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Date: 7/11/02

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| Document # | Document Name  | New Rev.<br>#/ Date | Old Rev.<br>#/ Date | Instructions            |
|------------|--|---------------------|---------------------|-------------------------|
| U2         | EP Implementing Procedures   |                     |                     |                         |
| TOC        | Emergency Plan Implementing Procedures Table of Contents                 | 6/10/02             | 7/11/02             | Replace entire document |
| IP-1007    | Dose Assessment  | Cancel              | 11<br>3/26/01       | Remove entire document  |
| IP-1013    | Protective Action Recommendations  | Cancel              | 8<br>11/1/99        | Remove entire document  |
| IP-1016    | Obtaining Meteorological Data  | Cancel              | 12<br>9/1/99        | Remove entire document  |
| IP-1022    | Obtaining Meteorological, Radiological and Dose Assessment Data          | Cancel              | 5<br>9/1/99         | Remove entire document  |
| IP-1024    | Emergency Classification   | 11<br>7/11/02       | 10<br>6/10/02       | Replace entire document |
| IP-1030    | Emergency Operations Facility  | 6<br>7/11/02        | 5<br>9/6/01         | Replace entire document |
| IP-1033    | Modular Emergency assessment & Notification System (MEANS)               | Cancel              | 0<br>3/26/01        | Remove entire document  |
| IP-1036    | Estimation of Population Dose within the 10 Mile Emergency Planning Zone | Cancel              | 6<br>9/1/99         | Remove entire document  |

A045

| Document # | Document Name   | New Rev.<br>#/ Date | Old Rev.<br>#/ Date | Instructions           |
|------------|---|---------------------|---------------------|------------------------|
| U2         | EP Implementing Procedures  |                     |                     |                        |
| IP-1037    | Obtaining Offsite Reuter-Stokes Monitor Data                      | Cancel              | 8<br>9/1/99         | Remove entire document |
| IP-1045    | Activation of Alternate Emergency Operations Facility             | Cancel              | 9<br>5/18/01        | Remove entire document |
| IP-1047    | Obtaining Offsite Exposure Rates from Midas using a Data Terminal | Cancel              | 8<br>4/29/02        | Remove entire document |
| IP-1048    | Termination and Recovery  | Cancel              | 9<br>9/6/01         | Remove entire document |
|            |   |                     |                     |                        |

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| 3 RES DEPARTMENT MANAGER      | RES DEPARTMENT           | 45-4-A     |
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| 11 CONTROL ROOM & MASTER      | OPS (3PT-D001-D006 ONLY) | IP3        |
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| 41 SIMULATOR                  | TRAINING                 | 48-2-A     |
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| 511 L.GRANT                   | LRQ-OPS / TRAINING       | #48        |
| 512 C.STELLATO                | NRQ-OPS / TRAINING       | #48        |
| 513 C.STELLATO                | NRQ-OPS / TRAINING       | #48        |
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| 519 TSC                       | UNIT 2 (IPEC ONLY)       | IP2        |
| 520 CONTROL ROOM (UNIT 2)     | OPERATIONS (IPEC ONLY)   | IP2        |
| 521 SIMULATOR (UNIT 2)        | TRAIN/CENTER (IPEC ONLY) | 48-2-A     |
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| 524 JOHN MCCANN (UNIT 2)      | NUC SAFETY/LICENSING     | IP2        |

## Unit 2 Emergency Plan Implementing Procedures

### Table of Contents

| Procedure No. | Procedure Title  | Rev. No. | Effective Date |
|---------------|--|----------|----------------|
| IP-1001       | Mobilization of Onsite Emergency Organization                          | 13       | 5/25/01        |
| IP-1002       | Emergency Notification and Communication                               | 26       | 5/30/02        |
| IP-1003       | Planned Discharge of Containment Atmosphere During Accident Conditions | 7        | 4/16/01        |
| IP-1004       | Post Accident Offsite Environmental Surveys, Sampling and Counting     | 5        | 9/1/99         |
| IP-1007       | <b>Cancelled – Replaced by IP-EP-310</b>                               | -        | -              |
| IP-1008       | Personnel Radiological Check and Decontamination                       | 7        | 4/29/02        |
| IP-1009       | Radiological Check and Decontamination of Vehicles                     | 7        | 9/1/99         |
| IP-1010       | Central Control Room   | 5        | 5/30/02        |
| IP-1011       | Joint News Center  | 7        | 6/4/02         |
| IP-1012       | Onsite Medical Emergency   | 10       | 5/25/01        |
| IP-1013       | <b>Cancelled – Replaced by IP-EP-410</b>                               | -        | -              |
| IP-1014       | Radiological Check of Equipment Before It Leaves the Site              | 6        | 9/1/99         |
| IP-1015       | Radiological Surveys Outside the Protected Area (Title Change)         | 9        | 3/26/01        |
| IP-1016       | <b>Cancelled – Replaced by IP-EP-510</b>                               | -        | -              |
| IP-1019       | Coordination of Corporate Response                                     | 10       | 9/6/01         |
| IP-1020       | Airborne Activity Determination  | 8        | 01/12/01       |
| IP-1021       | Manual Update, Readout and Printout of Proteus Plant Parameter Data    | 6        | 4/29/02        |
| IP-1022       | <b>Cancelled – Replaced by IP-EP-510</b>                               | -        | -              |
| IP-1023       | Operations Support Center (OSC)  | 18       | 4/11/02        |
| IP-1024       | Emergency Classification   | 11       | 7/11/02        |
| IP-1025       | Cancelled  | -        | -              |
| IP-1026       | Emergency Data Acquisition   | 0        | 01/12/01       |
| IP-1027       | Personnel Accountability and Evacuation                                | 16       | 4/11/02        |
| IP-1030       | Emergency Operations Facility (EOF)                                    | 6        | 7/11/02        |
| IP-1033       | <b>Cancelled – Replaced by IP-EP-520</b>                               | -        | -              |

## Unit 2 Emergency Plan Implementing Procedures

### Table of Contents

| Procedure No. | Procedure Title                          | Rev. No. | Effective Date |
|---------------|--|----------|----------------|
| IP-1035       | Technical Support Center (TSC)           | 16       | 2/20/01        |
| IP-1036       | <b>Cancelled – Replaced by IP-EP-620</b> | -        | -              |
| IP-1037       | <b>Cancelled – Replaced by IP-EP-510</b> | -        | -              |
| IP-1039       | Offsite Contamination Checks             | 9        | 01/12/01       |
| IP-1045       | <b>Cancelled – Replaced by IP-EP-251</b> | -        | -              |
| IP-1047       | <b>Cancelled – Replaced by IP-EP-510</b> | -        | -              |
| IP-1048       | <b>Cancelled – Replaced by IP-EP-610</b> | -        | -              |
| IP-1050       | Security                                 | 3        | 4/11/02        |

## EMERGENCY CLASSIFICATION

|                     |                                      |  |                        |
|---------------------|--------------------------------------|--|------------------------|
| Prepared by:        | <u>C. Kelly Walker</u><br>Print Name | <u><i>C. Kelly Walker</i></u><br>Signature           | <u>7/1/02</u><br>Date  |
| Technical Reviewer: | <u>MaryAnn Wilson</u><br>Print Name  | <u><i>MaryAnn Wilson</i></u><br>Signature            | <u>7/2/02</u><br>Date  |
| Reviewer:           | _____<br>Print Name                  | _____<br>Signature                                   | _____<br>Date          |
| Reviewer:           | _____<br>Print Name                  | _____<br>Signature                                   | _____<br>Date          |
| Reviewer:           | _____<br>Print Name                  | _____<br>Signature                                   | _____<br>Date          |
| SNSC Review:        | <u>2884</u><br>Meeting Number        | <u><i>Melanie Higgins</i></u><br>Signature Secretary | <u>7/11/02</u><br>Date |
| Approval:           | <u>Frank Inzirillo</u><br>Print Name | <u><i>F. Inzirillo</i></u><br>Signature              | <u>7/11/02</u><br>Date |

Effective Date: 7/11/02

|               |                 |               |
|---------------|-----------------|---------------|
| _____         | Biennial Review | _____         |
| Reviewer/Date |                 | Reviewer/Date |
| _____         |                 | _____         |
| _____         |                 | _____         |

**EMERGENCY CLASSIFICATION****1.0 PURPOSE**

To describe the method for classification of emergencies as a Notification of Unusual Event (NUE), Alert, Site Area Emergency (SAE) or General Emergency (GE).

**2.0 DISCUSSION**

- 2.1 The symptom, event or barrier base classification may be made for NUE, Alert, Site Area or General Emergency, using Attachment 2.
- 2.2 **IF** a symptom, event or barrier base classification has been declared in a category followed by the same classification in another category **THEN** the classification continues to apply but an update should be made to offsite authorities in accordance with Reference 6.2.
- 2.3 **IF** a symptom, event or barrier based classification has been declared in a category followed by an increased classification **THEN** the higher classification shall be declared **AND** offsite authorities shall be notified in accordance with Reference 6.2.
- 2.4 Many of the classifications derived from the Reference 6.3 methodology are fission product barrier based. That is, a condition based upon loss or potential loss of one or more of the three fission product barriers. (Fuel cladding, RCS and Containment). Refer to Attachment 1.
- 2.5 The following criteria serves as bases for event classification related to fission product barrier loss:
- 2.5.1 Unusual Event - any loss **OR** potential loss of containment.
- 2.5.2 Alert - Any loss **OR** potential loss of fuel clad or RCS.
- 2.5.3 Site Area Emergency - Any loss of both fuel clad **AND** RCS **OR** any potential loss of **EITHER** fuel clad **OR** RCS with a loss of any addition barrier.
- 2.5.4 General Emergency - Loss of any two barriers with loss **OR** potential loss of a third.
- 2.6 Event based classifications refer to occurrences with potential safety significance such as failure of Safety Injection pumps, safety valve failures, or electric power failures.
- 2.7 The symptom based classifications refer to those indicators that are measurable over a continuous spectrum, such as, core temperature, coolant levels and containment pressure.
- 2.8 The Technical Bases Document provides an explanation and rational for each of the Emergency Action Levels (EALs). This document is also used by individuals who are responsible for the implementation of this procedure as a technical reference and aid in EAL interpretation.
- 2.9 The EALs are grouped into nine categories to simplify their presentation and promote a

rapid understanding by their users. These categories are:

- Category 1 CSFST Status
- Category 2 Reactor Fuel
- Category 3 Reactor Coolant System
- Category 4 Containment
- Category 5 Radioactivity Release/Area Radiation
- Category 6 Electrical Failures
- Category 7 Equipment Failures
- Category 8 Hazards
- Category 9 Other

- 2.10 Categories one through five are primarily symptom based. The symptoms are indicative of actual or potential degradation of either fission product barriers or personnel safety.
- 2.11 Categories six, seven and eight are event based. Electrical Failures are those events associated with losses of either AC or vital DC electrical power. Equipment Failures are abnormal and emergency events associated with vital plant system failures, while hazards are those non-plant system related events which have affected or may affect plant safety.
- 2.12 Category nine provides the Emergency Director (Shift Manager) the latitude to classify and declare emergencies based on plant symptoms or events which in his judgment warrant classification. This judgment includes evaluation of loss or potential loss of one or more fission product barriers warranting emergency classification consistent with the barrier loss criteria as specified in section 2.5.
- 2.13 Categories are further divided into one or more subcategories depending on the types and number of plant conditions that dictate emergency classifications. For example, the Electrical Failures category has two subcategories whose values can be indicative of losses of electrical power sources. Loss of AC power sources and loss of DC power sources. An EAL may or may not exist for each subcategory at all four classification levels. Similarly, more than one EAL may exist for a subcategory in a given emergency classification when appropriate (i.e. no EAL at the General Emergency level but three EALs at the Unusual Event Level).
- 2.14 The operating modes of operation are defined as follows:
  - 2.14.1 Power Operations -When the reactor is critical and the neutron flux power range instrumentation indicates greater than 2% of rated power.
  - 2.14.2 Hot Shutdown -When the reactor is sub-critical by an amount greater than or equal to the margin as specified in Technical Specification 3.10 and  $T_{avg}$  is greater than 200°F and less than or equal to 555°F.



- 2.14.3 Cold Shutdown -When the reactor is sub-critical by at least 1%  $\Delta k/k$  and  $T_{avg}$  is less than or equal to 200°F.
- 2.14.4 Refuel -Any operation involving movement of core components when vessel head is completely unbolted.
- 2.15.5 Defueled - Reactor vessel contains no irradiated fuel.
- 2.15 Plant Emergency Operating Procedures (EOPs) are designed to maintain or restore a set of critical safety functions that are prioritized for restoration efforts during accident conditions. By monitoring the critical safety functions status, the impact of multiple events can be inherently addressed.
- 2.16 The critical safety functions are monitored through the use of Critical Safety Function Status Trees (CSFSTs). When certain plant parameters exceed threshold values specified by the CSFST, the plant operator is directed to one or more functional restoration procedure in an attempt to restore those parameters to within acceptable limits. The following CSFSTs are utilized to be indicative of failures or potential failures of one or more fission product barriers:
  - 2.16.1 Subcriticality - Orange or Red paths in this CSFST indicate losses of reactivity control which may pose a threat to fuel clad and RCS integrity.
  - 2.16.2 Core Cooling - Orange OR Red paths in this CSFST indicate losses of core subcooling AND thus pose a direct threat to the integrity of the reactor fuel clad.
  - 2.16.3 Heat Sink - The Red path of this CSFST is indicative of a loss of ability to remove decay heat from the core and thus poses a direct threat to fuel clad integrity.
  - 2.16.4 Integrity - The Red path of this CSFST is indicative of a direct threat to RCS barrier integrity.
  - 2.16.5 Containment - Red path of this CSFST is indicative to a loss of RCS barrier AND direct threat to the containment barrier integrity.

### 3.0 PRECAUTIONS AND LIMITATIONS

NONE

### 4.0 EQUIPMENT AND MATERIALS

NONE

**5.0 INSTRUCTIONS**

- 5.1 The Operator is alerted by initial event recognition or Control Room alarms.
- 5.2 The Operator shall notify the Shift Manager **AND** Watch Engineer.
- 5.3 The Operator may enter the Emergency Operating Procedures (EOPs) or Abnormal Operating Instructions (AOIs) while the Watch Engineer monitors the Critical Safety Function Status Trees (CSFST), if appropriate.
- 5.4 The Shift Manager shall evaluate Attachment 2 to determine **IF** a GE, SAE, ALERT or NUE classification applies **THEN** determine the highest classification and declare it, if applicable.
- 5.5 The Shift Manager shall assume the role of Emergency Director and initiate County, State **AND** NRC notifications in accordance with Reference 6.2.
- 5.6 The Emergency Director (Shift Manager) continues to evaluate future events and potential challenges from information supported by the Operator and Watch Engineer. As conditions warrant, the Emergency Director (Shift Manager) shall re-enter Section 5.4.
- 5.7 If necessary the Emergency Director (Shift Manager) shall upgrade the emergency classification.
- 5.8 If no classification applies, the Shift Manager evaluates whether Technical Specifications Limits on LCO reportable under Reference 6.1 applies and performs the applicable notification as per Reference 6.1.

