

**OYSTER CREEK
EMERGENCY PREPAREDNESS
IMPLEMENTING PROCEDURE**

Number

EPIP-OC-.25

Title EMERGENCY OPERATIONS FACILITY (EOF)		Revision No. 22
Applicability/Scope Applies to work at Oyster Creek		Responsible Office Emergency Preparedness
This document is within QA plan scope Safety Reviews Required		Effective Date Date of Sale

Prior Revision 21 incorporated the following Temporary Changes:

N/A

This Revision 22 incorporates the following Temporary Changes:

N/A

List of Pages (all pages rev'd to Rev. 22)

- 1.0 to 5.0
- E1-1 to E1-16
- E2-1 to E2-2
- E3-1 to E3-2
- E4-1 to E4-9
- E5-1 to E5-2
- E6-1 to E6-3
- E7-1 to E7-2
- E8-1 to E8-2
- E9-1 to E9-3
- E10-1 to E10-5
- E11-1
- E12-1
- E13-1
- E14-1
- E15-1
- E16-1
- E17-1
- E18-1

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	Signature	Concurring Organization Element	Date
Originator		Emergency Planner	1/6/00
Concurred By		Director Ops & Maintenance	1-12-00
Approved By		Emergency Preparedness Mgr. OC	1/13/00

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DOCUMENT HISTORY

REVISION	DATE	ORIGINATOR	DESCRIPTION OF CHANGE
10	06/94	A. Smith	Insert step to make sure breaker on generator is open for testing purposes only.
11	09/94	A. Smith	Revise NRC Exhibit 1B to include NUREG 1471 requirements. Clarify exhibit 4, 4B, 4C for better flow. Exhibit 6 generator operation include manufactures updates for output. Add Exhibit 13 Media Access.
12	02/95	A. Smith	50-54.x requirements added as an exhibit 14 as is in Procedures EPIP-OC-.02 and EPIP-OC-.26. Provide Media Access during Security Driven Events. Assign GPU rep. to assist BNE with Tech. Info. for PAR.
13	07/95	A. Smith	Delete "Bullets" from Communications Req. Correct EPIP-OC-.29 to read EPIP-COM-.45. Update EOF Layout Diagram. Add note clarifying North Gate usage. Update Berkeley RAA Title.
14	12/95	A. Smith	Clarify Authorization Form for request from deviation from requirements.
15	04/96	A. Smith	Remove IDT Terminal Instructions and PCS Data Trent instructions. Remove operating procedure for EOF Back Up Power. Remove EOF Layout Relocate Frisker Adjust exhibit numbers to reflect changes
16	10/96	T. Blount	Change PAR guide & logic diagram to make Evacuation Preferred recommendation, provided direction to perform following notification for Off-site Protective Actions. Deleted reference to AEOF. Remove Ex 13-Procedure deviations, clarified EP Rep's duties.
17	06/97	A. Smith	Reflect recent improvements in technology and incorporate communications activities from EPIP-OC-04 Comm. & Recordkeeping for better procedure flow. Add notes for PAR beyond 10 mile EPZ.
18	10/97	A. Smith	Update Area Codes.
19	05/98	A. Smith	Clarify offsite notifications, clarify frisking at EOF.
20	02/99	A. Smith	EPIP-COM-.44 and EPIP-COM-.45 have been changed to Oyster Creek site specific procedures and the new numbers are EPIP-OC-.44 and EPIP-OC-.45 (reference EP changes 98-021 & 98-022)
21	05/99	A. Smith	Incorporate the new public information process and update Pinelands area load super. phone number.
22	DOS	A. Smith	Change references from GPU or GPUN to OCNCS.

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1.0 PURPOSE

This procedure describes the staffing, activation, and operation of the Emergency Operations Facility (EOF).

2.0 APPLICABILITY/SCOPE

2.1 This procedure shall apply to all AmerGen personnel assigned to the EOF during a Site Area Emergency, General Emergency, or when EOF activation is required by the Emergency Director.

3.0 DEFINITIONS

3.1 None

4.0 RESPONSIBILITIES

4.1 The Emergency Support Director (ESD) will perform or delegate the completion of the ESD's checklist (Exhibit 1).

4.2 The Emergency Support Director Assistant will assist the ESD in completing Exhibit 1 and complete the ESD assistant checklist (Exhibit 2).

4.3 The Group Leader - Radiological and Environmental Controls will complete the Group Leader R&EC checklist (Exhibit 3).

4.4 The Group Leader - Administrative Support will complete the Group Leader Administrative Support checklist (Exhibit 4) and implement the EOF Access Control Checklist (Exhibit 4B).

4.5 The Technical Support Representative will complete the Technical Support Representative checklist (Exhibit 5).

4.6 The Materials Management Coordinator will complete the Materials Management Coordinator checklist (Exhibit 6).

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4.7 The Emergency Preparedness Representative will assist the ESD in completing Exhibit 1 and complete the Emergency Preparedness Representative checklist (Exhibit 10).

4.8 The Communications Coordinator will monitor and support/direct Communicator activities in support of the emergency.

5.0 PROCEDURE

5.1 Emergency Support Organization (ESO) personnel will report to the EOF when they are notified of the activation of the ESO and perform the responsibilities identified in their assigned exhibits to this procedure and as requested by their emergency supervisors.

6.0 REFERENCES

- 6.1 2000-PLN-1300.01, "OCNGS Emergency Plan".
- 6.2 Oyster Creek Emergency Plan Implementing Procedures.
- 6.3 EPIP-OC-.26, The Technical Support Center.
- 6.4 EPIP-OC-.27, The Operations Support Center.
- 6.5 2000-ABN-3200.30, Control Room Evacuation.
- 6.6 1820-IMP-1720.01, Emergency Public Information Implementing Procedure.

7.0 EXHIBITS

- 7.1 Exhibit 1, Emergency Support Director's Checklist
- 7.2 Exhibit 1A, Emergency Support Director Turnover Checklist.
- 7.3 Exhibit 1B, NRC Emergency Response Interface Criteria.
- 7.4 Exhibit 1C, Protective Action Recommendation Logic Diagram for Oyster Creek.
- 7.5 Exhibit 2, ESD Assistant Checklist.

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- 7.6 Exhibit 3, Group Leader - Radiological and Environmental Controls Checklist.
- 7.7 Exhibit 4, Group Leader - Administrative Support Checklist.
- 7.8 Exhibit 4A, Emergency Aviation Support Instruction Form.
- 7.9 Exhibit 4B, EOF Access Control Checklist.
- 7.10 Exhibit 4C, Instructions for Source Check of Frisker at EOF.
- 7.11 Exhibit 5, Technical Support Representative Checklist.
- 7.12 Exhibit 6, Materials Management Coordinator Checklist.
- 7.13 Exhibit 6A, Lakewood Microwave Room Emergency Electric Procedure.
- 7.14 Exhibit 7, EOF Communications Coordinator Checklist.
- 7.15 Exhibit 8, EOF Communicator General Duties.
- 7.16 Exhibit 9, Press Release Approval Guidance.
- 7.17 Exhibit 10, Emergency Preparedness Representative Checklist.
- 7.18 Exhibit 10A, Emergency Response Facility Fitness For Duty Determination Instructions.
- 7.19 Exhibit 10B, ALCO Sensor III Operational Checklist.
- 7.20 Exhibit 11, Route to EOF.
- 7.21 Exhibit 12, Emergency Shift Schedule (Sample).
- 7.22 Exhibit 13, Alternate Emergency Response Facilities.
- 7.23 Exhibit 14, Site Access Policy for Media During Emergencies.
- 7.24 Exhibit 15, OC Emergency Communications Log (Sample).
- 7.25 Exhibit 16, Emergency Message Form (Sample).
- 7.26 Exhibit 17, HIFAX Log (Sample).
- 7.27 Exhibit 18, Media Access Briefing Form.

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EXHIBIT 1

Emergency Support Director's Checklist

Initials

- _____ 1.0 Activate the EOF by performing these steps:
- _____ 1.1 Complete Exhibit 1A of this procedure by obtaining a turnover from the ED. Contact the ED in the TSC or Control Room as appropriate.
- _____ 1.2 Confirm that the following functions are available at the EOF (Areas need not be fully staffed to be considered functional):
- Environmental Assessment
 - Technical Support
 - Communications with TSC
 - Offsite Notifications
- _____ 1.3 Ensure that Access Control is maintained to only allow authorized personnel in the EOF.
- _____ 1.4 Once the above steps have been completed, inform the ED that you are ready to assume your position as ESD and will take over responsibility for:
- Approving and directing official notifications to offsite agencies.

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EXHIBIT 1
(continued)

Emergency Support Director's Checklist

Initials

- Approving and directing information releases to the media.

NOTE

ED/ESD approval is not needed for information releases involving boiler plate information only, (e.g., emergency declarations and media center opening).

- Approving and, if possible, personally conveying appropriate Protective Action Recommendations to the New Jersey Office of Emergency Management.
- Briefing the NRC Site Team Leader and serve as the official point of contact for receiving NRC directives. This includes interfacing with the NRC regarding deviations from license conditions or technical specifications (10 CFR 50.54).

NOTE

Ensure ED advises the ESD when such deviations are planned and the technical experts are consulted to the fullest extent practicable.

NOTE

The ESD may overrule the ED if the ESD believes a higher emergency declaration is warranted.

- 1.5 Announce to the EOF staff that the EOF is activated, and ensure that you or your designee has notified the President of the Corporation.

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(continued)Emergency Support Director's ChecklistInitials

- _____ 1.6 Brief the EOF staff including NRC and State representatives (if available) of plant conditions using the EOF public address system. ESD should notify the State Office of Emergency Management of the Plant Status.
- _____ 1.7 Review, as appropriate, Exhibit 1B, NRC Emergency Response Interface.
- _____ 1.8 Ensure that someone is assigned to maintain the ESD's log and track ESD assigned action items.
- _____ 1.9 Review all press releases related to the emergency that have been approved for release by the ED.
- 2.0 ESD Conferences
- 2.1 ESD conferences should be held for information exchange periodically (approximately one every hour) with representatives from the State and NRC and the Group Leader R&EC, Technical-Support Representative, Public Information Representative, EP Representative, and other staff as necessary.
- 2.2 While the ESD is in conference, a staff member should be assigned as "in charge" of EOF activities and instructed to interrupt the conference in the event of a major plant change.
- 2.3 Action items resulting from ESD conferences should be logged and tracked, and their disposition should be discussed at future conferences.
- 3.0 EOF Staff Briefings
- 3.1 When major changes in plant status have occurred, the EOF staff should be briefed and status updated.

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EXHIBIT 1 (continued)

Emergency Support Director's Checklist

4.0 Press Releases/Media Site Access

- 4.1 Press Releases should be issued within approximately one hour from the time that a major plant event has occurred. "Draft" press releases shall have a timely review. Refer to Exhibit 7A for additional guidance.

NOTE

Press releases such as media advisories, emergency reclassifications which merely provide boiler plate information need not have the ED/ESD approval.

Once the Governor has declared a state of emergency, ensure all OCNCS press releases are provided to the state representative at the JIC for review.

- 4.2 If media access to the site is requested, refer to Exhibit 14, "Site Access Policy for Media during Emergencies".

5.0 Onsite Protective Actions

- 5.1 Determine the status of site accountability (if applicable) from the Group Leader Administrative Support or the ED. Ensure this is logged in ESD's Log.
- 5.2 Determine if a site evacuation has been ordered and ensure provisions are made for providing site employees with instructions on reporting to work for the next business day. Site evacuation should be logged in ESD's Log.
- 5.3 Determine if any of the offsite OCNCS Facilities are downwind of a radioactive release and provide for their monitoring and protection (e.g., Trailers 300, Oyster Creek Admin. Bldg. and Forked River).
- 5.4 If non emergency OCNCS facilities are within sectors that were ordered to evacuate by the State, then they should be evacuated also.
- 5.4.1 If OCNCS Emergency Facilities e.g. Remote Assembly Area are within sectors ordered to evacuate, direct the Group Leader R&EC to ensure appropriate assessment and protective actions for there locations. They need not be evacuated unless local conditions make it necessary.

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EXHIBIT 1 (continued)

Emergency Support Director's Checklist

- 5.5 A description of evacuation preplanning for Alternate Emergency Response Facilities is provided in Exhibit 11.
- 6.0 Changes to Emergency Classifications
 - 6.1 Immediately notify the EOF Communications Coordinator of any changes in emergency classifications and approve the offsite notification form.

NOTE

These offsite notifications must be made within 15 minutes of an emergency declaration.

- 7.0 Offsite Protective Action Recommendations (PAR)
 - 7.1 At the Site Area Emergency, convene an ESD conference and review the PAR Logic Diagram (Exhibit 1C) in preparation for a General Emergency declaration.
 - 7.2 At the General Emergency, convene an ESD conference and immediately discuss the PAR Logic Diagram (Exhibit 1C). Develop a PAR for appropriate notifications within approximately 15 minutes from the GE declaration and approve the offsite notification form for transmitting the PAR to the State.
 - 7.2.1 Providing the written and signed copy of the PAR notification to the OEM Liaison (if he is present in the EOF) is considered to meet state notification time requirements.
 - 7.2.1.1 However, notification of the PAR to the State by OC Communicators must also proceed directly.
 - 7.2.1.2 ESD personal conveyance of the PAR to the OEM should, if possible, also proceed directly.
 - 7.3 To the maximum extent practicable, attempt to obtain agreement from the State and NRC on the PAR. However, whether agreement is or is not reached, the Corporation shall communicate its PAR to the State OEM within approximately 15 minutes from the time the GE was declared.

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EXHIBIT 1 (continued)

Emergency Support Director's Checklist

- 7.4 ESD should discuss (time permitting) or inform the ED of the PAR decision. This should not hold up the notification of offsite agencies.
- 7.5 The PAR should not be included in press releases.
- 7.6 The ESD should ascertain from the NJ OEM what "Protective Action" has been implemented off-site. This should be provided to the NRC via the ENS line as required by 10 CFR 50.72 - follow-up notifications.
- 8.0 NRC Interface
 - 8.1 Brief the NRC upon arrival and determine if the Senior NRC person is the Site Team Leader or Director, Site Operations (see Exhibit 1B). This briefing should include the status of the event and information on the structure of the OCNCS emergency organization. Request the NRC keep OCNCS informed of all substantive information exchanges between the NRC and the state. The OCNCS emergency organization is not standard in the industry. Specifically discuss that the ED oversees site related activities, maintains a general cognizance of reactor operations (not detailed), and that while the ESD oversees the whole emergency effort, he concentrates on offsite issues.
 - 8.2 Assign an individual to introduce OCNCS personnel to their NRC counterparts in the EOF.
 - 8.3 NRC directives can only be received by the ESD (or in the ESD's absence, the ED) NRC should be requested to provide all directives in writing.
- 9.0 Long-term Recovery
 - 9.1 Refer to Procedure EPIP-OC-.45 for Long-Term Recovery and discuss its implementation at an ESD conference and with the ED.
 - 9.2 If a General Emergency is in effect, OCNCS will not de-escalate to a lower level of emergency. The only option is to go into Long-term Recovery and this transition shall not occur until all offsite protective actions have been completed and the State has been informed.

Name _____ Date _____ Time _____

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EXHIBIT 1A

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EMERGENCY SUPPORT DIRECTOR TURNOVER CHECKLIST

NOTE

This form may be completed by ESD Assistant/Emergency Preparedness representative and may be used to brief State and NRC Representatives upon their arrival.

EMERGENCY CLASSIFICATION

DATE/TIME OF DECLARATION

UNUSUAL EVENT _____

ALERT _____

SITE AREA EMERGENCY _____

GENERAL EMERGENCY * _____

Reactor Power at time of event _____ % BRIEF DESCRIPTION OF THE EMERGENCY

CURRENT PAR STATUS * (Required for General Emergency) _____

STATUS OF ACCOUNTABILITY/ONSITE PROTECTIVE ACTIONS _____

PRESENT STATUS OF PLANT

_____ AT POWER (_____ %)

_____ Hot Standby

_____ Hot Shutdown

_____ Cooling down (describe cooldown mode) _____

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EXHIBIT 1A (continued)

EMERGENCY SUPPORT DIRECTOR TURNOVER CHECKLIST

Estimated time to 'STABLE' plant conditions _____ hours

Did reactor trip? YES - NO

Did ECCS activate? YES - NO

Is offsite power available? YES - NO

Are both Diesel Generators operable? YES - NO

Are Diesels Running? #1 YES - NO #2 YES - NO

Are the Station Blackout CT's Available? YES - NO

Is fuel integrity maintained? YES - NO

Is containment integrity maintained? YES - NO

If no, specify _____

Do you suspect there is a release
(monitored or unmonitored) in progress? NO YES N/A

If yes, specify pathway: _____

Is release AIRBORNE RELEASE WIND RELEASE DOWN

Plume dispersion ELEVATED GROUND N/A

Details: _____

Are there any abnormally high inplant radiation levels? YES - NO

Specify location _____

Are there any personnel injuries? YES - NO

Provide status _____

Were there any news releases issued? YES - NO

Specify _____

EXHIBIT 1A (Continued)

EMERGENCY SUPPORT DIRECTOR TURNOVER CHECKLIST

Are there any open technical issues? YES - NO

Specify _____

News releases issued ATTACHED

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EXHIBIT 1B

NRC EMERGENCY RESPONSE INTERFACE CRITERIA

This is a synopsis of the NRC emergency response process as it applies to OCNGS. In essence, directives from the NRC must come from the NRC Director (typically, the NRC Chairman) or from the NRC Director of Site Operations (typically, the NRC Regional Administrator). Such advice or directive can only be communicated to the Emergency Director (the Emergency Support Director once the EOF is activated). If a directive order is issued by the NRC Director or Director of Site Operations, the ED/ESD should request written confirmation which spells out the specific nature of the directive. While NRC advice may be challenged by the ED or ESD, directives must be complied with. With respect to Protective Action Recommendations for the public, the NRC may either endorse the OCNGS recommendation or opt to recommend a different one. The ED/ESD is encouraged to include the NRC and State representatives in the Protective Action Recommendation discussions in order to arrive at a mutually agreeable recommendation. In the event that the NRC opts to recommend a different recommendation, they will attempt to resolve their differences with the utility prior to recommendations to the state. Their recommendation, like the utility recommendation, will be considered by the State in the development of a Governor directive.

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EXHIBIT 1B (Continued)

NRC EMERGENCY RESPONSE INTERFACE CRITERIA

Upon arrival of the NRC, the ED/ESD should:

- Verify who is the senior NRC person in charge.
- Ask the Senior NRC Person to inform the ED/ESD when the position of Director Site Operations is assumed and whether the responsibility to issue DIRECTIVES is included.
- Request that the NRC keep OCNCS informed of all substantive information exchanges between the NRC and the State.
- Request the NRC provide all DIRECTIVES in writing.

SYNOPSIS - NRC EMERGENCY RESPONSE

NOTE

Review the following as time permits and/or if the NRC is expected to respond.

Revision 2 to NUREG 0728, supplemented by NUREG 0845 and NUREG-1471, describes the manner in which the NRC will respond to an incident and provides criteria for making preplanned response decisions. They provide procedural guidance, describe the functions related to NRC emergency response, and define procedures for responding to the following NRC modes of operation.

Each mode defines the scope of NRC activities related to a particular level of emergency response in ascending order of degree of involvement to deactivation. The various modes are characterized as follows:

1. Normal mode - Normal activities designed to maintain readiness.
2. Standby mode - Regional office activates the Incident Response Center (IRC with an appropriate staff and NRC Headquarters Operations Center staffed by a standby team.

EXHIBIT 1B (Continued)

NRC EMERGENCY RESPONSE INTERFACE CRITERIA

3. Initial activation - NRC Operations Center is staffed by a response team, the Regional IRC is fully activated and a site team is dispatched under the leadership of the Regional Administrator, normally designated as Director of Site Operations (DSO).
4. Expanded activation - Focus on NRC response operations is shifted to the site. DSO is designated primary spokesman for the NRC and may be empowered with directive authority by the Chairman of the Nuclear Regulatory Commission.
5. Deactivation - Follow-up activities (e.g., reviews, investigation, and recovery operations).

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The particular mode assumed by the NRC will be dependent upon licensee event classification and "independent NRC perception of relative severity of uncertainty of accident conditions."

NRC ADVICE

The NRC may offer advice or assistance to the Licensee during an emergency, or may respond to Licensee requests for advice or assistance. This may involve diagnosis of critical problems, development of proposed remedial courses of action, and proposals to implement additional precautionary measures. The NRC is also prepared to direct that certain actions be taken if, after thorough discussion with the Emergency Director (the Emergency Support Director once the EOF is activated) it is decided that such direction is required.

In the event that such action is taken by the NRC Director or the NRC Director of Site Operations, the ED/ESD should request written confirmation which spells out the specific nature of the directive. Directives will be communicated directly to the ED/ESD from the NRC Director (NRC Chairman) or from the NRC Director of Site Operations (DSO), typically the Regional Administrator, once appointed and empowered to do so.

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EXHIBIT 1B (Continued)

NRC EMERGENCY RESPONSE INTERFACE CRITERIA

Several important concepts govern the NRC in providing advice, assistance, or direction. They are:

- a. The Licensee is at all times responsible for mitigating the consequences of the incident.
- b. Although the NRC could issue formal orders to the Licensee to take certain measures and to monitor implementation, ". . . licensee continues to make other key operational decisions and to operate and manage the facility . . .".
- c. The NRC must have a single voice when advising or directing the Licensee.
- d. The ED/ESD has the option to accept or challenge NRC advice.

