S) (UNIT 3/IPEC ONLY) | EUF HAO |
| 510 | L.GRANT (LRQ-OPS/TRAIN) | LRQ (UNIT 3/IPEC ONLY) | #40 #/9 |
| | L.GRANT (LRQ-OPS/TRAIN) | LRQ (UNIT 3/IPEC ONLY) | |
| 512 | C. STELLATO (NRO-OPS TRN) | NRO (UNIT 3/IPEC ONLY) | #48 |
| 513 | C.STELLATO (NRQ-OPS TRN) C.STELLATO (NRQ-OPS TRN) PLANT MANAGER'S OFFICE | NRQ (UNIT 3/IPEC ONLY) NRQ (UNIT 3/IPEC ONLY) | #48 |
| 517 | PLANT MANAGER'S OFFICE | ADMIN/(UNIT 2/IPEC ONLY) | IP2 |
| 518 | DOCUMENT CONTROL | UNIT 2 (UNIT 2/IPEC ONLY) | IP2 |
| 520 | PLANT MANAGER'S OFFICE DOCUMENT CONTROL CONTROL ROOM (UNIT 2) SIMULATOR | OPS (UNIT 2 & IPEC ONLY) | IP2 |
| 521 | SIMULATOR | TRAIN (UNIT 2/IPEC ONLY) | IP2 |
| 522 | NRC RESIDENI | US NRC (UNIT Z/IPEC UNLI) | 172 |
| 523 | ROBERT VOGLE (UNIT 2) | TRAIN/LIB (ALL EP'S) | TODDVILLE |
| 524 | JOHN MCCANN (UNIT 2) | NUC SAFETY/LIC(ALL EP'S) | IP2 |
| | | | |

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| Entergy | IPEC SITE MANAGEMENT MANUAL | QUALITY RELATED Administrative Proced | URE IP-SMM-AD | -103 Revision 0 |
|----------------------------------|--|---|-------------------------------------|----------------------------|
| | | INFORMATIONAL USE | Page | 13 of 21 |
| | | | | |
| ATTACHMENT 10.1 | ······································ | SMM CONT | ROLLED DOCUMENT | FRANSMITTAL FORM |
| SITE MANAG | EMENT MANUAL CONT | ROLLED DOCUMENT TRA | NSMITTAL FORM | - PROCEDURES |
| Entergy | / | 1 | Controlled Doc Mittal Form - Pr | |
| TO: DISTRIBUTI | ON DATE: 6 | | ANSMITTAL NO: 28 | 3207 |
| FROM: IPEC DC | CUMENT CONTROL: E | (Circle one) Cor IP2 53'EL F | HONE NUMBER: 2 | 71-7057 |
| receipt, incorporate | the document(s) into your (| ed for use. In accordance wi controlled document file, pro owledgement below within fi | perly disposition supe | erseded, void, or inactive |
| AFFECTED DOCU | MENT: EMER | GENCY PLANNING PROC | EDURE: | IPEC |
| DOC # | REV# | TITLE | INST | RUCTIONS |
| | IG PROCEDURE HAS I VISED COPY: | VITH ATTACHED REVI BEEN REVISED. REPL | | OPY WITH |
| | ***********PLEAS | | DATE********** | |
| SUPERSEDED, VO BEEN REMOVED F | DID, OR INACTIVE COPIES | NT(S) IS HEREBY ACKNO S OF THE ABOVE LISTED I ATES HAVE BEEN PERFO HOWN ON THE DOCUMEI | DOCUMENT(S) IN M RMED IN ACCORD/ | IY POSSESSION HAVE |
| NAME (PRINT |) SIGNATURE | DATE | CC# | 25 |

TO: Nuclear Regulatory Commission 25



FROM: IPEC Emergency Planning

SUBJECT: Emergency Planning Document Update

Date: 05/19/03

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

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

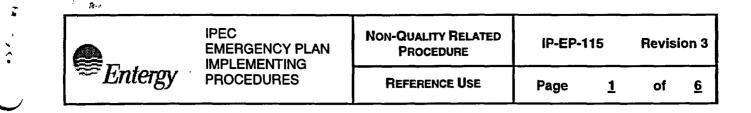
Entergy Nuclear Indian Point Nuclear Generating Station Records and Documents Department Broadway & Bleakley Aves. Buchanan, NY 10511 Attn: Document Custodian

| Document # | Document Name | New Rev. #/ Date | Old Rey. #/ Date | Instructions |
|---------------|---|---------------------|---------------------|----------------------|
| IPEC | IPEC Emergency Plan Implementing Procedures | | | |
| ТОС | | 05/19/03 | 05/05/03 | Replace old with new |
| IP-EP-115 | Emergency Plan Forms | Rev. 3 05/19/03 | Rev. 2 05/05/03 | Replace old with new |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

Update completed as specified:

Indian Point Energy Center Emergency Plan Implementing Procedures Table of Contents

| Procedure No. | Procedure Title | Rev. No. | Effective Date |
|------------------|--|-------------|-------------------|
| IP-EP-115 | Emergency Plan Forms | 3 | 05/19/03 |
| IP-EP-130 | Emergency Notifications and Mobilization | 0 | 05/05/03 |
| IP-EP-250 | Emergency Operations Facility | 0 | 03/06/03 |
| IP-EP-251 | Alternate Emergency Operations Facility | 1 | 03/06/03 |
| IP-EP-255 | Emergency Operations Facility Management and Liaisons | N/A | VOIDED |
| IP-EP-260 | Joint News Center | 0 | 03/06/03 |
| IP-EP-310 | Dose Assessment | 1 | 03/06/03 |
| IP-EP-410 | Protective Action Recommendations | 1 | 03/06/03 |
| IP-EP-510 | Meteorological, Radiological & Plant Data Acquisition System | 1 | 03/06/03 |
| IP-EP-520 | Modular Emergency Assessment & Notification System (MEANS) | 1 | 03/06/03 |
| IP-EP-610 | Emergency Termination and Recovery | 1 | 03/06/03 |
| IP-EP-620 | Estimating Total Population Exposure | 1 | 03/06/03 |
| | | | |



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Emergency Plan Forms

Prepared by: Daria Weaver Print Name <u>5/18/03</u> Date Signature (Klo) Frank Inzirillo Approval: Print Name Date

Effective Date: May 19, 2003

EP-IP-EP-115 (Forms) R3.doc



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| | 5.2 | Control of Forms | 3 |
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Emergency Plan Forms

1.0 PURPOSE

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

2.0 <u>REFERENCES</u>

NONE

3.0 **DEFINITIONS**

NONE

4.0 **RESPONSIBILITIES**

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

5.0 DETAILS

- 5.1 Use of Forms
 - 5.1.1 The Implementing Procedure that calls for a form to be completed controls the actual use of forms.
 - 5.1.2 Any needed instructions for form completion will either be on the form itself or in the procedure calling for its use.
- 5.2 Control of Forms
 - 5.2.1 Forms are numbered sequentially as the need for them is defined by other implementing procedures.
 - 5.2.2 Form numbers will be formatted as "Form EP-n Rev x", where n is the sequential number of the form and x is the current revision of the form.
- 5.3 Method of Placing Forms in this Procedure
 - 5.3.1 Forms are attached as addendums to this procedure. They will appear formatted in the end use format. There will be no annotation on the addendums or actual forms showing addendum number or procedure page number.



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6.0 **INTERFACES**

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

7.0 RECORDS

Forms become official records when completed during a declared emergency.

8.0 **REQUIREMENTS AND COMMITMENT CROSS-REFERENCE**

None

9.0 **ATTACHMENTS**

Attachment 9.1 **Current List of Effective Forms**



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<u>5</u> of

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Attachment 9.1 Current List of Effective Forms Sheet 1 of 2

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



of

Revision 3

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Page

Attachment 9.1 **Current List of Effective Forms** Sheet 2 of 2

| Form Number | Current Revision | Form Title (number of pages) | Interfacing Procedures |
|----------------|--|--|---------------------------|
| EP-18 | Rev. 0 | IP-3 Manual Determination of Release Rate | IP-EP-310 |
| EP-19 | Rev. 0 | IPEC Manual Dose Assessment Worksheet/Back Calculating Release Rate from Field Data | IP-EP-310 |
| EP-20 | Rev. 1 | Emergency Director Turnover Sheet | IP-EP-250 |
| EP-21 | Rev. 0 | Media Briefing Worksheet | IP-EP-260 |
| EP-22 | Rev. 0 | Media Briefing Issues Form | IP-EP-260 |
| EP-23 | Rev. 0 | JNC Staffing Form | IP-EP-260 |
| EP-24 | Rev. 0 | Emergency Summary Sheet | IP-EP-260 |
| EP-25 | Rev. 1 | Written Statement Distribution Checklist | IP-EP-260 |
| EP-26 | Rev. 2 | Information Distribution Guide | IP-EP-260 |
| EP-27 | Rev. 0 | Public Inquiry - Media Referral and Media Monitoring Form | IP-EP-260 |
| EP-28 | Rev. 0 | Joint News Center Fax Cover Sheet | IP-EP-260 |
| EP-29 | Rev. 0 | Individual Exposure Tracking Log | IP-EP-250 |
| EP-30 | Rev. 0 | Monitoring Team Radiation Field Survey Data | IP-EP-250 |
| EP-31 | Rev. 0 | Monitoring Team Sample Data | IP-EP-250 |
| EP-32 | Rev. 0 | Determination of Radioactive Airborne Concentrations | IP-EP-250 |
| EP-33 | Rev. 0 | Media Inquiry Log | IP-EP-260 |
| EP-34 | Rev. 0 | Courtesy Call Guide | IP-EP-260 |
| EP-35 | Rev. 0 | JNC Talking Points | IP-EP-260 |
| EP-36 | Rev. 0 | Primary – ERO Activation Checklist | IP-EP-130 |
| EP-37 | Rev. 1 | Backup – ERO Activation Checklist | IP-EP-130 |
| NRC 361 | 12-2000 | Reactor Plant Event Notification Worksheet (NRC Form) | IP-EP-130 |
| | | | |
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| 2 | <u>-</u> | New York State Radiological Emergency Data Form Notification # Indian Point Energy Center Part I - General Information Instructions |
|--------------|----------|---|
| \checkmark | 1. | This message being transmitted on:at: at: DAM VIA: A. RECS |
| Ī | 2. | This is A. <u>NOT</u> an Exercise B. An Exercise |
| | 3. | The Facility Affected is: A. Unit 2 B. Unit 3 C. Both |
| | 4. | The EmergencyA. Unusual EventC. Site Area EmergencyE. EmergencyF. RecoveryB. AlertD. General EmergencyTerminatedG. Other |
| | 5. | This Emergency Classification Declared on: at: at: D AM |
| | 6. | Release of A. No Release Radioactive Materials B. Release BELOW federally approved operating limits (Technical Specifications) due to the Classified Event: I To Atmosphere To Water C. Release ABOVE federally approved operating limits (Technical Specifications) I To Atmosphere To Water D. Unmonitored Release – requiring evaluation D. Unmonitored Release – requiring evaluation |
| ľ | 7. | Protective Action Recommendations: |
| | | A. No need for Protective Actions outside the site boundary. B. EVACUATE and implement the KI plan for the following ERPAs: |
| | | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 C. SHELTER all remaining ERPAs. |
| | 8. | EAL Number: |
| | 9. | The Plant status is: A. Stable C. Degrading E. Cold Shutdown B. Improving D. Hot Shutdown |
| | 10. | Reactor Shutdown: A. Not Applicable B at: DAM |
| | 11. | Wind Speed: Meters/Second at elevation10 meters. |
| | 12. | Wind Direction: (From) Degrees at elevation10 meters. |
| ľ | 13. | Stability Class: A B C D E F G |
| | 14. | Report By:at Telephone Number (914) (Communicator's Name) |
| ŀ | Mes | sage Received by: Message Ended at: |
| L | | Emergency Director Review and Approval: |