**6.0 REFERENCES**

- 6.1 SAO-124, Oral Reporting of Non-Emergency Items and Items of Interest and Significant Occurrence Reporting
- 6.2 IP-1002, Emergency Notification and Communication
- 6.3 NUMARC/NESP-007, Revision 2, Methodology for Development of Emergency Action Levels

**7.0 ATTACHMENTS**

- 7.1 Attachment 1 - Fission Product Barrier Loss & Potential Loss Indicators
- 7.2 Attachment 2 – Emergency Action Levels

**8.0 ADDENDUM**

None

## ATTACHMENT 1

Sheet 1 of 2

**Fission Product Barrier Loss/Potential Loss Matrix**

(Those thresholds for which loss or potential loss is determined to be imminent, classify as though the threshold(s) has been exceeded)

**Fuel Cladding**

| Potential Loss  |
|---|
| <ul style="list-style-type: none"> <li>• ORANGE path in F-0.2, CORE COOLING</li> <li>• RED path in F-0.3, HEAT SINK</li> <li>• Core Exit Thermocouple Readings &gt;700°F</li> <li>• RVLIS <math>\leq</math> 41% w/no RCPs running</li> <li>• Emergency Director Judgment</li> </ul> |

| Loss  |
|---|
| <ul style="list-style-type: none"> <li>• RED path in F-0.2, CORE COOLING</li> <li>• Coolant activity &gt;300 <math>\mu\text{Ci/cc}</math> I-131 equivalent</li> <li>• Core Exit Thermocouple Readings &gt;1200°F</li> <li>• Containment radiation monitor R-25 or R-26 &gt;17R/hr</li> <li>• Emergency Director Judgment</li> </ul> |

**RCS**

| Potential Loss   |
|--|
| <ul style="list-style-type: none"> <li>• RED path on F-0.4, INTEGRITY</li> <li>• RED path on F-0.3, HEAT SINK</li> <li>• Primary system leakage exceeding capacity (&gt;75GPM) of single charging pump</li> <li>• Emergency Director Judgment</li> </ul> |

| Loss  |
|---|
| <ul style="list-style-type: none"> <li>• RCS subcooling &lt; SI initiation setpoint due to RCS leakage</li> <li>• Unisolated faulted (outside VC) ruptured steam generator</li> <li>• &gt;0.17 <math>\mu\text{Ci/cc}</math> on R-42 OR &gt;66 <math>\mu\text{Ci/cc}</math> on R-41 due to RCS leakage</li> <li>• Emergency Director Judgment</li> </ul> |

## ATTACHMENT 1

Sheet 2 of 2

**Fission Product Barrier Loss/Potential Loss Matrix**

(Those thresholds for which loss or potential loss is determined to be imminent, classify as though the threshold(s) has been exceeded)

**Containment**

| Potential Loss  | Loss                   |                   |    |   |   |   |   |   |  |
|---|------------------------|-------------------|----|---|---|---|---|---|--|
| <ul style="list-style-type: none"> <li>- RED path F-0.5, CONTAINMENT</li> <li>- <u>Either</u>:<br/>Core exit thermocouples &gt;1200°F<br/><u>OR</u><br/>Core exit thermocouples &gt;700°F with RVLIS &lt; 41% w/no RCPs<br/><u>AND</u><br/>Restoration procedures not effective within 15 minutes</li> <li>- Confirmed phase "B" isolation signal following confirmed LOCA with less than minimum containment cooling safeguards equipment operating <table> <tr> <td>Fan Cooler Units Oper.</td><td>Spray Pumps Req'd</td></tr> <tr> <td>&lt;3</td><td>2</td></tr> <tr> <td>3</td><td>1</td></tr> <tr> <td>5</td><td>0</td></tr> </table> </li> <li>- Containment Pressure <b>47 psig</b> and increasing</li> <li>- <b>≥4%</b> hydrogen concentration in containment</li> <li>- Containment radiation monitor R-25/26 reading <b>&gt;68 R/hr</b></li> <li>- Emergency Director Judgment</li> </ul> | Fan Cooler Units Oper. | Spray Pumps Req'd | <3 | 2 | 3 | 1 | 5 | 0 | <ul style="list-style-type: none"> <li>- Rapid uncontrolled decrease in containment pressure following initial increase due to RCS failure</li> <li>- <u>Either</u>:<br/>Any Phase "A" or Phase "B" or containment ventilation isolation valve(s) not closed when required following confirmed LOCA<br/><u>OR</u><br/>Inability to isolate any primary system discharging outside containment<br/><u>AND</u><br/>Radiological release to the environment exists as a result</li> <li>- Both doors open on a VC airlock for &gt;4 hrs.<br/><u>OR</u><br/>Inability to close containment pressure relief or purge valves which results in a radiological release pathway to the environment for &gt;4 hrs.<br/><u>OR</u><br/>Any Phase A or Phase B or containment ventilation isolation valve(s) not closed when required which results in a radiological release pathway to the environment</li> <li>- Unisolable release of secondary side to atmosphere from the affected steam generator(s) with primary to secondary leakage &gt;Technical Specification limit in any steam generator</li> <li>- Loss of primary coolant inside containment with containment pressure or sump level response not consistent with LOCA conditions</li> <li>- Emergency Director Judgment</li> </ul> |
| Fan Cooler Units Oper.  | Spray Pumps Req'd      |                   |    |   |   |   |   |   |  |
| <3  | 2                      |                   |    |   |   |   |   |   |  |
| 3   | 1                      |                   |    |   |   |   |   |   |  |
| 5   | 0                      |                   |    |   |   |   |   |   |  |

## Attachment 2 - Emergency Action Levels

**CATEGORY 1.0 CSFST STATUS**

| Category              | General  | Site Area  | Alert   | Unusual Event |
|-----------------------|--|--|---|---------------|
| 1.1<br>Subcriticality | [SG2]<br>1.1.3 {1,2}<br>RED path in F-0.1, Subcriticality<br><u>AND</u><br>Actual or imminent entry into either:<br>RED Path in F-0.2, Core Cooling<br><u>OR</u><br>Red Path in F-0.3, Heat Sink | [SS2,SS4]<br>1.1.2 {1,2}<br>RED path in F-0.1 Subcriticality<br><u>AND</u><br>Emergency boration is required   | [SA2]<br>1.1.1 {1,2}<br>Any Failure of an automatic trip signal to reduce power range < 5%<br><u>AND</u><br>Manual trip is successful |               |
| 1.2<br>Core Cooling   | [fl,rl,cpl] [FC1,PC6,PC6]<br>1.2.2 {1,2}<br>RED path in F-0.2,Core Cooling<br><u>AND</u><br>Functional restoration actions taken and procedures not effective within <b>15 minutes</b> .         | [fpl/fl,rl] [SS4,FC3,FC4]<br>1.2.1 {1,2}<br>ORANGE or RED path in F-0.2, Core Cooling                          |   |               |
| 1.3<br>Heat Sink      |  | [fpl,rpl] [SS4,RCS1,FC1]<br>1.3.1 {1,2}<br>RED path in F-0.3, HEAT SINK<br><u>AND</u><br>Heat sink is required |   |               |
| 1.4<br>Integrity      |  |  | [rpl] [RCS1]<br>1.4.1 {1,2}<br>RED Path on F-0.4, Integrity   |               |
| 1.5<br>Containment    | [fl,rl,cpl] [PC1]<br>1.5.1 {1,2}<br>RED Path F-0.5, Containment resulting from loss of coolant.  |  |   |               |

| Attachment 2 - Emergency Action Levels                 |  |  |   |  |
|--|--|--|---|--|
| CATEGORY 2.0 REACTOR FUEL                              |  |  |   |  |
| Category   | General  | Site Area  | Alert   | Unusual Event  |
| 2.1<br>Coolant Activity                                |  | [fl,rl] [FC2,RCS1,RCS2,RCS4]<br>2.1.3 {1,2}<br>Coolant activity > 300 $\mu\text{Ci/cc}$ I-131 equivalent and any of the following: <ul style="list-style-type: none"> <li>• RED path on F-0.4, Integrity</li> <li>• Primary system leakage exceeding capacity (&gt; 75 gpm) of single charging pump</li> <li>• RCS subcooling &lt; SI initiation setpoint due to RCS leakage</li> <li>• Rise in R-41 offscale or R-42 &gt; 0.17 <math>\mu\text{Ci/cc}</math> due to RCS leakage</li> </ul> | [fl] [FC2]<br>2.1.2 {1,2}<br>Coolant Activity > 300 $\mu\text{Ci/cc}$ I-131 equivalent  | [SU4]<br>2.1.1 {1,2,3,4,5}<br>Coolant sample activity:<br>$\geq 60/(\text{E bar}) \mu\text{Ci/cc}$   |
| 2.2<br>Containment Radiation                           | [fl,rl,cpl] [PC5]<br>2.2.3 {1,2}<br>Containment Radiation monitor R-25 or R-26 > 68 R/HR | [fl,rl] [FC5]<br>2.2.2 {1,2}<br>Containment Radiation monitor R-25 or R-26 > 17 R/HR   | [rl] [RCS4]<br>2.2.1 {1,2}<br>Rise in R-41 offscale or R-42 > 0.17 $\mu\text{Ci/cc}$ due to RCS leakage   |  |
| 2.3<br>Refueling Accidents or Other Radiation Monitors |  |  | [AA2]<br>2.3.2 {1,2,3,4,5}<br>Confirmed sustained alarm on ANY of the following radiation monitors resulting from fuel damage caused by an uncontrolled fuel handling process: <ul style="list-style-type: none"> <li>• R-2/R-7 Vapor Containment Area Monitors</li> <li>• R-5 Fuel Storage Building Area Monitor</li> <li>• R-25 or 26 Vapor Containment High Radiation Area Monitors</li> </ul> [AA2]<br>2.3.3 {1,2,3,4,5}<br>Report of visual observation of irradiated fuel uncovered | [AU2]<br>2.3.1 {1,2,3,4,5}<br>Spent fuel pool (reactor cavity during refueling ) water level cannot be restored and maintained above Technical Specification minimum water level |

| Attachment 2 - Emergency Action Levels |         |  |   |   |
|--|---------|--|---|---|
| CATEGORY 3.0 REACTOR COOLANT SYSTEM    |         |  |   |   |
| Category                               | General | Site Area  | Alert   | Unusual Event   |
| 3.1<br>RCS Leakage                     |         | [fpl,rl][SS5, SS4,FC4]<br><b>3.1.3 {1,2,3,4}</b><br>RVLIS cannot be maintained<br>> 41% with no RCP's running<br><b>OR</b><br>With the reactor vessel head removed,<br>it is reported that water level in the<br>reactor vessel is dropping in an<br>uncontrolled manner and core<br>uncovery is likely  | [rpl] [RCS2]<br><b>3.1.2 {1,2}</b><br>Primary system leakage<br>exceeding capacity (> 75<br>gpm) of single charging<br>pump | [SU5]<br><b>3.1.1 {1,2}</b><br>Unidentified or pressure<br>boundary leakage<br>> 10 gpm<br><b>OR</b><br>Identified leakage<br>> 25 gpm  |
| 3.2<br>Primary to Secondary Leakage    |         | [rpl,cl] [PC4,RCS2]<br><b>3.2.2 {1,2}</b><br>Unisolable release of secondary side to<br>atmosphere from the affected steam<br>generator(s) with primary to secondary<br>leakage exceeding capacity (> 75 gpm)<br>of a single charging pump<br>[fl,cl] [PC4,FC2]<br><b>3.2.3 {1,2}</b><br>Unisolable release of secondary side to<br>atmosphere from the affected steam<br>generator(s) with primary to secondary<br>leakage > Technical Specification limit<br>in any steam generator<br><b>AND</b><br>Coolant activity > 300 $\mu\text{Ci/cc}$ of I-131<br>equivalent |   | [cl] [PC4]<br><b>3.2.1 {1,2}</b> Unisolable<br>release of secondary side<br>to atmosphere from the<br>affected steam<br>generator(s) with primary<br>to secondary leakage ><br>Technical Specification<br>limit in any Steam<br>Generator |
| 3.3<br>RCS Subcooling                  |         |  | [rl] [RCS2]<br><b>3.3.1 {1,2}</b><br>RCS subcooling <SI<br>initiation setpoint due to<br>RCS leakage                        |   |

## Attachment 2 - Emergency Action Levels

## CATEGORY 4.0 CONTAINMENT

| Category                            | General   | Site Area  | Alert | Unusual Event   |
|-------------------------------------|---|--|-------|---|
|                                     | [fl,rl,cpl] [PC2,FC2,FC5]   | [rl,cl] [PC2]  |       | [cl] [PC7]  |
| 4.1<br>Containment Integrity Status | <p>4.1.4 {1,2}<br/>Confirmed <b>Phase "B"</b> isolation signal following confirmed LOCA with less than minimum containment cooling safeguards equipment operating, Table 4.3<br/><b>AND</b><br/>Any indicators of fuel clad loss, Table 4.1</p> <p>[fp/fl,rl,cl] [PC2,FC1,FC2,FC3,FC4,FC5]</p> <p>4.1.5 {1,2}<br/><b>EITHER:</b><br/>Rapid uncontrolled decrease in containment pressure following initial increase due to RCS failure<br/><b>OR</b><br/>Loss of primary coolant inside containment with containment pressure or sump level response not consistent with LOCA conditions<br/><b>AND</b><br/>Any indications of fuel clad damage, Table 4.2</p> <p>[fp/fl,rl,cl] [PC3,FC1,FC2,FC3,FC4,FC5]</p> <p>4.1.6 {1,2}<br/><b>EITHER:</b><br/>Any <b>Phase "A"</b> or <b>Phase "B"</b> or CVI valve(s) not closed when required following confirmed LOCA<br/><b>OR</b><br/>Inability to isolate any primary system discharging outside containment<br/><b>AND</b><br/>Radiological release to the environment exists as a result<br/><b>AND</b><br/>Any indicators of fuel clad damage, Table 4.2</p> | <p>4.1.2 {1,2}<br/>Rapid uncontrolled decrease in containment pressure following initial increase due to RCS failure<br/><b>OR</b><br/>Loss of primary coolant inside containment with containment pressure or sump level response not consistent with LOCA conditions</p> <p>[rl,cl] [PC3]</p> <p>4.1.3 {1,2}<br/><b>EITHER:</b><br/>Any <b>Phase "A"</b> or <b>Phase "B"</b> or CVI valve(s) not closed when required following confirmed LOCA<br/><b>OR</b><br/>Inability to isolate any primary system discharging outside containment<br/><b>AND</b><br/>Radiological release to the environment exists as a result</p> |       | <p>4.1.1 {1,2}<br/>Both doors open on a VC airlock for &gt; 4 hrs.<br/><b>OR</b><br/>Inability to close containment pressure relief or purge valves which results in a radiological release pathway to the environment for &gt; 4 hrs.<br/><b>OR</b><br/>Any <b>Phase "A"</b> or <b>Phase "B"</b> or containment ventilation isolation valve(s) not closed when required which results in a radiological release pathway to the environment</p> |



| Attachment 2 - Emergency Action Levels           |   |  |       |               |
|--|---|--|-------|---------------|
| CATEGORY 4.0 CONTAINMENT                         |   |  |       |               |
| Category   | General   | Site Area  | Alert | Unusual Event |
| 4.2<br>SG Tube Rupture<br>w/Secondary<br>Release | [fp/fl,rl,cl] [RCS3,FC1,FC2,FC3,FC4,FC5]<br>4.2.2 {1,2}<br>Unisolable faulted (outside VC) ruptured steam<br>generator<br><b>AND</b><br>Any indicators of fuel clad damage, Table 4.2 | [rl,cl] [RCS3]<br>4.2.1 {1,2}<br>Unisolable faulted (outside VC)<br>ruptured steam generator |       |               |
| 4.3<br>Combustible Gas<br>Concentrations         | [fl,rl,cpl] [PC2]<br>4.3.1 {1,2}<br>≥4% Hydrogen concentration in containment   |  |       |               |

## Attachment 2 - Emergency Action Levels

**CATEGORY 4.0 CONTAINMENT****Table 4.1 Fuel Clad Loss Indicators**

1. Coolant activity > **300  $\mu\text{Ci/cc}$**  of I-131 equivalent
2. Containment radiation monitor R-25/R-26 reading > **17 R/hr**
3. RED path in F-0.2, CORE COOLING

**Table 4.2 Fuel Clad Damage Indicators**

1. ORANGE or RED path in F-0.2, CORE COOLING
  2. RED path in F-0.3, HEAT SINK
- AND**
- Heat sink is required
3. Coolant activity > **300  $\mu\text{Ci/cc}$**  of I-131 equivalent
  4. Containment radiation monitor R-25/R-26 reading > **17 R/hr**

**Table 4.3 Minimum Containment Cooling Safeguards Equipment**

| Fan Cooler Units Operating | Spray Pumps Required |
|----------------------------|----------------------|
| < 3                        | 2                    |
| 3                          | 1                    |
| 5                          | 0                    |

| Attachment 2 - Emergency Action Levels                                |   |   |  |   |
|---|---|---|--|---|
| CATEGORY 5.0 RADIOACTIVITY RELEASE                                    |   |   |  |   |
| Category  | General   | Site Area   | Alert  | Unusual Event   |
| 5.1 Effluent Monitors   | <b>5.1.4 {1,2,3,4,5}</b><br>A valid reading on any monitors Table 5.1 column "GE" for <b>&gt; 15 minutes</b> unless dose assessment can confirm releases are below Table 5.2 column "GE" within this time period. | <b>5.1.3 {1,2,3,4,5}</b><br>A valid reading on any monitors Table 5.1 column "SAE" for <b>&gt; 15 minutes</b> unless dose assessment can confirm releases are below Table 5.2 column "SAE" within this time period. | <b>5.1.2{1,2,3,4,5}</b><br>A valid reading on any monitors Table 5.1 column "Alert" for <b>&gt; 15 minutes</b> unless dose assessment can confirm releases are below Table 5.2 column "Alert" within this time period.   | <b>5.1.1{1,2,3,4,5}</b><br>A valid reading on any monitors Table 5.1 column "NUE" for <b>&gt; 60 minutes</b> unless sample analysis can confirm release rates <b>&lt; 2 x technical specifications</b> within this time period. |
| 5.2 Dose Projections/<br>Environmental Measurements/<br>Release Rates | <b>5.2.5 {1,2,3,4,5}</b><br>Dose projections or field surveys resulting from an actual imminent release which indicate doses/dose rates > Table 5.2 column "GE" at the site boundary or beyond.                   | <b>5.2.4 {1,2,3,4,5}</b><br>Dose projections or field surveys resulting from an actual imminent release which indicate doses/dose rates > Table 5.2 column "SAE" at the site boundary or beyond.                    | <b>5.2.2{1,2,3,4,5}</b><br>Confirmed sample analysis for gaseous or liquid release rates <b>&gt; 200 x technical specifications</b> limits for <b>&gt; 15 minutes</b><br><br><b>5.2.3{1,2,3,4,5}</b><br>Dose projections or field surveys resulting from an actual imminent which indicate doses/dose rates > Table 5.2 column "Alert" at the site boundary or beyond. | <b>5.2.1{1,2,3,4,5}</b><br>Confirmed sample analysis for gaseous or liquid release rates <b>&gt; 2 x technical specifications</b> limits for <b>&gt; 60 minutes</b> .   |

| Attachment 2 - Emergency Action Levels |         |           |  |   |
|--|---------|-----------|--|---|
| CATEGORY 5.0 RADIOACTIVITY RELEASE     |         |           |  |   |
| Category                               | General | Site Area | Alert  | Unusual Event   |
| 5.3 Area Radiation Levels              |         |           | <p>[AA3]</p> <p>5.3.2{1,2,3,4,5}<br/>Sustained area radiation levels &gt; 15 mRem/hr in<br/><b>EITHER:</b><br/>Control Room<br/><b>OR</b><br/>Central Alarm Station and Secondary Alarm Station</p> <p>[AA3]</p> <p>5.3.3{1,2,3,4,5}<br/>Sustained abnormal area radiation levels &gt; 8 R/hr within any areas, Table 5.3<br/><b>AND</b><br/>Access is required for safe operation or shutdown</p> | <p>[AU2]</p> <p>5.3.1{1,2,3,4,5}<br/>Any sustained direct ARM readings &gt; 100 x alarm or offscale high resulting from an uncontrolled process</p> |