At no time will advice or direction come from both the Director and DSO and the Licensee will always be kept apprised of who is empowered to exercise authority as the NRC Spokesman. All other NRC personnel in contact with Licensee personnel are responsible to make clear that discussions should not be construed as advice or direction but rather as a sharing or gathering of information.

NRC INPUT TO RECOMMEND PROTECTIVE ACTIONS

The NRC responsibility during an emergency, as during normal operations, is to ensure that protection of public health and safety is adequate. One aspect of exercise of this responsibility is to provide Protective Action Recommendations or advice to offsite authorities. This may take the form of an NRC endorsement of a Licensee Protective Action Recommendation or the NRC may opt to recommend additional protective actions. The NRC is not involved in recommending protective actions. However they may get involved if a major problem is identified with the protective actions recommended by the Licensee or protective actions undertaken by the state or local government. Additionally NRC involvement may be requested by state or local officials.

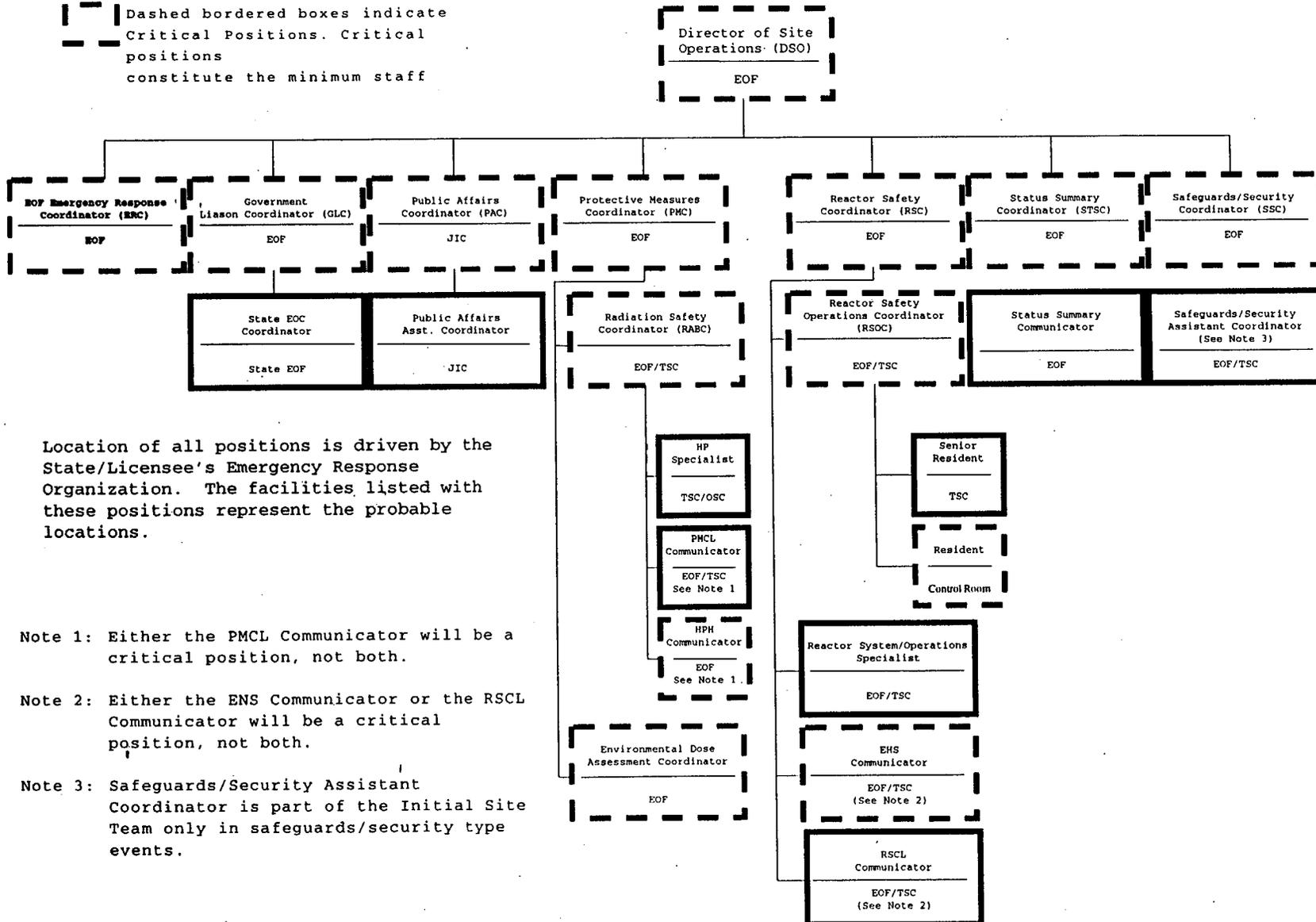
NRC ORGANIZATION

The attachment to the synopsis is provided for your information. This attachment depicts the site team organization and is an extract of NUREG 1471. It defines the number of NRC personnel expected to operate in each facility and shows the lines of communications the NRC expects to use.

Exhibit 1B (continued)

NRC Site Organization - Initial Site Team

Dashed bordered boxes indicate Critical Positions. Critical positions constitute the minimum staff



Location of all positions is driven by the State/Licensee's Emergency Response Organization. The facilities listed with these positions represent the probable locations.

- Note 1: Either the PMCL Communicator will be a critical position, not both.
- Note 2: Either the ENS Communicator or the RSCL Communicator will be a critical position, not both.
- Note 3: Safeguards/Security Assistant Coordinator is part of the Initial Site Team only in safeguards/security type events.

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PAR LOGIC DIAGRAM CHANGE

Exhibit 1c

SITE AREA EMERGENCY IS DECLARED

REVIEW PAR LOGIC DIAGRAM IN PREPARATION FOR A POTENTIAL GENERAL EMERGENCY DECLARATION AND PROTECTIVE ACTION RECOMMENDATIONS

GENERAL EMERGENCY IS DECLARED

NO

YES

**EVACUATE A 2 MILE RADIUS AND 5 MILES DOWNWIND
UNLESS it is KNOWN THAT SHELTERING will offer Greater Protection
See Exhibit 1c Section 1.1.1 thru 1.1.3
SHELTER ANY AREAS OF THE 10 MILE EPZ NOT EVACUATED**

NOTE

If PAGs are exceeded, or are expected to be exceeded, beyond the 10 mile EPZ, assess the impact on an AD HOC Basis (i.e. Field Monitoring Team Data or Hand Written Contingency Calculations), and provide recommendations as appropriate.

CONTINUE ASSESSMENT BASED ON ALL AVAILABLE PLANT AND FIELD MONITORING INFORMATION

EXPAND EVACUATION RECOMMENDATION TO COVER AREAS WHERE DOSES ARE EXPECTED TO EXCEED 1 REM TEDE OR 5 REM ADULT THYROID

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EXHIBIT 1c (continued)

OFFSIDE PROTECTIVE ACTION RECOMMENDATIONS GUIDE

1.0 Offsite

1.1 At the General Emergency, review the Protective Action Logic Diagram and provide PAR's to the State within approximately 15 minutes of declaring the General Emergency.

1.1.1 The guidance provided by the NRC for a Protective Action Recommendation at a General Emergency is **Evacuation 2 miles in 360 degrees and 5 miles downwind. Shelter all other non-affected areas** of the 10 mile EPZ.

NOTE

If PAGs are exceeded, or are expected to be exceeded, beyond the 10 mile EPZ, assess the impact on an AD HOC basis (i.e., Field Monitoring Team Data or hand written contingency calculations), and provide recommendations as appropriate.

1.1.2 Under certain circumstances it is permissible to recommend Sheltering if it is **known** that **Sheltering WILL PROVIDE GREATER PROTECTION**.

1.1.2.1 This would most likely occur only for short (puff) release periods that are less than 1.5 Hrs. (which is substantially shorter than the evacuation time).

1.1.2.2 There must be strong assurance that there is definite control of the release and termination of the release by the positive actions of the emergency responders actions during the release process (such as Containment Venting).

1.1.3 Sheltering may be the protective action of choice, if rapid evacuation is impeded by:
a) severe environmental conditions - e.g. severe weather or floods;
b) physical constraints to evacuation - e.g. inadequate roads

NOTE

The information in 1.1.3 a) and b) **MAY ONLY BE AVAILABLE from previous discussions** with New Jersey Office of Emergency Management or New Jersey Bureau of Nuclear Engineering Personnel.

1.2 During a Site Area Emergency, Protection Action Recommendations should not be immediately necessary, however, the PAR Logic Diagram should be reviewed.

1.3 Offsite Protective actions should not be required during an Unusual Event or Alert.

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- _____ 1.0 Upon arrival at the EOF, ensure that steps are being taken to expeditiously activate the EOF and assist the ESD in filling out his checklist.
- _____ 2.0 Ensure that missing positions are provided to the Group Leader Admin. Support so that personnel can be contacted to fill the positions.
- _____ 3.0 Ensure that personnel properly use the EOF name board and have tags displayed to identify the position they are filling.
- _____ 4.0 Provide a briefing to the NRC and State personnel once they arrive.
- _____ 5.0 Review, as appropriate, Exhibit 1B, NRC Emergency Response Interface.
- _____ 6.0 Review and initial press releases as requested by the ESD or Press Release Writer. The review of press releases should be performed for technical accuracy as quickly as possible. Utilize the guidance in Exhibit 9 for areas of content. Do not "editorialize" information.
- _____ 7.0 Request the Group Leader Admin-Support or the Communications coordinator to call out additional personnel to provide interface with the NRC if necessary. Other ESD Assistants, Licensing personnel, or Corporate Licensing may be useful in providing information to the NRC.

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EXHIBIT 2
(Continued)

ESD ASSISTANT CHECKLIST

Initials

_____ 8.0 If the ESD leaves the EOF for any reason (e.g., leaves the immediate area of the second floor of the Lakewood facility) assume the Person-In-Charge role until he returns.

NOTE

This does not include assuming those responsibilities that the ESD has assumed from the ED.

_____ 9.0 Assume the point of contact role for any inquiries from Nuclear Energy Institute (NEI) Technical and Regulatory Division or EPRI.

_____ 10.0 Refer to EPIP-OC-.01, "Classification of Emergency Conditions" whenever major plant changes have occurred to determine if an emergency upgrade is warranted.

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EXHIBIT 3

GROUP LEADER - RADIOLOGICAL AND ENVIRONMENTAL CONTROLS CHECKLIST

- _____ 1.0 Evaluate the need for personnel frisking at the EOF and notify the Group Leader Adm. Support.
- _____ 2.0 Start a Group Leader R&EC log.
- _____ 3.0 Confirm that the EACC is staffed and operational.
- _____ 4.0 Establish communications with the RAC.
- _____ 5.0 Review, as appropriate, Exhibit 1B, NRC Emergency Response Interface.
- _____ 6.0 Request the Group Leader Admin Support or the Communication Coordinator to call out additional personnel to provide interface with the NRC if necessary. Other Group Leader R&EC's, Licensing personnel, or Corporate Licensing may be helpful in providing information to the NRC.
- _____ 7.0 Ensure that all Radiological Control personnel use the tag board.
- _____ 8.0 Initiate the development of a watchbill for your organization that will support the emergency on a 24 hour/day basis using Exhibit 12 and forward to the Group Leader Admin Support.
- _____ 9.0 Direct the EAC to supply you with dose projections and field monitoring team results as applicable.
- _____ 10.0 Be prepared to brief the ESD on all radiological conditions and review the PAR Logic Diagram (Exhibit 1C) in preparation for PAR discussions.

-- NOTE

Should it be necessary to evacuate the areas containing the RAA (NNW 5 - 10 miles) consider appropriate protection for personnel at the facility. This may consist of increased habitability.

NOTE

If problems are encountered with emergency telephones, contact the EOF Communications Coordinator.

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EXHIBIT 4

GROUP LEADER - ADMINISTRATIVE SUPPORT CHECKLIST

Initials

- _____ 1.0 Maintain awareness of security events and Materials Management Coordinator Activities (i.e., procurement of transportation, equipment).
- _____ 2.0 Assign an individual to implement exhibit 4B, EOF Access Control Checklist.

NOTE

If problems are encountered with emergency telephones, contact the EOF Communications Coordinator.

- _____ 3.0 Ensure all Admin Support personnel use the tag board.
- _____ 4.0 Assist EOF Coordinators and Group Leaders in:
- Filling personnel vacancies (via Security).
 - Developing shift schedules.
 - Coordinating with offsite support.
 - Obtaining needed reference material (i.e., INPO Resource Manual, Plant Prints, Technical Specifications, etc.).

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EXHIBIT 4
(Continued)

GROUP LEADER - ADMINISTRATIVE SUPPORT CHECKLIST

Initials

- _____ 5.1 Assist NRC in implementation of their work area at EOF by providing the following items (as needed):

NOTE

THIS APPLIES DURING EMERGENCIES. DO NOT PERFORM THIS FUNCTION DURING DRILLS/EXERCISES UNLESS INSTRUCTED BY THE DRILL CONTROLLER.

- Use of facsimile and Xerox machines.
- Additional office space in building where available.
- Office supplies.

- _____ 6.0 Direct the efforts of the Administrative Support staff in the administrative and logistic support of the Emergency Response Organization.

Including, but not limited to:

- 6.1 General administration.
- 6.2 Personnel administration and accommodations.
- 6.3 Outside plant support.

NOTE

If diesel fuel is needed for the site due to emergency conditions (e.g. hurricane) and can not be obtained through normal commercial suppliers, contact the OEM Rep. at the EOF or the NJ Office of Emergency Management (OEM). See EPIP-OC-.06 for the number.

- 6.4 Commissary/Food Logistics.
- 6.5 Human Resources/Paychecks.
- 6.6 Aviation Support (Exhibit 4A).

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EXHIBIT 4 (continued)

GROUP LEADER - ADMINISTRATIVE SUPPORT CHECKLIST

Initials

- _____ 7.0 Develop a shift schedule for your organization. (Exhibit 12)
- _____ 8.0 Notify the ESD Assistant when the facility is functionally staffed with groups as outlined below. Collect, coordinate and maintain shift staffing schedules (Exhibit 12) prepared by the following group leaders:
- _____ 8.1 EOF Communications Coordinator.
- _____ 8.2 Technical Support Representative.
- _____ 8.3 Group Leader Radiological and Environmental Controls.
- _____ 8.4 Environmental Assessment Coordinator.
- _____ 8.5 Material Management Coordinator.
- _____ 8.6 PI Tech Rep/EOF.
- _____ 8.7 Emergency Preparedness Representative.
- _____ 9.0 If necessary, provide support to the Communications Coordinator.
- _____ 10.0 Function as point of contact for ANI/INPO.
- _____ 11.0 Function as Person-In-Charge if asked and both the ESD and ESD Assistant must leave the (2nd floor of the Lakewood facility) EOF.
- _____ 12.0 If site access is required by personnel not currently badged at OCNCS:
- _____ 12.1 Using the Site Confidential Phone List, contact the Technical Training Manager or designee for O.C. Inform individual of the circumstances and request provisions be made to accommodate emergency training.
- _____ 13.0 Ascertain from the Security Shift Commander and inform the ESD on the status of accountability and/or site evacuation, if and when declared.
- Establish telephone and radio communications with Site Security.
- _____ 14.0 If any personnel are injured onsite, keep the ESD informed. All official notifications are done by the Medical Department.

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EXHIBIT 4 (continued)

GROUP LEADER - ADMINISTRATIVE SUPPORT CHECKLIST

Initials

- _____ 15.0 Documentation collected from center coordinators.
- Communicator Log Sheets.
 - Emergency Message Forms.
 - Facsimile Machine Transmitted Documents.
- _____ 16.0 Emergency Center restored.
- Procedures returned.
 - Prints returned.
 - Office supplies returned.
 - Computers, lights and other equipment turned off.
- _____ 17.0 Center returned to an orderly Condition.
- Clean off status boards.
- 18.0 Report the EOF secured to the Emergency Support Director.

Signature _____ Date _____ Time _____
Group Leader Administrative Support

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EXHIBIT 4A

EMERGENCY AVIATION SUPPORT INSTRUCTION FORM

Initials

- _____ 1.1 Request for Aviation Support Authorized by:
Title: _____
Name: _____ Signature: _____
- _____ 1.2 Contact Horsham Valley Airways, Inc.
(215) 674-2100 working hours
(215) 674-2101 after hours
(215) 578-6466 pager
Identify yourself by title and name. Record the data and time and name of the person contacted:
Name: _____
Time and Date: _____/_____/_____
- _____ 1.3 Describe the extent of the emergency aviation support needed.
- _____ 1.4 Provide the Aviation Support Contractor with the location of the pick up and destination.
- 1.4.1 Record the location and personnel/cargo to be picked up, as well as the estimated time of arrival at the pick up site.

(Location)

(Personnel/Cargo)

(Estimated Time of Arrival)

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EXHIBIT 4A (Continued)

EMERGENCY AVIATION SUPPORT INSTRUCTION FORM

Initials

1.4.2 Record the destination of the cargo from Step 1.4.1 and estimated time of arrival.

(Cargo)

(Estimated Time of Arrival)

_____ 1.5 Arrangements have been made to deliver the cargo to the pickup site by the estimated arrival time.

_____ 1.6 Arrangements have been made to pick up the cargo at the destination by the estimated arrival time.

_____ 1.7 For additional emergency aviation support, repeat Steps 1.2 through 1.6 recording conversation using the Telephone and Communications Logsheet.

_____ 1.8 Upon completion of emergency aviation requirements, notify the aviation services contractor to terminate services. Record the name of the individual and the time of the notification.

Oyster Creek Aviation Facility Information Form

1. Airports

- a. Miller Air Park located west of Toms River on Pinewald-Keswick Road.
- b. Lakewood Airport located on Rt. 528 Southeast of Lakewood.

2. Heliports

- a. Onsite heliport is designated as FAA Site Number H-205 and is equipped with a wind sock but no lights.

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EXHIBIT 4B

EOF ACCESS CONTROL CHECKLIST

Initials

- _____ 1.0 Establish an Access Control area at the main entrance of the EOF/JIC.
- _____ 2.0 Ensure all entrances other than the main entrance to the EOF/JIC are locked. Post the locked doors of the JIC with the signs available in the main hallway closet, when time and resources permit.
- _____ 3.0 Activate and reset the alarm system. The power switch is inside the closet in the hallway by the entrance to the Auditorium (JIC Briefing area).
- _____ 4.0 Establish an access log. Allow only authorized personnel to enter the EOF or JIC.

NOTE

Authorized personnel are: Employees with Employee Identification Card, Federal and State Emergency Response personnel with proper identification. The duty roster may be used for guidance. If personnel other than those on the roster request entry, you must get authorization from the Group Leader Admin. Support or the Emergency Preparedness Representative.

NOTE

If unauthorized personnel attempt to gain access to the EOF, the individual assigned access control should contact the OEM Representative at the EOF or the Lakewood Police Dept. at (732) 363-0200 and request assistance.

- _____ 5.0 Source check the frisker stored in the EOF using the instructions in Exhibit 4C. After source checking the frisker, place it at the entrance of the EOF with the range switch set for 500 CPM full scale. Hand and foot frisks should be required until the Group Leader R&EC arrives, and confirms or discontinues the need for frisking. Otherwise, when communications are established call the RAC at 609-971-4156 and ask if frisking is required.

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EXHIBIT 4B
(Continued)

EOF ACCESS CONTROL CHECKLIST

Initials

- _____ 6.0 If you are notified by an individual that they have consumed an alcoholic beverage within the past five (5) hours or believe an individual should be tested for Fitness for Duty, notify the Emergency Preparedness Representative.
- _____ 7.0 Forward this completed form to the Group Leader Administrative Support.

Signature _____ Date _____ Time _____

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EXHIBIT 4C

INSTRUCTIONS FOR SOURCE CHECKS OF FRISKER AT EOF

The frisker is located in the EOF next to Public Information Desk. The check source is located in a lock box above the frisker.

Initials

- _____ 1.0 Verify with the Gr Ldr R & EC that frisking is required at the EOF if the Gr Ldr is available, otherwise setup the frisking station.
- _____ 2.0 Check calibration sticker and ensure that the current date is before the "Calibration Due Date".
- _____ 3.0 Ensure the frisker is plugged into 110V AC outlet.

NOTE

The frisker will operate on battery power if no 110V AC is available.

- _____ 4.0 Check the frisker cable connections secure.
- _____ 5.0 Turn selector knob to "BATT" (battery) position and check that meter reads in BATT OK range. Assure AC light is on.
- _____ 6.0 Unplug the AC Power, Take Frisker to Supply Closet.
- _____ 7.0 Turn selector knob to "X500" position, place probe directly over the source and wait 30 to 60 seconds for meter to respond. If it does not, contact Group Leader R&EC for direction.
- _____ 8.0 Turn selector knob to X1 position.
- _____ 9.0 Relocate the frisker to the EOF entrance to be used for personnel monitoring, as appropriate, with existing conditions.
- _____ 10.0 When the frisker is no longer needed, or the EOF is deactivated, return the frisker to EOF, turn selector knob to "OFF" and plug the frisker into 110V AV electrical outlet to maintain a charge on the batteries.