Part I Page 1 of 1

1

Effective 5/5/03

| Indian Point Energy (| | ologic | New York State cal Emergency I plogical Assess | | | |
|---|---|--|---|---|---|--|
| This is: A. <u>NC</u> | DT an Exercise | В | . An Exercise | | | |
| Message transmitted | at: Date: | _ Tim | e: Loca | tion / Facility trans | mitted from: | |
| 16. General relea A. Event Release B. Event Release C. Event Release D. Reactor Shutd Meteorological Data E. Wind Speed F. Wind Direction G. Stability class 17. Atmospheric A. Release from: B. lodine/Noble g (Assumed) C. Total release release | se information: e started Date e expected to end Date e ended: Date: lown: N/A OR As of Date: meter n: degree (Pasquill):A B C D release information: □ Ground □ Elevate pas ratio: IOR Actual) | Ti Ti Ti Ti Ti Ti Ti Ti Ti Ti | ime:Time: ime:Ti ate:Ti ime:Ti ime: ond At elevatio t elevation: E G S of Date S of Date Noble gas Noble gas | me: on: meters Time s release rate: ease rate articulate release | meters Ci/sec Ci/sec Ci/sec rate Ci/sec | |
| B. Total concentr 19. Dose calculat Calculation is based o | tions (based on a rele | μC ase dι | Ci/ml D. Te | otal activity release hours) | ed <i>Ci</i> | |
| Table below applie | es to (circle one) A | . Atn | nospheric rele | ase B. Water | borne release | |
| DISTANCE | Xμ/Q | | DOSE TEDE (<i>Rem</i>) | <u> </u> | TODE (Rem) | |
| Site Boundary | | | | | | |
| 2 Miles | | | | | | |
| 5 Miles | | | | | | |
| 10 Miles | | | | | | |
| Miles | | | | | | |
| 20. Field measure | ement of dose rates of | or sur | face contamina | tion/deposition: | L | |
| Mile/Sector OR Mile/Degrees | Location OR Sampli | ng Po | int | Time of Reading | Dose Rate (<i>mR/hr</i>) OR Contamination (µCi/m ²) | |
| | Emergency | Direct | or Review and A | pproval: | | |

Control Room NUE Notification Checklist

| No | te: Perform only circled i | tems for NUE periodic Updat | e Notifications | | |
|-------------------------|--|---|---|---|----------------------|
| No | tify Protected Area Personne | el: | | | Tim |
| 1. | Contact opposite unit's Control I IF Unit 3 is the affected unit THE Unit 2: 734-5294 (5295) | | | • | |
| 2. | Notify Security Shift Superviso classification. IF Unit 3 is decl Room. | aring the event, THEN request | an Offsite Communi | | |
| $\overline{\mathbf{x}}$ | tify State and Counties: (to be | | | | |
| (<u>3.</u>) (4.) | Pick up the RECS handset and o When you hear the message | *You have initiated a conferen | <i>ce</i> " s tate: | | |
| (5.) | • | | • | HEN hang up (for V-Band pres | s "Clear |
| 6. | IF unable to contact any statio OR telephone (phone number | n via RECS <u>THEN</u> use Local (s on back), to contact Warning | Government Radio (L Point(s) for those sta | GR) (instructions on back). ations not reached. | |
| (7.) | Enter time you are starting the | initial roll call in the space pro | vided below. | | |
| (8.) | | tify itself. Check off "Initial Roll | | nowing stations, stopping after on as they answer the roll call: Final | each na |
| | | Location | Roll Call | Roll Call | |
| | Time Initial Roll Call | New York State | | | |
| ſ | Started | Westchester County | | | |
| Į | | Peekskill City | | | |
| | Time Final | Rockland County | | | |
| Γ | Roll Call Completed | Orange County | | | |
| | | Putnam County | Q | <u>i</u> | |
| Į | | West Point | | | |
| 9. | SLOWLY read all of the inform After reading the form say "Sta | | approved NYS Radio | plogical Emergency Data Form | Part I. |
| (10) | | Il call. IF any location did not c | | on. Check off "Final Roll Call" fo <u>EN</u> instruct them to call the Sta | |
| (1) | End notification by saying "Ind | lian Point out at (<i>time</i>)". Ente | er final Roll Call time i | n the space provided above. | |
| 12) | | the initial roll call <u>THEN</u> contained to either call the State to one location and time of this notif | btain the notification i | information or read them the in | nbers on formatio |
| | | 0 | Room activates DIAL | OGIC system) | Time |
| No | tify Emergency Response | Organization: (Unit 2 Contro | | | |
| | tify Emergency Response Ask the Shift Manger (Emerge Emergency Response Organiz <u>THEN</u> contact the Unit 2 Contr | ncy Director) if Emergency Rezation should receive Event No | sponse Organization tification only. <u>IF</u> Uni | t 3 is the affected unit | |
| | Ask the Shift Manger (Emerge Emergency Response Organiz <u>THEN</u> contact the Unit 2 Contr <u>IF</u> Emergency Response Orga Mobilization" envelop to mobili | ncy Director) if Emergency Re- zation should receive Event No- rol Room and direct notification anization mobilization is needed ize the ERO. (Form EP-36) | sponse Organization tification only. <u>IF</u> Uni by one of the followi d, <u>THEN</u> use Envelop | t 3 is the affected unit ng as appropriate: pe A "IPEC ERO | |
| | Ask the Shift Manger (Emerge Emergency Response Organiz <u>THEN</u> contact the Unit 2 Contr IF Emergency Response Orga | ncy Director) if Emergency Re- zation should receive Event No- rol Room and direct notification anization mobilization is needed ize the ERO. (Form EP-36) <u>N</u> use Envelope B "IPEC ERC notify them of the event. (Form | sponse Organization tification only. <u>IF</u> Uni by one of the followi d, <u>THEN</u> use Envelo D Event Notification" e D EP-36) | It 3 is the affected unit ng as appropriate: be A "IPEC ERO envelop to contact the | |

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Control Room NUE Notification Checklist (cont)

| No | tify Media Relations: | | | | Time |
|------|--|-----------------------|---------------------------|--------------------------|--------|
| 14. | Call Indian Point Communications Representat | tive at 914-271-7031 | | | |
| | Read the following statement to individual an | | | | |
| | "This is the Unit Control Room, an Un | | | (time) on | · · |
| | Emergency Action Level number Obtain and enter name of individual contacted | | | | |
| | | 90 | | | |
| No | tify NRC: (to be initiated within 1 hr. of classi | fication) | | | Time |
| 15. | IF it is during normal working hours THEN normal working hours the second se | | it(s) NRC Resident In | spector | |
| | IF during off-hours THEN call or page the NI the Emergency Telephone Directory | RC Senior Resident | Inspector using phone | e numbers provided in | |
| | Provide the Inspector with Date/Time of NUI | E classification, EAL | # and brief descriptio | n of event. | |
| 16.) | Contact NRC by calling main number listed of 2nd or 3rd backup number, or region 4 altern | | nain number does not | work THEN use 1st, | |
| | Inform them that this is a 50.72 notification a # and brief description of event. Complete N | | | ency classification, EAL | |
| 17) | Record any Comments: | | | | |
| | | | | | |
| 18 | Date and sign this form | Date: | Signature: | | |
| 19 | Inform the Shift Manager that you have com | pleted NUE notificat | lions. | | |
| 20) | Fax copies of the NYS Radiological Emerge originals to the Shift Manager. | ncy Data Form, Par | t I to State, counties, 7 | SC, EOF, and JNC and p | rovide |

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

- B. If using the commercial telephone, then dial the Warning Points phone numbers below.
- C. Transmit the following: "This is to report that an Unusual Event has been declared at Indian Point Energy Center. Stand by for a fax of the Part I form".
- D. Fax the Part I form to the State and Counties Warning Points and EOC's.