Attachment 2 - Emergency Action Levels  
**CATEGORY 5.0 RADIOACTIVITY RELEASE**

| <b>Table 5.1</b>                                  |                      |                       |                           |                           |
|---|----------------------|-----------------------|---------------------------|---------------------------|
| <b>Effluent Monitor Classification Thresholds</b> |                      |                       |                           |                           |
| Monitor   | GE                   | SAE                   | Alert                     | UE                        |
| R-27  | 53 $\mu\text{Ci/cc}$ | 5.3 $\mu\text{Ci/cc}$ | 5.3 E-1 $\mu\text{Ci/cc}$ | 2.3 E-3 $\mu\text{Ci/cc}$ |
| R-44  | 53 $\mu\text{Ci/cc}$ | 5.3 $\mu\text{Ci/cc}$ | 5.3 E-1 $\mu\text{Ci/cc}$ | 2.3 E-3 $\mu\text{Ci/cc}$ |
| R-54  | N/A                  | N/A                   | 2.5 E-1 $\mu\text{Ci/cc}$ | 2.5 E-3 $\mu\text{Ci/cc}$ |
| R-49  | N/A                  | N/A                   | 2.7 E-2 $\mu\text{Ci/cc}$ | 2.7 E-4 $\mu\text{Ci/cc}$ |

| <b>Table 5.2</b>  |              |             |            |
|---|--------------|-------------|------------|
| <b>Dose Projection/Env. Measurement Classification Thresholds</b> |              |             |            |
|   | GE           | SAE         | Alert      |
| TEDE  | 1000 mRem    | 100 mRem    | 10 mRem    |
| CDE Thyroid   | 5000 mRem    | 500 mRem    | N/A        |
| External Exposure Rate  | 1000 mRem/hr | 100 mRem/hr | 10 mRem/hr |
| Thyroid exposure rate<br>(for 1 hr. of inhalation)                | 5000 mRem/hr | 500 mRem/hr | N/A        |

Attachment 2 - Emergency Action Levels  
**CATEGORY 5.0 RADIOACTIVITY RELEASE**

| <b>Table 5.3</b><br><b>Plant Areas</b>   |
|--|
| <ul style="list-style-type: none"><li>• Condensate Storage Tank</li><li>• RWST</li><li>• Service Water Pump Structure</li><li>• Service Water Valve Pit East</li><li>• Fuel Storage Building</li><li>• Primary Auxiliary Building/Fan House</li><li>• 480 Volt Switchgear Room (Control Building)</li><li>• Cable Spreading Room/Electrical Tunnel</li><li>• Diesel Generator Building/Fuel Tank Area</li><li>• Auxiliary Feedwater Pump Building</li><li>• Battery Room (Control Building 33'0" ele.)</li></ul> |

## Attachment 2 - Emergency Action Levels

**CATEGORY 6.0 ELECTRICAL FAILURES**

| Category                               | General  | Site Area  | Alert  | Unusual Event  |
|--|--|--|--|--|
| <b>6.1</b><br>Loss of AC Power Sources | <b>6.1.5 {1,2}</b> [SG1]<br>Loss of all emergency AC power<br><u>AND EITHER:</u><br>Power restoration to required core cooling systems is not likely in $\leq 1$ hr.<br><u>OR</u><br>Actual or imminent entry into ORANGE or RED path on F-0.2, "Core Cooling" | <b>6.1.4 {1,2}</b> [SS1]<br>Loss of AC power to all 480 volt busses (5A,2A/3A,6A) for <b>&gt; 15 minutes.</b><br><u>AND</u><br>Inability to power required core cooling systems with alternate power sources for <b>&gt; 15 minutes.</b> | <b>6.1.2 {3,4,5}</b> [SA1]<br>Loss of AC power to all 480 volt busses (5A, 2A/3A, 6A) for <b>&gt; 15 minutes.</b><br><u>AND</u><br>Inability to power required core cooling/ spent fuel cooling systems with alternate power sources for <b>&gt; 15 minutes.</b> [SA5]<br><b>6.1.3 {1,2}</b><br>AC power capability to 480 volt busses (5A,2A/3A,6A) reduced to only one of the following sources for <b>&gt; 15 minutes.:</b> <ul style="list-style-type: none"> <li>• 480V EDG 21</li> <li>• 480V EDG 22</li> <li>• 480V EDG 23</li> <li>• Unit Auxiliary Transformer*</li> <li>• Station Auxiliary Transformer*</li> <li>• 13.8 KV gas turbine auto transformer*</li> </ul> * with 86P or 86BU tripped, all offsite power supplies must be considered as one power supply | <b>6.1.1 {1,2,3,4,5}</b> [SU1]<br>Unplanned loss of offsite power to all 480V busses(5A,2A/3A,6A) for <b>&gt; 15 minutes.</b>  |
| <b>6.2</b><br>Loss of DC Power Sources |  | <b>6.2.2 {1,2}</b> [SS3]<br>Loss of bus voltage ( <b>&lt; 105 vdc</b> ) for <b>&gt; 15 minutes</b> on all of the DC Busses.  |  | <b>6.2.1 {3,4}</b> [SU7]<br>Unplanned loss of bus voltage ( <b>&lt; 105 vdc</b> ) for <b>&gt; 15 minutes</b> on any DC bus resulting in the loss of decay heat removal capability. |

| Attachment 2 - Emergency Action Levels               |         |  |  |  |
|--|---------|--|--|--|
| CATEGORY 7.0 EQUIPMENT FAILURES                      |         |  |  |  |
| Category   | General | Site Area  | Alert  | Unusual Event  |
| 7.1<br>Technical Specifications/<br>Requirements     |         |  |  | 7.1.1 {1,2} [SU2]<br>Plant is not brought to required<br>operating mode within Technical<br>Specifications LCO Action Statement<br>Time.   |
| 7.2<br>System Failures or Control<br>Room Evacuation |         | 7.2.5 {1,2,3,4,5} [HS2]<br>Control Room Evacuation<br><b>AND</b><br>Plant control cannot be<br>established per AOI27.1.9,<br>"Control Room<br>Inaccessibility/ Safe<br>Shutdown" in ≤ 15 minutes | 7.2.2 {1,2} [HA1]<br>Turbine failure generated missiles<br>which causes or potentially causes<br>any required safety related system or<br>structure to become inoperable.<br><br>7.2.3 {1,2,3,4,5} [HA5]<br>Entry into AOI-27.1.9, "Control Room<br>Inaccessibility/ Safe Shutdown<br>Control"<br><br>7.2.4 {3,4} [SA3]<br>Reactor coolant temperature cannot<br>be maintained < 200°F | 7.2.1 {1,2} [HU1]<br>Report of main turbine failure requiring<br>turbine trip resulting in:<br>Damage to turbine generator seals<br>causing release of lubricating oil or<br>hydrogen<br><b>OR</b><br>Casing penetration |



## Attachment 2 - Emergency Action Levels

**CATEGORY 7.0 EQUIPMENT FAILURES**

| Category   | General | Site Area   | Alert   | Unusual Event  |
|--|---------|---|---|--|
|  |         | [SS6]   | [SA4]   | [SU3]  |
| 7.3 Loss of Indications/<br>Alarms/Communication<br>Capability |         | <b>7.3.4 {1,2}</b><br>Loss of most (approx. 75%)<br>safety system annunciators<br>or indications on Control<br>Room Panels<br><u>AND</u><br>Loss of ability to monitor<br>critical safety function status<br><br><u>AND</u><br>A significant plant transient in<br>progress | <b>7.3.3 {1,2}</b><br>Unplanned loss of most (approx.<br>75%) safety system annunciators or<br>indications on Control Room Panels<br>for > 15 minutes<br><u>AND</u><br>Increased surveillance is required for<br>safe plant operation<br><u>AND EITHER:</u><br>A significant plant transient in<br>progress<br><u>OR</u><br>Proteus and SAS are unavailable | <b>7.3.1 {1,2}</b><br>Unplanned loss of most (approx. 75%)<br>safety system annunciators or<br>indications on Control Room Panels<br>for > 15 minutes<br><u>AND</u><br>Increased surveillance is required for<br>safe plant operation<br><br>[SU6]<br><b>7.3.2 {1,2,3,4,5}</b><br>Loss of all communications capability<br>affecting the ability to EITHER:<br>Perform routine operations<br><u>OR</u><br>Notify offsite agencies or personnel |

## Attachment 2 - Emergency Action Levels

## CATEGORY 8.0 HAZARDS

| Category                 | General  | Site Area  | Alert   | Unusual Event   |
|--------------------------|--|--|---|---|
| 8.1<br>Security Threats  | 8.1.4 {1,2,3,4,5} [HG1]<br>Security Event which results in:<br>Loss of plant control from the Control Room<br><u>AND</u><br>Loss of remote shutdown capability | 8.1.3 {1,2,3,4,5} [HS1]<br>Intrusion into a plant security vital area by an adversary<br><u>OR</u><br>Any security event which represents actual or likely failures of plant systems needed to protect the public. | 8.1.2 {1,2,3,4,5} [HA4]<br>Intrusion into plant Protected Area by an adversary<br><u>OR</u><br>Any security event which represents an actual substantial degradation of the level of safety of the plant.   | 8.1.1 {1,2,3,4,5} [HU4]<br>Bomb device or other indication of attempted sabotage discovered within plant Protected Area<br><u>OR</u><br>Notification of any credible site specific security threat by the Security Shift Supervisor or outside agency (NRC, military or law enforcement )   |
| 8.2<br>Fire or Explosion |  |  | 8.2.3 {1,2,3,4,5} [HA2]<br>Fire or explosion in any plant area, Table 8.2, which causes or potentially causes any required safety related system or structure to become inoperable  | 8.2.1 {1,2,3,4,5} [HU2]<br>Confirmed fire in or contiguous to any plant area, Table 8.2 not extinguished in <b>≤ 15 minutes</b> of Control Room notification.<br><br>8.2.2 {1,2,3,4,5} [HU1]<br>Report by plant personnel of an explosion within Protected Area boundary which impacts plant safety related systems or structures.  |
| 8.3<br>Man-Made Events   |  |  | 8.3.3 {1,2,3,4,5} [HA1]<br>Vehicle crash or projectile impact which causes or potentially causes any required safety related system or structure to become inoperable, Table 8.2<br><br>8.3.4 {1,2,3,4,5} [HA3]<br>Report or detection of toxic or flammable gases within a plant area, Table 8.2, in concentrations that will be life threatening to plant personnel or preclude access to equipment (even when using personal protective equipment) needed for safe plant operation | 8.3.1 {1,2,3,4,5} [HU1]<br>Vehicle crash into or projectile which impacts plant safety related structures or systems within Protected Area boundary<br><br>8.3.2 {1,2,3,4,5} [HU3]<br>Report or detection of toxic or flammable gases that could enter or have entered within the Protected Area boundary in amounts that could affect the health of plant personnel or safe plant operation<br><u>OR</u><br>Report by local, county or state officials, or Unit 3, for potential evacuation of site personnel based on offsite event |

[1]= Power Operations [2]= Hot Shutdown [3]= Cold Shutdown [4]= Refuel [5]= Defuel

## Attachment 2 - Emergency Action Levels

**CATEGORY 8.0 HAZARDS**

| Category              | General | Site Area | Alert  | Unusual Event  |
|-----------------------|---------|-----------|--|--|
| 8.4<br>Natural Events |         |           | <p><b>8.4.4 {1,2,3,4,5}</b> [HA1]<br/> Earthquake felt in- plant based upon consensus of Control Room Operators on duty<br/> <u>AND</u><br/> Notification from Unit 3 that an earthquake of a magnitude <math>\geq 0.15g</math> horizontal or <math>\geq 0.10g</math> vertical has occurred.</p> | <p><b>8.4.1 {1,2,3,4,5}</b> [HU1]<br/> Earthquake felt in plant based upon a consensus of Control Room Operators on duty<br/> <u>AND</u><br/> Notification received from Unit 3 that an earthquake has been detected on their instrumentation.</p> |
|                       |         |           | <p><b>8.4.5 {1.2.3.4.5}</b> [HA1]<br/> Sustained winds <math>&gt; 100</math> mph<br/> <u>OR</u><br/> Tornado strikes a plant vital area, Table 8.2</p>   | <p><b>8.4.2 {1,2,3,4,5}</b> [HU1]<br/> Report by plant personnel of tornado within plant Protected Area boundary</p>   |
|                       |         |           | <p><b>8.4.6 {1,2,3,4,5}</b> [HA1]<br/> Assessment by the Control Room personnel that a natural event has occurred which causes or potentially causes any required safety system or structure to become inoperable, Table 8.2</p>   | <p><b>8.4.3 {1,2,3,4,5}</b> [HU1]<br/> River level <math>\geq 14.5'</math> (OMSL)<br/> <u>OR</u><br/> Service water bay level <math>&lt; -4.5'</math> (OMSL)</p>   |
|                       |         |           | <p><b>8.4.7 {1,2,3,4,5}</b> [HA1]<br/> River level <math>\geq 15'</math> (OSML)<br/> <u>OR</u><br/> Low service water bay level resulting in a loss of service water flow</p>  |  |
|                       |         |           |  |  |

Attachment 2 - Emergency Action Levels

CATEGORY 8.0 HAZARDS

| Table 8.2 Plant Vital Areas  |
|--|
| <ul style="list-style-type: none"> <li>• Condensate Storage Tank</li> <li>• RWST</li> <li>• Service Water Pump Structure</li> <li>• Service Water Valve Pit East</li> <li>• Fuel Storage Building</li> <li>• Primary Auxiliary Building/Fan House</li> <li>• Vapor containment Building</li> <li>• 480 Volt Switchgear Room (Control Building)</li> <li>• Cable Spreading Room/Electrical Tunnel</li> <li>• Central Control Room</li> <li>• Diesel Generator Building/Fuel Tank Area</li> <li>• Auxiliary Feedwater Pump Building</li> <li>• Battery Room (Control Building 33'0" ele)</li> <li>• Central Alarm Station</li> </ul> |

## Attachment 2 - Emergency Action Levels

**CATEGORY 9.0**

| Category     | General  | Site Area  | Alert  | Unusual Event   |
|--------------|--|--|--|---|
| 9.1<br>Other | <p><b>9.1.7 {1,2,3,4,5}</b> [HG2]<br/>As determined by the Shift Manager or Emergency Director, events are in progress which indicate actual, or imminent core damage and the potential for a large release of radioactive material in excess of EPA PAGs outside the site boundary.</p> <p>[FC7,RCS6,PC8]<br/><b>9.1.8 {1,2}</b><br/>Any event, as determined by the Shift Manager or Emergency Director, that could lead or has led to a loss of any two fission product barriers and loss or potential loss of the third, Attachment 1.</p> | <p><b>9.1.5 {1,2,3,4,5}</b> [HS3]<br/>As determined by the Shift Manager or Emergency Director, events are in progress which indicate actual or likely failures of plant systems needed to protect the public. Any releases are not expected to result in exposures which exceed EPA PAGs.</p> <p>[FC7,RCS6,PC8]<br/><b>9.1.6 {1,2}</b><br/>Any event, as determined by the Shift Manager or Emergency Director, that could lead or has led to <b>EITHER</b>:<br/>Loss or potential loss of both fuel clad and RCS barrier, Attachment A.<br/><b>OR</b><br/>Loss or potential loss of either fuel clad or RCS barrier in conjunction with a loss of containment, Attachment 1.</p> | <p><b>9.1.3 {1,2,3,4,5}</b> [HA6]<br/>Any event, as determined by the Shift Manager or Emergency Director, that could cause or has caused actual substantial degradation of the level of safety of the plant.</p> <p>[FC7,RCS6]<br/><b>9.1.4 {1,2}</b><br/>Any event, as determined by the Shift Manager or Emergency Director, that could lead or has led to a loss or potential loss of either fuel clad or RCS barrier, Attachment 1.</p> | <p><b>9.1.1 {1,2,3,4,5}</b> [HU5]<br/>Any event, as determined by the Shift Manager or Emergency Director, that could lead to or has led to a potential degradation of the level of safety of the plant.</p> <p>[PC8]<br/><b>9.1.2 {1,2}</b><br/>Any event, as determined by the Shift Manager or Emergency Director, that could lead to or has led to a loss or potential loss of containment, Attachment 1.</p> |

## Emergency Operations Facility

Prepared by:

Al Lee

Print Name



Signature

6/20/02

Date

Approval:

Frank Inzirillo

Print Name



Signature

7/1/02

Date

*Reference Use*

Effective Date: 7/11/02

## Table of Contents

| <u>Section</u>  | <u>Page</u> |
|---|-------------|
| 1.0 PURPOSE .....   | 4           |
| 2.0 DISCUSSION.....   | 4           |
| 3.0 PRECAUTIONS AND LIMITATIONS .....                                 | 4           |
| 4.0 EQUIPMENT AND MATIREALS.....                                      | 4           |
| 5.0 INSTRUCTIONS .....  | 5           |
| 5.1 Offsite Radiological Assessment Director .....                    | 5           |
| 5.2 Dose Assessment Health Phycisist .....                            | 5           |
| 5.3 Midas Operator .....  | 5           |
| 5.4 Survey Team Health Phycisist .....                                | 5           |
| 5.5 Technical Advisor to Emergency Director .....                     | 5           |
| 5.6 EOF Communicator #1 .....   | 5           |
| 5.7 EOF Communicator #2 .....   | 5           |
| 5.8 EOF Clerical Staff .....  | 5           |
| 5.9 EOF SAS / Proteus Operator .....                                  | 5           |
| 6.0 REFERENCES .....  | 6           |
| 7.0 ATTACHMENTS   |             |
| Attachment 1:Offsite Radiological Assessment Director Checklist ..... | 25          |
| Attachment 2: Dose Assessment Health Phycisist Checklist .....        | 33          |
| Attachment 3: MIDAS Operator Checklist .....                          | 37          |
| Attachment 4: Survey Team Health Phycisist Checklist .....            | 41          |
| Attachment 5: Technical Advisor to Emergency Director Checklist ..... | 45          |
| Attachment 6: EOF Communicator #1 Checklist .....                     | 48          |
| Attachment 7: EOF Communicator #2 Checklist .....                     | 52          |
| Attachment 8: EOF Clerical Staff Checklist .....                      | 55          |
| Attachment 9: EOF SAS / Proteus Operator .....                        | 59          |

8.0 ADDENDUM

|   |    |
|---|----|
| Addendum 1:EOF Layout .....   | 67 |
| Addendum 2:NYS Radiological Data Form (Part I & II) (Form IP-1030-1)..... | 69 |
| Addendum 3:EOF Radiological Survey Map (Form IP-1030-3) .....             | 72 |
| Addendum 4:Directions to NYS EOC .....                                    | 73 |
| Addendum 5:EPA 302.4 Nuclide Table (Form IP-1030-4) .....                 | 74 |
| Addendum 6:Offsite Survey Team Data Sheet (Form IP-1030-5) .....          | 75 |



**1.0 PURPOSE**

Along with procedure IP-EP-255, Emergency Operations Facility Management and Liaisons, to describe the activation and operation of the Emergency Operations Facility (EOF)

**2.0 DISCUSSION**

None

**3.0 PRECAUTIONS AND LIMITATIONS**

EOF habitability checks are necessary to ensure long-term manning of the EOF. Should conditions exist which may result in a loss of long-term habitability of the EOF, evaluate the need for relocation of emergency response functions to the Alternate EOF in accordance with IP-1045 "Activation of Alternate Emergency Operations Facility."

**4.0 EQUIPMENT AND MATERIALS**

4.1 The following types of equipment and materials are available for use in the EOF

4.1.1 Plant information systems:

- EDDS
- SAS
- Proteus
- Meteorological Displays

4.1.2 Radiological equipment needed to perform offsite monitoring:

- Field Monitoring kits
- Survey equipment for performance of facility habitability checks

4.1.3 Dose Assessment and plume tracking equipment:

- Plant Integration Computer System (PICS)
- MEANS
- Map table

4.1.4 Communication systems needed to transfer important data to offsite authorities:

- V-Band communications consoles
- Telephones
- Fax Machines

4.1.5 Procedures and forms:

- IP2 Emergency Plan
- IP2 Emergency Plan Implementing Procedures
- Position Binders
- Forms

4.1.6 Office Supplies

4.2 The key to the EOF is located in a break glass container in the EOF entry way.

**5.0 INSTRUCTIONS**

- 5.1 The Offsite Radiological Assessment Director (ORAD) shall follow the instructions outlined Attachment 1, Offsite Radiological Assessment Director (ORAD) Checklist
- 5.2 The Dose Assessment Health Physicist (DAHP) shall follow the instructions outlined in Attachment 2, Dose Assessment Health Physicist Checklist.
- 5.3 The Midas Operator shall follow the instructions outlined Attachment 3, MIDAS Operator Checklist.
- 5.4 The Survey Team Health Physicist (STHP) shall follow the instructions outlined in Attachment 4, Survey Team Health Physicist Checklist.
- 5.5 The Technical Advisor to Emergency Director shall follow the instructions outlined in Attachment 5, Technical Advisor (TA) Checklist
- 5.6 The EOF Communicator #1 shall follow the instructions outlined in Attachment 6, EOF Communicator #1. Checklist
- 5.7 The EOF Communicator #2 shall follow the instructions outlined in Attachment 7, EOF Communicator #2. Checklist
- 5.8 The EOF Clerical Staff shall follow the instructions outlined in Attachment 8, EOF Clerks. Checklist
- 5.9 The EOF SAS Proteus Operator shall follow the instructions outlined in Attachment 9, EOF SAS Proteus Operator Checklist

**6.0 REFERENCES**

- 6.1 IP-1021, "Manual Update and Readout of Proteus Plant Parameter Data"
- 6.2 IP-1024, "Emergency Classification"
- 6.3 IP-1027, "Site Personnel Accountability and Evacuation"
- 6.4 IP-1048, "Termination & Recovery"
- 6.5 IP-EP-255, "Emergency Operations Facility Management and Liaisons"

**7.0 ATTACHMENTS**

- 7.1 Attachment 1, Offsite Radiological Assessment Director (ORAD) Checklist
- 7.2 Attachment 2, Dose Assessment Health Physicist (DAHP) Checklist
- 7.3 Attachment 3, MIDAS Operator Checklist
- 7.4 Attachment 4, Survey Team Health Physicist (STHP) Checklist
- 7.5 Attachment 5, EOF Technical Advisor Checklist
- 7.6 Attachment 6, EOF Communicator #1 Checklist
- 7.7 Attachment 7, EOF Communicator #2 Checklist
- 7.8 Attachment 8, EOF Clerical Staff Checklist
- 7.9 Attachment 9, EOF SAS / Proteus Operator

**8.0 ADDENDUM**

- 8.1 Addendum 1, EOF Layout
- 8.2 Addendum 2, NYS Radiological Data Form (Part I & II) (Form IP-1030-1)
- 8.3 Addendum 3, Sample Form - EOF Radiological Survey Map (Form IP-1030-3)
- 8.4 Addendum 4, Directions to NYS EOC
- 8.5 Addendum 5., EPA 302.4 Nuclide Table (Form IP-1030-4)
- 8.6 Addendum 6, Sample Form - Offsite Survey Team Data Sheet (Form IP-1030-5)

Attachment 1  
**Offsite Radiological Assessment Director (ORAD)**

Sheet 1 of 8

| <u>Initial Responsibility/Activity</u>   | <u>Notes</u> |
|--|--------------|
| <p><b>1.0 Assume the position of ORAD.</b></p> <p>1.1 Review facility status boards, EDDS information and any other available sources to become familiar with current plant status.</p> <p>1.2 Obtain briefing from the EOF Manager or Emergency Director</p> <p style="padding-left: 20px;">A. Use an Essential Information Checklist (Form IP-1035-2) to document briefing items.</p> <p style="padding-left: 20px;">B. Request any additional information on current status of emergency response.</p> <p>1.3 <b><u>IF</u></b> the EOF has <b><u>NOT</u></b> been activated <b><u>THEN</u></b>:</p> <p style="text-align: center;"><b><u>NOTE:</u></b></p> <p style="padding-left: 40px;">Offsite Dose Assessment and Radiological Monitoring responsibilities may be transferred to the ORAD before the EOF is fully activated.</p> <p>A. <b><u>WHEN</u></b> the following minimum staff is available <b><u>THEN</u></b> inform the EOF Manager or the ED that you are ready to conduct offsite monitoring activity.</p> <p style="padding-left: 40px;">1. Field Monitoring Team Members (2)</p> <p style="padding-left: 40px;">2. EOF Communicator #1</p> <p>B. <b><u>WHEN</u></b> ready to assume offsite (outside Protected Area) monitoring responsibilities from the CCR <b><u>THEN</u></b> contact the CCR and formally assume these responsibilities.</p> <p>C. Review Normal EOF Staffing (Form IP-1030-2) to verify full EOF Staffing for offsite radiological tracking.</p> <p>D. <b><u>IF</u></b> additional personnel are required <b><u>THEN</u></b> inform the EOF Manager to direct callout of needed personnel.</p> <p>E. Notify the EOF staff that you have assumed these responsibilities.</p> |              |

## Attachment 1

## Offsite Radiological Assessment Director (ORAD)

Sheet 2 of 8

| <u>Initial Responsibility/Activity (con't)</u>   | <u>Notes</u> |
|--|--------------|
| <p>F Direct the MIDAS Operator to disarm (or disarm IAW steps in MIDAS Operator's Checklist) the Halon Fire Protection System (Real emergencies only)</p> <p>G <b><u>IF</u></b> there has been a release of radioactive to the environment <b><u>THEN:</u></b></p> <ol style="list-style-type: none"> <li>1. Direct the MIDAS Operator to place (or place IAW steps in MIDAS Operator's Checklist) the EOF ventilation in the internal recirculation mode.</li> <li>2. Contact the Unit #3 Control Room and request that a Field Monitoring Team report to EOF</li> </ol> <p>H <b><u>IF</u></b> the CCR performed offsite dose assessments and made a Protective Action Recommendation <b><u>THEN:</u></b></p> <ol style="list-style-type: none"> <li>1. Obtain and review NYS Radiological Emergency Data Form - Part I and Part II</li> <li>2. Verify or have the Dose Assessment HP verify dose assessment calculations.</li> <li>3. Evaluate Protective Action Recommendations.</li> <li>4. Notify the ED or CCR if there are any discrepancies.</li> </ol> <p>1.4 <b><u>IF</u></b> relieving another ORAD <b><u>THEN</u></b> perform a formal turnover with the current ORAD:</p> <ol style="list-style-type: none"> <li>A Review the current ORAD's activity log</li> <li>B Obtain briefing form current ORAD on the emergency and any actions the have been competed or are in progress.</li> <li>C Make an announcement to the EOF Staff that you are now the ORAD.</li> </ol> |              |

## Attachment 1

## Offsite Radiological Assessment Director (ORAD)

Sheet 3 of 8

| <u>Continuous Responsibility/Activity</u>   | <u>Notes</u> |
|---|--------------|
| <p><b>2.0 Ensure habitability surveys are performed in the EOF</b></p> <p>2.1 Assign an HP Technician to the position of Survey Team Health Physicist (STHP) providing them the following instructions:</p> <p style="padding-left: 40px;">A Perform steps in Attachment 6, Survey Team Health Physicist (STHP) Checklist</p> <p>2.2 <b><u>IF</u></b> there is a potential for surface or airborne contamination with in the EOF <b><u>THEN</u></b></p> <p style="padding-left: 40px;">A Suspend eating and drinking until you ensure EOF food and drinking water supplies are consumable.</p> <p style="padding-left: 40px;">B Determine the survey and radiological controls needed for the EOF based on plant conditions and whether there has been a release or not.</p> <p style="padding-left: 40px;">C Provide further guidance to STHP on frequency of surveys and on the level of contamination controls required.</p> <p>2.3 <b><u>IF</u></b> the following conditions are present <b><u>THEN</u></b> inform the EOF Manager and/or the ED that an organized evacuation of the EOF to the AEOF should be considered.</p> <ul style="list-style-type: none"> <li>• Exposure rates &gt; 80 mRem/Hr TEDE <b><u>OR</u></b> 500mRem/Hr TODE</li> <li>• Projected Whole Body Dose for a 12 hour period is &gt; 1 Rem TEDE <b><u>OR</u></b> Thyroid Dose &gt;5 Rem TODE</li> <li>• Airborne concentrations which may result in exceeding occupational limits for inhalation specified in 10CFR20, Appendix B, Table 1.</li> </ul> <p>2.4 Evacuation may be performed at rates below those listed based on plant conditions and response needs.</p> |              |

## Attachment 1

## Offsite Radiological Assessment Director (ORAD)

Sheet 4 of 8

|   |  |
|---|--|
| <b>3.0 Maintain personnel accountability in the EOF</b>   |  |
| 3.1 Keep apprised of the whereabouts of Field Monitoring Teams and other personnel assigned to you at all times.  |  |
| 3.2 <b><u>IF</u></b> you are temporarily leaving the work area <b><u>THEN</u></b><br><br>A Inform the EOF Manager if you are leaving the work area.<br><br>B Upon return, obtain a briefing from the EOF Manager on any events which have occurred while you were away. |  |
| <b>4.0 Maintain a Log</b>   |  |
| 4.1 Use Form IP-1023-4, ERO Log Sheet to log information.   |  |
| 4.2 Log when you assumed the duties of ORAD.  |  |
| 4.3 Log significant decisions and important details used to make decisions.   |  |
| <b>5.0 Develop and provide recommendations for EAL and classification level changes based on radiological considerations to the ED.</b>   |  |
| 5.1 Compare dose projection and field survey results with EAL criteria to determine the impact on the existing classification level.  |  |
| 5.2 Notify the ED of any EALs affected by changes in radiological conditions.   |  |
| <b>6.0 Develop and provide recommendations for offsite PARs based on radiological considerations to the ERM.</b>  |  |
| 6.1 Notify the ED of any changes in radiological conditions which may effect the PAR  |  |
| 6.2 Use procedure IP-EP-410, Protective Action Recommendations to determine proper PAR.   |  |
| 6.3 Document Entergy PARs whenever a General Emergency is declared.   |  |
| 6.4 Review PARs whenever radiological conditions change significantly.  |  |

## Attachment 1

## Offsite Radiological Assessment Director (ORAD)

Sheet 5 of 8

| <u>Continuous Responsibility/Activity (con't)</u>  | <u>Notes</u> |
|--|--------------|
| <p><b>7.0 Maintain communications with the TSC Radiological Advisor to discuss radiological conditions and on and off site response actions.</b></p> <p>7.1 Contact the TSC Radiological Advisor for information on releases or potential releases and plant conditions which may lead to offsite radiological effects.</p> <p>7.2 Periodically contact the TSC Radiological Advisor to provide updates on new dose projections, results of environmental monitoring and to provide technical assistance as needed.</p>  |              |
| <p><b>8.0 Coordinate and direct the dose assessment and environmental monitoring efforts.</b></p> <p>8.1 Supervise the activities of the Dose Assessment HP, MIDAS Operator, EOF Communicator #1 and the Field Monitoring Teams</p> <p>8.2 Ensure the Health Physics Network (HPN) is manned when requested by the NRC</p> <p>8.3 Determine the periodicity of dose projection calculations.</p> <p>A Direct the Dose Assessment HP to perform offsite dose projections using IP-EP-310, Dose Assessment.</p> <p>B Direct MIDAS Operator to obtain meteorological data, plume plot and Reuter-Stokes Senti System readings, using EP-IP-510, Meteorological, Radiological &amp; Plant Data Acquisition System.</p> <p>8.4 Analyze dose assessment and environmental information to determine any actual or potential offsite consequences of the event.</p> <p>8.5 Determine anticipated plume based on meteorological data.</p> <p>8.6 Mark plume front and times on map table map.</p> <p>8.7 Based on projected plume travel path select offsite sample points and indicate them on Form IP-1030-5.</p> |              |



## Attachment 1

## Offsite Radiological Assessment Director (ORAD)

Sheet 6 of 8

| <u>Continuous Responsibility/Activity (con't)</u>   | <u>Notes</u> |
|---|--------------|
| <p>8.8 Determine special instructions to be provided to monitoring teams:</p> <p>A IF the expected thyroid dose is greater than 25 Rem THEN consider issuing KI</p> <p>B Team tracking efforts should be directed to limit their exposure to less than 5 Rem for the entire emergency.</p> <p>8.9 IF site perimeter surveys are needed for sectors 1,14, 15 or 16 THEN contact the OSC to have in-plant HP technicians perform survey.</p> <p>8.10 Teams should not go into radiation fields greater than 1 Rem/hr without specific directions from you. Direct EOF Communicator #1 to have Field Monitoring Teams survey anticipated plume path:</p> <p>A Brief teams on expected doses, plume path and any special instructions or safety precautions (such as use of KI, respirators, or protective clothing).</p> <p>B Have teams pick up samples from designated sample points.</p> <p>C Direct environmental monitoring be performed to confirm dose projections and track any offsite radioactive plume.</p> <p>8.11 Compare projected doses with actual readings taken by field monitoring teams.</p> <p>8.12 Determine which ERPAs are affected by any release and verify proper PARs have been issued.</p> <p>8.13 Conduct periodic briefings with the ED and the EOF Manager to discuss the status of offsite radiological information and assessments.</p> <p>8.14 Compare dose assessment and environmental monitoring efforts with state and county personnel located in the EOF or in the EOCs if county and state personnel are not located in the EOF.</p> <p>8.15 Compare dose assessment and environmental monitoring efforts with the NRC Environmental Dose Assessment Coordinator once the NRC Site Team is in the EOF.</p> |              |