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EXHIBIT 5

TECHNICAL SUPPORT REPRESENTATIVE CHECKLIST

Initials

- _____ 1.0 Start a Technical Support Representative log.
- _____ 2.0 Ensure all Tech Support personnel use the tag board.
- _____ 3.0 If additional personnel are needed for technical reasons or NRC interface, request the Group Leader Admin Support to call out personnel. Tech Support staff from other teams, Licensing personnel, or Corporate Licensing may be helpful in providing information to the NRC.
- _____ 4.0 Monitor the (01) Conference Line ED/OPS Headset to keep abreast of Plant conditions. This line is not to be used for communicating Engineering questions, concerns or discussions. Engineering tasks should be communicated over other EP lines or alternate lines as appropriate.
- _____ 5.0 Initialize the Plant Computer System Terminal and Display Data on center screen. Operating aids for the projector are at the projector.
- _____ 6.0 Ensure the computer is on next to the projector stand in center. This computer is also connected to the projector and can display other information as desired, such as logs, action items, etc.
- _____ 7.0 Ensure the PPM Computer is on and displaying appropriate tables as requested.
- _____ 8.0 Review, as appropriate, Exhibit 1B, NRC Emergency Response Interface.
- _____ 9.0 If problems are encountered with emergency telephones, contact the EOF Communications Coordinator.
- _____ 10.0 Verify that prints, technical manuals, reference materials, etc., are available in the Technical Support area.
- _____ 11.0 Initiate the development of a watchbill for your organization that will support the emergency on a 24 hour/day basis using Exhibit 11 and provide to the Group Leader Admin. Support.

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EXHIBIT 5 (continued)

TECHNICAL SUPPORT REPRESENTATIVE CHECKLIST

Initials

- _____ 12.0 When the BNE arrives, establish an information exchange pathway with them. Provide known current plant status. Ensure communications are clear and precise. It is important to answer all BNE questions concerning plant status, release pathway etc. in a timely fashion. The ESD should be made aware of any request that can not be met in a timely fashion so that the appropriate contacts can be made to answer the question.
- _____ 13.0 Be prepared to advise the ESD on any plant or technical information which may be needed and review the PAR Logic Diagram (Exhibit 1C) and obtain data necessary to answer PAR questions in advance of PAR discussion.
- _____ 14.0 Obtain additional technical support (as requested) for the Emergency Response Organization through contact with the Corporate Engineering dept. personnel. Call-out additional assistance through use of the Engineering dept. call-out list.
- _____ 15.0 Review the appropriate press releases for technical accuracy, as quickly as possible, when requested by the PI rep. or ESD. Utilize the guidance in Exhibit 9A as a reference.
- _____ 16.0 Forward this completed form to the EOF Communications Coordinator.

Signature _____ Date _____ Time _____

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EXHIBIT 6

MATERIALS MANAGEMENT COORDINATOR CHECKLIST

Initials

- _____ 1.0 Access the Automated Materials Management System (AMMS).
- _____ 2.0 Initiate the development of a watchbill for your organization that will support the emergency on a 24 hour/day basis using Exhibit 12 and provide to the Group Leader Admin. Support.
- _____ 3.0 Be prepared to place the EOF microwave system backup generator in service using Exhibit 6A when directed by the ESD.

Signature _____ Date _____ Time _____

Title

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EXHIBIT 6A

LAKWOOD MICROWAVE ROOM

EMERGENCY ELECTRIC PROCEDURE

1.0 PURPOSE

The purpose of this procedure is to provide the necessary steps to provide an emergency electric power supply for the microwave radio equipment and base station radio equipment located at the Lakewood facility.

NOTE

The microwave communications system will function for up to eight hours after a loss of power on its batteries. Before connecting the portable generator, attempt to contact tele-communications technicians from the Larrabee Shop, phone number (732) 370-7242. During off hours contact the Pinelands Area Load Supervisor at (973) 455-8274 and request that technicians be called out to connect the generator. The tele-communications supervisor may also be paged at (973) 203-8164.

2.0 PROCEDURE

- 2.1 Move the portable emergency generator from the boiler room to the rear of the building; the generator should remain outside the building and be within close proximity of the microwave room. The key for the boiler room must be gotten from the key cabinet in the EOF. The key for the lock on the generator security chain is located on the "Emergency Backup Generator Supplies" board located in the microwave room.
- 2.2 Fill the generator with gas. Gas containers and gas can be found in the "Flammable Fuels" cabinet located in the Line Department's fenced-in storage enclosure. Note that gas is also available at the outside gas pumps which are also powered by a backup generator.
- 2.3 On the generator, set the Voltage Selector to the "120V/240V" position.
- 2.4 On the generator, set the AC Circuit Breaker to the "OFF" position.
- 2.5 On the two battery charger/eliminators, set the Power Switches to the "OFF" position.

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EXHIBIT 6A
(Cont'd)

LAKWOOD MICROWAVE ROOM
EMERGENCY ELECTRIC PROCEDURE

- 2.6 Disconnect the base station radios power cords.
- 2.7 Disconnect the two power cords for the battery charger/eliminators.
- 2.8 Select one of the battery charger/eliminators for use. Only one is required to supply the necessary power for the microwave equipment.
- 2.9 On the selected battery charger/eliminator open the front panel by loosening the two top screws. Set the battery charger/eliminator input source switch to operate at "240 Volts".
- 2.10 Connect the two extension cords to the generator and the appropriate equipment.
The extension cords are located on the "Emergency Backup Generator Supplies" board located in the microwave room. The "120 Volt" extension cord is for the base station radios; the "240 Volt" extension cord is for the one selected battery charger/eliminator which will power the microwave equipment.
- 2.11 Start the generator by turning the ON/OFF switch to the "ON" position and pulling the starter rope. A choke is also available and may have to be used. See the generator operator manual for additional operating instructions.
- 2.12 On the generator, turn the AC Circuit Breaker to the "ON" position.
- 2.13 On the selected battery charger/eliminator, set the POWER switch to the "ON" position.
- 2.14 The microwave equipment and the base station radios are now back in operation powered the emergency backup generator.
- 2.15 To ensure adequate cooling for the microwave room, keep the door open and apply forced ventilation via electric fan. The fan may be plugged into the extension cord used by the radios.

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EXHIBIT 7

EOF COMMUNICATIONS COORDINATOR CHECKLIST

INITIALS

- _____ 1.0 Report to the ESD Assistant, monitor and support/direct communicator activities in support of the emergency.
- _____ 2.0 Ensure that sufficient communications capability exists to function satisfactorily. Report phone problems to the TSC Communications Coordinator who will initiate repairs.
- _____ 3.0 Verify all computers are running and displaying the appropriate information.
- _____ 4.0 Set the EOF clock to agree with the time displayed by the PCS. (During drills ask the controller). Maintain a communications log, recording significant communications related events. Utilize the PC if available, or other means of recording information.
- _____ 5.0 Ensure all communications personnel use tag board.
- 6.0 Call out additional personnel if required.

NOTE

For call out of Duty Roster positions contact Security Shift Commander. For additional staff contact Group Leader Admin Support. If he is not available, use normal department call out methods.

- _____ 7.0 Assign responsibilities to Communicators for:
 - Notifications to offsite agencies (EPIP-OC-.03) as appropriate.
 - Maintaining ESD log and ESD Action Items using a PC or other means as appropriate or available.
 - Status boards if needed or appropriate.

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EXHIBIT 7
(continued)

EOF COMMUNICATIONS COORDINATOR CHECKLIST

INITIALS

_____ 8.0 When the ESD activates the EOF, contact the ECC Communications Coordinator and assume Off-site notification responsibilities unless directed not to do so. Request all completed off-site notifications checklists and station status checklists be faxed, so that there is a clear understanding of which notifications have been made from the ECC.

Time of Transfer: _____

ECC Communications Coordinator: _____
Name

_____ 9.0 Initiate the development of a watch bill for your organization that will support the emergency on a 24 hour/day basis. Refer to Exhibit 12.

_____ 10.0 Upon termination of the emergency ensure that communications equipment and supplies are replaced and returned to a ready status upon deactivation of the EOF.

_____ 11.0 Upon termination of the emergency, ensure those agencies previously notified in EPIP-OC-.03 have been advised of the termination.

_____ 12.0 Forward all completed logs and records to the Emergency preparedness Department.

Signature: _____ Date: _____
EOF Communication Coordinator

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EXHIBIT 8

EOF COMMUNICATOR GENERAL DUTIES

- 1.0 Report to EOF Communications Coordinator.
- 2.0 Receive and direct incoming calls to requested positions.
- 3.0 Complete outgoing calls as directed by Emergency Management.
- 4.0 Direct outgoing messages to appropriate facilities.
- 5.0 Maintain telephone log and/or message log current.
 - 5.1 Communications logs are stored at the communicator's duty station via the PC or book. Alternately, Exhibit 15 may be used.
 - 5.2 The following items should be recorded:
 - All significant telephone conversations (e.g.: 08:40-ESD called re Status of OSC Team #8)
 - Date and time of emergency declarations
 - Notifications of offsite agencies
 - Incoming fax transmissions
 - Plant status prior to and at the time of emergency declarations
 - Logging and routing of incoming message forms
 - Major actions requested and major actions performed (by whom)
 - Significant information (e.g., Protective Action Recommendations, requests for assistance, etc.)
 - Communications with offsite agencies
- 6.0 Collect all paper records (Ensure records have been completed as appropriate) and turn over to EOF Communications Coordinator for review.
- 7.0 Report telecommunications problems to EOF Communications Coordinator.

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EXHIBIT 8
(continued)

EOF COMMUNICATOR GENERAL DUTIES

- 8.0 Perform offsite notifications in accordance with EPIP-OC-.03 as directed by EOF communications Coordinator.
- 9.0 Relay requests.
- 9.1 Verbal requests for engineering information (TSC) should be logged. Request may be followed up with written communications over the fax.
- 9.2 When transmitting a written request:
- transcribe it (as necessary) onto the Emergency Message Form (Exhibit 16)
 - complete all spaces on the form
 - message number (Communicators may assign message numbers to correspond with individual Communicator's log but must reserve the Message Number Line for the number assigned by Plant Status Update Line Communicator).
 - to whom directed
 - to center directed
 - "from" person
 - "from" center
 - Completed form should be faxed to the appropriate center. The reply may be stapled to, or transcribed onto the same message form.
 - Number and log each fax transmission using Exhibit 17.

NOTE

Number outgoing transmissions sequentially regardless of the type of transmission. Use location designator as part of sequential number, i.e. EOF-001, EOF-002, etc.

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EXHIBIT 9

PRESS RELEASE APPROVAL GUIDANCE

- 1.0 Press releases should be issued within approximately one hour from the time that a major plant event has occurred. Press releases shall include the time that the information is current and be written in accordance with the following guidelines.
- 2.0 The following categories of information should be included in press releases.
 - a. Level of Emergency

This is simply identifying which one of the four emergency levels was declared.
 - b. Basis for Emergency Declaration

This should be a simplified description of the plant condition which produced the emergency action level (e.g., a leak of radioactive water within the plant building).
 - c. Operational Status of Plant

A simple description of plant status at the time of the emergency declaration (e.g., OCNGS was operating at 100% power when the leak was discovered, however, the plant is currently reducing power).
 - d. Company/Government Interface

This is intended to inform the public that OCNGS has notified and is working closely with government officials so that public confidence and company credibility can be increased.

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EXHIBIT 9
(Continued)

PRESS RELEASE APPROVAL GUIDANCE

e. Corrective Actions

This should be a non-technical description of what plant personnel are doing to correct the problem. It may include such language as "attempts are being made to stop the leak" or "plant personnel are investigating the cause of the leak."

f. Offsite Impact

A statement which simply assesses what impact this event may have on the environment. This is intended to provide factual information on offsite radiological conditions (e.g., a radioactive release is in progress, however, environmental monitoring teams have not detected any radiation levels offsite in excess of normal background).

The initial press release should include all or part of the above information since time is of the essence. However, at the very least it should contain items a-e above. (pre-approved boiler plate news releases are contained in Procedure 1820-IMP-1720.01, Attachment 1) --

3.0 In addition to the above, the following guidance will be used in issuing press releases:

- Speculation, dose projections and Protective Action Recommendations should not be included in press releases.

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EXHIBIT 9
(Continued)

PRESS RELEASE APPROVAL GUIDANCE

- All press releases must be approved by the ESD, except the press release announcing the opening and location of the Joint Information Center when it is activated. Operational and radiological review and concurrence by the ESD Assistant and Group Leader R&EC may be appropriate if the press release has radiological or operation details.

NOTE

For security related events, Press releases containing potential Safeguards information are to be reviewed by the Security Coordinator.

Original initialed copies are to be retained for records. Exceptions to this are limited to press releases with boiler plate information only (e.g., pre-approved boiler plate news releases are contained in Procedure 1820-IMP-1720.01, Attachment 1) which may be issued without prior review and approval. Once the Governor has declared a "State of Emergency" all OCNCS Press Releases shall be provided to the State Police representative in the Joint Information Center for review prior to final issuance. Changes made as a result of this review should be communicated to the ESD.

- Press releases will be reviewed expeditiously in order to support timely issuance.
- Press releases should avoid technical terms (e.g., plant names) and jargon (e.g., trip) and should be written as simple as possible. For example, Iso Condenser could be referred to as a heat removal process from the reactor.

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EXHIBIT 10

EMERGENCY PREPAREDNESS REPRESENTATIVE CHECKLIST

Initials

- _____ 1.0 Ensure that EOF communications links and information displays are properly set up and functioning.
- _____ 2.0 If requested, assist the ESD in completing Exhibit 1.
- _____ 3.0 Ensure that proper information channels have been set up with BNE and NRC representatives if necessary.
- _____ 4.0 Initiate a watchbill for your position that will support the emergency on a 24 hour/day basis using Exhibit 12 and forward to the Group Leader Admin. Support.
- _____ 5.0 Ensure that all EOF personnel have used the tag board.
- _____ 6.0 Support the ESD by providing information on:
 - 1. The Emergency Plan implementation.
 - 2. On Site, Off Site and State Emergency Response facilities. Refer to the NJ State RBRP and applicable procedures (SOP's) Provide interpretation/conversion of PAR Keyhole sectors and related NJ-OEM used Emergency Response Areas (ERPA's) - (SOP-305).
 - 3. Communications abilities, means and methods. Initiate ESDs on the PC in Conf. area next to "Large Screen" TV.
 - 4. Personnel and resources availabilities.
 - 5. Procedure/Plan requirements.
- _____ 7.0 When requested by the ESD, ensure Fitness for Duty requirements are met in accordance with Exhibit 10A. Breathalizers are kept in the EOF supply cabinet.
- _____ 8.0 Approve access for those who are not badged or on the approved access list.
- _____ 9.0 Ensure the Communications Coordinator collects completed checklists from all EOF personnel when time permits and forwards them to you.

Signature _____ Date _____ Time _____

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EXHIBIT 10A

EMERGENCY RESPONSE FACILITY

FITNESS FOR DUTY DETERMINATION INSTRUCTIONS

NOTE

The Fitness for Duty rule applies to all Company employees (including contractors and vendors) granted unescorted access to the protected area or who are required by position or name to report to the EOF. These instructions address their evaluation for utilization in an emergency only. All "for cause" evaluations must be conducted by the Medical or Security Department.

Scope:

In accordance with 1000-ADM-2002.06, Fitness for Duty, individuals responding to an emergency who have consumed alcohol within the previous five hours but believe that they are fit for duty shall inform the Emergency Support Director and receive an evaluation. Contractor/vendor personnel shall be asked if they have consumed alcohol within the previous 5 hours. If the answer is yes, an evaluation shall be conducted.

Instructions:

The Emergency Support Director shall direct the Emergency Preparedness Representative to administer the breath alcohol evaluation in accordance with Exhibit 10B.

NOTE

Extra copies of Exhibit 10B are kept with the instrument.

Based on the results of the test, perform the following:

- 1) BAC 0.01% or less

Allow the individual to work in the facility.

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EXHIBIT 10A
(Continued)

EMERGENCY RESPONSE FACILITY

FITNESS FOR DUTY DETERMINATION INSTRUCTIONS

- 2) BAC greater than 0.01% but less than 0.04%
Allow the individual to work in the facility. Re-test the individual approximately every thirty minutes to determine the maximum BAC. If the maximum BAC is equal to or greater than 0.04%, refer to Step 3. If less than 0.04%, no further action is required.
- 3) BAC equal to or greater than 0.04%
If determined that the individuals unique knowledge or skills are required, that Individual shall only be permitted to work with permission of the Site Director, (or in his/her absence, his/her designee), Emergency Support Director, Emergency Director, or Office of the President only after satisfactory assurance, that the individual is capable of performing his/her duties. Remind the Emergency Support Director that if this individual is needed to work, he/she must be escorted at all times. Arrangements should be made as soon as practicable for (For Cause) testing in accordance with 1000-ADM-2002.06.

NOTE

Individuals not "ON CALL" who report to their Emergency Response Facility and test equal to or greater than 0.04 percent BAC are not subject to disciplinary action.

- 4) Ensure the individual who tested equal to or greater than 0.04 percent, if not needed, is not permitted to drive home. Provide a place for the individual to rest or contact Group Leader - Admin Support to arrange for transportation.
- 5) Be alert for any individual that exhibits aberrant behavior or smell of alcohol. Test these individuals in accordance with this exhibit. If aberrant behavior cannot be attributed to a positive BAC reading, ask the Group Leader - Admin Support to contact the Security Department for further action.

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SAMPLE

EXHIBIT 10B

ALCO SENSOR III OPERATIONAL CHECKLIST

TEST SUBJECT NAME: _____ DATE: _____
SOCIAL SECURITY #: _____ SERIAL #: _____
TIME OF TEST: TEST 1 _____ TEST 2 _____
TEST RESULT (BAC): TEST 1 0. _____ % TEST 2 0. _____ %
OPERATOR NAME: _____ SIGNATURE: _____

INSTRUCTIONS - check each box after completion of step.

NOTE

The fifteen minute observation period of the subject may be waived as long as a positive test result is not received. Should a positive test result be indicated, it shall be disregarded and the alcohol breath test started anew after at least a 15 minute observation period.

A weak battery is indicated by an "8.888" in the display window. Replace battery.

- Check temperature window on back of unit (should read 20° to 36°C)
- Have the individual mount mouth piece on unit.
- Press "READ" button and hold for (10) seconds. Check to see if .000 is constant. If not, press "Set" button and recheck in one minute. If the display reads greater than .000, use another unit or send individual to another location. Remove the instrument from service and forward to the Medical Department for repair and use another instrument for testing.
- Press "SET" button.
- Instruct subject to take a deep breath and blow steadily through the tube until told to stop (minimum of 4 seconds). (NO smoking within [15] minutes of test.)
- Push "READ" button during third second that the subject is blowing. (Subject MUST continue to blow for a minimum of one [1] second after the "READ" button is depressed.)

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EXHIBIT 10B
(Continued)

ALCO SENSOR III OPERATIONAL CHECKLIST

7. Keep "READ" button depressed until reading stops climbing.

8. Record and time of TEST 1/TEST 2. (Note: The two readings must agree within $\pm 10\%$, of the averages of the two measurements, if not, use another instrument)

9. Press "SET" button to accelerate elimination of reading and electrically clean the cell surface.

10. Wait a minimum of two minutes and a maximum of 10 minutes and repeat Steps 3 through 9.

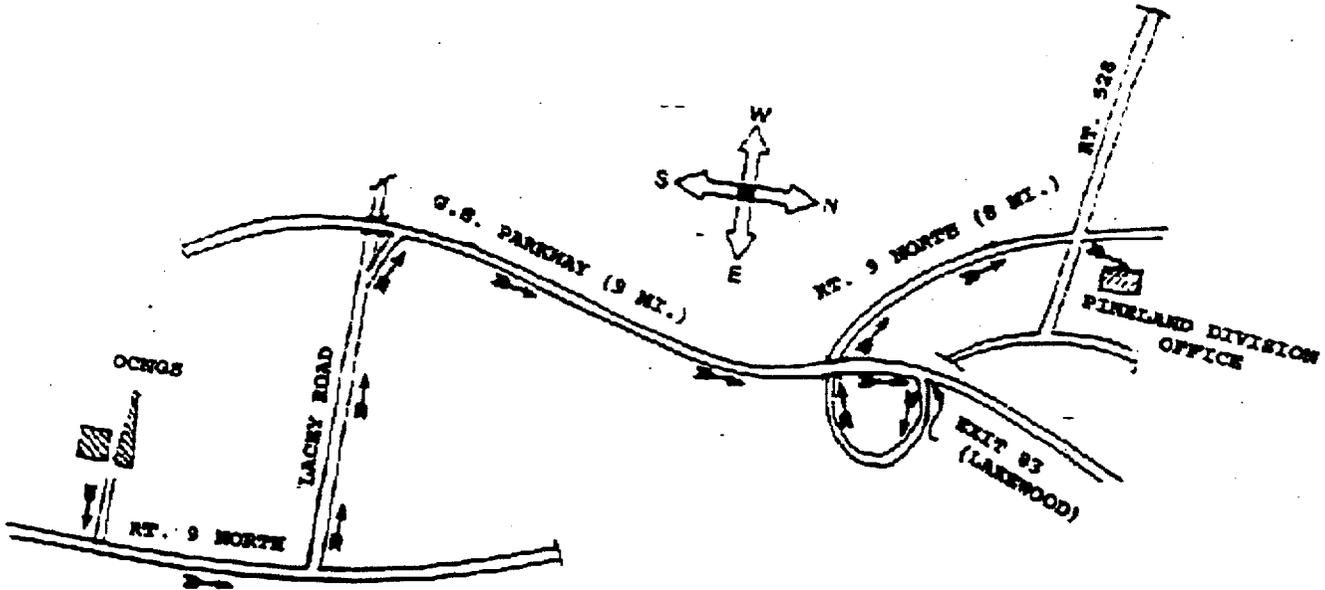
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EXHIBIT 11

ROUTE TO EOF

(PINELAND DIVISION OFFICE)

1. Take Route 9 north to Lacey Road.
2. Make left on to Lacey Road and travel west to the Parkway North entrance which will be on your right.
3. Take Garden State Parkway North to exit 83 (Lakewood).
4. Follow jug handle to Route 9 North. (An AT&T microwave tower is located in the center of the jug handle.)
5. Take Route 9 North.
6. The EOF (Pineland Division Office) is on the right about 500 ft. past the light at the intersection of Routes 9 and 528.