Warning Point and EOC phone numbers

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

Control Room Initial Notification Checklist – Alert / SAE / GE

| No | tify Protected Area Personnel: | Time |
|-----|--|------|
| | te: If the Shift Manager does not feel it is safe to relocate personnel at this time <u>DO NOT</u> sound the Site Assembly Alarm or call for personnel to report to the Assembly Areas. | |
| 1. | Contact opposite unit's Control Room and inform them of classification, time, EAL# and brief description. Unit 2: 734-5294 (5295) Unit 3: 736-8277 (8282) | |
| 2. | Coordinate the following with the opposite unit Control Room: | |
| | a. Sounding of the Site Assembly Alarm for 30 seconds and, | |
| | b. Announcing the following message over both Unit's P.A. Systems three (3) times: "Attention all personnel, a (Alert / Site Area Emergency / General Emergency) has been declared" "All Essential Personnel report to your assigned emergency facility" "All other personnel report to the (Energy Education Center [Unit 2])/ (Training Center [Unit 3])" | |
| 3. | Notify Security Shift Supervisor at 736-8067 (8068) and provide them with the affected unit, date/time of classification. IF Unit 3 is declaring the event, THEN request an Offsite Communicator report to the Control Room | |
| 'No | tify Emergency Response Organization: (Unit 2 Control Room activates DIALOGIC system) | Time |
| 4. | Request direction from Shift Manger (Emergency Director) as to ERO mobilization needed utilizing the appropriate envelope. <u>IF</u> Unit 3 is the affected unit <u>THEN</u> contact the Unit 2 Control Room and direct notification by one of the following, as appropriate: <u>IF</u> a security Event, <u>THEN</u> use Envelope C "IPEC ERO Mobilization to Backup Locations" (Form EP-36, Dimensional Context and the provided to th | |
| | Primary – ERO Activation Checklist) to mobilize EROs to backup locations. <u>Otherwise</u> use Envelope A "IPEC ERO Mobilization" (Form EP-36, Primary – ERO Activation Checklist) to mobilize EROs. | |
| No | tify State and Counties: (to be initiated within 15 min. of classification) | |

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

| | Location | Initial Roll Call | Final Roli Cali |
|------------------------|--------------------|----------------------|--------------------|
| Time Initial Roll Call | New York State | Q | |
| Started | Westchester County | | |
| | Peekskill City | Q | |
| Time Final | Rockland County | Q | |
| Roll Call Completed | Orange County | Q | |
| | Putnam County | Q | |
| | West Point | | |

- 11. SLOWLY read all of the information from the completed and approved NYS Radiological Emergency Data Form Part I. After reading form say "Stay on line for final roll call."
- 12. Perform a final roll call by asking "(location title) did you copy?" for each location. Check off "Final Roll Call" for each location as they answer the roll call. IF any location did not copy the message <u>THEN</u> instruct them to call the State for clarification or, if requested, repeat the information.
- 13. End notification by saying "Indian Point out at (time)". Enter the time above when final roll call is completed.
- 14. <u>IF</u> any location did not answer the initial roll call <u>THEN</u> contact the missing location via telephone and direct them to either call the State to obtain the notification information or read form information over the telephone. Record the location and time of this notification in the comment section of this form. **Go to page 2 (back)**
- **Proprietary Information**

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

| : | Not | tify Media Relations: | | · · · · · · · · · · · · · · · · · · · | Time | | | | |
|---|---|---|---|---------------------------------------|------------------|--|--|--|--|
| | 15. | Call Indian Point Communications Representati IF individual answers <u>THEN</u> read the following s "This is the Unit Control Room, a(n) (<u>Ale</u> was declared at on Emergency Ac (time) | statement: <u>rt/Site Area Emergency/(</u> (circle proper classif | ication) | | | | | |
| | | Obtain and enter name of individual contacted: OR JF after 2-5 rings the machine picks up THEN read the above message into machine after beep. | | | | | | | |
| | Notify NRC: (to be initiated within 1 hr. of classification) | | | | | | | | |
| | IF it is during normal working hours <u>THEN</u> notify the affected unit(s) NRC Resident Inspector Unit 2: 739-9361 or x 5347 Unit 3: 739-8899 | | | | | | | | |
| | IF during off-hours <u>THEN</u> call or page the NRC Senior Resident Inspector using phone numbers provided in the Emergency Telephone Directory | | | | | | | | |
| | | Provide the Inspector with Date/Time of NUE cl | assification, EAL # and b | rief description of event. | | | | | |
| | 17. | Contact NRC by calling main number listed on I 1 st , 2 nd or 3 rd backup number, or region 4 alternative statements of the statement of the | ENS phone. (IF main nun ate number listed.) | nber does not work THEN use | | | | | |
| | | Inform them that this is a 50.72 notification and EAL # and brief description of event. Complete | | | | | | | |
| | 18. | Record any Comments: | <u> </u> | | | | | | |
| | | | , | <u> </u> | | | | | |
| | 19. | Date and sign this form | Date: | Signature: | | | | | |
| | 20. | Inform the Shift Manager that you have complet | ed emergency notificatio | ns. | | | | | |
| / | 21. | Fax copies of the NYS Radiological Data Form, Shift Manager. | Part I to State, counties, | TSC, EOF and JNC and provide of | originals to the | | | | |
| - | Use | of Local Government Radio or commercial telep | phone: | | | | | | |
| | ۸ | A If using the LCP (for V-Rend depress the "LCP" button on the communications console) verify power on and nickup the | | | | | | | |

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

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

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

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

Notify Protected Area Personnel:

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- 1. IF a Site Area Emergency or General Emergency is declared and initial accountability has not been completed <u>THEN</u> notify the unaffected unit control room and coordinate the sounding or have both control rooms sound the Site Assembly Alarms
- 2. <u>IF</u> the emergency classification changes <u>THEN</u> 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" <u>OR</u> if emergency classification is terminated <u>THEN</u> announce:

"Attention all personnel, the emergency has been terminated"

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

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

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

Initial

Cinal

| | Location | Roll Call | Roll Call |
|-----------------------------------|------------------------|-----------|-----------|
| Time Initial Roll Call Started | New York State | Q | |
| | Westchester County | Q | |
| | Peekskill City | Q | |
| Time Final Roll Call Completed | Rockland County | | |
| | Orange County | Q | |
| | Putnam County | | |
| L | West Point | Q | |
| | | | |

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

Go to page 2 (back)

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

| | Note: | Use the CCR Alert/SAE/GE | Initial Notification (| hecklist for upgrade | from NUE to Alert. | |
|-----|---|--|--|----------------------------|----------------------|-----------------|
| No | tify NRC: (1 | to be initiated within 1 hr. of u | ipgrade) | | | Time |
| 13. | Contact NR 1 st , 2 nd or 3 ^t | C by calling main number listed backup number, or region 4 a | t on ENS phone. (IF Iternate number liste | nain number does no d.) | t work THEN use | |
| | | n that this is a 50.72 notification n, EAL # and brief description c | | | | |
| No | tify ANI, N | YPSC, INPO, NEIL | | | હો | Time |
| 14. | numbers m | gency is classified at an Alert o ay be in Emergency Telephone n, brief event description, and a | Directory). Provide t | he facility, classificatio | n, date/time of the | |
| | ANI NYPSC INPO NEIL | (860) 561 - 3433 (Daytime) (518) 473 – 0763 (800) 321 – 0614 (302) 888 - 3000 | (Off hours) (518) 674 | I - 8836 | | |
| 15. | Record any | Comments: | | | | |
| | | | · · · · · · · · · · · · · · · · · · · | | <u></u> | |
| 16. | Date and si | gn this form: | Date: | Signature: | | |
| 17. | Inform the S | Shift Manager that you have cor | npleted emergency r | otifications (CCR only | <i></i> | <u>_</u> |
| 18. | | of the NYS Radiological Emerg d provide a copy to the Shift Ma | | | ounties, TSC, EOF an | d JNC. Maintain |
| | | | | | | |

Use of Local Government Radio or commercial telephone:

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

Warning Point and EOC phone numbers

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

INDIVIDUAL EMERGENCY EXPOSURES AUTHORIZATION

5

| / N/ | AME: | SOC | IAL SEC | URITY NO.: | |
|-----------|--|--|---------------------------|---|-------------------------|
| A | GE: | | | | |
| Re | eason for exposure in | excess of 5 Rem: (include tas | sks to be p | performed) | |
| | | | | | |
| | ESTI | MATE OF PLANNED DOSE | | AUTHORIZED EMERGENCY DO | <u>)SE</u> |
| w | HOLE BODY | | REM | | REM |
| E) | TREMITY | | REM | <u> </u> | REM |
| TH | IYROID | | REM | | REM |
| : n po | ave volunteered to pe stential consequences | rform the task(s) during which of the proposed emergency f | n I will rec rom the a | eive the emergency Exposure, and I ttached summary. | l understand the |
| | dividual to aceive Exposure: | (Signature) | <u> </u> | Date: | |
| O | PM/POM Emergency Director oproval: | | | Date: | |
| E | mergency worker e | | RNING O BE A | PPLIED to minors or Fertile wo | men |
| Er | mergency Exposure G | uidelines: | | | |
| 1. | • • • | - | | gency Director or Emergency Plant N | - |
| 2. | | be authorized up to 5 Rem em ure is not totaled into this limit | | exposure for a given emergency eve | ent. Historical |
| 3. | | r the Emergency Director or E posure for Alert or higher clas | | y Plant Manager to give a blanket at 5. | uthorization of up to 5 |
| 4. | | osure greater than 5 Rem Wh on a individual basis for a spe | | , 50 Rem Extremities or 50 Rem Ski | n of Whole Body, |
| 5. | All emergency expo | sures are voluntary. – For hig | her doses | s individuals over the age of 45 are p | |
| 6. | Individuals shall be | briefed that these exposures r | may incre | ase their chances of cancer during t | heir lifetime. |

- 7. Volunteers may be authorized up to 10 Rem to protect valuable property.
- 8. Volunteers may be authorized up to 25 Rem for life saving or the protection of large populations.
- 9. Individuals may volunteer to receive greater than 25 Rem to save a life.
- 10. For any expected or actual Thyroid Exposure > 25 Rem CDE, the issuance of KI should be considered.

Form EP-6 Rev 0

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:

2

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

<u>Potential Long Term Effects</u>: 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).

Page 2 of 2

Form EP-6 Rev 0

EOF Staffing

| No. | Positions | 1 st SHIFT | 2 nd SHIFT |
|-----|-------------------------------|-----------------------|-----------------------|
| 1* | Emergency Director | | |
| 1* | ED Technical Advisor | | |
| | | | |
| 1* | Offsite Radiological Manager | | |
| 1* | Offsite Communicator | | |
| 1 | EOF Manager | | |
| 2** | Dose Assessor | | |
| 1 | Radiological Communicator | | |
| 1 | Field Team Coordinator | | |
| 6 | Field Monitoring Team Members | | |
| | | | |
| 1 | | | |
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| · | | | |
| 1 | Admin & Logistics Manager | | |
| 3 | EOF Clerical Staff | | |
| | | | |
| | | | |
| | | | |
| | Lead Offsite Liaison | | |
| 1 | State Liaison | | |
| 1 | Westchester County Liaison | | |
| 1 | Rockland County Liaison | | |
| 1 | Orange County Liaison | | |
| 1 | Putnam County Liaison | | |
| 1 | Equipment Operator | | |
| 1 | Information Liaison | | |
| | | | |
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Minimum Staffing for facility activation
 ** Only one Dose Assessor required if determination is made there is limited offsite radiological concerns for event.