## Attachment 1

## Offsite Radiological Assessment Director (ORAD)

Sheet 7 of 8

- |  |  |
|--|--|
| <p><b>9.0 Evaluate and direct the requirements for offsite emergency exposure.</b></p> <p><b>9.1 Track EOF Staff emergency exposures.</b></p> <p><b>A</b> Monitor EOF personnel exposures or potential exposures and request ED to Authorize Emergency Exposures and the issuance of KI to Entergy emergency workers outside the Protected Area. (ED authorization of exposures is non-delegable)</p> <p><b>B</b> <b>IF</b> EOF staff must receive exposure <b>THEN</b> request the ED authorize emergency exposures up to <b>1 Rem TEDE</b> for all monitoring team personnel dispatched from the EOF and remainder of staff as required. This authorization shall be documented in the ED's ERO Log Sheet.</p> <p><b>C</b> <b>IF</b> emergency measures require additional exposure <b>THEN</b> request the ED to raise the emergency exposure limit 1 Rem at a time up to 5 Rem.</p> <p><b>D</b> Emergency exposures beyond 5 Rem shall be authorized on an individual basis. Request the ED authorize these exposures using Form IP-1023-6, Emergency Exposure Authorization. General guidelines (more details are listed on authorization form)</p> <ol style="list-style-type: none"><li>1. ERO members may receive up to 5 Rem TEDE (per event) for any required emergency activities.</li><li>2. ERO members may be authorized emergency exposures up to 10 Rem TEDE to protect vital equipment.</li><li>3. ERO members may be authorized emergency exposures up to 25 Rem TEDE to save a life.</li><li>4. Individuals may volunteer to receive greater than 25 Rem TEDE to save a life.</li></ol> <p><b>9.2</b> Request authorization for the issuance of KI for any large exposures or expected large exposures to the thyroid.</p> <p><b>9.3</b> Direct the use of protective clothing and respirators as necessary for Entergy workers outside the Protected Area.</p> <p><b>9.4</b> IF emergency workers are exposed to contamination or airborne activities <b>THEN</b> direct radiological evaluations and monitoring as needed. IP-1008, Personnel Radiological Check and Decontamination should be used for these checks.</p> |  |
|--|--|

Attachment 1  
Offsite Radiological Assessment Director (ORAD)  
Sheet 8 of 8

| <b><u>Continuous Responsibility/Activity</u></b> (con't)  | <b><u>Notes</u></b> |
|---|---------------------|
| <p><b>10.0 Report releases to the Environmental Protection Agency (EPA)</b></p> <p>10.1 <b><u>IF</u></b> any radionuclide release exceeds the value listed in Appendix B to § 302.4, (Form IP-1030-4) Title 40CFR302 <b><u>THEN</u></b></p> <p style="padding-left: 40px;">A Notify the EPA National Response Center (phone number in Emergency Telephone Directory).</p> <p style="padding-left: 40px;">B Direct Communicator to identify report is pursuant to 40CFR302.</p> <p>10.2 Document details of any communications with EPA.</p> |                     |
| <p><b>11.0 Initial Post Accident Environmental Sampling</b></p> <p style="text-align: center;"><b><u>NOTE:</u></b></p> <p style="padding-left: 40px;">After a radiological release preliminary sampling may be performed to aid in development of more extensive plan for environmental sampling.</p> <p>11.1 Confer with Emergency Director and offsite radiological officials on need for sampling.</p> <p>11.2 Refer to IP-1004, Post Accident Offsite Environmental Surveys, Sampling and Counting for sampling guidelines</p>          |                     |
| <b><u>Closeout Responsibility/Activity</u></b>  |                     |
| <p><b>12.0 Direct Staff to return all equipment to proper storage locations.</b></p>  |                     |
| <p><b>13.0 Review all documentation the EOF Radiological Staff maintained during the emergency:</b></p> <p>13.1 Ensure logs, forms and other documentation are complete</p> <p>13.2 Ensure all temporary procedures used and/or developed are properly documented for use by Recovery Organization so that necessary actions can be taken for plant operations</p>  |                     |
| <p><b>14.0 Provide all logs and records to the Recovery Manager upon termination of the emergency and entry into the Recovery Phase.</b></p>  |                     |

Attachment 2  
Dose Assessment Health Physicist (DAHP)

Sheet 1 of 4

| <u>Initial Responsibility/Activity</u>  | <u>Notes</u> |
|---|--------------|
| <p><b>1.0 Assume the position of DAHP.</b></p> <p>1.1 Review facility status boards, EDDS information and any other available sources to become familiar with current plant status.</p> <p>1.2 Obtain briefing from the ORAD or EOF Manager</p> <p>A. Use an Essential Information Checklist (Form IP-1035-2) to document briefing items.</p> <p>B. Review NYS Radiological Emergency Data Form, Part II if copy is available.</p> <p>C. Request any additional information on current status of emergency response.</p> <p>1.5 <b><u>IF</u></b> relieving another DAHP <b><u>THEN</u></b> perform a formal turnover with the current DAHP:</p> <p>D Review the current DAHP activity log</p> <p>E Obtain briefing from current DAHP on the emergency and any actions the have been completed or are in progress.</p> <p>1.3 Inform the ORAD that you are now the DAHP.</p> |              |
| <u>Continuous Responsibility/Activity</u>   | <u>Notes</u> |
| <p><b>2.0 <u>IF</u> you are temporarily leaving the work area <u>THEN</u></b></p> <p>2.1 Inform the ORAD you are leaving the work area.</p> <p>2.2 Upon return, obtain a briefing from the ORAD on any events which have occurred while you were away.</p>  |              |
| <p><b>3.0 Maintain a Log</b></p> <p>3.1 Use Form IP-1023-4, ERO Log Sheet to log information.</p> <p>3.2 Log when you assumed the duties of DAHP.</p> <p>3.3 Log significant decisions and important details used to make decisions.</p>  |              |

Attachment 2  
**Dose Assessment Health Physicist (DAHP)**

Sheet 2 of 4

| <u><b>Continuous Responsibility/Activity (cont.)</b></u>  | <u><b>Notes</b></u> |
|---|---------------------|
| <p><b>4.0 Evaluate Plant Radiological Data</b></p> <p>4.1 Obtain Form 42c data from EDDS display, SAS printouts or fax copies received from the TSC.</p> <p>4.2 Review radiation monitor readings and evaluate for actual or potential radiological releases.</p> <p>4.3 Contact the TSC Radiological Advisor for additional information on plant radiological conditions and assistance in interpreting data.</p> <p>4.4 IF there are any indications of a radiological release THEN perform step 5.0 of this checklist.</p> |                     |
| <p><b>5.0 <u>IF</u> there has been a release or potential release of radioactive materials from the plant <u>THEN</u>:</b></p> <p>5.1 Perform dose projections utilizing procedure IP-EP-310, Dose Assessment, MEANS Program and procedure IP-520, Modular Emergency Assessment and Notification System (MEANS).</p>  |                     |
| <p><b>6.0 Assist the ORAD in directing Field Monitoring Teams to survey locations.</b></p> <p>6.1 Use overlays to obtain an approximation of the plume location</p> <p>6.2 Determine which emergency sampling sites would be appropriate to send the Field Monitoring Teams to.</p> <p>6.3 Use Xu/Q values to approximate relative values between locations.</p>  |                     |

## Attachment 2

## Dose Assessment Health Physicist (DAHP)

Sheet 3 of 4

| <u>Continuous Responsibility/Activity</u> (con't)  | <u>Notes</u> |
|--|--------------|
| <p><b>7.0 Evaluate the offsite survey data.</b></p> <p>7.1 Calculate the charcoal / silver zeolite iodine and particulate activities using procedure IP-1020, Airborne Radioiodine Determination.</p> <p>7.2 Determine the equivalent thyroid and whole body exposure rates utilizing Procedure IP-EP-310, "Dose Assessment"</p> <p>7.3 Complete Form IP-1030-5, Offsite Survey Data and review data with the ORAD</p>   |              |
| <p><b>8.0 Establish communications with the NRC via the HPN phone line.</b></p> <p>8.1 Dial the number listed on the V-Band console or listed in the Emergency Telephone Directory.</p> <p>8.2 Inform the NRC that the EOF is activated and performing offsite dose assessment activities. Brief them on any potential releases and answer any questions.</p> <p>8.3 <b><u>IF</u></b> requested by the NRC to stay on <b><u>THEN</u></b> stay on the line and request the ORAD to locate another individual to assist in HPN line communications.</p> <p>8.4 <b><u>IF</u></b> continuous communications are not requested <b><u>THEN</u></b> receive calls from the NRC on the HPN when phone rings.</p> |              |

Attachment 2  
Dose Assessment Health Physicist (DAHP)  
Sheet 4 of 4

| <b><u>Continuous Responsibility/Activity</u></b> (con't)  | <b><u>Notes</u></b> |
|---|---------------------|
| <b>9.0 Review Reuter-Stokes Sentri readings.</b>  |                     |
| 9.1 Obtain the readings from the MIDAS Operator   |                     |
| 9.2 Compare the projected values and the measured offsite exposure rates with the Reuter-Stokes readings  |                     |
| 9.3 <b><u>IF</u></b> there are large discrepancies <b><u>THEN</u></b> Inform the ORAD and continue to gather and analyze data to resolve values.  |                     |
| 9.4 Present Reuter-Stokes data to ORAD for review   |                     |
| <b><u>Closeout Responsibility/Activity</u></b>  |                     |
| <b>10.0 Return all equipment to proper storage locations.</b>   |                     |
| <b>11.0 Review all documentation the DAHPs maintained during the emergency:</b><br><br>A. Ensure logs, forms and other documentation are complete<br><br>B. Ensure any items which need follow up investigations are identified to be completed during the Recovery Phase |                     |
| <b>12.0 Provide all logs and records to the ORAD upon termination of the emergency and entry into the Recovery Phase.</b>   |                     |

Attachment 3  
**MIDAS Operator**

Sheet 1 of 4

| <u><b>Initial Responsibility/Activity</b></u>   | <u><b>Notes</b></u> |
|---|---------------------|
| <p><b>1.0 Assume the position of MIDAS Operator.</b></p> <p>1.1 Sign in on the Facility Sign-in Board</p> <p>1.2 Review facility status boards, EDDS information and any other available sources to become familiar with current plant status.</p> <p>1.3 Obtain briefing from the DAHP or the ORAD</p> <p style="padding-left: 20px;">A. Review NYS Radiological Emergency Data Form, Part II if copy is available.</p> <p style="padding-left: 20px;">B. Request any additional information on current status of emergency response.</p> <p>1.4 <b><u>IF</u></b> relieving another MIDAS Operator <b><u>THEN</u></b> perform a formal turnover with the current MIDAS Operator:</p> <p style="padding-left: 20px;">A. Review the current MIDAS Operator activity log</p> <p style="padding-left: 20px;">B. Obtain briefing from current MIDAS Operator on the emergency and any actions the have been completed or are in progress.</p> <p>1.5 Inform the DAHP that you are now the MIDAS Operator.</p> <p>1.6 <b><u>IF</u></b> the facility has <b><u>NOT</u></b> been activated <b><u>THEN</u></b></p> <p style="padding-left: 20px;">A. Check operability and availability of MIDAS equipment, Reuter-Stokes Systems and Meteorological data.</p> <p style="padding-left: 20px;">B. Report any equipment problems to the DAHP or ORAD.</p> |                     |
| <u><b>Continuous Responsibility/Activity</b></u>  | <u><b>Notes</b></u> |
| <p><b>2.0 <u>IF</u> you are temporarily leaving the work area <u>THEN</u></b></p> <p>2.1 Inform the DAHP or ORAD you are leaving the work area.</p> <p>2.2 Upon return, obtain a briefing from the DAHP or ORAD on any events which have occurred while you were away.</p>  |                     |



Attachment 3  
**MIDAS Operator**  
 Sheet 2 of 4

| <u>Continuous Responsibility/Activity (cont.)</u>  | <u>Notes</u> |
|--|--------------|
| <p><b>3.0 Maintain a Log</b></p> <p>3.1 Use Form IP-1023-4, ERO Log Sheet to log information.</p> <p>3.2 Log when you assumed the duties of MIDAS Operator.</p> <p>3.3 Log significant decisions, important details used to make decisions and any equipment operability issues.</p>   |              |
| <p><b>4.0 <u>WHEN</u> directed by the ORAD <u>THEN</u> disarm the EOF Halon System</b></p> <p>4.1 Obtain the key to the FIKE Fire Suppression System control panel from the EOF key locker.</p> <p>4.2 Open the upper compartment of the FIKE control panel located on the west wall of the EOF next to the key locker.</p> <p>4.3 Toggle the module switch (the switch is located in the lower left corner of the panel.) from the "Armed" position to the "S1" position.</p> <p>4.4 <u>IF</u> the ORAD does <u>NOT</u> direct this action <u>THEN</u> ask the ORAD if the action is required.</p>  |              |
| <p><b>5.0 <u>WHEN</u> directed by the ORAD <u>THEN</u> place the EOF ventilation on internal recirculation.</b></p> <p>5.1 Obtain the key to the EOF Electrical Equipment Room from the EOF key locker.</p> <p>5.2 Locate the EOF HVAC damper control system switches on the East wall of the EOF Electrical Equipment Room.</p> <p>5.3 Rotate all three (3) damper control knobs CLOCKWISE to close the dampers.</p> <p>5.4 Place the three (3) AC Unit control switches to the "OVERRIDE" (up) position</p> <p>5.5 Inform the ORAD and log when you have placed ventilation system in recirculation and return key to key locker.</p> <p>5.6 <u>IF</u> the ORAD does <u>NOT</u> direct this action <u>THEN</u> ask the ORAD if the action is required.</p> |              |

Attachment 3  
**MIDAS Operator**  
 Sheet 3 of 4

| <u><b>Continuous Responsibility/Activity (con't)</b></u>  | <u><b>Notes</b></u> |
|---|---------------------|
| <p><b>6.0 Maintain the MET Data Status Board</b></p> <p>6.1 Use procedure EP-IP-510, Meteorological, Radiological &amp; Plant Data Acquisition System. to retrieve weather predictions.</p> <p>6.2 Obtain the latest measured MET data from systems every 15 minutes.</p> <p style="padding-left: 20px;">A Update the MET Data Status Board to display the correct data.</p> <p style="padding-left: 20px;">B Notify the ORAD of any changes in the meteorological data.</p> <p>6.3 Obtain weather predictions from MIDAS and/or Weather Bureau</p> <p style="padding-left: 20px;">A Update the MET Data Status Board to display the correct data.</p> <p style="padding-left: 20px;">B Notify the ORAD of any significant changes in the weather forecast data</p> |                     |
| <p><b>7.0 Obtain Reuter-Stokes data.</b></p> <p>7.1 Use procedure EP-IP-510, Meteorological, Radiological &amp; Plant Data Acquisition System to obtain Reuter-Stokes monitor data.</p> <p>7.2 IF any readings indicate above background levels THEN inform the DAHP and ORAD immediately of the readings.</p>  |                     |
| <p><b>8.0 Assist in obtaining radiological release data and performance dose projections as directed.</b></p> <p>8.1 Use the Plant Information Computer System (PICS) to, obtain data.</p> <p>8.2 Review dose assessment data with the DAHP and ORAD</p>  |                     |

Attachment 3  
**MIDAS Operator**

Sheet 4 of 4

| <b><u>Closeout Responsibility/Activity</u></b>  |   |
|---|---|
| <b>9.0 Rearm the EOF Halon System</b>   |   |
| 9.1   | Obtain the key to the FIKE Fire Suppression System control panel from the EOF key locker.   |
| 9.2   | Open the upper compartment of the FIKE control panel located on the west wall of the EOF next to the key locker.                                    |
| 9.3   | Toggle the module switch (the switch is located in the lower left corner of the panel.) from the "S1" (up) position to the "Armed" (down) position. |
| <b>10.0 Return the EOF ventilation to normal.</b>   |   |
| 10.1  | Obtain the key to the EOF Electrical Equipment Room from the EOF key locker.  |
| 10.2  | Locate the EOF HVAC damper control system switches on the East wall of the EOF Electrical Equipment Room.   |
| 10.3  | Rotate all three (3) damper control knobs COUNTER - CLOCKWISE half way to open the dampers.   |
| 10.4  | Place the three (3) AC control switches to the "NORMAL" (down) position   |
| <b>11.0 Return all equipment used by MIDAS Operators to it's proper storage locations.</b>                                |   |
| <b>12.0 Review all documentation the MIDAS Operator maintained during the emergency:</b>                                  |   |
| 12.1  | Ensure logs, forms and other documentation are complete   |
| 12.2  | Ensure any items which need follow up investigations are identified to be completed during the Recovery Phase                                       |
| <b>13.0 Provide all logs and records to the ORAD upon termination of the emergency and entry into the Recovery Phase.</b> |   |

Attachment 4  
Survey Team Health Physicist (STHP)