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EXHIBIT 12

Page of

SAMPLE

DATE:

EMERGENCY SHIFT SCHEDULE

GROUP (eg. Admin.):

TIME:	SHIFT 1	SHIFT 2	SHIFT 3
BEGIN			
END			

	NAME	NAME	NAME
POSITION #			
P H O N E	HOME #		
	WORK #		
	BEEPER #		
POSITION #			
P H O N E	HOME #		
	WORK #		
	BEEPER #		
POSITION #			
P H O N E	HOME #		
	WORK #		
	BEEPER #		
POSITION #			
P H O N E	HOME #		
	WORK #		
	BEEPER #		

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EXHIBIT 13

ALTERNATE EMERGENCY RESPONSE FACILITIES

This exhibit provides for a description of evacuation preplanning for Alternate Emergency Response Facilities as follows:

1. Control Room/ECC - Evacuation of Control Room - the Operators control the plant from remote shutdown panels and the GSS directs plant operations from the TSC. All other ECC IREO members are integrated into the TSC organization. (Refer to 2000-ABN-3200.30 for specific direction).
2. OSC - Evacuation of OSC - all OSC personnel are evacuated to the SOSOC which is located in the rear of the TSC. (Refer to EPIP-OC-.27 for specific direction.)
3. TSC - Evacuation of TSC - the ED support staff which includes the ED, ED Assistant, RAC, RASE, and PI Rep. evacuate to the Control Room (ECC). The Tech Support staff which includes the TSC Coordinator, TSC Engineers, Communication Coordinator, Communicators and the Tech Assistant evacuate to the OSC. The Core Engineer would initially report to the Control Room, but if his services are not needed, he will be sent to the OSC. (Refer to EPIP-OC-.26 for specific direction).
4. Remote Assembly Area - Evacuation of RAA's-- if the Forked River Bldg. 14 RAA is not available then relocate to the Berkeley Customer Operations Center and vice versa.
5. Emergency Assembly Area - The EAA may be redirected to the Forked River Assembly Area or to the Remote Assembly Area at Berkeley Line as directed by management. In this case Site Accountability is conducted as personnel exit the site.
6. EOF - There are no backup facilities for the EOF because it is remote from the site and it is unlikely that a nuclear related incident would affect both the plant and this center.

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Exhibit 14

SITE ACCESS POLICY FOR MEDIA DURING EMERGENCIES

Providing reasonable site access to the media during a plant emergency is in the best interest of OCNCS and the public.

Responsibility for approving site access rests with the Emergency Support Director, or if the EOF is not activated, with the Emergency Director.

For purposes of media access to the site during an emergency, the same industrial safety and security standards and requirements that apply to non-essential employees will be applied to the media.

Communication Dept. Responsibilities

Requests for media access will be made to the ESD or ED by the Public Information Duty Representative or the Media Center Lead.

Communications will provide the ED/ESD with the number of media to gain site access, areas to be accessed and length of time the media will be there. (Communications will decide the number of media gaining access based on conditions at the time of the emergency. An attempt will be made to gain access for, at a minimum, one representative each from radio, television, and print media.)

Communications will provide media transportation on and off site.

Communications will have each member of the media sign a Media Access Briefing Form, Exhibit 18, indicating they were briefed about the risks as they were known at the time by the Corporation.

1. If media access does not involve entry into a posted radiologically controlled area:
 - a. At Oyster Creek, Security will retain responsibility for sign in and badging.
 - b. Communications will supervise and escort the media while on site.
 - c. Communications will conduct a briefing explaining the radiological and industrial conditions and risks on site.
2. If media access involves entry into a posted radiologically controlled area:
 - a. Media will be processed as appropriate, receiving dosimetry, training, bioassay, waivers and briefings based on established procedural requirements.
 - b. Communications will notify the Security Coordinator prior to site access.
 - c. Communications in conjunction with Radiological Controls will supervise and escort the media while in posted radiologically controlled areas.

ED/ESD Responsibilities

1. The ED/ESD will consult with the RAC/Group Leader R&EC, and media will be granted access if the projected dose will not exceed the 500 millirem annual limit including external and internal exposure.

NOTE

For Security Driven Events, media access to the site must also be approved by the local Law Enforcement Agency and Security.

2. Approve media access to the site if requirements are met.

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EXHIBIT 18
MEDIA ACCESS BRIEFING FORM

I have been briefed about the risks, both industrial and radiological, to which I may be exposed while at this nuclear facility. I understand there may be some risk and willingly accept it for the purpose of visiting the plant site.

Signature _____

Date _____

News Organization _____

Communications Rep. _____

Title THE TECHNICAL SUPPORT CENTER	Revision No. 21
Applicability/Scope Applies to work at Oyster Creek Division & Support Divisions	Responsible Office Emergency Preparedness
This document is within QA plan scope <u> X </u> Yes <u> </u> No Safety Reviews Required <u> X </u> Yes <u> </u> No	Effective Date Date of Sale

Prior Revision 20 incorporated the following Temporary Changes:

N/A

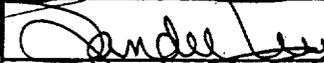
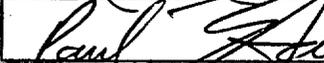
This Revision 21 incorporates the following Temporary Changes:

N/A

List of Pages (all pages rev'd to Rev. 21)

- 1.0 - 5.0
- E1-1 to E1-20
- E2-1
- E3-1 to E3-4
- E4-1 to E4-2
- E5-1 to E5-2
- E6-1
- E7-1
- E8-1 to E8-2
- E9-1 to E9-2
- E10-1 to E10-6
- E11-1 to E11-3
- E12-1
- E13-1 to E13-5
- E14-1
- E15-1 to E15-2
- E16-1
- E17-1
- E18-1
- E19-1
- E20-1

**NON-CONTROLLED
THIS DOCUMENT WILL NOT
BE KEPT UP TO DATE
IRMC OYSTER CREEK**

	Signature	Concurring Organization Element	Date
Originator		Emergency Planner	1/5/00
Concurred By		Director, Ops/Mtce.	1-7-00
Approved By		Emergency Preparedness Mgr, O.C.	1/11/00

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DOCUMENT HISTORY

REVISION	DATE	ORIGINATOR	DESCRIPTION OF CHANGE
10		A. Smith	Improve guidance for authorizing deviations from procedures, operating limits, Tech, Spec's, license and license conditions. Added Exhibit 13. Also changed reference to EPIP-OC-.23 to EPIP-COM-.44. Provide guidance in Exhibit 10 Computer Eng. Checklist for modem reset if ERDS has problems. Add note concerning Main Gate Evacuation new Exhibit 14, Core Engineers Responsibilities.
11	12/94	A. Smith	Update GPUN/NRC response interface criteria per NUREG-1471. Add Exhibit 15 for media access during emergencies.
12	02/95	A. Smith	Provide guidance for Media access during Security driven events and add current time of events statement to Exhibit 1F.
13	06/95	A. Smith	Update facility titles and changes to facility locations due to elimination of trailer complexes. Delete Energy Spectrum as an alternate location for AEOF. Also renumber pages to eliminate blank page.
14	11/95	T. Blount	Corrects typo's, upgrade and modify ED Deviation Authorization Form based on feedback.
15	10/96	T. Blount	Change PAR guide and Logic diagram to make Evacuation Preferred recommendation. Deleted reference to AEOF based on Rev. 11, E Plan change. Deleted TSC Layout diagram since it is normally set up.
16	06/97	A. Smith	Reflect recent improvements in Technology and incorporate communicator activities from EPIP-OC-.04.
17	08/98	A. Smith	Improve & clarify ED Assistants first step on checklist. Reword press release reviews for ED Assistant to be consistent with EPIP-OC-.25. Which is less ambiguous. Make Tech. Assistants checklists responsibilities instead of check offs.
18	02/99	A. Smith	EPIP-COM-.44 and EPIP-COM-.45 have been changed to Oyster Creek site specific procedures and the new numbers are EPIP-OC-.44 and EPIP-OC-.45 (reference EP changes 98-021 & 98-022)
19	05/99	A. Smith	Revise the public information-process. Change reporting of Tech Assistant to the ED instead of Comm. Coord.
20	10/99	A. Smith	Clarify Core Eng. reporting to EOC then TSC.
21	DOS	A. Smith	Change references from GPU to OCNCS.

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THE TECHNICAL SUPPORT CENTERRevision No.
21**1.0** PURPOSE

1.1 This procedure provides for the activation, operation, deactivation, and evacuation of the Technical Support Center (TSC).

2.0 APPLICABILITY/SCOPE

2.1 This procedure applies to TSC personnel.

3.0 RESPONSIBILITIES

3.1 The Initial Response Organization Emergency Director is responsible for completing Exhibit 1.

3.2 The ED Assistant is responsible for assisting in completing Exhibit 1.

3.3 The Tech Support Center Coordinator is responsible for completing Exhibit 3 and implementing Exhibit 9 as appropriate.

3.4 The Tech Support Engineers are responsible for completing Exhibit 4 and 5.

3.5 The Chemistry Coordinator is responsible for completing Exhibit 6.

3.6 The Radiological Assessment Coordinator is responsible for completing Exhibit 7.

3.7 The Radiological Assessment Support Engineer is responsible for completing Exhibit 8.

3.8 The Core Engineer is responsible for implementing Exhibit 14.

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4.0 PROCEDURE

4.1 Initial Response Emergency Organization (IRO) personnel assigned to the Technical Support Center (TSC) will report to the TSC when they are notified of activation of the IRO and perform the responsibilities identified in their assigned exhibits to this procedure and as requested by their emergency organization supervisors.

5.0 REFERENCES

- 5.1 2000-PLN-1300.01 OCNCS Emergency Plan.
- 5.2 OEP-ADM-1319.02, "Emergency Response Facilities and Equipment Maintenance"
- 5.3 EPIP-OC-.01, "Classification of Emergency Conditions"
- 5.4 EPIP-OC-.27, "The Operations Support Center"
- 5.5 2000-ABN-3200.30, "Control Room Evacuation"
- 5.6 1820-IMP-1720.01, "Emergency Communications Implementing Procedure"

6.0 EXHIBITS

- 6.1 Exhibit 1, Emergency Director Checklist.
- 6.2 Exhibit 1A, Emergency Director Turnover Checklist.
- 6.3 Exhibit 1B, Protective Action Recommendation Guide.
- 6.4 Exhibit 1C, Oyster Creek PAR Logic Diagram.
- 6.5 Exhibit 1D, Emergency Director Responsibilities.
- 6.6 Exhibit 1E, NRC Emergency Response Interface Criteria.
- 6.7 Exhibit 2, Control Room Evacuation.
- 6.8 Exhibit 3, TSC Coordinators Checklist.
- 6.9 Exhibit 4, TSC Coordinator Checklist.

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- 6.11 Exhibit 5, TSC Checklist.
- 6.12 Exhibit 5A, TSC Technical Assistant Responsibilities.
- 6.13 Exhibit 6, TSC Chemistry Coordinators Checklist.
- 6.14 Exhibit 7, TSC Radiological Assessment Coordinators Checklist.
- 6.15 Exhibit 8, TSC Radiological Assessment Support Engineer Checklist.
- 6.16 Exhibit 9, Press Release Approval Guidance.
- 6.17 Exhibit 9A, Public Information Representative Checklist.
- 6.18 Exhibit 10, Plan for Storage and transfer of Contaminated Water.
- 6.19 Exhibit 11, Relocation of the TSC.
- 6.20 Exhibit 12, Alternate Emergency Response Facilities.
- 6.21 Exhibit 13, Emergency Director Authorization Form for Deviations from Requirements.
- 6.22 Exhibit 14, Core Engineers Responsibilities.
- 6.23 Exhibit 15, Site Access Policy for Media During Emergencies.
- 6.24 Exhibit 16, Emergency Shift Schedule.
- 6.25 Exhibit 17, HiFax Log.
- 6.26 Exhibit 18, Communications Log.
- 6.27 Exhibit 19, Emergency Communicator Log.

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EXHIBIT 1

Emergency Director's Checklist

NOTE

The Emergency Director may initially report to the ECC to assess plant status. He may assume ED duties in the ECC but should activate the TSC and relocate to it in a timely manner. The ED Assistant will assist with the completion of this checklist but may not assume ED responsibility as delineated in Exhibit 1D.

Initials

1.0 Activate the TSC by performing these steps:

- _____ 1.1 ED Assistant has confirmed that the following areas are functional (Areas need not be 100% activated to be considered "functional"). Once the following areas are functional inform the ED that the center is ready to be activated and receive him if not already in TSC.

Technical Support
Radiological Assessment
Communications link to Control Room and OSC

NOTE

Areas need not be 100% staffed to be considered functional

- _____ 1.2 The ED will complete Exhibit 1A of this procedure by obtaining a turnover from the Shift ED (GSS/SSM). This may be done in the Emergency Control Center, face to face, or may be done from the TSC by phone.
- _____ 1.3 Brief the TSC staff including NRC (if available).
- _____ 1.4 Once the above steps have been completed, inform the Shift ED that you are ready to assume your position as ED and will take over ED responsibilities (Exhibit 1D contains these for reference).
- _____ 1.5 Announce to the TSC staff that you are the ED, the TSC is activated and will assume Site Command and Control and off site notifications if appropriate. Notify site protection security supervisor that the TSC is activated.
- _____ 1.6 Review all press releases related to the emergency that have been approved for release by the Shift ED. **Only the ED can approve.**
- _____ 1.7 Log TSC Activation time in ED Log.

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EXHIBIT 1

Emergency Director's Checklist
(cont'd)

Initials

2.0 TSC Operations

_____ 2.1 TSC information exchanges should take place periodically (approximately one every hour) with NRC (if available), RAC, Technical Support Coordinator, Technical Assistant, ED Assistant, EAA Coordinator and other staff as necessary. Log briefing time and synopsis of briefing in ED Log for each occurrence.

_____ 2.2 EDA or designee to maintain the ED's log and track assigned action items.

2.2.1 Action items resulting from ED assignments shall be logged and tracked, and their disposition should be discussed periodically. The rolling white board or the PC may be used to display Action Items.

_____ 2.3 If the ED leaves the TSC for any reason, as the ED assistant, assume the person-in-charge until the ED returns.

NOTE 1

This does not include assuming ED responsibilities (see exhibit 1D for reference).

NOTE 2

Interrupt the ED Conferences or phone calls to inform him of major plant changes or as other conditions warrant.

_____ 2.4 EDA to brief NRC and provide liaison.

_____ 2.5 When the EOF is activated the ESD will seek an initial briefing. There after the ED should periodically brief the ESD approximately hourly or as conditions change. The ESD may take this briefing with his staff (and NRC/BNE) via a speaker phone.

NOTE

These briefings shall be general in nature. Technical discussions should be conducted between the TSC and EOF engineering staff to ensure accuracy.

_____ 2.6 EDA is point of contact for NEI or EPRI or INPO.

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EXHIBIT 1

Emergency Director's Checklist
(cont'd)

Initials

- _____ 2.7 EDA directs efforts as appropriate for the following groups:
- Communicates through the ECC and TSC communications coordinators.
 - Security through the Security Shift Commander.
 - Emergency Assembly Area through Security or the EAA coordinator.
- _____ 2.8 Ensure that any TSC or Security teams are tracked by the OSC.
- _____ 2.9 Review, as appropriate, Exhibit 1E, NRC Emergency Response Interface.
- 3.0 Site ED Page
- _____ 3.1 Periodic briefings (hourly or when major changes in plant status have occurred) should take place using the ED page system. This system goes to all on-site Emergency Response Facilities (OSC, ECC, Main Gate, North Gate, TSC).
- 4.0 Press Releases (If not yet assumed by ESD)
- 4.1 Press releases should be issued within approximately one hour from the time that a major plant event has occurred. "Draft" press releases shall have a timely review. Refer to Exhibit 9 for additional guidance.

NOTE

Pre-approved boiler plate press releases are contained in Procedure 1820-IMP-1720.01, Attachment 1. Boiler plate information need not have the ED/ESD approval.

- 4.2 Once the Governor has declared a "state of emergency", ensure all OCNCS press releases are provided to the state police representative at the Media Center for review and agreement.

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21EXHIBIT 1Emergency Director's Checklist
(cont'd)

Initials

- _____
- _____
- _____
- 5.0 On-site Protective Actions
- 5.1 If any of the off-site GPUN Emergency Response Facilities are downwind of a radioactive release, provide for their monitoring and protection (e.g., RAA at Forked River). Exhibit 1B provides guidance.
- 5.1.1 If these GPUN facilities are within sectors that were ordered to evacuate by the State, then they should be relocated to an alternate facility.
- 5.2 If site accountability has been ordered, ensure it is logged on PAR status board, in the ED's log, and communicated to the ESD. Direct the C.R. to make the appropriate page announcement for accountability. If needed, provide the route to the EAA(OCAB/Warehouse).
- 5.3 If a site evacuation has been ordered, ensure provisions are made for providing site employees with instructions on reporting to work for the next business day. Site evacuation should be logged on PAR status board, ED's log, and communicated to ESD.
- 6.0 Changes to Emergency Classifications

NOTE

If the Communications have not been turned over to the EOF, off-site notifications must be made within 15 minutes of an emergency declaration.

- 6.1 Immediately notify the TSC Communications Coordinator of any changes in emergency classifications and direct the notifications be completed.
- 6.1.1 All notifications for on-site and off-site should be conducted from the Control Room if available, until the off-site notifications are assumed by the EOF. Upon changes in classes direct the Control Room (ECC Comm Coord, Ops Coord or GSS) to complete the appropriate notifications. This directions satisfies the approval of such notifications.
- 6.1.2 If off-site notifications have been turned over to EOF, immediately confer with ESD on the need to reclassify the emergency. Remind him to ensure appropriate off-site notifications are made within 15 minutes.
- 6.2 Log any changes in classification in the ED Log.

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EXHIBIT 1

Emergency Director's Checklist
(cont'd)

Initials

7.0 Off-site Protective Action Recommendations (PAR)

NOTE

These actions shall be performed if off-site PAR responsibility is not turned over the ESD. They may be done in parallel if responsibility has been turned over.

- _____ 7.1 At the Site Area Emergency, review the PAR Logic Diagram (Exhibit 1C) in preparation for a General Emergency declaration.
- _____ 7.2 At the General Emergency, immediately review the PAR Logic Diagram (Exhibit 1C) with appropriate staff members. Develop a PAR within approximately 15 minutes from the GE declaration and approve the off-site notification form for transmitting the PAR to the State.
- 7.3 OCNGS should attempt to obtain agreement from the NJBNE and NRC on the PAR. However, whether agreement is or is not reached, OCNGS shall communicate its PAR to the State OEM within approximately 15 minutes from the time the GE was declared.
- 7.4 The PAR should not be included in press releases.
- 7.5 The ED should ascertain from the NJOEM what protective action has been implemented off-site (\approx 45 min. after providing PAR). This should be provided to NRC via the ENS Line as required by 10-CFR 50.72 - follow-up Notifications - (if not done by ESD). Off-site protective action and time implemented should be logged in ED's Log.
- 8.0 All deviations from procedures, equipment operating limits, Technical Specifications, License, and License Conditions will be authorized and documented using the guidance in Exhibit 13.

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EXHIBIT 1
Emergency Director's Checklist
(cont'd)

Initials

9.0 NRC Interface

9.1 The Security Plan allows that "when ever site conditions are, or may soon become, a danger to the public health and safety, certain safe guards measures may be suspended in accordance with the following requirements. The action taken is approved by the Manager of Plant Operations, Operations Group Shift Supervisor or Emergency Director. If the ED is not a licensed SRO, he/she must consult with a licensed SRO prior to authorizing the Suspension of any safeguards measures".

9.1.1 Security is able to process the NRC site response team rapidly if the ED (GSS/SSM) authorizes their immediate access under the above Security Plan provision. Any such authorization should be logged.

9.1.2 If this provision is not used it will likely take 2-3 hours to train, badge and allow access to the whole NRC team. This delay will detract from the functioning of the NRC Team but is clearly at the judgment/discretion of the ED.

NOTE

An alternative to waiving access requirements is to arrange for escort.

9.1.3 NRC immediate access under this Security Plan provision is meant to provide access to emergency centers only, not site wide access, RWP access or approve respiratory protective equipment use.

9.2 Brief the NRC upon arrival and determine if the Senior NRC person is the Site Team Leader or Director, Site Operations (see Exhibit 1E for reference).

9.3 NRC directives can only be received by the ESD (or in the ESD's absence, the ED). NRC should be requested to provide all directives in writing.