Form EP-7 Rev 0

| Area | Owner | Recovery Issu | | Priority | Duration | Man-hou |
|-------------|--|---|---|--------------|--|---------|
| <u>Area</u> | <u>Owner</u> | | Safety Rel. | FIIOHIY | | |
| | | | | | | |
| | | | | | | |
| Descrin | tion of Issue | | L | l | l | L |
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| Resour | ces Needed | | | | | |
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| Use th | is form to document | major items to be ad | dressed during R | ecovery. | | |
| Use th | is form to document Area: | t major items to be ad Onsite / Offsite / F | | | | |
| Use th | | | Public Information | - | | |
| Use th | Area: | Onsite / Offsite / F | Public Information | - | | |
| Use th | Area: Owner: | Onsite / Offsite / F Responsible indiv | Public Information idual or organizat | ion | hort Term (1 ^v | Week) |
| Use th | Area: Owner: Safety Related: | Onsite / Offsite / F Responsible indiv Yes or No | Public Information idual or organizat I hr.) | ion 2 = S | hort Term (1 ^v ong Term (> 1 | |
| Use th | Area: Owner: Safety Related: | Onsite / Offsite / F Responsible indiv Yes or No 1 = Immediate (24 | Public Information idual or organizat I hr.) 1 Month) | ion 2 = S | | |
| Use th | Area: Owner: Safety Related: Priority: | Onsite / Offsite / F Responsible indiv Yes or No 1 = Immediate (24 3 = Intermediate (| Public Information idual or organizat I hr.) 1 Month) ar Duration | ion 2 = S | | |
| Use th | Area: Owner: Safety Related: Priority: Duration: | Onsite / Offsite / F Responsible indiv Yes or No 1 = Immediate (24 3 = Intermediate (Estimated Calend | Public Information idual or organizat I hr.) 1 Month) ar Duration | ion 2 = S | | |

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| • | Essential Information Checklist | | | | | | | |
|---|---|----------|---------------------------------------|--------------------|---------------------------------------|----------|----------|-----|
| | Affected Unit: 🛛 Unit 2 🖵 Unit 3 🔾 | Both | Status of | Unaffecte | d Unit: | | | |
| | Emergency Classification: Time: E/ Image: Image | | RCS: Temp: RVLIS / P | eressuriz | Power D Tri Pressure: er Level: | | P | |
| | Method of Core Cooling: | | Safety Inje | ection | | | | |
| | Electrical Power Supply: 138 KV 13.8 KV # Diesel Ge | | | | Diesel Ge | nerato | ors | |
| | Event Description: | | | | | | | |
| | Major Equipment Problems: | | | | | | | |
| | Current Priorities: | | | | | High | Med | Low |
| | | | | <u></u> | | | | |
| | | | · · · · · · · · · · · · · · · · · · · | | | | | |
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| | | | ainment | | | <u>ل</u> | | |
| | Controlled Uncontrolled | Wind S | Speed: | Wind | d Direction Fro | om: | | |
| | Date / Time This Checklist was Completed: / | Other: | | | | | | _ |

Emergency Response Organization Log Sheet

| | ERO Positic Name: | on: | | | | Date: | | |
|---|----------------------|-----|---------------|--------------|--------------|----------------|---------------------------------------|----------|
| | Time | | Significant I | Events, Info | rmation or (| Communications | 5 | |
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Signature: _____

Form EP-10 Rev 0

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) | | (_µ Ci/cc) / (R/hr) |
| Time after Shutdown (hrs.) | Dose Conver | sion 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 Contain | ment | Activity Calcu | latio | n |
|-----------------------------|---|------------------------------|------|-----------------------|-------|--------------------------------------|
| | × | | × | 7.4 E+10 cc | = | |
| R-25 / 26 Reading (R/hr) | | Dose Conversion Factor | | Containment Volume | | Total VC Activity (_µ Ci) |

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

Form EP-11 Rev. 1

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IPEC Manual Dose Assessment Worksheet

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Estimating Containment Activity via R-25 / 26

| Containment Data | | | |
|--|---------------------------------|--|--|
| Containment Pressure | psig | | |
| Estimated Leak Rate (see table below) | (cc/sec) – cm² | | |
| 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 | 1.74 E +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 (Cm²) | | Conversion Factor | VC Release Rate (Ci/sec) | | | | |

Sheet 2 of 2

Form EP-11 Rev. 1

| | | 1 ···· | ED TOTAL POPUL | I | Denvilada - 44 | Sheet 1 of 8 |
|-------------|---------------------------------------|-----------------------|----------------------|----------------|----------------|--------------|
| Sector/Zone | Ref. TLD mrem | Zone Corr. Factor (1) | Interpreted mrem (2) | Modifler (3) | Population (4) | Est. WB Rem |
| 1-1 | | | | | 0 | |
| 1-2 | | | | | 55 | |
| 1-3 | · · · · · · · · · · · · · · · · · · · | | | | 0 | |
| 1-4 | | | | | 20 | |
| 1-5 | | | | | 335 | |
| 1-6 | · · · · · · · · · · · · · · · · · · · | | | | 350 | |
| 1-7 | | | | | 5,425 | |
| 1-8 | | | | | 5,935 | |
| 1-9 | | | | | 2,345 | |
| 1-10 | | | | | 990 | |
| | | | | SECTOR TOTALS: | | |
| 2-1 | | | | | 0 | |
| 2-2 | | | | | 40 | |
| 2-3 | • | | | | 135 | |
| 2-4 | | | | | 140 | |
| 2-5 | | | | | 1,450 | • |
| 2-6 | | | | | 1,065 | |
| 2-7 | | | | | 825 | |
| 2-8 | | | | | 695 | |
| 2-9 | | | | | 2,280 | |
| 2-10 | | | | | 1,370 | |
| | | | | SECTOR TOTALS: | | |

- 1990 Census

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| ESTIMATED TOTAL POPULATION DOSE | | | | | | | | | |
|---------------------------------|--|-----------------------|----------------------|----------------|----------------|-------------|--|--|--|
| Sector/Zone | TLD mrem | Zone Corr. Factor (1) | Interpreted mrem (2) | Modifier (3) | Population (4) | Est. WB Rem | | | |
| 3-1 | | | | | 0 | | | | |
| 3-2 | | | | | 4,480 | | | | |
| 3-3 | | | | | 8,945 | | | | |
| 3-4 | | | | | 3,520 | | | | |
| 3-5 | | | | | 5,315 | | | | |
| 3 <u>-6</u> | | | | | 3,660 | | | | |
| 3-7 | | | | | 4,020 | | | | |
| 3-8 | | | | | 1,175 | | | | |
| 3-9 | | | | | 635 | | | | |
| 3-10 | | | | | 1,455 | | | | |
| | Balance Conductor | | | SECTOR TOTALS: | | | | | |
| 4-1 | | | | | 40 | | | | |
| 4-2 | | | | | 2,715 | | | | |
| 4-3 | | | | | 3,035 | | | | |
| 4-4 | · · · · · · · · · · · · · · · · · · · | | | | 1,990 | | | | |
| 4-5 | ····· | | | | 2,095 | | | | |
| 4-6 | | | | | 2,725 | | | | |
| 4-7 | | | | | 2,715 | | | | |
| 4-8 | ······································ | | | | 5,140 | | | | |
| L9 | | | | | 5,920 | | | | |
| L 10 | | | | | 4,475 | | | | |
| | | | | SECTOR TOTALS: | | | | | |

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

Form EP-12 Rev 0

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

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

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

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

1990 Census

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

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

1990 Census

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

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

1990 Census

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| | | · · · · · · · · · · · · · · · · · · · | ED TOTAL POPUL | ····· | | Sheet 7 of 8 |
|-------------|---|---------------------------------------|----------------------|----------------|----------------|--------------|
| Sector/Zone | TLD mrem | Zone Corr. Factor (1) | Interpreted mrem (2) | Modifier (3) | Population (4) | Est. WB Rem |
| 13-1 | | | | | 0 | |
| 13-2 | | | | | 280 | |
| 13-3 | | | | | 200 | |
| 13-4 | | | | | 0 | |
| 13-5 | | | | | 0 | |
| 13-6 | | | | | 0 | |
| 13-7 | · · · · · · · · · · · · | | | | 0 | |
| 13-8 | | | | | 70 | |
| 13-9 | | | | | 440 | |
| 13-10 | | | | | 55 | |
| | a de la companya de la company | | | SECTOR TOTALS: | | |
| 14-1 | | | · | | 0 | |
| 14-2 | ····· | | | | 80 | |
| 14-3 | ······· | | | | 65 | |
| 14-4 | | | | | 0 | |
| 14-5 | | | | | 25 | |
| 14-6 | | | | | 45 | |
| 14-7 | • | | | | 20 | |
| 14-8 | | | | | 620 | |
| 14-9 | | | | | 320 | |
| 14-10 | | | | | 2,045 | |
| | | | | SECTOR TOTALS: | | |

1990 Census

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|--|----------|-----------------------|----------------------|----------------|--|-----------------------|--|--|--|
| ESTIMATED TOTAL POPULATION DOSE Sheet 8 of 8 | | | | | | | | | |
| Sector/Zone | TLD mrem | Zone Corr. Factor (1) | Interpreted mrem (2) | Modifier (3) | Population (4) | Est. WB Rem | | | |
| 15-1 | | | | | . 0 | | | | |
| 15-2 | | | | | 20 | | | | |
| 15-3 | | | | | 105 | | | | |
| 15-4 | | | | | 180 | | | | |
| 15-5 | | | | | 45 | | | | |
| 15-6 | | | | | 0 | | | | |
| 15-7 | | | | | 20 | | | | |
| 15-8 | | | | | 305 | | | | |
| 15-9 | | | | | 25 | | | | |
| 15-10 | | | | | 1,055 | | | | |
| | | | | SECTOR TOTALS: | ······································ | | | | |
| 16-1 | | | | | 0 | | | | |
| 16-2 | | | | | 70 | | | | |
| 16-3 | | | | | 0 | | | | |
| 16-4 | | | | | 95 | | | | |
| 16-5 | | | | | 1,635 | | | | |
| 16-6 | | | | | 235 | | | | |
| 16-7 | | | | | 00 | | | | |
| 16-8 | | | | | 35 | | | | |
| 16-9 | | | | | 25 | | | | |
| 16-10 | | | | | 0 | | | | |
| | | | | SECTOR TOTALS: | | | | | |