Sheet 1 of 4

| <u>Initial Responsibility/Activity</u>   | <u>Notes</u> |
|--|--------------|
| <p><b>1.0 When directed by the ORAD assume the position of STHP.</b></p> <p>1.1 Sign in on the Facility Sign In Board.</p> <p>1.2 Periodically review this checklist throughout the emergency to determine which actions are appropriate for current conditions.</p> <p>1.3 <b><u>IF</u></b> relieving another STHP <b><u>THEN</u></b> perform a formal turnover with the current STHP:</p> <p style="padding-left: 20px;">A. Review the current EOF survey data</p> <p style="padding-left: 20px;">B. Obtain briefing form current STHP on the emergency and any actions the have been completed or are in progress.</p>  |              |
| <u>Continuous Responsibility/Activity</u>  | <u>Notes</u> |
| <p><b>2.0 Confer with the ORAD or DAHP on the need to set up EOF Radiological Controls. When directed set up EOF entrance as follows:</b></p> <p>2.1 Set up stanchions, rope barricade, and frisker in the main hall entrance to EOF work area.</p> <p>2.2 Set frisker alarm to two (2) times background.</p> <p>2.3 Set up Step Off Pads (SOPs) at entrance.</p> <p style="padding-left: 20px;">A <b><u>IF</u></b> hallway contamination levels are LESS THAN 1000 dpm/100 cm<sup>2</sup> <b><u>THEN</u></b> use SOP labeled "CHECK SHOES BEFORE STEPPING HERE"</p> <p style="padding-left: 20px;">B <b><u>IF</u></b> hallway contamination levels are GREATER THAN 1000 dpm/100 cm<sup>2</sup> <b><u>THEN</u></b> use SOP labeled "REMOVE PROTECTIVE CLOTHING BEFORE STEPPING HERE"</p> <p style="padding-left: 40px;">AND</p> <p style="padding-left: 20px;">C Place a waste receptacle and clean shoe covers near the SOP location.</p> <p>2.4 Post the door in the upper level EOF near the Clerks as "Emergency Exit Only"</p> <p>2.5 Check to ensure door to West stairwell (to upper EOF) is locked.</p> |              |

Attachment 4  
Survey Team Health Physicist (STHP)  
Sheet 2 of 4

| <u>Continuous Responsibility/Activity (cont.)</u>  | <u>Notes</u> |
|--|--------------|
| <p><b>3.0 Monitor Habitability of the EOF</b></p> <p>3.1 Survey building using an Ion Chamber instrument approximately every 30 minutes. Survey times can be changed at the discretion of the ORAD.</p> <p>3.2 Take Beta and Gamma readings throughout occupied areas of the EOF and hallways record readings on EOF Radiological Survey (Form IP-1030-3).</p> <p>3.3 Take smears at building entrance, EOF entrance and in hallways. Record results on EOF Radiological Survey (Form IP-1030-3)</p> <p>3.4 <b>IF</b> any readings are found to be above background <b>THEN</b> inform the ORAD or DAHP immediately.</p> <p>3.5 Use procedure IP-1041, Use of Triton to Monitor for Radiogas” to set up the Triton monitor.</p> <p>3.6 <b>IF</b> Triton monitor alarms or surveys indicate contamination <b>THEN</b> monitor air in the EOF</p> <p style="padding-left: 20px;">A Set up air sampler near HP Work Area</p> <p style="padding-left: 20px;">B <b>IF</b> beta survey results are greater than 50 mr/hr <b>OR</b> the iodine-131 activity on a charcoal filter cartridge is greater than 10 –8 uCi/cc <b>THEN</b> use silver zeolite filter cartridge.</p> <p style="padding-left: 20px;">C Set up MS-2/SPA-3 Counter in the lower level of the EOF by the HP area.</p> <p style="padding-left: 20px;">D Determine airborne air activity using procedure IP-1020, Airborne Activity Determination. Record results EOF Radiological Survey (Form IP-1030-3).</p> |              |
| <p><b>4.0 IF the Security Guards do NOT bring two (2) radios THEN obtain Emergency Planning Radios</b></p> <p>4.1 Call the Command Guard House and request they send the two (2) Emergency Planning Radios to the EOF</p> <p>4.2 Provide radios to Security Guards</p>   |              |

Attachment 4  
Survey Team Health Physicist (STHP)  
Sheet 3 of 4

| <u>Continuous Responsibility/Activity</u> (con't)   | <u>Notes</u> |
|---|--------------|
| <p><b>5.0 Assign Dosimetry</b></p> <p>5.1 <b>IF</b> the EOF Security Guards do <b>NOT</b> have a TLD or dosimeter <b>THEN</b> assign a TLD badge and dosimeter to the EOF Security Guards.</p> <p>5.2 Place one (1) each TLD badge and dosimeter in the upper and lower areas of the EOF work areas to monitor EOF personnel exposures.</p> <p>5.3 Ensure Field Monitoring Team members are issued TLD badges and dosimeter.</p>  |              |
| <p><b>6.0 Personnel Exposure Control - ALARA</b></p> <p>6.1 <b>IF</b> Entergy Emergency Personnel outside the Protected Area must receive emergency exposures <b>THEN</b> confer with the ORAD and EOF Manager to establish controls and limits.</p> <p style="padding-left: 40px;">A Emergency Exposures may be authorized by the Emergency Director up to 5 Rem for the event regardless of prior year-to-date exposures.</p> <p style="padding-left: 40px;">B Limits will normally be set at 1 Rem and raised 1 Rem at a time up to 5 Rem.</p> <p style="text-align: center;"><u>NOTE</u></p> <p>EOF Communicator #1 shall track exposures of Field Monitoring Team members.</p> <p>6.2 <b>IF</b> any Entergy emergency workers outside the Protected Area are receiving radiological exposures <b>THEN</b> record exposures on Individual Exposure Tracking Log (Form IP-1023-3)</p> <p>6.3 Maintain Total Effective Dose Equivalent (TEDE) less than established emergency exposure limits.</p> <p>6.4 <b>IF</b> any worker must receive greater than 5 Rem <b>THEN</b> Have the ORAD request the ED authorize these exposures using Form IP-1023-6, Emergency Exposure Authorization.</p> |              |
| <p><b>7.0 IF directed to determine thyroid burdens THEN arrange for emergency workers to receive Whole Body counts at a onsite or offsite counting station.</b></p>   |              |

Attachment 4  
Survey Team Health Physicist (STHP)  
Sheet 4 of 4

| <u>Continuous Responsibility/Activity</u> (con't)  | <u>Notes</u> |
|--|--------------|
| 8.0 <b>IF</b> directed to perform onsite surveys <b>THEN</b> use procedure IP-1015, Radiological Surveys Outside the Protected Area.   |              |
| 9.0 <b>IF</b> directed to perform site perimeter surveys <b>THEN</b> use procedure IP-1015, Radiological Surveys Outside the Protected Area..  |              |
| 10.0 <b>IF</b> directed to perform personnel contamination checks and decontamination <b>THEN</b> use procedure IP-1008, Personnel Radiological Check and Decontamination.   |              |
| 11.0 <b>IF</b> directed to perform vehicle contamination checks and decontamination <b>THEN</b> use procedure IP-1009, Radiological Check and Decontamination of Vehicles.   |              |
| 12.0 <b>IF</b> directed to check equipment leaving the site <b>THEN</b> use procedure IP-1014, Radiological Check of Equipment Before it leaves the Site.  |              |
| <u>Closeout Responsibility/Activity</u>  |              |
| 13.0 Review all documentation the STHPs maintained during the emergency:<br>13.1 Ensure logs, forms and other documentation are complete<br>13.2 Ensure any items which need follow up investigations are identified to be completed during the Recovery Phase |              |
| 14.0 Provide all logs and records to the ORAD upon termination of the emergency and entry into the Recovery Phase.   |              |

Attachment 5  
**EOF Technical Advisor (TA)**  
 Sheet 1 of 3

| <u>Initial Responsibility/Activity</u>   | <u>Notes</u> |
|--|--------------|
| <p><b>1.0 Assume the position of TA.</b></p> <p>1.1 Sign in on the Facility Sign-in Board</p> <p>1.2 Review facility status boards, EDDS information and any other available sources to become familiar with current plant status.</p> <p>1.3 Confer with the Emergency Director and EOF Manager on emergency status</p> <p>1.4 <b>IF</b> relieving another TA <b>THEN</b> perform a formal turnover with the current TA:</p> <p style="padding-left: 20px;">A. Review the current TA activity log</p> <p style="padding-left: 20px;">B. Obtain briefing from current TA on the emergency and any actions the have been competed or are in progress.</p> <p>1.5 Inform the Emergency Director that you are now the TA.</p> |              |
| <u>Continuous Responsibility/Activity</u>  | <u>Notes</u> |
| <p><b>2.0 IF you are temporarily leaving the work area THEN</b></p> <p>2.1 Inform the DAHP or ORAD you are leaving the work area.</p> <p>2.2 Upon return, obtain a briefing from the DAHP or ORAD on any events which have occurred while you were away.</p>   |              |
| <p><b>3.0 Maintain a Log</b></p> <p>3.1 Use Form IP-1023-4, ERO Log Sheet to log information.</p> <p>3.2 Log when you assumed the duties of Emergency Director Technical Advisor.</p> <p>3.3 Log significant decisions, important details used to make decisions and any equipment operability issues.</p>   |              |



Attachment 5  
**EOF Technical Advisor (TA)**

Sheet 2 of 3

| <u>Continuous Responsibility/Activity (cont.)</u>   | <u>Notes</u> |
|---|--------------|
| <p><b>4.0 Obtain and monitor plant data:</b></p> <p>4.1 Monitor plant data and operations information on the EOF-TSC-CCR dedicated phone line.</p> <p>4.2 Monitor plant data on the Emergency Data Display System (EDDS), SAS Computer Terminal and Proteus Computer.</p> <p>4.3 Advise ED on the following items:</p> <ul style="list-style-type: none"> <li>A Any significant change in the condition of the plant</li> <li>B Any observable trends in plant data</li> <li>C Major Operator actions being undertaken</li> <li>D Any condition which may effect the emergency classification.</li> </ul> <p>4.4 Advise the ORAD of any observed changes in plant radiological data.</p> <p>4.5 <b><u>IF</u></b> any of the EOF plant data computer systems are not functioning <b><u>THEN</u></b> inform a SAS/Proteus operator of malfunctions.</p> |              |
| <p><b>5.0 Maintain Plant Status Chronology on easel pad.</b></p> <p>5.1 Enter major information on plant status or changes to plant status obtained from CCR or TSC</p> <p>5.2 WHEN easel sheet gets full THEN:</p> <ul style="list-style-type: none"> <li>A Have Clerical Staff transcribe information onto log sheet, place sheet with TA logs.</li> <li>B Have Clerical Staff hang completed easel sheet on the wall between upper and lower levels of EOF.</li> </ul>   |              |
| <p><b>6.0 Assist ED in interpreting plant data</b></p> <p>6.1 Provide technical advice on plant operating procedures</p> <p>6.2 Provide technical advice on Severe Accident Management Guidelines.</p>  |              |

Attachment 5  
EOF Technical Advisor (TA)

Sheet 3 of 3

| <b><u>Continuous Responsibility/Activity (cont.)</u></b>  |  | <b><u>Notes</u></b> |
|---|--|---------------------|
| <b>7.0 Assist Emergency Director in conduct of briefings</b>  |  |                     |
| 7.1 Assist the ED in preparations for facility briefings.   |  |                     |
| 7.2 When directed by the ED provide summary briefings of plant conditions to EOF Staff and/or offsite authorities present in the EOF. |  |                     |
| <b>8.0 Return all equipment to it's proper storage locations.</b>   |  |                     |
| <b>9.0 Review all documentation the ED Technical Advisors maintained during the emergency:</b>  |  |                     |
| 9.1 Ensure logs, forms and other documentation are complete   |  |                     |
| 9.2 Ensure any items which need follow up investigations are identified to be completed during the Recovery Phase                     |  |                     |
| <b>10.0 Provide all logs and records to the EOF Manager upon termination of the emergency and entry into the Recovery Phase.</b>      |  |                     |

Attachment 6  
EOF Communicator No. 1

Sheet 1 of 4

| <u>Initial Responsibility/Activity</u>  | <u>Notes</u> |
|---|--------------|
| <p><b>1.0 Assume the position of EOF Communicator No. 1.</b></p> <p>1.1 Review facility status boards, Emergency Data Display System (EDDS) information and any other available sources to become familiar with current plant status.</p> <p>1.2 Obtain briefing from the Dose Assessment HP (DAHP) or the Offsite Radiological Assessment Director (ORAD).</p> <p>A. Review Field Monitoring Team data.</p> <p>B. Request any additional information on current status of emergency response.</p> <p>1.3 <b><u>IF</u></b> relieving another communicator <b><u>THEN</u></b> perform a formal turnover with the current EOF Communicator No. 1:</p> <p>A. Review the current EOF Communicator No. 1 activity log.</p> <p>B. Obtain briefing from current EOF Communicator No. 1 on the emergency and any actions the have been completed or are in progress.</p> <p>1.4 Inform the ORAD and DAHP that you are now EOF Communicator No. 1.</p> |              |

Attachment 6  
**EOF Communicator No. 1**  
 Sheet 2 of 4

| <u><b>Continuous Responsibility/Activity</b></u>  | <u><b>Notes</b></u> |
|---|---------------------|
| <p><b>2.0 Transmit directions to the Offsite Teams</b></p> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p style="text-align: center;">Note:<br/>Offsite Teams are designated as Unit # 2 or Unit # 3</p> </div> <p>2.1 Use the Radio or Cell Phones to communicate with teams.</p> <p>2.2 Confer with the ORAD and DAHP to determine the sample points and the expected whole body exposure rates based on dose projections.</p> <p>2.3 Enter selected sample point(s) and assigned team number on Form IP-1030-5, Offsite Survey Team Data Sheet.</p> <p>2.4 Contact the each team and direct them to the designated sample point providing following information:</p> <p style="margin-left: 40px;">A The expected whole body dose rates</p> <p style="margin-left: 40px;">B Methods of traversing the plume to keep their exposure as low as possible, such as going around plume or traveling through low field areas.</p> <p>2.5 Have teams verify instructions by repeating them back.</p> |                     |
| <p><b>3.0 Receive and Record Field Monitoring Team Data</b></p> <p>3.1 Have teams state sample point for which data is being transmitted.</p> <p>3.2 Record survey data on Form IP-1030-5, Offsite Survey Team Data Sheet.</p> <p>3.3 Verify numbers by repeating values back to Team</p> <p>3.4 Inform the ORAD or DAHP immediately of survey and sample results</p>   |                     |

Attachment 6  
**EOF Communicator No. 1**  
 Sheet 3 of 4

| <u><b>Continuous Responsibility/Activity (con't)</b></u>  | <u><b>Notes</b></u> |
|---|---------------------|
| <p><b>4.0    <u>Receive and Record Field Monitoring Team Data</u></b></p> <p>4.1    Have teams state sample locations for which data is being transmitted.</p> <p>4.2    Record survey data on Form 1030-5, Offsite Survey Team Data Sheet.</p> <p>4.3    Verify numbers by repeating values back to each team.</p> <p>4.4    Inform the ORAD or DAHP immediately of survey and sample results.</p>   |                     |
| <p><b>5.0    <u>Maintain Field Monitoring Team Exposure Records.</u></b></p> <p>5.1    <b><u>IF</u></b> any exposure rates are above background <b><u>THEN</u></b> obtain team member whole body exposure (dosimetry readings) each time they radio or call in.</p> <p>5.2    <b><u>IF</u></b> any team members are receiving radiological exposures <b><u>THEN</u></b> record exposures on Individual Exposure Tracking Log (Form IP-1023-3)</p> |                     |
| <p><b>6.0    <u>Keep Field Monitoring Teams informed of major changes in emergency status:</u></b></p> <p>6.1    Changes in emergency classification.</p> <p>6.2    Start or stop of any offsite releases of radioactive materials.</p>   |                     |
| <p><b>7.0    <u>Obtain new sample locations and points from ORAD</u></b></p> <p>Repeat above steps to continue plume tracking until ORAD determined surveys and sampling are no longer necessary.</p>   |                     |

Attachment 6  
EOF Communicator No. 1

| <b><u>Closeout Responsibility/Activity</u></b> |  |
|--|--|
| <b>8.0</b>                                     | <b>Return all equipment to proper storage locations.</b>   |
| <b>9.0</b>                                     | <b>Review all documentation EOF Communicator No. 1s maintained during the emergency:</b>                             |
| 9.1  | Ensure logs, forms and other documentation are complete  |
| 9.2  | Ensure any items which need follow up investigations are identified to be completed during the Recovery Phase        |
| <b>10.0</b>                                    | <b>Provide all logs and records to the ORAD upon termination of the emergency and entry into the Recovery Phase.</b> |