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EXHIBIT 1Emergency Director's Checklist
(cont'd)

Initials

- _____ 9.4 As time permits, discuss with the senior NRC person in the TSC the OCNCS emergency organization. Discuss that the ED oversees site related activities, maintaining general (not detailed) cognizance of reactor operations and that while the ESD oversees the whole emergency effort, he concentrates on off site interfaces and issues.
- _____ 9.5 If media access to the site is requested, refer to Exhibit 15, "Site Access Policy for Media During Emergencies".
- _____ 10.0 Long-term Recovery
- 10.1 Refer to Procedure EPIP-OC-.45 for Long-term Recovery and discuss its implementation with the ESD.
- 10.2 If a General Emergency is in effect, OCNCS will not de-escalate to a lower level of emergency. The only option is to go into Long-term Recovery and this transition shall not occur until all off-site protective actions have been completed and the State has been informed.
- 10.3 Establish long term staffing requirements and prepare appropriate watch bill.
- 11.0 Control Room Evacuation
- 11.1 Review Exhibit 2A for guidance.
- 12.0 TSC Relocation
- 12.1 Should the TSC be or become unavailable (e.g. due to Fire, Security Event, etc.) refer to Exhibit 11 which provides guidance for the establishment of TSC functions in alternate locations.
- 12.2 A description of evacuation preplanning for other Alternative Response Facilities is provided in Exhibit 12.

Name _____ Date _____ Time _____

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EXHIBIT 1A

EMERGENCY DIRECTOR TURNOVER CHECKLIST

NOTE

This form may be completed by ED in the Control Room or via phone. It may be used to brief NRC representatives upon their arrival.

EMERGENCY CLASSIFICATION

DATE/TIME OF DECLARATION

UNUSUAL EVENT _____

ALERT _____

SITE AREA EMERGENCY _____

GENERAL EMERGENCY * _____

Reactor Power at time of event _____ % BRIEF DESCRIPTION OF THE EMERGENCY

CURRENT PAR STATUS * (Required for General Emergency) _____

STATUS OF ACCOUNTABILITY/ON-SITE PROTECTIVE ACTIONS _____

PRESENT STATUS OF PLANT/TIME OF DATA: _____

DATE: _____

_____ AT POWER (_____ %)

_____ Hot Standby

_____ Hot Shutdown

_____ Cooling down (describe cooldown mode) _____

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EXHIBIT 1A (Continued)
EMERGENCY DIRECTOR TURNOVER CHECKLIST

(Page 2 of 3)

Estimated time to 'STABLE' plant conditions _____ hours

Did reactor trip? YES - NO

Did ECCS activate? YES - NO

Is off-site power available? YES - NO

Are both Diesel Generators operable? YES - NO

Are Diesels Running? #1 YES - NO #2 YES - NO

Are the Station Blackout CT's Available? YES - NO

Is fuel integrity maintained? YES - NO

Is containment integrity maintained? YES - NO

If no, specify _____

Do you suspect there is a release
(monitored or unmonitored) in progress? NO YES N/A

If yes, specify pathway: _____

Is release AIRBORNE RELEASE LIQUID RELEASE UNKNOWN

Plume dispersion ELEVATED GROUND N/A

Details: _____

Are there any abnormally high implant radiation levels? YES - NO

Specify location _____

Are there any personnel injuries? YES - NO

Provide status _____

Were there any news releases issued? YES - NO

Specify _____

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EXHIBIT 1B

PROTECTIVE ACTION RECOMMENDATION GUIDE

1.0 On-site

- 1.1 Inform the OSC Coordinator of personnel who were dispatched in support of emergency before the OSC was activated.
- 1.2 Relocate site personnel from areas of hazard or where the dose is projected to exceed 1000 mRem Total Effective Dose Equivalent (TEDE). Consult RAC.
- 1.3 Evacuation of any area, site accountability, and site evacuation may be ordered at the discretion of the Emergency Director.

Accountability is required at the declaration of a Site Area Emergency, or at the discretion of the ED in accordance with the E-Plan.

Site Evacuation is required at the declaration of a General Emergency, or at the discretion of the ED in accordance with the E-Plan.

NOTE

During Drills do not initiate Site Accountability or Site Evacuation without Drill Controller agreement.
During Real Events accountability and evacuation shall be conducted in accordance with the E-Plan. If the Main Gate is evacuated, accountability can not be conducted.

- 1.4 Consider protective actions such as: securing ventilation, access control, Safety Department support.
- 1.5 Consider protective actions such as: leaving the site, sheltering, or evacuation to an assembly area for OCAB, Forked River Site, Combustion Turbine Site, Southern Area Stores Warehouse and Trailer 300. If action is necessary, personnel may be informed by the following mechanisms:
 - 1.5.1 Contact Security Shift Supervisor to make a page announcement on the Forked River Site and Trailer 300.
 - AND**
 - 1.5.2 Direct Security Shift Supervisor to dispatch a patrol to the affected areas to direct personnel to take the prescribed protective actions. Consider Security manpower requirements when taking this action.
 - OR**
 - 1.5.3 Direct available personnel (e.g., from OSC) to go to the affected areas to direct personnel to take the prescribed protective actions.

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EXHIBIT 1B
(cont'd)

PROTECTIVE ACTION RECOMMENDATION GUIDE

1.6.1 Consider use of KI if personnel have been exposed to significant radioactive Iodine. Consult RAC and Medical representative. EPIP-OC-.44 provides guidance.

1.7.1 Consider the need for security to control access to hazardous areas outside the RCA or outside the Protected Area.

1.8 Emergency Exposure Guidelines

- | | |
|----------------------------------|---------------------------|
| A. Voluntary Life Saving Actions | No Pre-established limit |
| B. Corrective Actions | Administrative Guidelines |
| 1. Total Whole body dose (TEDE) | 10 Rem |
| 2. Lens of the eye | 30 Rem |
| 3. Total organ dose | 100 Rem |

2.0 Off-site

2.1 At the General Emergency, review the Protective Action Logic Diagram and provide PAR's to the State within approximately 15 minutes of declaring the General Emergency.

2.1.1 The guidance provided by the NRC for a Protective Action Recommendation at a General Emergency is **Evacuation 2 miles in 360 degrees and 5 miles downwind. Shelter all other non-affected areas of the 10 mile EPZ.**

NOTE

If PAGs are exceeded, or are expected to be exceeded, beyond the 10' mile EPZ, assess the impact on an Ad Hoc Basis (i.e. Field Monitoring Team Data or Hand Written Contingency Calculations), and provide recommendations as appropriate.

2.1.2 Under certain circumstances it is permissible to recommend Sheltering if it is **known** that **Sheltering WILL PROVIDE GREATER PROTECTION.**

2.1.2.1 This would most likely occur only for short (puff) release periods that are less than 1.5 Hrs. (which is substantially shorter than the evacuation time).

2.1.2.2 There must be strong assurance that there is definite control of the release and termination of the release by the positive actions of the emergency responders actions during the release process (such as Containment Venting).

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EXHIBIT 1B
(cont'd)

PROTECTIVE ACTION RECOMMENDATION GUIDE

- 2.1.3 Sheltering may be the protective action of choice, if rapid evacuation is impeded by:
- a) severe environmental conditions-e.g. severe weather or floods;
 - b) physical constraints to evacuation-e.g. inadequate roads

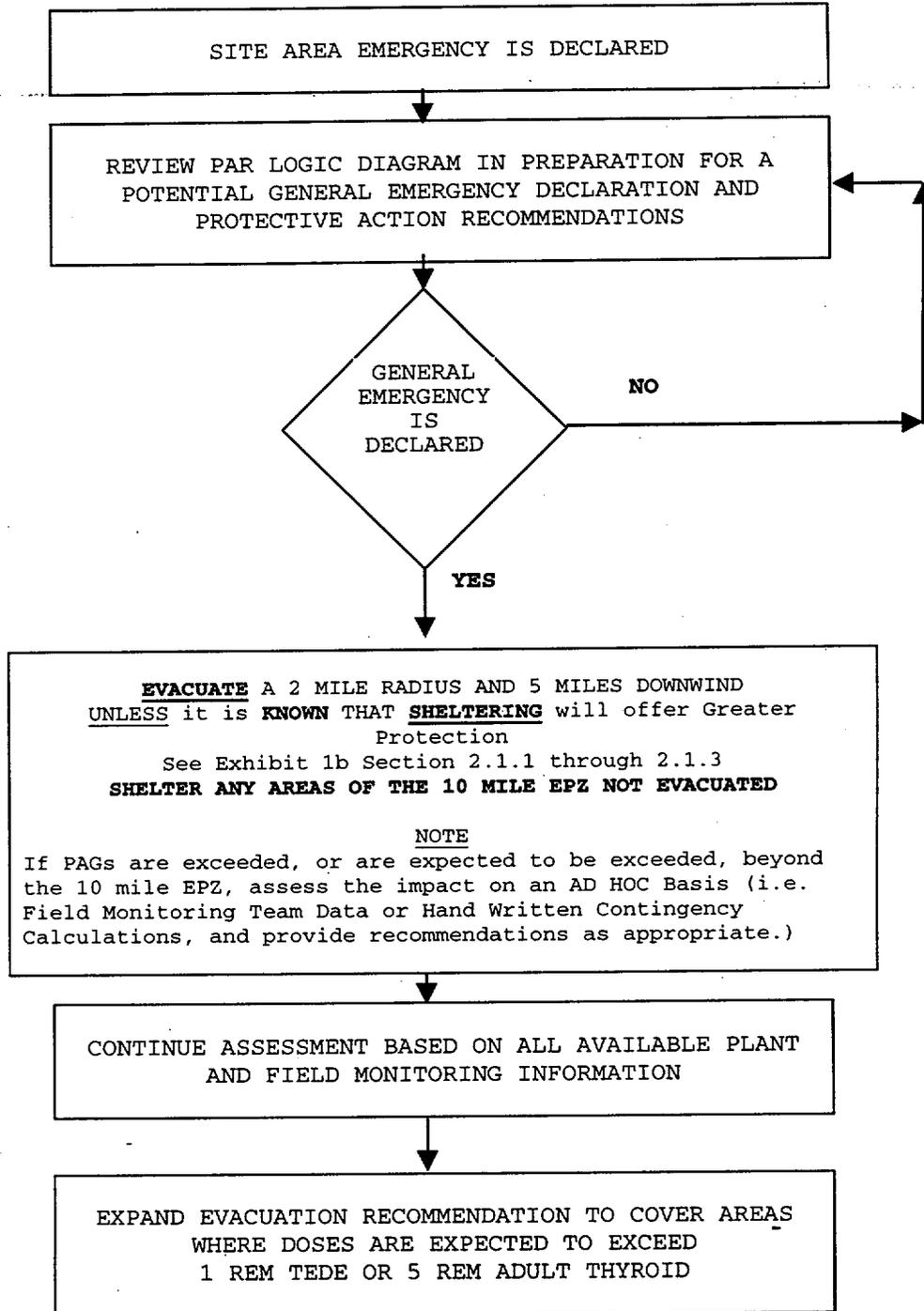
NOTE

The information in 2.1.3 a & b **MAY ONLY BE AVAILABLE** from previous **discussions** with New Jersey Office of Emergency Management or New Jersey Bureau of Nuclear Engineering Personnel.

- 2.2 During a Site Area Emergency, Protection Action Recommendations should not be immediately necessary, however, the PAR Logic Diagram should be reviewed.
- 2.3 Off-site protective actions should not be required during an Unusual Event or Alert.

EXHIBIT 1C

OYSTER CREEK
PAR LOGIC DIAGRAM



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EXHIBIT 1D

EMERGENCY DIRECTOR RESPONSIBILITIES

The ED is vested with certain authority and responsibilities that may not be delegated to a subordinate. Included are:

- A. Approving and directing official notifications to off-site agencies.
- B. Approving and directing information releases to the media. ED/ESD approval is not required for public announcement of formal emergency declaration and changes of emergency classifications, or other pre-approved boiler plate news releases as contained in Procedure 1820-IMP-1720.01, Attachment 1.
- C. Approving and, if possible, personally conveying appropriate Protective Action Recommendations to the New Jersey Office of Emergency Management.
- D. Serve as principle "point of contact" for receiving NRC directives.
- E. Classification of an emergency event.
- F. Directing on-site evacuation at the Alert or lower level emergency classification based on potential hazard to nonassigned personnel.
- G. Authorizing emergency workers to exceed 10 CFR 20 Radiation Exposure Limits in accordance with Exhibit 1b.
- H. Approving and directing deviation from established operating procedures, normal equipment operating limits, or technical specifications during attempts to control the plant emergency/or during a declared National Security Emergency.

NOTE: For National Security Emergencies, the following conditions must be met.

1. When this action is immediately needed to implement national security objectives as designated by the National Command Authority through the NRC.

and
2. No action consistent with license conditions and technical specifications that can meet national security objectives is immediately apparent.

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EXHIBIT 1D
(continued)

EMERGENCY DIRECTOR RESPONSIBILITIES

NOTE: In essence, no one below a licensed SRO individual can make the decision to depart from the license. However, if a more senior manager is present (i.e., Emergency Director) even though he may not possess an SRO license, the decision authority would be passed to him as a higher authority in the chain of command. The licensed SRO shall provide his best judgment to the ED for his consideration. Beyond that, the SRO shall follow the orders of his supervisor. It is imperative that the Emergency Director consult the SRO, and the Technical Support Center to the fullest extent practicable in arriving at a decision to deviate from prescribed procedures. However, Emergency Operating Procedures should generally not be deviated from. If the decision is made to depart from licensee conditions or technical specifications, notify the NRC before taking such actions, if time permits or if time does not permit then within one hour.

When the Emergency Support Director (ESD) arrives at the EOF and declares himself to be ready to assume that role, he will assume overall responsibility for management of the response to the accident and recovery operations. With the activation of the Emergency Support Direction function, the ESD specifically will assume decision authority for Items A, B, C, and D. However, decision authority for Items E, F, G, and H will be retained by the ED. Decisions on all of the listed actions normally will result from close and continuous consultation between the ED and the ESD, and it shall be the responsibility of the ED to ensure the ESD is provided with the necessary information to arrive at timely and appropriate decisions. In the special case of event classification, the ESD shall retain the prerogative to overrule the ED if, in the judgment of the ESD, uncertainty or other considerations exist to the extent warranting classification of higher level of emergency than that classified by the ED.

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EXHIBIT 1E

NRC EMERGENCY RESPONSE INTERFACE CRITERIA

This is a synopsis of the NRC emergency response process as it applies to OCNCS.

In essence, directives from the NRC must come from the NRC Director (typically, the NRC Chairman) or from the NRC Director of Site Operations (typically, the NRC Regional Administrator). Such advice or directive can only be communicated to the Emergency Director (the Emergency Support Director once the EOF is activated). If a directive order is issued by the NRC Director or Director of Site Operations, the ED/ESD should request written confirmation which spells out the specific nature of the directive.

While NRC advice may be challenged by the ED or ESD, directives must be complied with.

With respect to Protective Action Recommendations for the public, the NRC may either endorse the OCNCS recommendation or opt to recommend a different one. The ED/ESD is encouraged to include the NRC and State representatives in the Protective Action Recommendation discussions in order to arrive at a mutually agreeable recommendation. In the event that the NRC opts to recommend a different recommendation, they will communicate directly with the State. Their recommendation, like the utility recommendation, will be considered by the State in the development of a Governor directive.

Upon arrival of the NRC, the ED/ESD should:

- Verify who is the senior NRC person in charge
- Ask the senior NRC person to inform the ED/ESD when the position of Director Site Operations is assumed and whether the responsibility to issue directives is included.
- Request that the NRC keep OCNCS informed of all substantive information exchanges between the NRC and the slate.
- Request the NRC provide all directives in writing.

SYNOPSIS - NRC EMERGENCY RESPONSE

NOTE

Review the following as time permits and/or if the NRC is expected to respond.

Revision 2 to NUREG-0728, supplemented by NUREG-0845 and NUREG-1471, describes the manner in which the NRC will respond to an incident and provides criteria for making preplanned response decisions. They provide procedural guidance, describe the functions related to NRC emergency response, and define procedures for responding to the following NRC modes of operation.

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THE TECHNICAL SUPPORT CENTERRevision No.
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Each mode defines the scope of NRC activities related to a particular level of emergency response in ascending order of degree of involvement to deactivation. The various modes are characterized as follows:

1. Normal mode - Normal activities designed to maintain readiness.
2. Standby mode - Regional office activates the Incident Response Center (IRC with an appropriate staff and NRC Headquarters Operations Center staffed by a standby team.
3. Initial activation - NRC Operations Center is staffed by a response team, the Regional IRC is fully activated and a site team is dispatched under the leadership of the Regional Administrator, normally designated as Director of Site Operations (DSO).
4. Expanded activation - Focus on NRC response operations is shifted to the site. DSO is designated primary spokesman for the NRC and may be empowered with directive authority by the Chairman of the Nuclear Regulatory Commission.
5. Deactivation - Follow-up activities (e.g., reviews, investigation, and recovery operations).

The particular mode assumed by the NRC will be dependent upon licensee event classification and "independent NRC perception of relative severity of uncertainty of accident conditions."

NRC ADVICE

The NRC may offer advice or assistance to the Licensee during an emergency, or may respond to Licensee requests for advice or assistance. This may involve diagnosis of critical problems, development of proposed remedial courses of action, and proposals to implement additional precautionary measures. The NRC is also prepared to direct that certain actions be taken if, after thorough discussion with the Emergency Director (the Emergency Support Director once the EOF is activated) it is decided that such direction is required. In the event that such action is taken by the NRC Director or the NRC Director of Site Operations, the ED/ESD should request written confirmation which spells out the specific nature of the directive.

Directives will be communicated directly to the ED/ESD from the NRC Director (NRC Chairman) or from the NRC Director of Site Operations (DSO), typically the Regional Administrator, once appointed and empowered to do so.

Several important concepts govern the NRC in providing advice, assistance, or direction. They are:

- a. The Licensee is at all times responsible for mitigating the consequences of the incident.
- b. Although the NRC could issue formal orders to the Licensee to take certain measures and to monitor implementation, ". . . licensee continues to make other key operational decisions and to operate and manage the facility.
- c. The NRC must have a single voice when advising or directing the Licensee.
- d. The ED/ESD has the option to accept or challenge NRC advice.

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EXHIBIT 1E
(continued)

NRC EMERGENCY RESPONSE INTERFACE CRITERIA

At no time will advice or direction come from both the Director and DSO and the Licensee will always be kept apprised of who is empowered to exercise authority as the NRC Spokesman. All other NRC personnel in contact with Licensee personnel are responsible to make clear that discussions should not be construed as advice or direction but rather as a sharing or gathering of information.

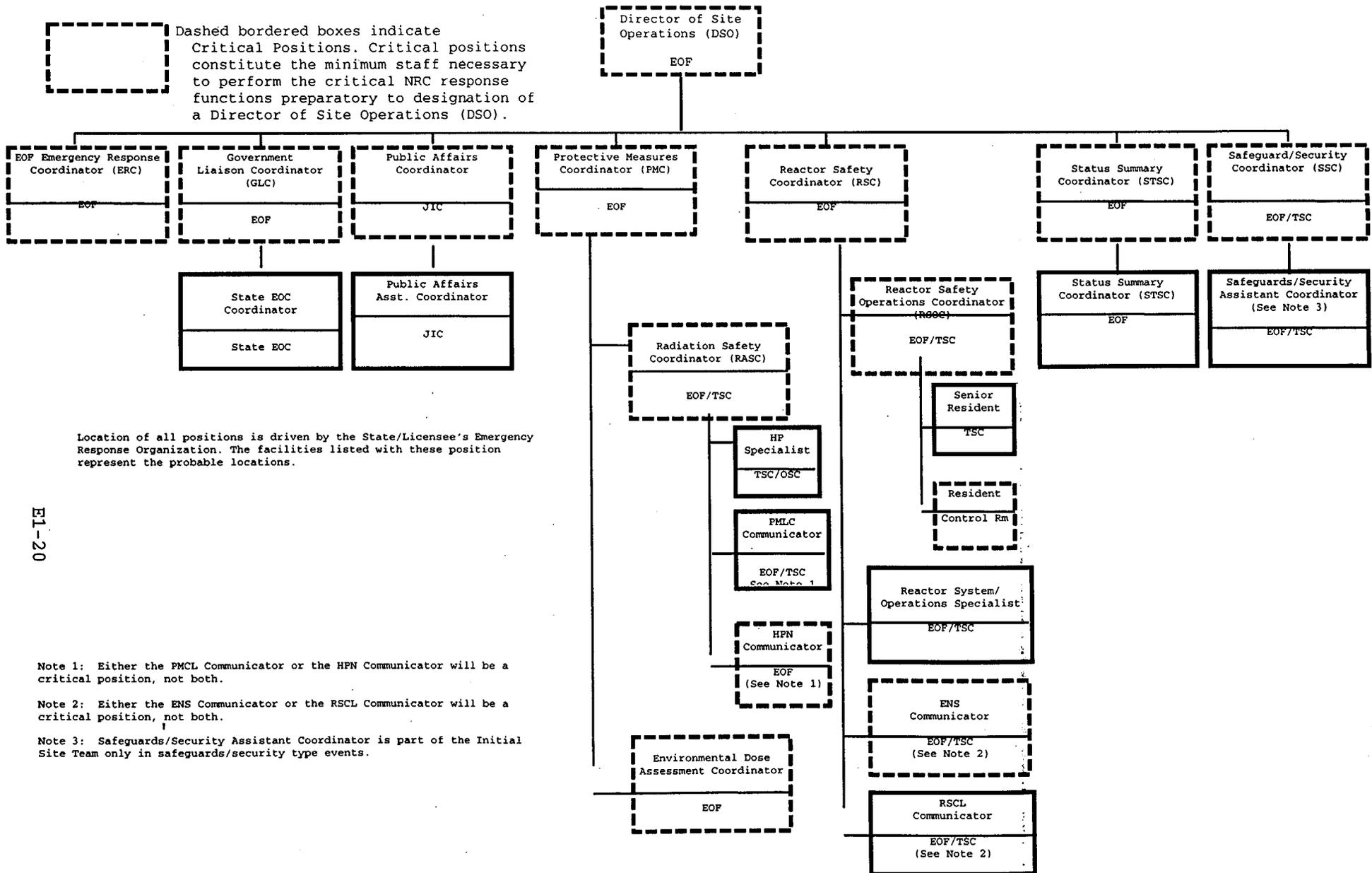
NRC INPUT TO RECOMMEND PROTECTIVE ACTIONS

The NRC responsibility during an emergency, as during normal operations, is to ensure that protection of public health and safety is adequate. One aspect of exercise of this responsibility is to provide Protective Action Recommendations or advice to off-site authorities. This may take the form of an NRC endorsement of a Licensee Protective Action Recommendation or the NRC may opt to recommend additional protective actions. The NRC is not involved in the process of recommending Protective Actions, the NRC may get involved if a major problem is identified with the protective actions recommended by the licensee or protective actions undertaken by the state or local government. Additionally NRC involvement may be requested by state or local officials.