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

1990 Census

Manual Dose Assessment Worksheet

TEDE Whole Body Exposure Calculations

Date:

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Time

Name:

| Meteorology | | | | · | | | | | | | |
|------------------------------------|--------------|--------|------|----------------|--------------------|---|-----|-------------------------------|----------------|----------------------------|-----------------------------|
| Wind Direction (from): Downwind Se | | | | ector: | | | WS- | = Wind | Speed (m/sec): | | |
| Pasquill Category: A A B C C | | | | | | | D | |] E | ΩF | G |
| TEDE - Who | le Body | / Expo | sure | | | | · | | | Release Duration | RD): hrs |
| Distance | NGI (Cl/s | | | u/Q tables) | 1 WS (M/sec) | 1 | | (1 ⁽¹⁾ - onstan | | Dose Rate(DR) (mrem/hr) | Dose (mrem) (DR x RD) |
| Site Boundary | | | x | x | 1 |] | X (| + |) = | = | |
| 2 Mile | | | x | x | 1 |] | X (| + |) = | = | |
| 5 Mile | | | x | x | 1 |] | X (| + |) = | = | |
| 10 Mile | | | x | x | 1 |] | X (| + |) = | = | |

(1) Obtain K1 value from table below.

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

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

NOTE:

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

Form EP-13 Rev.1

| | | IPEC | Manual | Dose A | Assessme | nt Works | heet | |
|------------------------------|----------|--------|------------|---------|--------------|---------------|------|--|
| | | • | TODE Thy | roid Ex | posure Calc | ulations | | |
| Date: | Time | | | Na | me: | | | |
| Meteor | ology | | ······ | | | | | |
| Wind Direction (from): | | Downwi | nd Sector: | | WS = Wind Sp | beed (m/sec): | | |
| | <u> </u> | | D B | | | | | |

NOTES:

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

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

| Isotope I-131 (or Total Mix) TODE - | | | | yroid Exposure Release Duration (I | | | ation (RD)= | |
|-------------------------------------|-----------------------|--------------------|---|------------------------------------|-----------------------|-----------|------------------------|-----------------------------|
| NGRR | X K1= | Α | - | RF | ₹ _{(I-131}) | or Total) | Х К2 | = B |
| Distance | Xu/Q (from tables) | 1 WS (m/sec) | | | A + E above | | Dose Rate (mrem/hr) | Dose (mrem) (DR X RD) |
| Site Boundary | x | | x | (| + |) = | = | |
| 2 Mile | x | | x | (| + |) = | = | |
| 5 Mile | x | | x | (| + |) = | = | |
| 10 Mile | x | | x | (| + |) = | = | |

Form EP-13 Rev. 1

EOF Check Point Sign In Log

| EOF | Registration Assistant: |
|-----|--------------------------------|
| | (print name) |

i

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: I |
| | | | 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: I |
| | | | 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 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 <u>THEN</u> 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: <u>IF</u> individuals are only going to another room within the Buchanan Service Center (offices across the hall or men's rest room) <u>THEN</u> 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. |

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IP-2 Manual Determination of Release Rate

Date:

1

Time:

Determine Noble Gas & Radioiodine Release Rates Name:

| | Pla | nt Vent Re | lease Ra | te Calculat | ions (use c | only on | e vent monitoring meth | od) | |
|---------------------------------------|------|---------------|----------|----------------------|-------------|-------------|------------------------|---------|--------------|
| R-27 | | | Х | , | | Х | 4.7E-04 = | | |
| Wide Range | ŀ | (µĈi/ | cc) | (Plant V | ent CFM)* | | (Constant) | (NG | RR Ci/sec) |
| R-44 | | - | Х | , , , | | Х | 4.7E-04 = | | |
| Low / Mid Rang | je - | (µĈi/ci | c) | (Plant Vo | ent CFM)* | | (Constant) | (NGR | R Ci/sec) |
| Vent Contact | | | Х | | х | | X 4.7E-04 | = | |
| Reading | | (mR/hr) | (Co | nv. Factor) | (Plant Vent | CFM)* | (Constant) | | NGRR Ci/sec) |
| Time After | T | TAS | (hr) | Fa | ctor | | TAS (hr) | F | actor |
| Shutdown | [| 0 - | 2 | 2.8 | E-04 | | 6 - 8 | 4. | 9E-04 |
| Conversion Factors for | Γ | 2 - | 4 | 3.4 | E-04 | | 8 - 12 | 6.1E-04 | |
| Contact Readin | g | 4 - | 6 | 4.1 | E-04 | | 12 - 24 | 7.6E-04 | |
| Plant Vent | | X X 4.7E-04 = | | | | | | | |
| Chemistry Sample | ŀ | (µCi/ | cc) | c) (Plant Vent CFM)* | | | (Constant) | (NG | RR Ci/sec) |
| | | | | Air Ejeo | ctor (AE) | | | | |
| Air Ejector | | | X | , | | X 4.7E-04 = | | | |
| R-45 | F | (µCi/ | cc) | (AE C | FM)** | | (Constant) | (NG | iRR Ci/sec) |
| | | | | Main Stean | n Line (MS | SL) | | | |
| R-28, R-29 | | | | 7E-03 | X | | X 4.9 E-06 | = | |
| R-30, R-31 | | (CPM) | (MSL) | Conv. Factor) | (lbm/t | hr)*** | (Constant) | (| NGRR Ci/sec) |
| | | | Steam | Generator | Blowdowr | ı (SG | BD) | | - |
| Chemistry | | | | X | | X | 6.3E-05 = | : | |
| Sample | | (µCi/ | cc) | (G | PM)** | | (Constant) | (NC | JRR Ci/sec) |
| Total Noble Gas F Add Plant Vent + | | | BD | | | | Total NGRR Ci/sec | | |

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

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

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

*** Steam Generator Atmospheric Flowrate 3.50 E+5 lbm / hr / atmospheric Steam Generator Safety Flowrate 7.60 E+5 lbm / hr / safety #22 Auxiluary Feedwater Pump 2.5 x 10⁴ lbm / hr

IP-3 Manual Determination of Release Rate

| Dates |
|-------|
| Date: |

1

Time:

Determine Noble Gas & Radioiodine Release Rates Name:

| | Plant Vent Rele | ase Rate Calcu | lations (use on | ly one vent monitorin | ng method) | | | | |
|---|-----------------|----------------|-----------------|-----------------------|------------|---------------|--|--|--|
| R-27 | | X 1.0 | E-06 | = | | | | | |
| Wide Range | (µCi/sec |) | (Ci/µĊi)* | | (NGRI | R Ci/sec) | | | |
| R-14 | | X | | X 4.7E-04 | = | | | | |
| Low / Mid Range | e (µCi/cc) | (Plar | t Vent CFM)* | (Constant) | (NC | GRR Ci/sec) | | | |
| Vent Contact | , | X | Х | X 4.7E- | | | | | |
| Reading (Contact / 6 Ft) | (mR/hr) | (Conv. Factor) | (Plant Vent C | FM)* (Cons | itant) | (NGRR Ci/sec) | | | |
| Time After | TAS (hr) | Contact Fa | ctor 6ft | TAS (hr) | Contact Fa | ictor 6 ft | | | |
| Shutdown | 0 - 2 | 6.0E-04 | 2.5E-03 | 6 – 12 | 2.8E-03 | 9.5E-03 | | | |
| Conversion Factors for | 2 - 4 | 1.2E-03 | 3.8E-03 | 12 - 24 | 5.5E-03 | 1.6E-02 | | | |
| Contact Reading | 4-6 | 1.6E-03 | 5.5E-03 | 24 – 2 Wk | 6.5E-03 | 2.0E-02 | | | |
| Plant Vent Chemistry | | X | > | K 4.7E-04 | · · | | | | |
| Sample | (µCi/cc) | (Pla | nt Vent CFM)* | (Constant) | (| NGRR Ci/sec) | | | |
| | | Air E | jector (AE) | | | | | | |
| Air Ejector | | X | •* | X 4.7E-04 | = | | | | |
| R-15 | (µCi/cc) | (A) | E CFM)** | (Constant) | | (NGRR Ci/sec) | | | |
| | | Main Ste | am Line (MSL | .) | | | | | |
| R-62A, R-62B | | X | X | 3.2 E-06 | = | | | | |
| R-62C, R-62D | (µCi/cc) | (lbm/hr)*** | | (Constant) | 0 | IGRR Ci/sec) | | | |
| Total Noble Gas R Add Plant Vent + A | |) | | Total NGRI Ci/sec | R | | | | |

| Determine Radioiodine Release Rat | e (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 Obtai | n) Total IRR (Ci/sec) = | |

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

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

*** Steam Generator Atmospheric Flowrate Steam Generator Safety Flowrate

6.30 E+5 lbm / hr / atmospheric 5.50 E+5 lbm / hr / safety

IPEC Manual Dose Assessment Worksheet

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Back Calculating Release Rate from Field Data

| Administrative Data | | | | | | | | | | | | | | | | |
|------------------------|---|---|---|---|---|----|-----|---|---|----|----|----|----|----|----|----|
| Field Reading Location | | | | | | | | | | | | | | | | |
| Field Reading Mileage | | | | | | Mi | les | | | | | | | - | | |
| 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) / (_µ Ci/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) | |