Attachment 7  
**EOF Communicator No. 2**

Sheet 1 of 3

| <u><b>Initial Responsibility/Activity</b></u>  | <u><b>Notes</b></u> |
|--|---------------------|
| <p><b>1.0 Assume the position of EOF Communicator No. 2.</b></p> <p>1.1 Review facility status boards, Emergency Data Display System (EDDS) information and any other available sources to become familiar with current plant status.</p> <p>1.2 Obtain briefing from the EOF Manager or the Emergency Director</p> <p style="padding-left: 20px;">A. Review NYS Radiological Emergency Data Form Part I data which has been transmitted</p> <p style="padding-left: 20px;">B. Request any additional information on current status of emergency response.</p> <p>1.3 <b><u>IF</u></b> relieving another communicator <b><u>THEN</u></b> perform a formal turnover with the current EOF Communicator No. 2:</p> <p style="padding-left: 20px;">A. Review the current EOF Communicator No. 2 activity log.</p> <p style="padding-left: 20px;">B. Obtain briefing from current EOF Communicator No. 2 on the emergency and any actions the have been completed or are in progress.</p> <p style="padding-left: 20px;">C. Determine the time the next notification update is due to be transmitted.</p> <p>1.4 Inform the EOF Manager and ED that you are now EOF Communicator No. 2.</p> |                     |
| <u><b>Continuous Responsibility/Activity</b></u>   | <u><b>Notes</b></u> |
| <p><b>2.0 <u>IF</u> you are temporarily leaving the work area <u>THEN</u></b></p> <p>2.1 Inform the EOF Manager you are leaving the work area.</p> <p>2.2 Upon return, obtain a briefing from the EOF Manager on any events which have occurred while you were away.</p>   |                     |
| <p><b>3.0 Maintain a Log</b></p> <p>3.1 Use Form IP-1023-4, ERO Log Sheet to log information.</p> <p>3.2 Log when you assumed the duties of EOF Communicator No.2.</p> <p>3.3 Log all communications that are not already documented on Forms.</p>   |                     |

Attachment 7  
**EOF Communicator No. 2**  
 Sheet 2 of 3

| <u><b>Continuous Responsibility/Activity (cont.)</b></u>   | <u><b>Notes</b></u> |
|--|---------------------|
| <p><b>4.0 form required notifications to Offsite Authorities.</b></p> <p style="text-align: center;"><u><b>NOTES:</b></u></p> <p>Start notification of any change in classification within 15 minutes of the classification change.</p> <p>The MEANS Computer program may be used to print NYS Radiological Emergency Data Forms</p> <p><b>4.1 IF</b> the emergency classification changes(upgrade, downgrade, terminates) <b>THEN</b> perform the following:</p> <ul style="list-style-type: none"> <li>A Complete or obtain from ED a NYS Radiological Emergency Data Form Part 1 (Form IP-1030-1)</li> <li>B Ensure the ED has signed the NYS Radiological Emergency Data Form to indicate approval for transmittal.</li> <li>C Communicate the information on the completed form(s) to the offsite authorities per instructions on Alert/SAE/GE Upgrade/Update Notification Checklist (Form IP-1002-3)</li> </ul> <p><b>4.2 IF</b> the emergency classification <b>DOES NOT</b> change <b>THEN</b> perform subsequent notifications as follows:</p> <ul style="list-style-type: none"> <li>A Complete or obtain from ED a NYS Radiological Emergency Data Form (Part I) when any of the following conditions are met:           <ul style="list-style-type: none"> <li>• It has been approximately 30 minutes since the last form was transmitted.</li> <li>• The plant status has changed (Stable, improving, degrading or entry into the recovery phase)</li> <li>• There has been a change in the status of an actual or potential radiological release.</li> </ul> </li> <li>B <b>IF</b> there is a change in radiological release data <b>THEN</b> include transmittal of data on NYS Radiological Emergency Data Form Part II</li> </ul> |                     |



Attachment 7  
**EOF Communicator No. 2**

Sheet 3 of 3

| <b><u>Continuous Responsibility/Activity (cont.)</u></b>   | <b><u>Notes</u></b> |
|--|---------------------|
| <p>C Ensure the ED has signed the NYS Radiological Emergency Data Form(s) to indicate approval for transmittal.</p> <p>D Communicate the information on the completed form(s) to the offsite authorities per instructions on Alert/SAE/GE Upgrade/Update Notification Checklist (Form IP-1002-3)</p> |                     |
| <p><b>5.0 WHEN directed by the Emergency Director (ED) THEN obtain accountability status from the OSC Manager and/ or Unit 3 Watch Supervisor.</b></p>   |                     |
| <p><b>6.0 Industry group notifications</b></p> <p>6.1 Notify the following:</p> <ul style="list-style-type: none"> <li>• American Nuclear Insurers</li> <li>• New York Public Service Commission</li> </ul> <p>6.2 Notify the EOF Manager the notifications were made or not made.</p>               |                     |
| <p style="text-align: center;"><b><u>Closeout Responsibility/Activity</u></b></p>  |                     |
| <p><b>7.0 Return all equipment to proper storage locations.</b></p>  |                     |
| <p><b>8.0 Review all documentation EOF Communicator No. 2 maintained during the emergency:</b></p> <p>8.1 Ensure logs, forms and other documentation are complete</p>  |                     |
| <p><b>9.0 Provide all logs and records to the EOF Manager upon termination of the emergency and entry into the Recovery Phase.</b></p>   |                     |

Attachment 8  
**EOF Clerical Staff**

Sheet 1 of 4

| <u><b>Initial Responsibility/Activity</b></u>   | <u><b>Notes</b></u> |
|---|---------------------|
| <p><b>1.0 Assume the position of EOF Clerical.</b></p> <p>1.1 Sign in on the Facility Sign-in Board</p> <p>1.2 Obtain briefing from the EOF Manager</p> <p>1.3 <b>IF</b> relieving another clerk <b>THEN</b> perform a formal turnover with the current clerk:</p> <p style="padding-left: 40px;">A. Review current emergency status</p> <p style="padding-left: 40px;">B. Obtain briefing from current Clerical Staff on the emergency and any actions the have been competed or are in progress.</p> <p>1.4 Inform the EOF Manager that you are now part of the EOF Clerical Staff.</p>   |                     |
| <u><b>Continuous Responsibility/Activity</b></u>  | <u><b>Notes</b></u> |
| <p><b>2.0 Process Plant Status Data</b></p> <p>2.1 <b>IF</b> the Emergency Data Display System (EDDS) is operating <b>THEN</b> perform the following:</p> <p style="padding-left: 40px;">A. Obtain computer printout of Forms 42a, 42b and 42c trend data screens every 15 minutes.</p> <p style="padding-left: 40px;">B. Make and distribute copies of updated Forms 42a, 42b and 42c to representative located in the EOF.</p> <p>Telecopy forms (a, b &amp; c) to the following locations and record times sent in the Telecopy Log, Form 19:</p> <ul style="list-style-type: none"> <li>• State</li> <li>• County EOCs</li> <li>• NRC</li> <li>• JNC</li> </ul> |                     |

Attachment 8  
EOF Clerical Staff

Sheet 2 of 4

| <u>Continuous Responsibility/Activity (cont.)</u>   | <u>Notes</u> |
|---|--------------|
| <p>2.2 <b><u>IF</u></b> the Emergency Data Display System (EDDS) is <b><u>NOT</u></b> operating <b><u>THEN</u></b> perform the following:</p> <ul style="list-style-type: none"> <li>A. Inform the EOF Manager</li> <li>B. Receive Forms 42a, 42b and 42c via telecopier from the TSC.</li> <li>C. Prepare transparencies of forms and place on projector.</li> <li>D. Make and distribute copies of forms to NRC, FEMA, State and County Representatives at the EOF</li> <li>E. Telecopy forms (a, b &amp; c) to the State and County EOCs, JNC and NRC and record times sent in the Telecopy Log (Form 19).</li> </ul> <p>2.3 <b><u>IF</u></b> the Emergency Data Display System (EDDS) is <b><u>NOT</u></b> operating <b><u>AND</u></b> Forms 42a, 42b and 42c are <b><u>NOT</u></b> available via telecopier from the TSC <b><u>THEN</u></b> perform the following:</p> <ul style="list-style-type: none"> <li>A. Inform the EOF Manager</li> <li>B. Receive data on Forms 42a, 42b and 42c from the EOF SAS Proteus Operator and the TSC</li> <li>C. Prepare transparencies of forms and place on projector.</li> <li>D. Make and distribute copies of updated Forms 42a, 42b and 42c to NRC, FEMA, State and County Representatives at the EOF.</li> <li>E. Telecopy forms (a, b &amp; c) to the State and County EOCs, JNC and NRC and record times sent in the Telecopy Log (Form 19).</li> </ul> <p>2.4 <b><u>IF</u></b> all of the following systems are <b><u>NOT</u></b> operating: EDDS, Telecopiers and EOF SAS Proteus Computer Terminals:</p> <p><b><u>THEN</u></b></p> <ul style="list-style-type: none"> <li>A. Inform the EOF manager that equipment necessary to obtain plant data in the EOF is not operating</li> <li>B. Request the SAS / Proteus Operator obtain Form 42a, 42b and 42c data via phone from the TSC</li> <li>C. Distribute forms as specified in step 2.3 above..</li> </ul> |              |

Attachment 8  
**EOF Clerical Staff**

Sheet 3 of 4

| <u><b>Continuous Responsibility/Activity (cont.)</b></u>  | <u><b>Notes</b></u> |
|---|---------------------|
| <p><b>3.0 Process the NYS Radiological Emergency Data Form Parts I &amp; II as follows:</b></p> <p>3.1 Receive form(s) from the EOF Communicator #2, verifying that the form(s) are signed by the Emergency Director.</p> <p>3.2 Telecopy form(s) to NYS, Counties, JNC and NRC</p> <p>3.3 Record time of telecopy on Telecopy Log, Form 18</p> <p>3.4 Make and distribute copies of form to NRC, FEMA, State and County representatives in the EOF.</p> <p>3.5 Return original form to EOF Communicator #2</p> |                     |
| <p><b>4.0 Process the Offsite Survey Team Data (Form IP-1030-5) as follows:</b></p> <p>4.1 Receive form from the ORAD</p> <p>4.2 Make copies of form and distribute to NRC, FEMA, State and County representatives in the EOF.</p> <p>4.3 Telecopy form to NYS and County EOCs. (Ask the ORAD for the order in which to transmit forms to the counties.)</p>  |                     |
| <p><b>5.0 Receive and distribute telecopies from outside sources as follows:</b></p> <p>5.1 Make copies of all documents received.</p> <p>5.2 Distribute to addressee if known</p> <p>5.3 For any document containing radiological data distribute copies to ORAD and NRC, FEMA, State and County representatives in the EOF.</p> <p>5.4 Maintain copies of all telecopies.</p>   |                     |

Attachment 8  
**EOF Clerical Staff**

Sheet 4 of 4

| <b><u>Continuous Responsibility/Activity (cont.)</u></b>  |  | <b><u>Notes</u></b> |
|---|--|---------------------|
| <b>6.0 Copy Chronology Easel Pad as follows:</b>  |  |                     |
| 6.1 Receive completed easel pad from ED Technical Advisor   |  |                     |
| 6.2 Transcribe the information from the easel pad and give transcript to the ED Technical Advisor                                 |  |                     |
| 6.3 Tape the easel pad to the wall between the upper and lower levels of the EOF.   |  |                     |
| <b>7.0 Perform accountability duty for the Upper Level of the EOF as follows:</b>   |  |                     |
| 7.1 Record the names and arrival times of personnel stationed in the upper level EOF.   |  |                     |
| <b><u>Closeout Responsibility/Activity</u></b>  |  |                     |
| <b>8.0 Return all equipment to proper storage locations.</b>  |  |                     |
| <b>9.0 Review all documentation maintained during the emergency by the clerical staff to ensure it is complete and organized.</b> |  |                     |
| <b>10.0 Provide all logs and records to the EOF Manager upon termination of the emergency and entry into the Recovery Phase.</b>  |  |                     |

Attachment 9  
**EOF SAS / Proteus Operator**

Sheet 1 of 2

| <u>Initial Responsibility/Activity</u>  | <u>Notes</u> |
|---|--------------|
| <p><b>1.0 Assume the position of EOF SAS / Proteus Operator.</b></p> <p>1.1 Sign in on the Facility Sign-in Board</p> <p>1.2 <b><u>IF</u></b> the EOF has not been previously activated <b><u>THEN</u></b> perform the following steps:</p> <p style="padding-left: 20px;">A. Start the EDDS computers to display plant data.</p> <p style="padding-left: 40px;">1. Start computer</p> <p style="padding-left: 40px;">2. Log on to the network</p> <p style="padding-left: 40px;">3. Launch "Internet Explorer" from the windows desktop</p> <p style="padding-left: 40px;">4. From the "Favorites" menu select EDDS (Address <a href="http://epccrr/edds/!main.htm">http://epccrr/edds/!main.htm</a>)</p> <p style="padding-left: 40px;">5. Select "Go To Trend Pages"</p> <p style="padding-left: 40px;">6. Select "Form 42A" for monitor labeled Form 42A</p> <p style="padding-left: 40px;">7. Adjust display to display entire form.</p> <p style="padding-left: 40px;">8. Return to step 1 and repeat for Forms 42B and 42C</p> <p style="padding-left: 40px;">9. Repeat steps 1-5 above for the EDDS terminal(s) located upstairs in the State and County work area.</p> <p style="padding-left: 20px;">B. Verify SAS Terminals are operational to display plant data (adjust brightness)</p> <p style="padding-left: 20px;">C. Verify Proteus Computer is operational to display plant data.</p> <p style="padding-left: 20px;">D. Ensure the Plant Integration Computer System (PICS) is operational.</p> <p style="padding-left: 20px;">E. <b><u>IF</u></b> the proteus computer is not properly displaying data <b><u>THEN</u></b> refer to IP-1021, "Manual Update and Readout of Proteus Plant Parameter Data"</p> |              |

Attachment 9  
**EOF SAS / Proteus Operator**

Sheet 2 of 2

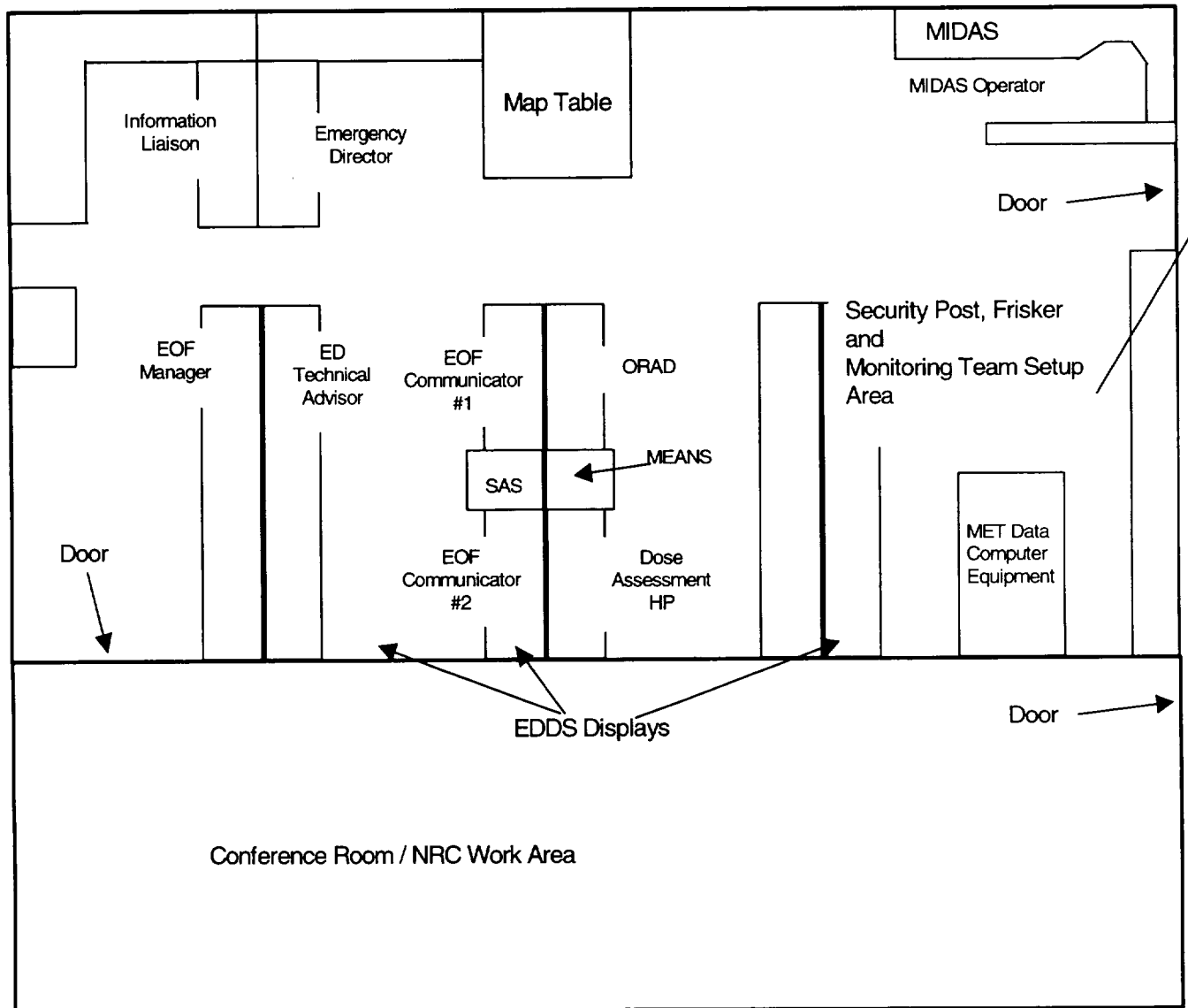
| <u><b>Initial Responsibility/Activity (cont.)</b></u>   | <u><b>Notes</b></u> |
|---|---------------------|
| <p>1.3 <b><u>IF</u></b> relieving another EOF SAS / Proteus Operator <b><u>THEN</u></b> perform a formal turnover with the current SAS / Proteus Operator:</p> <ul style="list-style-type: none"> <li>A. Review current emergency status</li> <li>B. Obtain briefing from current SAS / Proteus Operator on the emergency and any actions the have been competed or are in progress.</li> </ul> <p>1.4 Inform the EOF Manager that you are now the EOF SAS / Proteus Operator</p> |                     |
| <u><b>Continuous Responsibility/Activity</b></u>  | <u><b>Notes</b></u> |
| <p>2.0 <b><u>IF</u></b> the Emergency Data Display System (EDDS) is <b><u>NOT</u></b> operating <b><u>THEN</u></b> perform the following:</p> <ul style="list-style-type: none"> <li>A. Inform the EOF Manager</li> <li>B. Contact the TSC Data Coordinator to verify the server is operating properly.</li> <li>C. Attempt to call up data. Procedure IP-1026, Emergency Data Acquisition, provides further guidance on system troubleshooting.</li> </ul>                       |                     |
| <p>3.0 <b>Continue to monitor EOF information systems and assist EOF Staff in obtaining information as needed.</b></p>  |                     |
| <u><b>Closeout Responsibility/Activity</b></u>  |                     |
| <p>4.0 <b>Return all equipment to proper storage locations.</b></p>   |                     |
| <p>5.0 <b>Review all documentation maintained during the emergency by the EOF SAS / Proteus Operator to ensure it is complete and organized.</b></p>  |                     |
| <p>6.0 <b>Provide all logs and records to the EOF Manager upon termination of the emergency and entry into the Recovery Phase.</b></p>  |                     |