NRC ORGANIZATION

The attachment to the synopsis is provided for your information. This attachment depicts the site team organization and is an extract of the Region I supplement. It defines the number of NRC personnel expected to operate in each facility and shows the lines of communications the NRC expects to use.

NRC SITE ORGANIZATION - INITIAL SITE TEAM



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EXHIBIT 2

CONTROL ROOM EVACUATION

CR evacuation is guided by Operations Procedures. Should it be necessary Operations personnel will establish plant control via the remote shut down panels. If the CR evacuation is the initiating event, CR staff will implement their procedures and declare an Alert, activating the Emergency Response Organization. Operations Management will locate in the TSC. If the ERO is already activated, several ECC personnel will report to the TSC.

In either case guidance for integrating these resources into the TSC staff follows:

- Ops Coordinator with Technical Assistant
- GSS/SSM, STA will require table space in back of TSC to guide operators by radio.
- ECC Communicators - to Communications Coordinator for deployment in TSC, other centers, Remote Assembly Area or home.
- ECC Communications Coordinator is licensed and may be of use to OPs Coord, GSS/SSM, TSC Coord, EOF or as NRC liaison. Discuss these arrangements with the OPs Coordinator and deploy personnel accordingly.

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EXHIBIT 3

TSC Coordinators Checklist

Initials

1.0 TSC Activation

- _____ 1.1 The TSC should be declared ready for the ED when the following areas are functional:

NOTE

These areas need not be 100% staffed to be considered functional.

- Radiological Assessment
- Technical Support (appropriate engineering expertise)
- Communications links to Control Room and OSC

NOTE

The following actions should be performed expeditiously but are not necessary to declare the TSC functional.

- _____ 1.2 When possible perform, or have a Technical staff member perform, a briefing of the TSC staff prior to the ED's arrival. This should provide the staff with the current emergency conditions
- _____ 1.3 Ensure all required TSC personnel use the position tag board and display position tags.
- _____ 1.4 Ensure the RASE has set up one entry point with a frisking station is established. Based on actual or expected emergency conditions, Rad Con will evaluate whether or not a whole body frisk is required for entry into the TSC. If a whole body frisk is required, Rad Con will post the area accordingly. Proper frisking techniques will be followed by all personnel prior to entering the TSC once the area is posted as requiring a whole body frisk.

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(continued)TSC Coordinators Checklist

- _____ 1.5 Ensure the RASE has performed continuous air monitor preoperational checks and the system is operating.
- _____ 1.6 Ensure the RASE has performed area radiation monitor preoperational checks and the system is operating.
- _____ 1.7 Check duty board in back of TSC to determine positions not manned. Notify Security of unfilled positions and ask them to call out personnel. The following engineering disciplines should be adequately represented:
- 1.7.1 Mechanical Engineering
 - 1.7.2 Electrical Engineering
 - 1.7.3 Radiological Engineering
 - 1.7.4 Instrument and Controls Engineering
- _____ 1.7.5 Core Engineering
- _____ 1.8 Callout any additional personnel as needed. Complete staffing of this area is not necessary for TSC activation. Security through the ED Assistant can help with duty roster callouts.
- _____ 1.9 Ensure one set of Emergency Plan Implementing Procedures are available at the ED's desk, the TSC Coordinator's desk, and the RAC/Chemistry Coordinator's desk.
- _____ 1.10 Ensure both PCS terminals in the TSC are functioning.
- _____ 1.11 Check on PCS availability at the OSC and EOF. Attempt to help the other centers bring on-line if necessary.
- _____ 1.12 Check the status of the ERDs link. If necessary, work to establish the line to the NRC.

NOTE

Report to the TSC Coordinator, unless needed in the ECC. If Core Engineer reports to ECC first, then the TSC Coordinator should be informed.

NOTE

If there is an ERDS problem it may be because the modem (located in the Computer Room) is locked up. The problem may be resolved by resetting the modem or turning it off and on.

- _____ 1.13 Call Computer APPS. for additional assistance as needed.

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EXHIBIT 3
(continued)

TSC Coordinators Checklist

- 1.14 Set TSC clock to match the time on the Plant Computer System display (during drills this time may be obtained from the controller).
- 2.0 TSC Operations
 - 2.1 Accept assignments from the ED. Disposition them to TSC staff and log in the TSC Coordinator's log using Lotus Notes or paper.
 - 2.2 If at any time it becomes necessary to operate the TSC Ventilation System review the following guidance.
 - 2.2.1 There is a continuous indicating air monitor in the TSC which will provide indication if the need for use of the TSC ventilation charcoal filters. Rad Con is also located in the TSC and can provide guidance on use of the filters.
 - 2.2.2 TSC Ventilation System normally operates with charcoal filters bypassed.
 - 2.2.3 The filters are controlled by a two position covered switch on the rear column in the TSC. It is labeled Emergency/Normal. The Emergency position places the charcoal filters in service. The Normal position removes the filter from service.
 - 2.2.4 When the charcoal filters are engaged the gauge above the Control switch should be at + 0.125 inches water or greater to assure no leakage into the room. If it is otherwise notify Radiological Controls to assess habitability and specify compensatory measures as necessary.
 - 2.2.5 Log time charcoal filter enters and is taken out of service. This may be entered in the ED's Log.
 - 2.2.6 Advise RAC to conduct surveys in accordance with Exhibit 8 Step 6.
 - 2.3 Establish contact with Corporate Engineering Support and assess their status and resources. Engineering requests suited for Corporate Engineering should be sent to them, in writing if practical. Corporate Engineering will contact the TSC as soon as they are available.
 - 2.4 Develop a shift schedule for the TSC organization Exh. (16). The current duty roster may be used to develop this schedule. Attempt to allow adequate rest time for all shifts off duty.

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(continued)TSC Coordinators Checklist

2.5 TSC support of site accountability.

_____ 2.5.1 ~~Announce Site accountability to the TSC Staff and~~
ensure that all personnel present in the TSC have key
carded into the Accountability Key Card Reader.

2.6 If notified by the Security Shift Commander/designee of
security computer failure, complete Steps 2.6.1 through 2.6.4.

_____ 2.6.1 Assign an individual to collect accountability
cards in facility.

_____ 2.6.2 Direct individual to sort the cards into separate
groups for North Gate and Main Gate.

_____ 2.6.3 Direct individual to call both Main Gate and
North Gate Security with badge slot numbers
within 10 minutes of initial declaration of
accountability.

_____ 2.6.4 Accountability notifications completed for facility.

_____ 2.7 Should long term accident management require it, Exhibit 10
provides guidance on storage/transfer of contaminated water.

3.0 Facility deactivated by order of Emergency Director.

_____ 3.1 Documents, records, and reports delivered to Emergency
Preparedness Department.

_____ 3.2 Record any equipment failures.

_____ 3.3 Refile prints and procedures as required.

_____ 3.4 Report discrepancies to the Emergency Preparedness Dept.

_____ 3.5 TSC returned to standby condition.

4.0 TSC Evacuation

4.1 Should the TSC be or become unavailable (e.g.; due to
Fire, Security Event, etc.) refer to Exhibit 11 which
provides guidance for the establishment of the TSC
Functions in alternate locations.

NAME:

Technical Support Center Coordinator_____
Time_____
Date

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EXHIBIT 4

TSC COMMUNICATIONS COORDINATOR CHECKLIST

INITIALS

- | | | |
|-------|-----|---|
| _____ | 1.0 | Report to the ED Assistant and support information transmittals to ECC, OSC, EOF, BNE and NRC using Exhibit 19 or Lotus notes as appropriate. |
| _____ | 2.0 | Set the TSC clock to agree with the time displayed by the PCS. (During drills, ask the Controller) |
| _____ | 3.0 | Log appropriate activities or tasks via lotus notes or exhibit 18. |
| _____ | 4.0 | Dim the lighting in the front of the TSC to enhance data display. |
| _____ | 5.0 | Activate fax and set time in accordance with PCS Clock. Send test transmissions to the activated Centers. |
| _____ | 6.0 | Number and log each fax transmission using Exhibit 17. |

NOTE

Number outgoing transmissions sequentially regardless of the type of transmission. Use location designator as part of sequential number, i.e. TSC-001, TSC-002, etc.

- 7.0 When the ED Assumes command and Control in the TSC, Relay Appropriate directives to the ECC Communications Coordinator Such as:
1. Perform Off-site Notifications
 2. Perform On-site Notifications
 3. Transfer Notification Responsibilities.
- 8.0 Ensure that communications to the NRC via NRC/ENS line are made by an individual knowledgeable of plant systems. This may require callout of additional personnel. Only one Emergency Center should provide this function at one time.
- 9.0 Report failed communications systems to information services for resolutions when needed have security or the group leader admin. callout information services telecommunications personnel. These individuals will work under the TSC Communications Coordinator's direction to repair phone problems in emergency centers. If they must leave the SEB to effect repairs, coordinate their movements with the OSC as a repair team. A briefing via telephone is permissible if briefing items are logged. Alternately the briefing forms could be telefaxed from OSC to TSC and back. Report ENS or ERDS phone line problems (FTS-2000) to the NRC at (301) 816-5100.

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EXHIBIT 5

TSC Engineers Responsibilities

- 1.0 Report to the TSC Coordinator.
- 2.0 As requested assist the TSC Coordinator in activation, operation, and recovery of the TSC. Refer to his checklist (Exhibit 3) for guidance.
- 3.0 Perform and document engineering tasks as directed by the TSC Coordinator as needed provide appropriate information to the EOF or other activated centers.
- 4.0 Present all documentation generated during the performance of their duties to the TSC Coordinator.
- 5.0 As directed, assist TSC Coordinator in deactivation of TSC.
- 6.0 Should the TSC be or become unavailable (e.g.; due to Fire, Security Event etc.) refer to Exhibit 11 which provides guidance for the establishment of the TSC functions in alternate locations.

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EXHIBIT 5A

TSC TECHNICAL ASSISTANT RESPONSIBILITIES

- 1.0 Report to the TSC Emergency Director.
- 2.0 Maintain Operations Conference Line in response to calls from Operations Coordinator .
- 3.0 Coordinate with the ED, ED Assistant and Engineering Staff in the TSC to provide technical support to the ECC pertaining to various items such as:
 - Equipment Failure
 - EOP's Support

4.0

NOTE

If operational data is not being provided as needed, actively solicit this data.

5.0

Monitor the Equipment Status Display System (ESDS) if available. Provide technical update on equipment status as necessary, validate and correct as needed.

6.0

Convey ED directives to the ECC through the Ops Coordinator as necessary. Maintain ED (TSC Staff) apprised of the operational status and activities taken by the ECC, Review EAL matrix periodically for applicability of classifications and changes to plant conditions.

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Chemistry Department will staff the OSC Chemistry Coordinator position first and send a Chemistry supervisor to the TSC when available.

- 1.0 Advise the ED and RAC on conditions related to reactor coolant chemistry including, but not limited to:
 - 1.1 Normal chemistry sampling.
 - 1.2 Post Accident Sampling (PASS and RAGEMS)
- 2.0 Coordinate with the RAC to develop source term information.
- 3.0 Prestage a chemistry team to obtain and analyze an effluent sample should it become necessary. This should be given the highest priority if a release begins.
- 4.0 Prestage a PASS team to obtain and analyze samples should it become necessary. Ensure all necessary equipment and arrangements are in place should transport of the PASS sample off-site become necessary.
- 5.0 Consider actions necessary to quantify all components of radiological releases. Plan a course of action which will support post accident investigation of source term released to the environment.
- 6.0 Should the TSC be or become unavailable (e.g.; due to Fire, Security Event, etc.) refer to Exhibit 11 for guidance.

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EXHIBIT 7

TSC Radiological Assessment Coordinators Checklist

Initials

- 1.0 Periodically brief the ED on radiological conditions.
- In-plant radiation and contamination levels and associated protective actions.
 - On-site (and near site) radiological conditions and associated protective actions.
 - Off-site radiological conditions including dose projections and Protective Action Recommendations until relieved of this responsibility by the Environmental Assessment Coordinator (EAC).
- 2.0 Routinely ensure the EAC is informed of all source term information which is available.
- 3.0 Coordinate with the Chemistry Coordinator to develop source term information.
- 4.0 Maintain the meteorological and PAR status boards.
- 5.0 Periodically review Radiological EAL's in EPIP-OC-.01 "Classification of Emergency Conditions". Ensure that the ED is immediately notified of any situation which meets these EALs.
- _____ 6.0 At the Site Area Emergency assist the ED with review of the PAR Logic Diagram (Exhibit 1C). Provide route for Site Accountability to the ED that avoids/minimizes radiological hazards.
- _____ 7.0 At the General Emergency assist the ED with development of a PAR (Exhibit 1C). Provide route for Site Evacuation to the ED that avoids/minimizes radiological hazards.
- 8.0 Should the TSC be or become unavailable, (e.g.; due to Fire, Security Event, etc.) refer to Exhibit 11 for guidance.

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EXHIBIT 8

TSC Radiological Assessment Support Engineer Checklist

Initials

- _____ 1.0 Report to the Radiological Assessment Coordinator (RAC) and provide support.
- _____ 2.0 Establish one entry point with a frisking station as directed by the TSC Coordinator/Radiological Assessment Coordinator.
- _____ 3.0 Place a sign on the south door, "This TSC Entrance Closed. Use other Door".
- _____ 4.0 Perform an operational check on the continuous air monitor to ensure the system is operating. Report Status to the TSC Coordinator when complete.
- _____ 5.0 Perform an operational check on the area radiation monitor to ensure the system is operating. Report Status to the TSC coordinator when complete.
- _____ 6.0 Provide radiological evaluation on the air and ambient radiation levels of the TSC.

CAUTION

Turn on HEPA filter when continuous air monitor trends upward after initial stabilization during startup.

- 6.1 If HEPA filter turned on, have filters monitored periodically (approx. every 15-30 minutes)
- 6.2 Post area in accordance with RadCon procedures.
- 6.3 Advise TSC Coordinator of survey results.
- 7.0 Distribute self reading dosimetry to all TSC personnel.
- 8.0 Perform radiological hazard/ALARA analysis for investigative, corrective, and recovery actions as directed.
- 9.0 On an ongoing basis determine source terms for ground and elevated releases and provide to EAC.
- 10.0 Perform internal and external personnel exposure evaluations as necessary.
- 11.0 Provide on going technical support and analysis for the radiological aspects in support of radiological control activities.

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EXHIBIT 8
(continued)

TSC Radiological Assessment Support Engineer Checklist

- 12.0 Establish Radiological Communications as the other emergency centers become activated. Maintain a Communications Log.
- 13.0 Activate the Dose Assessment Computer and ensure operability. Perform off-site dose calculations as requested by the RAC using actual or projected source terms.
- 14.0 Inform the RAC, or the TSC Coordinator in the absence of the RAC, that the TSC Radiological Work Area is ready for activation.
- 15.0 In the event of a radiological release, recommend on-site and near site protective actions as appropriate (see Exhibit 1B for guidance).
- 16.0 Maintain the Emergency Classification/PAR and Meteorology Status Board.
- 17.0 Present all documentation generated during the performance of their duties to the TSC Coordinator.

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EXHIBIT 9

PRESS RELEASE APPROVAL GUIDANCE

1.0 Press releases should be issued within approximately one hour from the time that a major plant event has occurred. Press releases shall include the time that the information is current and be written in accordance with the following guidelines:

1.1 The following categories of information should be included in press releases.

- a. Level of Emergency
This is simply identifying which one of the four emergency levels was declared.
- b. Basis for Emergency Declaration
This should be a simplified description of the plant condition which produced the emergency action level (e.g., a leak of radioactive water within the plant building).
- c. Operational Status of Plant
A simple description of plant status at the time of the emergency declaration (e.g., OCNCS was operating at 100% power when the leak was discovered, however, the plant is currently reducing power).
- d. Company/Government Interface
This is intended to inform the public that OCNCS has notified and is working closely with government officials so that public confidence and company credibility can be increased.
- e. Corrective Actions
This should be a nontechnical description of what plant personnel are doing to correct the problem. It may include such language as "attempts are being made to stop the leak" or "plant personnel are investigating the cause of the leak."
- f. Off-site Impact
A statement which simply assesses what impact this event may have on the environment. This is intended to provide factual information on off-site radiological conditions (e.g., a radioactive release is in progress, however, environmental monitoring teams have not detected any radiation levels off-site in excess of normal background). The initial press release should include all or part of the above information since time is of the essence. However, at the very least, it should contain items a-e above.

2.0 In addition to the above, the following guidance should be used in issuing press releases:

- Speculation, dose projections and Protective Action Recommendations should not be included in press releases.

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(continued)PRESS RELEASE APPROVAL GUIDANCE

- Press releases may have operational and radiological review but shall have concurrence by the ED. Original initialed copies are to be retained for records. Exceptions to this are limited to press releases with boiler plate information only (e.g., Pre-approved boiler plate news releases are contained in Procedure 1820-IMP-1720.01, Attachment 1) which may be issued without prior review and approval. Once the Governor has declared a "State of Emergency", all OCNCS press releases shall be provided to the State Police representative in the Media Center for review prior to final issuance. Changes made as a result of this review should be communicated to the ESD (ED if ESD is not activated).

NOTE

For security related events, press releases containing potential safeguards information are to be reviewed by the Security Coordinator.

- Press releases will be reviewed expeditiously in order to support timely issuance.
- Press releases should avoid technical terms (e.g., plant names) and jargon (e.g., trip) and should be written as simple as possible. For example, ISO Condenser could be referred to as a heat removal process from the reactor.

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EXHIBIT 10PLAN FOR STORAGE AND TRANSFER OF CONTAMINATED WATER

Prior to implementing a recovery program for handling large volumes of contaminated water, the conditions unique to the accident should be known and evaluated. Methods for dealing with large amounts of contaminated water and dependent on its volume, activity, and location, and require that technical evaluations be performed and special procedures be developed prior to implementation. Unless required by Emergency Operating Procedures or directed by the ED, it is OCNCS policy not to transfer radioactive material out of primary or secondary containment to any other storage location. For any such transfers (except as permitted by EOP's), a detailed safety evaluation must be performed and approved by the Emergency Director. This report, therefore, provides only general guidelines for the post accident handling of large volumes of contaminated water released as a result of pipe breaks that occur either in or out of primary containment.

I. PIPE BREAK IN PRIMARY CONTAINMENT

A pipe break in primary containment will cause contaminated liquid to be discharged initially to the Drywell basement floor. Depending upon the severity of the break, and if the 1-8 sump capacity is exceeded, contaminated water could eventually flood the basement and spill into the Torus. The Torus can accommodate an additional 126,000 ft³ of liquid before reaching its flooded volume capacity of 213,000 ft³.

A. Drains and Sump Operation in Primary Containment

The Drywell Floor Drain Sump 1-8 is part of the Equipment and Floor Drainage System and normally collects water from spills received through the Drywell floor drains. The sump is located in the Drywell at elevation 6'0" and has an available capacity of 81.6 gallons. The sump discharge is isolated (full valve closure of containment isolation valves V-22-28, 28) on high Drywell pressure or low, low reactor water level. These valves can also be manually controlled from panel 11F in Control Room by making necessary electrical changes per OCNCS Procedure 312.1, "Drywell Isolation Signal Bypass" (Emergencies). The sump pumps are interlocked to shutdown on closure of the discharge isolation valves. This allows for the isolation of contaminated liquid within primary containment. In addition, the sump can be manually isolated by closing sump pump discharge valves V-22-184, 186.

To discharge the contents of the sump for processing, pumps 1-8A and 1-8B can be manually operated intermittently using their respective power supplies 1A21 and 1B21. This operation assumes that the containment isolation valves have reopened or are in the open position. Also, the sump isolation valves V-22-184, 186 should be considered for manually controlling the sump discharge flow.