Sheet 1 of 1

Form EP-19 Rev 0

| Turnove | er Sheet |
|--|--------------------------------|
| Date: | Time: |
| Outgoing: | Relieving: |
| Discuss the following items: | |
| 1. Emergency Classification: GE GE S EAL: | AE Alert Unusual Event |
| 2. Initiating Event: | |
| 3. Current Status of: | |
| A. Personnel Safety: | |
| B. Plant Safety: | |
| C. Release of Non-Essential Personnel: | |
| D. Accountability: Missing Persons: Search and Rescue: | |
| E: Radiological Conditions: | |
| F. WPO/JNC Actions: | |
| G. OSC/TSC Status: | |
| H. Offsite Actions (ie: schools, facility activation | on, PARs, etc.) |
| | |
| 5. Status of Offsite Notifications: | RC (headquarters and Residents |
| 6. Corrective Actions: Teams Out: | |
| 7. Actions Underway: Priorities: | |
| 8. Actions that need to be Initiated: | |
| 9. Prognosis: | |

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Media Briefing Worksheet

| Date: | | | Briefing #: | | - |
|--|------------|----------|---------------------------------------|--------|---------------------------------------|
| Time: | | | Briefing Announced: | 🛛 Yes | 🔲 No |
| Reason for Briefing | - | EAS Bro | ncy Classification Change | . 99.5 | |
| | Points to | be Cover | ed | _ | Order |
| Entergy | | | | | |
| Westchester County | | | | | |
| Rockland County | | | | | |
| Putnam County | | | | | |
| Orange County (confirm if via PictureTel or teleconference) | | | | | |
| State of NY | | | | | |
| Public Inquiry Feedback | | | · · · · · · · · · · · · · · · · · · · | | |
| Media Monitoring Feedback | | | | | |
| Graphic Change | es Needed: | | | | · · · · · · · · · · · · · · · · · · · |
| Graphics / Visual | Requests: | | | | |

| | | ing issues Form |
|---------------------------------------|---------------------------------------|---|
| Time Noted: | Note | ed By: |
| | | Additional Information Needed Unanswered Question |
| Issue: | | |
| | | |
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| | | |
| | | |
| ······ | _, | |
| | | to Media Rep. 🖵 Include in Written Statement f Spokesperson(s) 🖵 Other |
| Resolution Details: | | |
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| 10 | | |
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|--|--|-----------------|------------------|---------------------------------------|-----------------|------------------|
| | | | | | | |
| Position | 1 st Shift Name (print) | Time Arrived | Time Departed | 2 nd Shift Name (print) | Time Arrived | Time Departed |
| JNC Director | | | | | | |
| Company Spokesperson | | | | | | |
| JNC Technical Advisor | | | | | | |
| Technical Briefer | | | | | | |
| Agency Llaison | | | | | | |
| Support Services Manager | | | | | | |
| Media Room Manager | | | | ····· | | |
| Media Room Liaison | | | | | | |
| JNC Writer | | | | , | | |
| JNC Documenter | | | | | | |
| Audiovisual Coordinator | ······································ | | | | | |
| AV / Graphics Staff | | | | | | |
| (2 minimum for activation, may include Audiovisual Coordinator) | | | | | | |
| Coordinator) | | | | | | |

Date: _____

Form EP-23 Rev. 0

Shaded positions entail functions that are required for activation

| $\left(\right)$ | | (| | | | · · |
|--------------------------------------|---------------------------------------|-----------------|------------------|---------------------------------------|-----------------|------------------|
| | JU JU | IC STAR | FRING FOR | RM | | |
| Position | 1 st Shift Name (print) | Time Arrived | Time Departed | 2 nd Shift Name (print) | Time Arrived | Time Departed |
| Public Inquiry Coordinator | | | | | | |
| Media Monitoring Staff | | | | | | |
| Media Referral Staff Member(s) | | | | | | |
| | | | | | | |
| Public Inquiry Staff as required) | | | | | | |
| | | | | | | |
| | | | | | | |

Page 2 of 3

Shaded positions entail functions that are required for activation

Date: _____

Form EP-23 Rev. 0

| $\left(\right)$ | | (| - - | | | (• |
|-------------------------------------|---------------------------------------|-----------------|------------------|---------------------------------------|-----------------|------------------|
| JNC STAFFING FORM | | | | | | |
| Position | 1 st Shift Name (print) | Time Arrived | Time Departed | 2 nd Shift Name (print) | Time Arrived | Time Departed |
| | | | | | | |
| Support Services Staff | | | | | | |
| | | | | | | |
| Registration Coordinator | | | | | | |
| Registration Coordinator | | | | | | |
| IT Representative | | | | | | |
| Radiological Advisor | | | | | | |
| | | | | | | |
| JNC Access Control | | | | | | |
| | | | | | | |
| IP Communications Representative | | | | | | |
| Government Liaison Rep | | | | | | |
| Government Liaison Rep | | | | | | |
| Government Liaison Rep | | | | | | |

Date: _____

Form EP-23 Rev. 0

Shaded positions entail functions that are required for activation

Emergency Summary Sheet



| : | | | | |
|---|----------------------------------|----------|--|----|
| : | | <u> </u> | | |
| | This is a Drill | | $1 / // \langle$ | |
| | This is an Actual Event | | Putnam County | Ņ |
| | Emergency Classifica | ation: | county Westcheste | |
| | Unusual Event | | 270° - Orange County County | |
| | Alert | | Indian Po | |
| | Site Area Emergency | | | |
| | General Emergency | | THE Station | / |
| | Event Description: | | | |
| | | | | |
| | Radiological Condition | ons: | 180 | |
| | Release of Radioactive Materials | | No Release | |
| | due to the classified event. | | Release BELOW federally approved operating limi (Technical Specifications) | ts |
| | | | | |
| | | | To Atmosphere D To Water | |
| | | | To Atmosphere To Water Release ABOVE federally approved operating limit | s |
| | | | To Atmosphere To Water | s |
| | | | To Atmosphere To Water Release ABOVE federally approved operating limit (Technical Specifications) | S |
| | <u>Meteorological Cond</u> | | To Atmosphere To Water Release ABOVE federally approved operating limit (Technical Specifications) To Atmosphere To Water Unmonitored Release – Being Evaluated | S |
| | | | To Atmosphere To Water Release ABOVE federally approved operating limit (Technical Specifications) To Atmosphere To Water Unmonitored Release – Being Evaluated | |

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

Form EP-24 Rev. 0

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Written Statement Distribution Checklist

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| | urrent, as noted by the | assigned. Some steps are e numbering. Support Services teps are completed at conclusion. | Statement Number: | |
|--------------|---|--|---|--|
| Step # | JNC Position Responsible | Detail Description | Completed By (Print) and Time | |
| 1 | Support Services Manager | Documenter of ap Documenter of ap Start a Written Sta and Fax Distribution and file cabinet) | and start distribution pokesperson initial, notify proval time tement Distribution Checklist on Sheet (in Position Binder | |
| | | · · · · | ment with Distribution Distribution sheet to Support | |
| 2 | Assigned Support Services Staff Person | with 2 copies (one for fax distribution | ervices Staff in fax/copy room for further copying and one described below) | |
| \checkmark | | Provide original ini Services Manager | tialed copy back to Support | |
| 3a | Support Services Staff assigned to | Make 48+ copies of final wr releases and coordinate dis Services Staff as follows: | | |
| | Copy area | 12+ Copies to the media (Coordinate | c Inquiry Coordinator Media Room Liaison for number needed with Media bies to Media may take on timing.) | |
| | | | Monitoring Room Personnel | |
| | | Post 1 Copy on Bu 7 (or 14-2 each) | lletin Board near JNC Writer copies to each work room er, Rockland, Putnam, | |
| | | Upon completion, | provide this Distribution ort Services Manager | |

Written Statement Distribution Checklist

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| | each step below as a n all steps are comple | ssigned. Support Services Manager is to ted. | Statement Number: |
|----|---|---|---|
| 3b | Support Service Staff in Fax/Copy Room | machine Complete fax distribution facilities and other for fax machine (follow Review Fax Confirm state that all transmost | tion Form. DO NOT SEND IN OUT-GOING FAX ax Cover Sheet oution to media on one fax oution to other emergency Entergy locations on another Fax Distribution Form) nation sheets to ensure they issions were successfully of the confirmation will read |
| 4 | Support Services Manager | Provide original (initialed) sta and this Distribution Checklis keeping | |
| 1 | | | |

Page 2 of 2

Form EP-25 Rev. 1

Information Distribution Guide

(Follow the priority order noted)

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| Type of Information | Recipient (follow order for distribution, if possible) | Distribution Completed By (Print) |
|---|---|--------------------------------------|
| Plant Status, including | Utility Room A & B | |
| PICS or EDDS data sheets, Forms and plant parameters | JNC Technical Advisor (& Radiological Advisor) | |
| (received via fax or | Company Spokesperson | |
| from/via JNC Technical | JNC Director | |
| Advisor) | Agency Liaison | |
| | JNC Documenter | |
| | State/County PIOs (Radiological Data Forms, Part 1 and 2 ONLY) | |
| EAS Statements | ALL Locations/All positions | |
| (provided by State or via Agency Liaison) | Public Inquiry Room & Media Monitoring Room (20+ copies) | |
| | Entergy Rooms A & B (9+ copies) | |
| 1 | State, County and Federal Work Rooms | |
| \mathbf{i} | Media Briefing Room (at assigned time provided by State or Agency Liaison) | |
| Written Statements, including news releases | Follow Written Statement Distribution Checklist form | |
| All Other Information Received (via fax or otherwise) | Request distribution instructions from the Support Services Manager and/or JNC Director | |
| | | |
| | Page 1 of 1 | Form EP-26 Rev. 2 |

PUBLIC INQUIRY - MEDIA REFERRAL -MEDIA MONITORING FORM

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| 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 () |
| Was the call referred: () Yes () No If yes, to whom? |
| Further action required: () Yes () No |
| Was this action completed? () Yes () No By: |
| Reported to Public Inquiry Coordinator at: |
| Public Inquiry Coordinator Notes: |
| |

Return completed form to Public Inquiry Coordinator:

Joint News Center Fax Cover Sheet

| FROM: DATE: | | ЛЕ: |
|-------------------|---------------------------|--------------|
| Number of Pages (| (including cove | r): |
| | /ICES | |
| AP/NYC | | |
| AP/WESTCH | ESTER | |
| CNN | | |
| REUTERS AN | | |
| | BURBAN NEWS B NEWSWIRE | WHITE PLAINS |
| | TIMES NEWS SI | FBVICE |
| | | |
| | OR | |
| | MEDIA RELA | TIONS |
| | FICIALS | |
| O ther | | |

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Individual Exposure Tracking Log

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

NOTES:

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

MONITORING TEAM RADIATION FIELD SURVEY DATA

Team Name:_____

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Date:

Team Member Names:

Count Rate Meter, Model#: ______Serial#: _____Ion Chamber, Model#: R-02 Serial#: _____

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

NOTES: [1]

24-hr clock

Count Rate Meter data or conversion from Dose Rate Meter 1000 CPM = 0.1mR/hr (OW).