Addendum 1

EOF Layout

Sheet 1 of 2

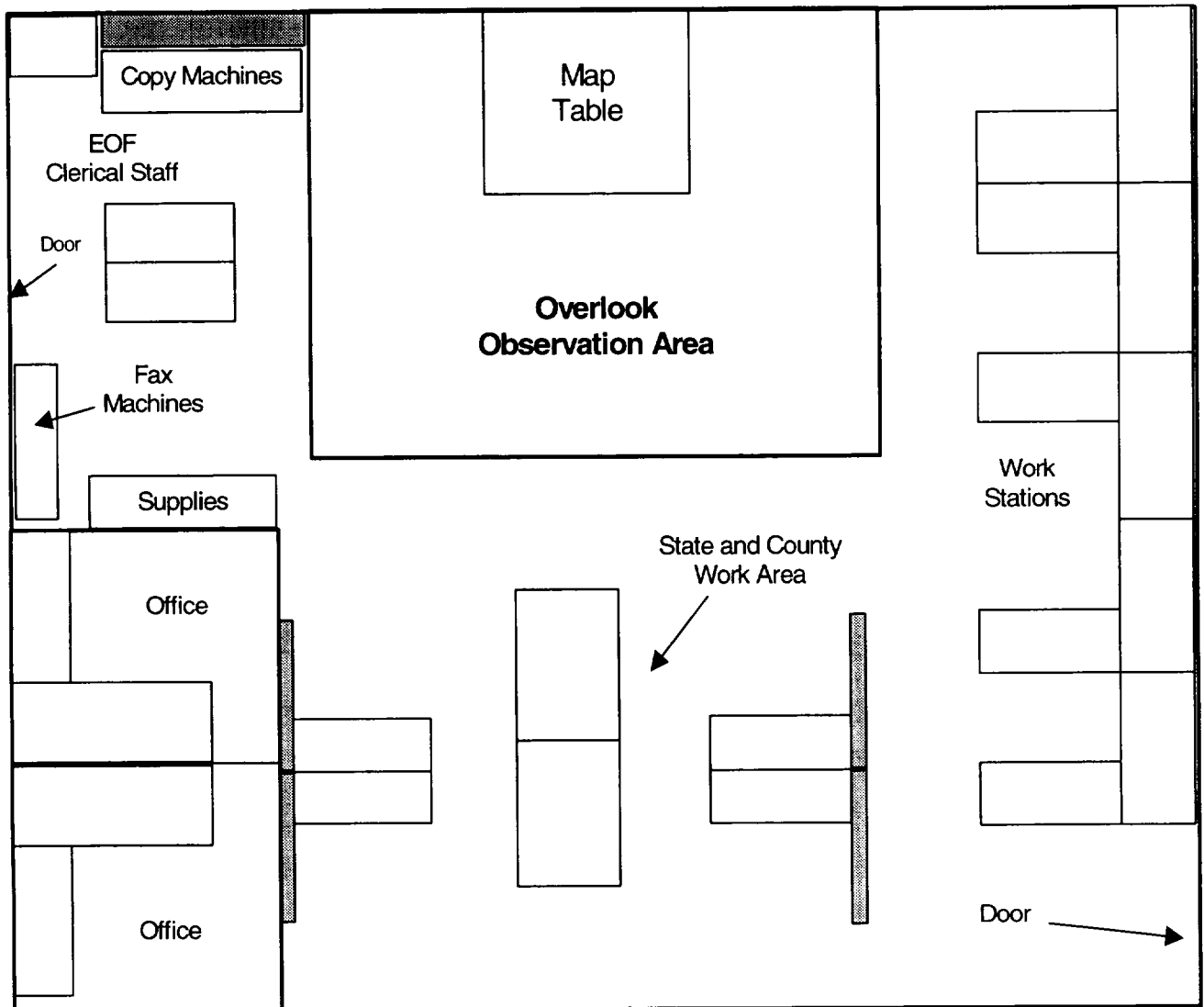
Lower Level Work Area





Addendum 1  
EOF Layout  
Sheet 2 of 2

Upper Level Work Area



## Addendum 2

## NYS Radiological Data Form (Part I) (Form IP-1030-1)

Sheet 1 of 2

| New York State<br>Radiological Emergency Data Form<br>Part I - General Information Instructions   |  |                                |
|---|--|--------------------------------|
| 1. This message being transmitted on: _____ at: _____<br>(Date) (Time)  | <input type="checkbox"/> AM<br><input type="checkbox"/> PM | VIA: A. RECS<br>B. Other _____ |
| 2. This is..... A. <b>NOT</b> an Exercise B. An Exercise  |  |                                |
| 3. The Facility Providing this Information is: A. INDIAN POINT NUMBER 2<br>B. INDIAN POINT NUMBER 3   |  |                                |
| 4. The Emergency A. Unusual Event C. Site Area Emergency E. Emergency Terminated F. Recovery<br>B. Alert D. General Emergency G. Transportation Incident  |  |                                |
| 5. This Emergency Classification Declared on: _____ at: _____<br>(Date) (Time) <input type="checkbox"/> AM<br><input type="checkbox"/> PM   |  |                                |
| 6. Release of Radioactive Materials due to the Classified Event: A. No Release<br>B. Release <b>BELOW</b> federally approved operating limits (Technical Specifications)<br><input type="checkbox"/> To Atmosphere <input type="checkbox"/> To Water<br>C. Release <b>ABOVE</b> federally approved operating limits (Technical Specifications)<br><input type="checkbox"/> To Atmosphere <input type="checkbox"/> To Water<br>D. Unmonitored Release - requiring evaluation |  |                                |
| 7. Protective Action Recommendations:<br>A. No need for Protective Actions outside the site boundary.<br>B. EVACUATE the following ERPAs:<br>1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20<br>21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40<br>41 42 43 44 45 46 47 48 49 50 51<br>C. SHELTER all remaining ERPAs.   |  |                                |
| 8. EAL Number: <input type="text"/><br>Brief _____<br>Event _____<br>Description _____  |  |                                |
| 9. The Plant status is: A. Stable C. Degrading E. Cold Shutdown<br>B. Improving D. Hot Shutdown   |  |                                |
| 10. Reactor Shutdown: A. Not Applicable B. _____ at: _____<br>(Date) (Time) <input type="checkbox"/> AM<br><input type="checkbox"/> PM  |  |                                |
| 11. Wind Speed: _____ Meters/Second at elevation <u>10</u> meters.  |  |                                |
| 12. Wind Direction: (From) _____ Degrees at elevation <u>10</u> meters.   |  |                                |
| 13. Stability Class: A B C D E F G  |  |                                |
| 14. Report By: _____ at Telephone Number (914) 737-8929<br>(Communicator's Name)  |  |                                |
| Message Received by: _____  |  | Message Ended at: _____        |

Emergency Director Review and Approval: \_\_\_\_\_

| <b>New York State</b><br><b>Radiological Emergency Data Form</b><br><b>Part II - Radiological Assessment Data</b>   |                            |                 |  |
|---|----------------------------|-----------------|--|
| <b>This is:</b> A. <u>NOT</u> an Exercise                      B. An Exercise   |                            |                 |  |
| <b>14. Message transmitted at:</b> Date: _____ Time: _____ Location / Facility transmitted from: _____  |                            |                 |  |
| <b>16. General release information:</b><br>A. Event Release started                      Date _____ Time: _____<br>B. Event Release expected to end                      Date: _____ Time: _____<br>C. Event Release ended:                      Date: _____ Time: _____<br>D. Reactor Shutdown:      N/A OR      Date: _____ Time: _____<br><b>Meteorological Data</b> As of Date: _____ Time: _____<br>E. Wind Speed      _____ meters/second                      At elevation: _____ meters<br>F. Wind Direction:      _____ degrees                      At elevation: _____ meters<br>G. Stability class (Pasquill):      A B C D E F G |                            |                 |  |
| <b>17. Atmospheric release information:</b> As of Date _____ Time _____<br>A. Release from: <input type="checkbox"/> Ground <input type="checkbox"/> Elevated      D. Noble gas release rate:      _____ Ci/sec<br>B. Iodine/Noble gas ratio:      _____      E. Iodine release rate      _____ Ci/sec<br>(Assumed OR Actual)<br>C. Total release rate:      _____ Ci/sec      F. Particulate release rate      _____ Ci/sec  |                            |                 |  |
| <b>18. Waterborne release information:</b> As of Date _____ Time _____<br>A. Volume of release      _____ gallons      C. Radionuclides in release:      _____<br>B. Total concentration:      _____ µCi/ml      D. Total activity released      _____ Ci   |                            |                 |  |
| <b>19. Dose calculations</b> (based on a release duration of _____ hours)<br>Calculation is based on (circle one):<br>A. Inplant measurements      B. Field Measurements      C. Assumed source term  |                            |                 |  |
| <b>Table below applies to (circle one) A. Atmospheric release      B. Waterborne release</b>  |                            |                 |  |
| DISTANCE  | Xµ/Q                       | <u>DOSE</u>     |  |
|   |                            | TEDE (Rem)      | TODE (Rem)                                     |
| Site Boundary   |                            |                 |  |
| 2 Miles   |                            |                 |  |
| 5 Miles   |                            |                 |  |
| 10 Miles  |                            |                 |  |
| ____ Miles  |                            |                 |  |
| <b>20. Field measurement of dose rates or surface contamination/deposition:</b>   |                            |                 |  |
| Mile/Sector OR<br>Mile/Degrees  | Location OR Sampling Point | Time of Reading | Dose Rate (mR/hr) OR<br>Contamination (µCi/m²) |
|   |                            |                 |  |
|   |                            |                 |  |
|   |                            |                 |  |
|   |                            |                 |  |

Emergency Director Review and Approval: \_\_\_\_\_

Addendum 3  
EOF Radiological Survey Map (Form IP-1030-3)  
Sheet 1 of 1

**EOF Radiological Survey Map**

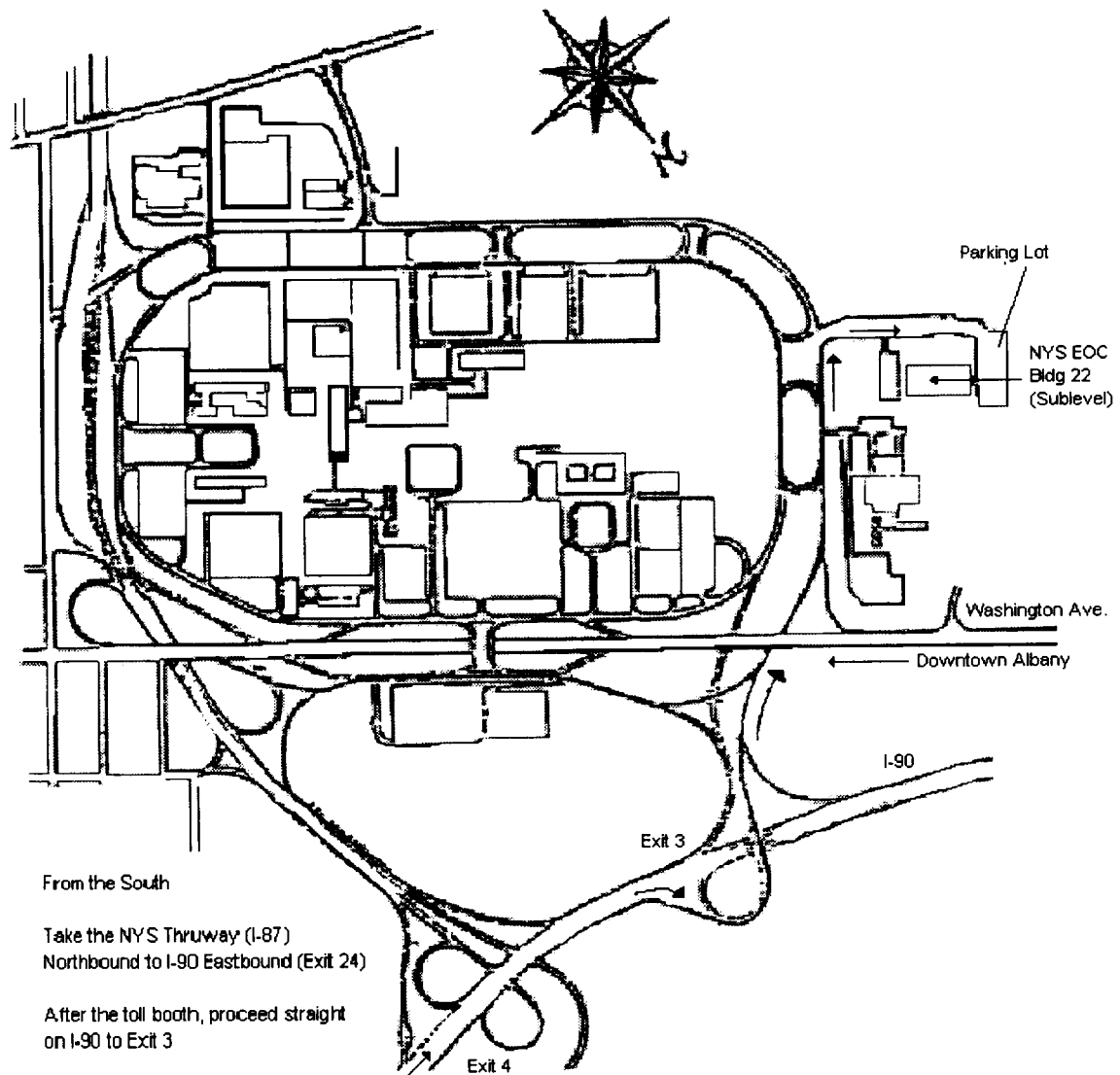
|  |                 |   |                 |
|--|-----------------|---|-----------------|
| By: _____  |                 | Area / Item: Occupied Areas EOF / Service Center  |                 |
| Date: _____  | Time: _____     | Type of Survey: <input type="checkbox"/> Rad <input type="checkbox"/> Cont <input type="checkbox"/> Air |                 |
| Meter / Serial # _____   |                 | Smear Counter/ Serial # _____   |                 |
| Map Key: ___ =Dose Rate, * =Contact, $\beta$ =Beta, O =Smear, H =Head, C =Chest, K =Knee, FL = Floor |                 |   |                 |
| Air Sample Results: _____  | RadioGas: _____ | Particulate: _____  | Charcoal: _____ |
| Air Sample Counter / Serial # _____  |                 | Highest mr/hour Reading: _____  |                 |
| Comments: _____  |                 |   |                 |

The diagram illustrates the layout of the Emergency Operations Facility (EOF) for a radiological survey. It is divided into two main sections: the Upper Level and the Lower Level. The Upper Level is shaded and contains several rooms and corridors. A 'Halfway' label points to a corridor. The Lower Level is unshaded and contains a large 'EOF Work Area' and a 'Security' area. A 'Contamination Results' table is located on the right side of the diagram, with columns for 'dpm / 100 cm²' and 'Remarks'.

| Contamination Results (dpm / 100 cm <sup>2</sup> ) |  |
|--|--|
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

Form IP-1030-3 Rev 0

Addendum 4  
State Campus Office Building Map  
Sheet 1 of 1



**Addendum 5**  
**Appendix B to § 302.4**

The table of reportable amounts of radionuclides from CFR 40 PART 302—  
DESIGNATION, REPORT-ABLE QUANTITIES, AND NOTIFICATION

Maintained current by Emergency Planning Department and distributed to ERO position  
binders where required.

The table is designated as Form IP-1030-4, titled "APPENDIX B TO § 302.4 –  
RADIONUCLIDES"

Current Revision is 0

7 pages

## Offsite Survey Team Data Sheet

[illegible]

Form IP-1030-5 Rev 0