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21EXHIBIT 10
(continued)PLAN FOR STORAGE AND TRANSFER OF CONTAMINATED WATERII. PIPE BREAK OUTSIDE PRIMARY CONTAINMENT

The most likely areas for contaminated water to collect following a pipe break in the Reactor Building or Turbine Building basement are Reactor Building sump 1-6 and 1-7 and Turbine Building sump 1-3. The amount of contaminated water expected to be released during a break outside primary containment will be relieved through the floor drain system located in each building to the respective sump.

A. Drains and Sump Operation Outside Primary ContainmentReactor Building

Contaminated water relieved through the floor drains in the Reactor Building will collect in sumps 1-6 and 1-7 (SE Corner). The sumps are located at Elevation -19'6" and have a combined capacity of approximately 1,500 gallons. The sumps are interconnected and provided with sump inlet isolation valves (V-24-35, 36, 37, 38) which automatically close on high, high sump level. Sump 1-7 discharge lines are equipped with isolation valves (V-22-167, 169) that are manually (local) controlled to allow for sump isolation, and can be used to control sump outlet flow for intermittent liquid processing. In addition to valve manipulations, the sump pumps can be tripped off manually from the 480 switchgear room (supplies 1A21, 1B21) to allow for local sump flooding and contaminated liquid isolation.

Turbine Building

The Condenser Bay Area of the Turbine Building basement is most likely to accumulate contaminated water resulting from a pipe break in the basement and steam tunnel. In the extreme case, a pipe line break (LOCA) in the Main Steam System outside primary containment would cause high pressure steam to be discharged from both sides of the break. However, the flow limiters in the main steam line would control the blowdown to 200% of rated flow. The line break would be sensed by either increased pressure drop across venturis due to high steam flow rate, or increased temperature in pipe tunnel, and main steam isolation valve closure would be activated within 0.5 seconds after break and full valve closure at 10.5 seconds. The limited amount of contaminated water deposited as the steam condense would be drained through the Equipment Floor Drain System. The basement floor is equipped with a segregated floor drain system for controlled drainage to the Turbine Building sumps. Sump 1-3 collects the contaminated water generated in a Condenser Bay Area and would collect the water generated from a major pipe break. The sump is located at Turbine Building (NW corner of Condensate Pump Pit) at elevation 0'0" and has a capacity of 1,500 gallons.

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EXHIBIT 10
(continued)

PLAN FOR STORAGE AND TRANSFER OF CONTAMINATED WATER

The sump pump discharge valves (V-22-172, 174) are manually (local) isolated from the Turbine Building and the sump pump power supplies (1A12, 1B12) secured from Turbine Building Mezzanine North Control location. Manual isolation of sump 1-3, which is similar to the manual isolation of Reactor Building sump 1-7, will allow local flooding to occur. Intermittent pump operation or valve throttling will allow for controlled liquid processing at a desired capacity.

III. SAMPLING CONTAMINATED WATER

Samples of the contaminated water should be obtained to determine the liquid's radioisotopic content and conductivity. The sampling results will influence the subsequent processing path chosen.

Possible sample points that should be investigated for use are:

<u>TO SAMPLE</u>	<u>USE</u>	<u>LOCATION</u>
Torus	V-21-57	"C" Containment Spray Pump - Reactor Building
Drywell Sump (1-8)	Drywell Sample Valve	Reactor Building 23' Elev.
Reactor Building Sump (1-7)	DS HV-133	ORW Pipe Tunnel
Turbine Building Sump (1-6)	DS HV-134	ORW Pipe Tunnel

Since operation of the respective sump pumps will be required for sampling, pump run time should be minimized to limit the amount of contaminated water transported to Chem. Waste/Floor Drain System. An attempt should be made, therefore, to sample the contaminated water at a point nearest to the break location using a Geyser Pump and ALARA practices when transporting the liquid.

IV. PROCESSING SCHEMES

Prior to transferring highly contaminated water from its spill area, several issues need to be addressed in a technical evaluation. These include:

1. Does the flooded area need to be recovered radiologically to allow workers entry?
2. Does retaining the water pose a greater radiological concern than transferring to Radwaste?
3. Does Radwaste have available capacity?
4. Are there processing options such as a temporary demineralizer?

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21EXHIBIT 10
(continued)PLAN FOR STORAGE AND TRANSFER OF CONTAMINATED WATER

These types of concerns should be addressed on an individual basis prior to implementing a processing plan.

A. NORMAL

Contaminated water generated within the plant during normal operation which collects in the Drywell, Turbine Building, or Reactor Building sumps is transferred to the Chem. Waste/Floor Drain System for processing. This system, in addition to the High Purity Liquid Waste System, comprises the new Radwaste Liquid Radwaste System. The Chem. Waste/Floor Drain System receives the sump water in a series of collector tanks; WC-T-1A, 1B, 1C. The total combined capacity of these tanks is 42,000 gallons. In the event that this primary collector capacity is unavailable for use, 10,000 gallons of secondary collector capacity is available by diverting flow to the ORW Floor Drain Collector Tank NV-49. Flow from the Turbine Building sumps to NV-49 can be accomplished by manually opening DS-HV-111 and closing DS-HV-106 from their location in the ORW pipe tunnel. Flow from Reactor Building Sump 1-7 to NV-49 can be accomplished by closing DS-HV-109 and opening DS-HV-114. Additional tanks available for receiving water are:

Waste Neutralizer Tanks NV-05A/B - 10,000 gallons each.
High Purity Waste Collector Tank HP-T-1B - 30,000 gallons.

Water can be transferred from NV-49 to the Waste Neutralizer Tank using Section 11 of OCNCS Station Procedure 313.2.
The Chem. Waste/Floor Drain System is capable of processing water at 60 GPM with both process trains in use.

B. According to Sample Results**Water with Excessively High Radioisotopic Activity**

Contaminated water of excessively high radioisotopic activity which precludes safe handling and disposition will be retained at its location and processed in small enough portions such that exposures to operating personnel are not significantly impacted. The method for handling this water will depend on its location and rad levels. If necessary, steps should be taken to dilute the Contaminated water with low activity water to reduce the concentrations. Subsequent to authorization allowing the processing to occur, contaminated water located in the sumps can be directed to the Chem. Waste/Floor Drain

System tanks and diluted as required. Water located in the Torus can be drained through the Containment Spray Pumps 1-3 and 1-4 manual drain valves V-21-57, 58. Manual drainage in this manner will allow water to subsequently be processed in either the High Purity System or Chem. Waste/Floor Drain System depending on water quality. (Water sent to High Purity System should have conductivity less than 50 UMHOs/CM - refer to SP-1302-28-001 Water Quality, OCNCS or the permission of the Manager of Chemistry).

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EXHIBIT 10
(continued)

PLAN FOR STORAGE AND TRANSFER OF CONTAMINATED WATER

Outdoor Storage Limit Not Exceeded

If the radioisotopic concentration of the contaminated water in the Torus is such that the outdoor storage Technical Specification (3.6.C) of 10 curies (see note below) would be exceeded, and processing cannot be initiated, outdoor storage options should be investigated. The following tanks can be used to store water:

Condensate Storage Tank - 535,000 gallons

Torus Water Storage Tank - 763,000 gallons

A temporary connection from the blind 14" flange off the common discharge header of containment Spray Pumps 1-3 and 1-4 will allow water to be transferred from the Torus to the above tanks.

NOTE: The new Radiological Effluents Technical Specifications Spec. 3.6.C allows storage of up to 10.0 Ci in the Condensate storage Tank. OCNGS would have to apply to the NRC for authorization to include Torus Water Storage Tank in the outdoor storage plan.

C. Radiation Levels not a Limiting Constraint
Processing through High Purity Waste System

Contaminated water of low mineral content is normally processed through the High Purity System. Torus water can be routed through Containment Spray Pumps 1-3, 1-4 drain valves V-21-57, 58 and allowed to collect in the R.B.E.D.T. The contents of the tank can then be pumped directly to the High Purity Waste Collector Tanks using existing connections. Contaminated sump water can be processed through the Chem. Waste/Floor Drain System bypassing the evaporators. Processing without the evaporators will allow rates approaching 60 GPM per train.

Processing through Chem. Waste/Floor Drain System

Contaminated water of high mineral content is normally processed through the Chem. Waste/Floor Drain System. Since sump water is normally processed through this system, temporary connections are not required. Contaminated Torus water can be processed through this system if the Reactor Building Equipment Drain Tank (R.B.E.D.T.) is allowed to overflow into Reactor Building sump 1-7(B). This can be accomplished by directing Torus water through Containment Spray Pumps 1-3, 4 drain valves (V-21-57, 58), so that drainage to the R.B.E.D.T. through the floor drain system will occur (see Appendix 1). The normal effluent path of R.B.E.D.T. can be manually isolated to allow for overflow by controlling pump isolation valves V-22-150, 152 from the Reactor Building or by manually controlling pump power (local controls - supply MCC 1B21).

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EXHIBIT 10
(continued)

PLAN FOR STORAGE AND TRANSFER OF CONTAMINATED WATER

V. STORAGE OF PROCESSED WATER

The Chem. Waste/Floor Drain System has the capability of providing 20,000 gallons of primary storage space. Two Chem. Waste Distillate Storage Tanks (WC-T-3A, 3B) normally provide space for water processed through the Chem. Waste System during normal operation. Two storage tanks, HP-T-2A, 2B, provide 60,000 gallons of High Purity Storage for water processed through the High Purity System. In addition, water processed in these two systems may be discharged to the condensate system directly if they are of condensate quality.

Secondary Storage Capacity is provided through use of the following vessels:

Condensate Storage Tank - 535,000 gallons
Hotwells - 84,550 gallons
Torus Water Storage Tank - 763,600 gallons

The secondary storage capacity will find use if the Torus contents have been processed and additional storage capacity is required.

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EXHIBIT 11

Relocation of the TSC

- 1.0 This Exhibit provides guidance for establishing TSC functions in alternate locations when directed by the ED.
- 2.0 TSC functions should be divided between the ECC and OSC as follows (ED may direct other arrangements as needed):
 - 2.1 The following should relocate to the ECC, take direction from the ED, and follow EPIP-26 or EPIP-35 as appropriate.

NOTE

The ECC has limited space and facilities so the number relocated here should be minimized.

2.1.1 ED

- ED briefings should be made on the Plant Page System or by telephone

2.1.2 ED Assistant

2.1.3 RAC/RASE

2.1.4 Core Engineer (if required in ECC)

2.1.5 Communications duties should be handled by the existing ECC communicators and the EOF for off site notifications once activated.

- 2.2 The following should relocate to the Drywell Command Center (Conference Room) of the OSC and take direction from the TSC Coordinator:

NOTE

The OSC has computer terminals and a set of plant procedures and drawings.

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EXHIBIT 11
(continued)

Relocation of the TSC

2.2.1 TSC Coordinator

- Continue to take direction from the ED while coordinating with the OSC Coordinator to minimize interference.

2.2.2 TSC Engineers

2.2.3 TSC Communications Coordinator

2.2.4 TSC Communicators

2.2.5 TSC Tech Assistant

2.2.6 Core Engineer (if not required in the ECC)

NOTE

The OSC has limited space and may be controlling several Damage Control Teams. To minimize interference only the TSC Coordinator should interface with the OSC Coordinator initially.

2.3 The following guidance is provided for integrating the TSC engineering function into the OSC.

2.3.1 TSC Engineer should establish a work space in the Drywell Command Center and survey the available procedures and drawings. If additional references are needed, they may be obtained from the Maintenance building.

NOTE

Anyone leaving the OSC building must be tracked as a team.

2.3.2 The Plant Computer System terminal is located in the OSC in a very busy area. If it is needed, coordinate with OSC staff to minimize interference.

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EXHIBIT 11
(continued)

Relocation of the TSC

2.3.3 TSC Communicators may not be needed by the OSC. However, ~~at least one should be used to support~~ ED/TSC Coordinator Communications. This may be via a normal telephone to ECC. This should be coordinated with the ECC Communications Coordinator.

Communicators who are not required for OSC operations may be useful at the EOF, especially if NRC is sending a response team. This should be coordinated with the EOF Communications Coordinator.

2.3.4 The Tech Assistant may be useful to assist the OSC with operational related teams. He may replace or supplement the GOS assigned to the OSC.

2.3.5 Personnel who are not required may be sent to the Emergency Assembly Area or Remote Assembly Area as appropriate. If neither Assembly Areas are activated, they may be sent home with reporting instructions for the next day (e.g.; report to site, EOF, OSC, etc.).

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EXHIBIT 12

ALTERNATE EMERGENCY RESPONSE FACILITIES

This exhibit provides a description of evacuation preplanning for Alternate Emergency Response Facilities as follows:

1. Control Room/ECC - Evacuation of Control Room - the Operators control the plant from remote shutdown panels and the GSS directs plant operations from the TSC. All other ECC IREO members are integrated into the TSC organization. (Refer to 2000-ABN-3200.30 for specific direction).
2. OSC - Evacuation of OSC - all OSC personnel are evacuated to the SOSC which is located in the rear of the TSC. (Refer to EPIP-OC-27 for specific direction.)
3. TSC - Evacuation of TSC - the ED support staff which includes the ED, ED Assistant, RAC, and RASE evacuate to the Control Room (ECC). The Tech Support staff which includes the TSC Coordinator, TSC Engineers, Communication Coordinator, Communicators and the Tech Assistant evacuate to the OSC. The Core Engineer would initially report to the Control Room, but if his services are not needed, he will be sent to the OSC.
4. Remote Assembly Area - Evacuation of RAA's - if the Forked River Bldg. 14 RAA is not available then relocate to the Berkeley Customer Operations Center and vise versa.
5. Emergency Assembly Area - The EAA may be redirected to the Forked River Assembly Area or to the Remote Assembly Area at Berkeley Line as directed by management. In this case Site Accountability is conducted as personnel exit the site.
6. EOF - There are no backup facilities for the EOF because it is remote from the site and it is unlikely that a nuclear related incident would affect both the plant and this center.

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21EXHIBIT 13EMERGENCY DIRECTOR AUTHORIZATION FORM FOR DEVIATIONS FROM REQUIREMENTSTYPE OF DEVIATION

- I. Deviations authorized under the Emergency Plan.
Deviations from operating procedures, emergency procedures, emergency plan implementing procedures, or normal equipment operating limits that do not result in a deviation from Technical Specifications, Operating License, License Conditions or other NRC Rules, Regulations, or Orders.
- II. Deviations authorized by 10 CFR 50.54 (x) and (y) for the protection of public health and safety.
- A. Departure from a Technical Specification requirement.
- B. Departure from the Operating License.
- C. Departure from a License Condition.
(Refer to page E13-3 & 4 for assistance in defining "License Conditions")
- D. Departure from NRC Rules, Regulations, or Orders.

Deviations are only permissible if all of the following are met:

1. An Emergency condition exists which can impact the public health and Safety.
2. The deviation is allowed if there are no actions which are inconsistent with license conditions or technical specifications.
3. The action must be taken immediately in order to be effective in protecting the public health and safety.

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EXHIBIT 13
(continued)

EMERGENCY DIRECTOR AUTHORIZATION FORM FOR DEVIATIONS FROM REQUIREMENTS

DEVIATION JUSTIFICATION

TYPE I II (circle)	TYPE I II	TYPE I II
<u>Deviation From</u>	<u>Deviation From</u>	<u>Deviation From</u>
<input type="checkbox"/> Procedure _____	<input type="checkbox"/> Procedure _____	<input type="checkbox"/> Procedure _____
<input type="checkbox"/> Tech Spec _____	<input type="checkbox"/> Tech Spec _____	<input type="checkbox"/> Tech Spec _____
<input type="checkbox"/> Operating License _____ (includes EOP's)	<input type="checkbox"/> Operating License _____ (includes EOP's)	<input type="checkbox"/> Operating License _____ (includes EOP's)
<input type="checkbox"/> License Condition _____ (See E13-3&4)	<input type="checkbox"/> License Condition _____ (See E13-3&4)	<input type="checkbox"/> License Condition _____ (See E13-3&4)
<input type="checkbox"/> NRC Rules, Reg or _____ Orders	<input type="checkbox"/> NRC Rules, Reg or _____ Orders	<input type="checkbox"/> NRC Rules, Reg or _____ Orders
<input type="checkbox"/> Other _____	<input type="checkbox"/> Other _____	<input type="checkbox"/> Other _____
<u>Deviation Justification</u>	<u>Deviation Justification</u>	<u>Deviation Justification</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
<u>Alternatives Considered</u>	<u>Alternatives Considered</u>	<u>Alternatives Considered</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
SRO Concurrence _____	SRO Concurrence _____	SRO Concurrence _____
TSC Engr Concurrence _____	TSC Engr Concurrence _____	TSC Engr Concurrence _____
ED Approval _____	ED Approval _____	ED Approval _____
Date Time	Date Time	Date Time
Notification of NRC by _____	Notification of NRC by _____	Notification of NRC by _____
Date Time	Date Time	Date Time
NRC Person Notified _____	NRC Person Notified _____	NRC Person Notified _____

EXHIBIT 13 (continued)
EMERGENCY DIRECTOR AUTHORIZATION FORM FOR DEVIATIONS FROM REQUIREMENTS

LICENSED CONDITIONS

REGULATION	REQUIREMENT	DESCRIPTION	DEVIATION
10 CFR 50.54(A) 10 CFR 50 APP. B	OQA Plan	Plan to insure quality in all phases of Nuclear Plant operation and to enhance Safety	A 50.54(x) deviation consists of not implementing the OQA Plan of a section of the Plan to protect public safety and health. See NOTE 1 below.
10 CFR 50.54(p) 10 CFR 73.55	Safeguards and Security Plan	Requirement for Physical Security and control of information pertaining to the method employed.	A 50.54(x) deviation is not implementing a major portion of the Security Plan to protect public health and safety. See Note 2 below.
10 CFR 50.54(q) 10 CFR 50.47(b) 10 CFR 50 APP. E	Emergency Plan	Plan to insure the appropriate facilities, personnel, procedures and equipment are available to adequately respond to emergencies. The sub-parts of this item are: * Standard Classification System * Notification of Local, State and Federal Organizations * Methods, Systems & Equipment for assessing & monitoring actual or potential radiological consequences * Use of Protective Action Recommendations * Controlling radiological exposure * Activation/use of Emergency Response Facilities * Use of ERDS (Emergency Response Data System)	All of these sub-parts of the Emergency Plan are implemented via implementing procedures. Examples of 50.54(x) DEVIATIONS, while protecting public health and safety follow: Deciding intentionally to <u>NOT</u> - * Control exposures of all workers per EPA-400 limits * Activate the Emergency Response organization * Use/Activate Emergency Facilities The other items of this part do not meet the criteria for a 50.54(x) DEVIATION that would still protect the public health and safety. Any instance of not complying with these parts is a violation, but not a valid DEVIATION.
10 CFR 50.54(z)	NRC Operations Center	Requires notify and maintain communications with the NRC Operations Center of events specified in 10 CFR 50.72	A 50.54(x) deviation is when the NRC is Intentionally Not notified or when communications with NRC is being suspended without NRC concurrence to protect public health and safety.

EXHIBIT 13 (continued)

EMERGENCY DIRECTOR AUTHORIZATION FORM FOR DEVIATIONS FROM REQUIREMENTS
LICENSED CONDITIONS (CONTINUED)

NOTE 1 - The OQA Plan describes the formal plan to implement the requirements of 10 CFR 50 Appendix B. The Plan contains the controls and bases for procedures that implement the Plan. If an entire process described in the Plan is not followed, this must be considered under 10 CFR 50.54(x). It is unlikely that such a deviation could be considered to protect the health and safety of the public thus could not be authorized under 10 CFR 50.54(x). Specific and individual deviations from the plan's implementing procedures are not considered a deviation from the Plan, and as such would still require the approval of the Emergency Director and documentation on Exhibit 6 but would not require notification of the NRC per 10 CFR 50.72(a) (2) (i) (C).

NOTE 2 - The Security Plan implements the requirements of 10 CFR 73.55. In essence, deviations from the Security Plan are deviations from 10 CFR 73.55 and in accordance with 10 CFR 73.55(a) are reported in accordance with 10 CFR 50.54(x). In addition to the Security Plan, 10 CFR 73.55 required a Safeguards Contingency Plan which gives guidance to accomplish specific defined objectives for different events. The Safeguards Contingency Plan is considered similar to an implementing document and therefore specific deviations from it are not 10 CFR 50.54(x) deviations. However, if whole parts of the Safeguards Contingency Plan are not followed, these should be considered under 10 CFR 50.54(x).

Example: The Security Plan, as required by 10 CFR 73.55, contains requirements on access controls. If access controls are suspended this should be considered a deviation of the Security Plan and be reported in accordance with 10 CFR 50.54(x). However, if access controls will be maintained but differently than described in the procedures, this is not a 10 CFR 50.54(x) deviation but would still require the appropriate approval and documentation using this exhibit page E13-1 and E13-2.

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EXHIBIT 13 (continued)

EMERGENCY DIRECTOR AUTHORIZATION FORM FOR DEVIATIONS FROM REQUIREMENTS

ADDITIONAL INFORMATION AND REGULATORY EXCERPTS

- 50.54(x) - A licensee may take reasonable action that departs from a license condition or technical specification (contained in a license issued under this part) in an emergency when this action is immediately needed to protect the public health and safety and no action consistent with license conditions and technical specifications that can provide adequate or equivalent protection is immediately apparent.

NOTE

The NRC has interpreted 50.54(x) to apply to NRC rules, regulations and orders in addition to Technical Specifications, Licenses, and License Conditions.

- 50.54(y) Licensee action permitted by paragraph (x) of this section shall be approved, as a minimum, by a licensed senior operator prior to taking the action.