[2] [3] RO-2, Ion Chamber data.

MONITORING TEAM SAMPLE DATA

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| m Name: | | Date: |
|----------------------------|---------------------------------|----------------------|
| Sample Location: | | |
| | | |
| Radiation Field Measureme | Nts (may be recorded on separat | e form). |
| Ion Chamber, Model #: | | |
| @ 3 in. above ground: | @ 3 ft. a | bove ground: |
| Opened Window (OW) (mR/h | nr):Opened | Window (OW) (mR/hr): |
| Closed Window (CW) (mR/hr |):Closed \ | Nindow (CW) (mR/hr): |
| 4 | · | /) X 2 (mrad/hr): |
| | | |
| Air Sampling: | | |
| Air Sampler, Model #: | Serial #: | |
| Particulate Filter: | lodine (C): | lodine (AgZ): |
| Sampling Start: | Time (HH:MM): | Flow (CFM): _ |
| Sampling Stop: | Time (HH:MM): | Flow (CFM): _ |
| Duration (MM) | | |
| Average Flow (CFM): | | |
| Sample Volume (CF): | | |
| Air Sample Counting: | | |
| Count Rate Meter, Model #: | S | erial #:Time: _ |
| Part Filter, Bkgd (CPM): | Gross (CPM):_ | Net (CPM): _ |
| Iodine (C), Bkgd (CPM): | Gross (CPM):_ | Net (CPM): |
| · · · · · · <u> </u> | | |

Form EP-31, Rev 0

Determination of Radioactive Airborne Concentrations

A = Net CPM x 1.0E-09

Where: $Vol^{(1)}$ is in liters (Liters = 2.832 x FT³) Efficiency⁽²⁾ is 0.1 for particulate, 0.2 for iodine CCF⁽³⁾ is .95 for Charcoal, 1.0 for AgZ / Paper

µCi/cc = $B = 2.2 \times Vol \times Eff. \times CCF$

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| | | | | | | | - | | |
|---|-----------|-------|-----------|---|-------|------------|-------------|------|--|
| Sample Location | on: | | | | | | Particulate | | lodine |
| Sample Time: | | | | | Team: | | | | |
| Sample Net C | РМ | | Constant | | | A | | | |
| | > | < | 1.0E-09 | = | | | | | ************************************** |
| Sample Volume in Liters ⁽¹⁾ | Efficienc | у | Constant | | | | | в₽ | |
| X | | X | 2.2 | X | | = | | | |
| µCi/cc = | A/B | = | | | | | µCi/cc | | |
| | С | alcul | ated by: | | | | Ţ | ime: | |
| Sample Locatio | n: | | | | | | Particulate | | lodine |
| Sample Time: | | | | | Team: | | | | |
| Sample Net C | РМ | | Constant | | | А Џ | | | |
| | > | (| 1.0E-09 | = | | | | | |
| Sample Volume in Liters ⁽¹⁾ | Efficienc | у | Constant | | CCF | | | в ₽ | |
| X | | X | 2.2 | X | | = | | | |
| µCi/cc = | A/B | = | | | | | µCi/cc | | |
| | С | alcul | lated by: | | | | Т | ime: | |
| Sample Locatio | n: | | | | | | Particulate | | lodine |
| Sample Time: | | | | | Team: | | | | |
| Sample Net C | PM | | Constant | | | A ₽ | | | |
| | > | (| 1.0E-09 | = | | | | | an a |
| Sample Volume in Liters ⁽¹⁾ | | у | Constant | | CCF | | | в Ф | |
| X | | Х | 2.2 | Х | | = | | | |
| µCi/cc = | A/B | = | | | | | μCi/cc | | |
| | C | alcul | lated by: | | | | Т | ime: | |

MEDIA INQUIRY LOG

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| DATE: | TIME: | | |
|-----------------------|-------|---|--|
| NAME OF REPORTER: | | - | |
| AFFILIATED WITH: | | - | |
| PHONE NUMBER: | | - | |
| INQUIRY: | | | |
| | | | |
| | | | |
| RESPONSE: | | | |
| | | | |
| | · | | |
| | | | |
| | | | |
| RESPONSE PROVIDED BY: | | | |
| COMMENTS: | | | |
| | | | |
| | | | |
| | | | |

Courtesy Call Guide

1. EVENT SUMMARY (from IP Communications Representative)

| Indicate Emergency | Classification I | Level (ECL), EAL/Time | |
|--------------------|------------------|-----------------------|-------------------|
| Unusual Event | Alert | Site Area Emergency | General Emergency |

Plant Status/Information/Radiological Conditions (notes):

2. Script for Courtesy Calls

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2

"Hi, my name is _____.

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

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

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

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

Name of GLR: _____

Time Calls Completed: _____

JNC BRIEFING SUMMARY/TALKING POINTS

| BRIEFING # | DATE: |
|---------------------------------|-----------------------------|
| TIME: Start: | End: |
| | at (time). The event was |
| PLANT STATUS/EVENT INFORMATION: | RESPONSE (SITE, CORPORATE): |
| | |
| | |
| | |
| | |
| | |
| | |
| ADIOLOGICAL CONDITIONS: | EMPATHY: |
| | |
| | |
| | |
| | |
| | |
| | |

QUESTIONS REQUIRING FOLLOW-UP:

RUMORS TO ADDRESS:

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Form EP-35 Rev. 0

| <u></u> | Primary - ERO A | ctivation C | hecklist | | | | | |
|---------|---|-------------------------------------|---------------------|-------------------------------|--|--|--|--|
| | Dialogic Notification Systems Activation: | | | | | | | |
| 1. | Verify that Shift Manager has determined that ER | O mobilization o | r notification is I | needed. | | | | |
| 2. | 2. Verify Control Room Pagers are on. | | | | | | | |
| 3. | Call: 9-788-7771 | | | | | | | |
| 4. | 4. You will hear: "This is the remote activation module. Please enter scenario activation password followed by the pound (#) sign." | | | | | | | |
| 5. | Enter Activation Password and Press #: | | | # | | | | |
| 6. | After entering the activation password you will hea scenario ID number followed by the pound (#) sign | | | | | | | |
| 7. | Enter Scenario Number and Press #: | | | # | | | | |
| 8. | 8. After entering the Scenario Number you will hear: "The pager event code is (three digit number). Press 1 to change the pager event code. Press 2 to continue." | | | | | | | |
| | TE: Do NOT change the three digit event code regardles | 2 | | | | | | |
| 9. | 9. After entering "2" you will hear: "To start the scenario, press 3, followed by the pound sign (#). | | | | | | | |
| | | 3 # | | | | | | |
| 10 | WHEN you hear: "Goodbye" THEN Hang-up. | | | | | | | |
| 11 | Enter the time you completed Dialogic activation. | | | Time: | | | | |
| | NOTE: Continue on with offsite notifications | while waiting fo | r verification of | pager activation | | | | |
| 12 | Verify the notification system successfully activate pager activates within 3 minutes, THEN go to Step | | rol Room page | r sounding. <u>IF</u> neither | | | | |
| 13 | Inform the Shift Manager that you have completed | I ERO activation | or notification. | | | | | |
| 14 | Date and sign this form when complete: | te: | Signature: | | | | | |
| Co | ntinue <u>ONLY</u> if Control Room Pagers Did Not A | ctivate | | | | | | |
| 15 | . Contact Security SAS at 734-5330 and ask if the S | Security pager a | ctivated. | | | | | |
| 16 | IF Security pager activated THEN go to step 13. | | | | | | | |
| 17 | . IF Security pager did not activate THEN repeat st | eps 3 through 10 |) one additional | time. | | | | |
| | IF during the 2 nd attempt, on step 8, you hear: scenario." THEN do not stop the scenario. Pre stop a scenario press 2, to check scenario info password press 4, to end this call press pound | ess: 6 You will to ormation press 3 | hen hear: "To s | tart a scenario press 1, to | | | | |
| 18 | . <u>IF</u> a Control Room or Security pager does not sou Notification System per Form EP-37, Backup - Err | | | | | | | |
| Pr | oprietary Information Pa | age 1 of 1 | | Form EP-36 Rev. 0 | | | | |

| Backup - E | ERO | Activation | Checklist |
|------------|-----|------------|-----------|
|------------|-----|------------|-----------|

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| | Backup | - ERO Activa | tion Checklist | |
|------------|--|--|---|---|
| A. | Backup Notification System Activati | on: | | |
| 1. | Use the Backup Notification System ONL | Y if the Primary Dialogic | system fails to activate. | |
| 2. | Verify Control Room Pagers are on. | | | |
| З. | Call: 9-1-866-521-7099 | | | |
| 4. | Upon hearing the following message: "Th pound (#) sign." | is is the DCC Service Bu | ireau. Please enter your compai | ny ID number followed by |
| 5. | Enter Company ID and Press #: | | | 4732 # |
| 6. | Upon hearing the following message: "Ple | ease enter Scenario Acti | vation Password followed by the | pound (#) sign." |
| 7. | Enter Activation Password found in Dia | logic Envelope and Pres | s #: | |
| 8. | After entering the Activation Password yo followed by the pound (#) sign, or press p | w will hear the following bound alone for more opt | message: <i>"To start a scenario, e</i> ions." | nter the Scenario ID Num |
| 9. | Enter Scenario ID Number found in Dial | ogic Envelope and Pres | s #: | |
| 10. | After entering the Scenario ID Number yo press 1, to stop a scenario press 2, to che scenario activation password press 4, to o | eck scenario Information | press 3, to enter a different | 3 # |
| | NOTE: Press pound (#) to end the call. | | | |
| 11. | WHEN you hear the following message: " | | ıp. | |
| 12. | Enter the time you completed Dialogic act | tivation. | | Time: |
| | NOTE: Continue on with offsite notifications | while waiting for verifica | tion of pager activation | |
| 13. | Verify the backup notification system succ activate, <u>THEN</u> go to Part B. | cessfully activated by eith | her Control Room pager soundin | g. <u>IF</u> the pager did not |
| 14. | Inform the Shift Manager that you have co | ompleted ERO activation | using the Backup System. | |
| 15. | Date and sign this form when complete: | Date: | Signature: | <u></u> |
| Con | tinue <u>ONLY</u> if Control Room Pagers Did N | lot Activate | 1 | <u></u> |
| | Contact Security SAS at 734-5330 and ask | if the Security pager acti | vated. | |
| 16. | | | | |
| | IF Security pager activated THEN go to step | 5 14. | | |
| 17. | IF Security pager activated <u>THEN</u> go to step IF Security pager did not activate <u>THEN</u> rep | | ne additional time. | |
| 17. | | eat steps 3 through 11 o ou hear: <i>"The scenario is</i> ill then hear: <i>"To start a</i> s | currently active. Do you wish to cenario press 1, to stop a scena | rio press 2, to check |
| 17. 18. | IF Security pager did not activate <u>THEN</u> rep IF during the 2 nd attempt, on step 10, yo not stop the scenario. Press: 6 You wi scenario information press 3, to enter a | eat steps 3 through 11 o ou hear: <i>"The scenario is</i> ill then hear: " <i>To start a s</i> a <i>different scenario activa</i> | currently active. Do you wish to cenario press 1, to stop a scena ation password press 4, to end th | nio press 2, to check is call press pound (#). |

| 2 | Backup | - ERO Activation Checklist | |
|--------------------|---|--|------------------------|
| B. | Manual Group Page Activation: | | |
| | Use the Manual Group Page Activation activate. | ONLY if the Primary AND Backup Dialogic sy | stems both fail to |
| 2. | Request direction from Shift Manger (Er | nergency Director) as to ERO mobilization ne | eded: IPEC. |
| 3. | If mobilization is needed, call the IPEC | Group Page phone number: | |
| 4. | To Activate IPEC ERO : | | |
| | Dial IPEC Group Page number: 9-1-8 | 00-759-8888 | |
| | Enter Pin number followed by # sign: | <u>1940606#</u> | |
| | Enter Event Code followed by # : | # (In Dialogic Envelop) | |
| 5. | Upon hearing one or more beeps, enter followed by the # sign, found in the Diak | the three digit Pager Event Code number ogic Envelop. Press: | # |
| 6. | Upon entering the three digit Event Cod | e followed by the # sign you will hear a short | message, to send the |
| | message, hit the # sign again, and to ca | incel the message hit the $$ key. Hang up. | |
| 7. | Enter time you completed activating page | gers Time: | |
| 8. | Verify that the correct message was ser Security pager is same as the three digi | nt by confirming the pager message received to the termination of termina | on the Control Room or |
| 9. | | ontrol Room pager <u>THEN</u> immediately call the discrete set of the send the "Disregard Last Message" code as | |
| ۰ <mark>٦</mark> , | Upon entering the three digit Event Cod | e followed by the # sign you will hear a short | message, to send the |
| 1 | message, hit the # sign again, and to ca | incel the message hit the * key. Hang up. | - |
| 11. | | il to activate <u>THEN</u> inform Shift Manager that | you are unable to |
| Brer | prietary Information | Page 2 of 2 | Form EP-37 Rev 1 |

PAGE 1 OF 2

U.S. NUCLEAR REGULATORY COMMISSION OPERATIONS CENTER

REACTOR PLANT EVENT NOTIFICATION WORKSHEET

| | | E١ | ENT N | IOTIFICATION WORKSHI | EET | Ε | N# | |
|---|----------------------------------|-------------------|---|---------------------------------------|------------------|---------------|--|-------|
| | | | | 16-5100 or 800-532-3469*, B/ | • | • | 951-0550 or 800-449-3694*, | |
| 12" 301-415-0550 and 13" 301-415-0553 NOTIFICATION TIME FACILITY OR ORGANIZA | | | *Licensees who maintain their own ETS are provided these telephone r TON UNIT NAME OF CALLER | | | CALL BACK # | | |
| EVENT TIME & Zone | EVENT DATE | POWER/MODE BEFORE | | | POWER/MODE AFTER | | | |
| EVENT CLASSIFICATI | IONS | 1-ŀ | Ir. Non | -Emergency 10 CFR 50.7 | 72(b)(1) | | (v)(A) Safe S/D Capability A | |
| GENERAL EMERGENC | Y GEN/AAEC | | TS Dev | viation | ADEV | | (v)(B) RHR Capability A | INB |
| SITE AREA EMERGENO | CY SIT/AAEC | 4-1 | ir. Non | -Emergency 10 CFR 50.7 | 72(b)(2) | | (v)(C) Control of Rad Release | AINC |
| ALERT | ALE/AAEC | | (i) | TS Required S/D | ASHU | | (v)(D) Accident Mitigation A | AIND |
| UNUSUAL EVENT | UNU/AAEC | | (iv)(A) | ECCS Discharge to RCS | ACCS | | (xii) Offsite Medical A | MED |
| 50.72 NON-EMERGENC | Y (see next columns) | | (iv)(B) | RPS Actuation (scram) | ARPS | | (xiii) Loss Comm/Asmt/Resp A | сом |
| PHYSICAL SECURITY (| 73.71) DDDD | | (xi) | Offsite Notification | APRE | | Day Optional 10 CFR 3(a)(1) | |
| MATERIAL/EXPOSURE | B??? | 8-ł | łr. Non | -Emergency 10 CFR 50.7 | 72(b)(3) | | Invalid Specified System Actuation AINV | 1 |
| FITNESS FOR DUTY | HFIT | | (ii)(A) | Degraded Condition | ADEG | Othe (Iden | r Unspecified Requirement ttify) | |
| OTHER UNSPECIFIED | REQMT. (see last column) | | (ii)(B) | Unanalyzed Condition | AUNA | | N | IONR |
| INFORMATION ONLY | NNF | | (iv)(A) | Specified System Actuation | AESF | | N | IONR |
| | | | | DESCRIPTION | | | | |
| nclude: Systems affected, act | uations and their initiating sid | nals. | causes. (| effect of event on plant, actions tal | ken or planned. | etc. (Co | potinued on back) | ····· |

| NOTIFICATIONS | YES | NO | WILL BE | ANYTHING UNUSUAL OR | YES (Explain above) | D NO | | |
|---------------------|-----|----|---------|-----------------------|---------------------|-------------------------|--|--|
| NRC RESIDENT | | | | NOT UNDERSTOOD? | | | | |
| STATE(s) | | | | DID ALL SYSTEMS | | NO (Explain above) | | |
| LOCAL | | | | FUNCTION AS REQUIRED? | | | | |
| OTHER GOV AGENCIES | | | | MODE OF OPERATION | ESTIMATED | | | |
| MEDIA/PRESS RELEASE | | | | UNTIL CORRECTED: | RESTART DATE: | ADDITIONAL INFO ON BACK | | |
| | | | | | | | | |

ACSIMILE of NRC FORM (12-2000)

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FACSIMILE of NRC FORM 361 (12-2000)

| | | | | _ | | ADDITIONAL INFORM | MATIO | N | | | | | P/ | AGE 2 OF 2 | |
|--|---|-------------|---------------------|--|-----------------------|--------------------|--|------------|-----------------|-----------------------|--------|----------|-------------------------------------|--------------------|--|
| Ĩ | RADIOLOGICAL RELEASES | <u>s: (</u> | CHECK OR FILL IN AP | PLK | CABL | E ITEMS (specific | detai | is/exp | lanat | tion should be covere | d In | the ever | nt description) | | |
| Ż | LIQUID RELEASE | | GASEOUS RELEASE | | Ē ! | UNPLANNED RELE | ASE | T | PLA | ANNED RELEASE | | ONGOIN | IG | TERMINATED | |
| | MONITORED | | UNMONITORED | | \Box | OFFSITE RELEASE | : | | T.S. | S. EXCEEDED | | RM ALAI | RMS | AREAS EVACUATED | |
| | PERSONNEL EXPOSED OR CONTAMINATED | | | | \square | OFFSITE PROTECT | OFFSITE PROTECTIVE ACTIONS RECOMMENDED | | | | | | * State release path in description | | |
| | Release Rate (Cl/se | | | | .) | % T. S. Limit | % T. S. Limit HOO GUIDE Total Activity (| | | | | ;1) | % T. S. Limit | HOO GUIDE | |
| 1 | Noble Gas | T | | | | | 0.1 | I Ci/se | с | | | | 1000 Ci | | |
| ŀ | odine | Τ | | | | | 10 uCl/sec | | | | | | | 0.01 Ci | |
| F | Particulate | Ι | | | | | 1 uCi/sec | | ; | | | | | 1 mCi | |
| | Liquid (excluding tritium and dissolved noble gases) | , | | | | | 10 | 10 uCi/min | | | | | | 0.1 Ci | |
| _ | Liquid (tritium) | | | | | | 0.2 | 0.2 Ci/min | | | | | | 5 Ci | |
| | Total Activity | T | | | | | | | | | | | 1 | | |
| | | | PLANT STACK | Τ | CONDENSER/AIR EJECTOR | | | | MAIN STEAM LINE | | | 1 | SG BLOWDOWN | OTHER | |
| F | RAD MONITOR READINGS | Ι | | Ι | | | | | | | | | | | |
| | ALARM SETPOINTS | T | | Τ | | | | | | | | | 1 | | |
| % T. S. LIMIT (if applicable) | | | | | | | | | | | | | | | |
| | RCS OR SG TUBE LEAKS: | | | KAI | BLEI | ITEMS: (specific d | etails/ | 'explai | natio | ns should be covered | l In (| event de | scription) | | |
| | LOCATION OF THE LEAK (e.g., SG #, 1 | | | | | | | | | | | | | | |
| ī | LEAK Rate UNITS: gpm/gpd T. | | | T. S. | . LIMIT | rs | | SUDD | EN OF | R LONG-TERM DEVELOP | ME | хт | | | |
| ī | LEAK START DATE TIME | | | COOLANT ACTIVITY PRIMARY SECONDARY AND UNITS: SECONDARY | | | | | | | | | | | |
| LIST OF SAFETY RELATED EQUIPMENT NOT OPERATIONAL | | | | | | | | | | | | | | | |
| \vdash | EVENT DESCRIPTION (Continued from front) | | | | | | | | | | | | | | |
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