- 73.55(a) In accordance with section 50.54(x) and (y) of Part 50, the licensee may suspend any safeguards measure pursuant to Section 73.55 in an emergency when this action is immediately needed to protect the public health and safety and no action consistent with the license conditions and technical specifications that can be provide adequate or equivalent protection is immediately apparent. This suspension of safeguards measures must be reported in accordance with the provisions of 73.71. Reports made under Section 50.72 need not be duplicated under 73.71.

NOTE

In essence, no one below a licensed SRO individual can make the decision to depart from the License. However, if a more senior manager is present (i.e., Emergency Director) even though he does not possess an SRO license, the decision authority would be passed to him as a higher authority in the chain of command. The licensed SRO shall provide his best judgment to the ED for his consideration. Beyond that the SRO shall follow the orders of his supervisor.

It is suggested that the Emergency Director consult to the extend practicable with the Technical experts at the TSC in arriving at a decision to deviate from prescribed procedures. However, Emergency Operating Procedures should not be deviated from.

- 50.72(b) Any deviation from the plant's technical specifications authorized pursuant 50.54(x) of this part.

NOTE

Notify the NRC before taking action if time permits, but at least within 1 hour of the deviation.

The NRC interprets the reporting requirement to cover any departure under 50.54(x) and (y), and is not limited to Technical Specification deviations.

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21EXHIBIT 14CORE ENGINEERS RESPONSIBILITIES

- 1.0 Report to the TSC Coordinator, unless needed in the ECC. If Core Engineer reports to ECC first, then the TSC coordinator should be informed.
- 2.0 As requested assist the TSC Coordinator in activation operation, and recovery of the TSC as applicable. Refer to Coordinators Checklist (Exhibit 3) for guidance.
- 3.0 Perform and document Core Damage Estimation Reports in accordance with EPIP-OC.33 and other engineering tasks as directed by the TSC Coordinator.
- 4.0 Assist with the PCS and SPDS Programs as requested.
- 5.0 Present all documentation generated during the performance of their duties to the TSC Coordinator.
- 6.0 As directed, assist TSC Coordinator in deactivation of TSC.
- 7.0 Should the TSC be or become unavailable (e.g., due to fire, security event, etc.) refer to EXHIBIT 11 which provides guidance for the establishment of the TSC functions in alternate locations.

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21EXHIBIT 15SITE ACCESS POLICY FOR MEDIA DURING EMERGENCIES

Providing reasonable site access to the media during a plant emergency is in the best interest of OCNCS and the public.

Responsibility for approving site access rests with the Emergency Support Director, or, if the EOF is not activated, with the Emergency Director.

For purposes of media access to the site during an emergency, the same industrial safety and security standards and requirements that apply to non-essential employees will be applied to the media.

Communication Dept. Responsibilities

Request for media access will be made to the ESD or ED by the Public Information Duty Representative or the Media Center Lead.

Communications will provide the ED/ESD with the number of media to gain site access, areas to be accessed and length of time the media will be there. (Communications will decide the number of media gaining access based on conditions at the time of the emergency. An attempt will be made to gain access for, at a minimum, one representative each from radio, television and print media.)

Communications will provide media transportation on and off site.

Communications will have each member of the media sign a Media Access Briefing Form, Exhibit 20, indicating they were briefed about the risks as they were known at the time by the corporation.

1. If media access does not involve entry into a posted radiologically controlled area:
 - a. At Oyster Creek, Security will retain responsibility for sign in and badging.
 - b. Communications will supervise and escort the media while on site.
 - c. Communications will conduct a briefing explaining the radiological and industrial conditions and risks on site.
2. If media access involves entry into a posted radiologically controlled area:
 - a. Media will be processed as appropriate, receiving dosimetry, training, bioassay, waivers and briefings based on established procedural requirements.
 - b. Communications will notify the Security Coordinator prior to site access.

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EXHIBIT 15

SITE ACCESS POLICY FOR MEDIA DURING EMERGENCIES
(continued)

- c. Communications in conjunction with Radiological Controls will supervise and escort the media while in posted radiologically controlled areas.

ED/ESD Responsibilities

1. The ED/ESD will consult with the RAC/Group Leader R&EC, and media may be granted access if the projected dose will not exceed the 500 millirem annual limit including external and internal exposure.

NOTE

For security driven events, Media access to the site must also be approved by the local Law Enforcement Agency and Security.

2. Approve media access to the site if requirements are met.

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EXHIBIT 16

Page of

EMERGENCY SHIFT SCHEDULE
EXAMPLE

DATE:

GROUP (eg. Admin.):

TIME:	SHIFT 1	SHIFT 2	SHIFT 3
BEGIN			
END			

	NAME	NAME	NAME
POSITION #			
P H O N E	HOME #		
	WORK #		
	BEEPER #		
POSITION #			
P H O N E	HOME #		
	WORK #		
	BEEPER #		
POSITION #			
P H O N E	HOME #		
	WORK #		
	BEEPER #		
POSITION #			
P H O N E	HOME #		
	WORK #		
	BEEPER #		

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EXHIBIT 19
EXAMPLE

Number _____					
OCNGS Emergency Message					
To:	OSC	TSC	EACC	_____	
	ECC	EOF		Staff Position Other	
Message:					
Originator: _____					
	Staff Position		Initials	Time	Date
Location:	ECC	TSC	OSC	EACC	EOF
Reply:					
Reply Completed by: _____					
	Staff Position/Other		Initials	Time	Date

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EXHIBIT 20

MEDIA ACCESS BRIEFING FORM

I have been briefed about the risks, both industrial and radiological, to which I may be exposed while at this nuclear facility. I understand there may be some risk and willingly accept it for the purpose of visiting the plant site.

Signature _____

Date _____

News Organization _____

Communications Rep. _____

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Applicability/Scope Applies to work at Oyster Creek	Responsible Office Emergency Preparedness
This document is within QA plan scope Safety Reviews Required	Effective Date Date of Sale
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Prior Revision 8 incorporated the following Temporary Changes:

N/A

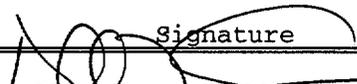
This Revision 9 incorporates the following Temporary Changes:

N/A

List of Pages (all pages rev'd to Rev. 9)

- 1.0 to 6.0
- E1-1 to E1-6
- E2-1 to E2-2
- E3-1 to E3-2
- E4-1 to E4-4
- E5-1
- E6-1 to E6-2
- E7-1 to E7-2
- E8-1
- E9-1
- E10-1 to E10-2
- E11-1
- E12-1 to E12-2
- E13-1
- E14-1
- E15-1
- E16-1

**NON-CONTROLLED
This Document Will Not
Be Kept Up To Date
DCC Oyster Creek**

	Signature	Concurring Organization Element	Date
Originator		Emergency Planner	1/11/00
Concurred By		Director, Ops/Mtce	1-12-00
Approved By		Emergency Preparedness Mgr, O.C.	1/13/00

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DOCUMENT HISTORY

PREPARED BY:
REVIEWED BY:
APPROVED BY:

REVISION	EFFECTIVE DATE	DESCRIPTION OF CHANGE	
4	05/94	Provide instructions on Exhibit 1B for Radwaste Operator Accountability.	
5	09/95	1. Clarify EX6A. 2. Clarify EX7A. 3. Modify EX8 to include UPS. 4. Modify EX10 to renumber damage equip. lockers.	
6	06/97	Improved method of information flow and computer equipment upgrades. Inclusion of communicators duties from EPIP-OC-.04	
7	01/98	Added a check on OSC Activation Checklist to make sure facility doors are open. Added a check on OSC Deactivation checklist to restore doors to original configuration. Delete ED/OPS & Plant Status lines. They are incorporated into OPS Coordinator line.	
8	10/99	Change "in accordance" to "suggested", pg. E1-1 & E7-1. Add RWP# to pg. E4-1 and add "typical arrangement" to pg. E8-1, E9-1. Add Fax Log E 14-1. Add GPU Emergency Message form E15-1, add Communication Log E16-1. Add "contact security for TEAM status update".	
9	DOS	Change references from GPU to OCNCS.	

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1.0 PURPOSE

1.1 This procedure provides for the activation and functioning of the Operations Support Center (OSC) and Secondary Operations Support Center (SOSC).

1.1.1 The OSC is located in the Drywell Processing Center.

1.1.2 The SOSC is located in the rear of the Technical Support Center (TSC) on the first floor of the Site Emergency Building.

1.2 Guidance and direction are given by this procedure for Command and Control of the OSC, emergency team organization, search and rescue, and damage control operations.

2.0 APPLICABILITY/SCOPE

2.1 This procedure applies to OSC personnel and all others who support the OSC during declared or simulated emergencies.

3.0 DEFINITIONS

None

4.0 RESPONSIBILITIES

4.1 The Operations Support Center (OSC) Coordinator will perform duties in accordance with Exhibit 1.

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- 4.2 The Functional Area Coordinators will complete Exhibit 2A.
- 4.2.1 The Emergency Maintenance Coordinator (EMC) shall direct the activities of maintenance personnel involved in emergency maintenance repair and corrective actions. He shall also direct the Equipment Operators in their Emergency Duties unless an off-shift GSS is assigned or the Equipment Operators remain under the direction of the Operations Coordinator.

NOTE

The Emergency Maintenance Coordinator shall ensure appropriate actions are taken to replace or replenish any respirator equipment used to respond to a plant emergency.

- 4.2.2 The Radiological Controls Coordinator (RCC) shall coordinate onsite and in-plant rad con support in accordance with EPIP-OC-.35, "Radiological Controls Emergency Actions."
- 4.2.3 The OSC Operations Coordinator, if assigned, shall receive directions from the Control Room through the OSC Coordinator and direct the emergency duties of the Equipment Operators.
- 4.2.4 The Medical Representative shall provide triage recommendations and medical assistance as required.

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5.0 PROCEDURE

5.1 On Shift Emergency Organization will be directed to report to the appropriate areas by the Emergency Director (GSS).

5.1.1 OSEO may not be required to immediately activate the OSC.

Their activities will be determined by ED/SSM

5.2 Initial Response Emergency Organization (IREO) personnel will report to the OSC when they are notified of the activation of the ERO and perform the responsibilities identified in their assigned exhibits to this procedure and as requested by their emergency supervisors.

NOTE

Emergency Maintenance, Chemistry, Rad Con, and First Aid equipment locker locations are identified in Exhibit 10, OSC Kits and Locker Locations.

NOTE

Keys for locker padlocks are maintained in the OSC facility key locker, which will be unlocked upon activation of the center. The locker key is in the OSC Coordinator log book. The lock is the "Breakaway" type and can be twisted off by hand if necessary.

6.0 REFERENCES

- 6.1 2000-PLN-1300.01, OCNCS Emergency Plan.
- 6.2 EPIP-OC-.01, Classification of Emergency Conditions.
- 6.3 EPIP-OC-.10, Emergency Radiological Surveys Onsite.
- 6.4 EPIP-OC-.12, Personnel Accountability.
- 6.5 EPIP-OC-.26, The Technical Support Center.
- 6.6 EPIP-OC-.35, Radiological Controls Emergency Actions.
- 6.7 Procedure 106, Conduct of Operations.
- 6.8 Procedure 106.6, Conduct of Chemistry Operations.
- 6.9 Procedure 107, Procedure Control.
- 6.10 Procedure 124.2, Control of Plant Engineering Directed Replacements and Modifications.
- 6.11 Procedure OEP-ADM-1319.02, Emergency Response Facilities and Equipment Maintenance.
- 6.12 Procedure 831.10, Operation of the GE Post-Accident Sampling System.

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7.0 EXHIBITS

- 7.1 OSC Coordinator Checklist
Exhibit 1A, Activation of OSC
Exhibit 1B, Operation of OSC
Exhibit 1C, Deactivation of OSC
- 7.2 Functional Area Coordinator Checklist
Exhibit 2A, Activation of OSC
Exhibit 2B, Operation of OSC
- 7.3 Search and Rescue Assignment
Exhibit 3A, Checklist
Exhibit 3B, Guidelines
- 7.4 Emergency Team Briefing/Debriefing
Exhibit 4A, Briefing Form
Exhibit 4B, Debriefing Form
Exhibit 4C, Briefing Guidelines
Exhibit 4D, Debriefing Guidelines
- 7.5 Emergency Job Planning Guidelines
Exhibit 5
- 7.6 Exhibit 6A, Evacuation of OSC to the SOSC OSC Coordinator Checklist
Exhibit 6B, Evacuation of OSC to the SOSC Functional Area Coordinators Checklist
- 7.7 Exhibit 7A, Activation of SOSC, OSC Coordinator Checklist
Exhibit 7B, Activation of SOSC, Functional Area Coordinators Checklist
- 7.8 Exhibit 8, OSC Floor Plan
- 7.9 Exhibit 9, SOSC Floor Plan
- 7.10 Exhibit 10, OSC Kits and Locker Locations
- 7.11 Exhibit 11, OSC Communicator - Team Status Tracking
- 7.12 Exhibit 12, OSC Communications Coordinator Responsibilities
- 7.13 Exhibit 13, OSC Emergency Shift Schedule
- 7.14 Exhibit 14, OSC Hy Fax Log
- 7.15 Exhibit 15, OSC Emergency Message
- 7.16 Exhibit 16, OSC Communication Log

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EXHIBIT 1A

OSC COORDINATOR CHECKLIST
ACTIVATION OF OSC

CHECK

- _____ 1.0 Ensure the OSC is set up as suggested in Exhibit 8.
- _____ 2.0 The OSC should be declared activated when the following areas are functional:

NOTE

These areas need not be 100% staffed to be considered functional.

- Radiological Protection
- Maintenance Support (appropriate expertise)
- Communications links to Ops Coordinator and TSC Coordinator

- _____ 3.0 Report OSC activated to the Operations Coordinator and log time. _____
- 3.1 Announce to OSC staff that center is activated.
- 3.2 Determine plant status and update center staff.

NOTE

The following actions should be performed expeditiously but are not necessary to declare the OSC functional.

- _____ 4.0 Radiological Monitoring Established
- _____ 5.0 Make sure facility access/egress doors are in the proper configuration. (Facility doors, including Drywell Process Facility, may lock automatically when closed. Tape over or otherwise disable locking mechanism to allow access/egress)

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EXHIBIT 1A (continued)

OSC COORDINATOR CHECKLIST
ACTIVATION OF OSC

CHECK

- 5.0 Areas Staffed:
 - 5.1 Emergency Maintenance Coordinator
 - 5.2 Rad Con Coordinator
 - 5.3 OSC Operations Coordinator
 - 5.4 Medical Representative
 - 5.5 OSC Communications Coordinator
 - 5.6 Chemistry Coordinator

NOTE

Notify Security of OSC positions not manned and request appropriate persons be contacted.

- 6.0 Communications established
 - 6.1 OSC Coordinator Line
 - 6.2 Communications operability check completed on all center phone/fax systems. Report deficiencies to the OSC Communications Coordinator.

OSC Coordinator

Date/Time

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EXHIBIT 1B

OSC COORDINATOR CHECKLIST
OPERATION OF OSC

- 1.0 Maintain communications with Emergency Director and Operations Coordinator.
- 2.0 Maintain communications with Functional Area Coordinators.
- 3.0 Perform job planning activities using Exhibit 5, Emergency Job Planning Guidelines.
- 4.0 Periodically advise Functional Area Coordinators to provide updates to their respective standby personnel.
- 5.0 Approve the call-out of additional support personnel requested by Functional Area Coordinators as required.
- 6.0 Evaluate the need for an Industrial Safety Representative to provide guidance and recommendations for work involving entry to confined spaces or extreme temperature work conditions.
- 7.0 Periodically advise the ED of the status of all OSC teams.
- 8.0 Notify the Emergency Director if OSC habitability conditions exist that could require evacuation.
- 9.0 If evacuation of OSC becomes necessary, refer to Exhibit 6 A & B, 7 A & B, Evacuation of OSC/Activation of SOSOC.
- 10.0 Personnel accountability is performed as directed by the ECC.

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EXHIBIT 1B
(continued)

OSC COORDINATOR CHECKLIST
OPERATION OF OSC

- 10.1 Announce Site Accountability to OSC Staff and ensure that all personnel present in the OSC have key carded into accountability card readers.

NOTE

Radwaste Operators will be tracked as a team at the "ALERT" level and above. Briefings and debriefings will be done via telephone or radio.

- 10.2 Instruct the OSC Communication Coordinator to call Main Gate Security with Radwaste Operator's name and keycard number(s) within ten (10) minutes of initial declaration of accountability.

NOTE

Security Coordinator will track via OSC locations and movements of Security Response Force.

- 11.0 If notified by the Security Shift Command/Designee of Security Computer Failure, complete Steps 11.1 - 11.3.

11.1 Assign individual to collect accountability badges.

11.2 Direct individual to sort cards into Main Gate and North Gate groups by color/gate design.

NOTE

Radwaste Operators will be tracked as a team at the "ALERT" level and above. Briefings and debriefings will be done via telephone or radio.

11.3 Direct individual to call both Main Gate and North Gate (when utilized) Security with badge slot number within ten (10) minutes of initial declaration of accountability.

- 12.0 If search and rescue activity is required, utilize Exhibits 3A/3B, Search and Rescue Assignment Checklist/Guidelines.

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EXHIBIT 1C

OSC COORDINATOR CHECKLIST
DEACTIVATION OF OSC

CHECK

- _____ 1.0 Directed by the Emergency Director or the Operations Coordinator to deactivate the center.
- _____ 2.0 All teams recalled and debriefed.
- _____ 3.0 All standby personnel notified of deactivation.
- _____ 4.0 Emergency equipment replaced and restored to standby condition.
- _____ 5.0 Center returned to standby condition.
 - _____ 5.1 Restore tables and chairs as required.
 - _____ 5.2 Wipe all status boards clean.
 - _____ 5.3 Refile all prints and procedures as required.
 - _____ 5.4 Restore access/egress doors to original configuration. (including Drywell Process Facility Doors).
- _____ 6.0 Documentation collected.
 - _____ 6.1 OSC Coordinator Checklist, Exhibit 1 A, B, C.
 - _____ 6.2 Functional Area Coordinator Checklists, Exhibit 2 A & B.
 - _____ 6.3 Search and Rescue Assignment Checklists, Exhibit 3 A & B.
 - _____ 6.4 Emergency Team Briefing/Debriefing Forms, Exhibit 4 A & B.
 - _____ 6.5 Evacuation of OSC/Activation of SOSC, OSC Coordinator Checklist, Exhibit 6 A & B.
 - _____ 6.6 Evacuation of OSC/Activation of SOSC, Functional Area Coordinator Checklist, Exhibit 7 A & B.
 - _____ 6.7 OSC Logs.
 - _____ 6.9 Emergency Message Forms.
 - _____ 6.10 Facsimile Machine transmitted documents.
 - _____ 6.11 Print copy of teams from team status computer.

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EXHIBIT 1C (continued)

OSC COORDINATOR CHECKLIST
DEACTIVATION OF OSC

CHECK

- 7.0 Ensure the following are completed and report discrepancies to the Emergency Preparedness Manager or designee.
- 7.1 Deliver collected documents from Section 6.0.
- 7.2 Report missing supplies, equipment, and documents discovered in performing Sections 4.0 and 5.0.
- 8.0 Report OSC/SOSC secured to the Operations Coordinator in the Emergency Command Center.

OSC Coordinator

Date/Time

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EXHIBIT 2A

FUNCTIONAL AREA COORDINATOR CHECKLIST
ACTIVATION OF OSC

NOTE

All the listed steps need not be completed prior to declaring an area fully functional.

CHECK

- _____ 1.0 Establish work area for respective work.
- _____ 2.0 Assist other Functional Area Coordinators in arranging the OSC (Exhibit 8).
- _____ 3.0 Establish telephone communications on respective emergency line.
- _____ 4.0 Establish radio communications utilizing appropriate radio.
- _____ 5.0 Notify the OSC Coordinator that you have assumed your duties and provide him with a shift schedule for extended operations if applicable.

Functional Area Coordinator

Date

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EXHIBIT 2B

FUNCTIONAL AREA COORDINATOR CHECKLIST
OPERATION OF OSC

- Maintain communications with OSC Coordinators.

NOTE

OSC Communications Coordinators shall perform their duties in accordance with Exhibit 12.

- Maintain awareness of activities of response teams assigned to their respective areas.
- Ensure team briefings are provided to each Emergency Response Team utilizing In-plant Emergency Response Team Briefing. Refer to Exhibit 4C/D, Emergency Team Briefing/Debriefing Guidelines.
- Provide team debriefing to each returning Emergency Response Team utilizing In-plant Emergency Response Team Debriefing.

NOTE

It may be necessary to debrief personnel dispatched prior to the activation of the OSC such as the Fire Brigade, Rad Con and Maintenance personnel to assess plant conditions.

- Coordinate Emergency Response Team activities with Rad Con Coordinator including ingress and egress routes, protective clothing and dosimetry requirements and allowable radiation exposure limits for each assignment.
- Ensure Emergency Response Teams in the field are advised of any changing plant conditions that could affect their routes of travel.
- Call out additional plant personnel as necessary with the OSC Coordinator's approval.
- Establish Relief Duty Roster as required.
- Ensure arriving personnel are directed to the standby assembly area in the Drywell Processing Center.
- Emergency Response Teams shall be formed by the Functional Area Coordinators as required, assigned a team leader, and furnished with portable two-way radio communications for contact with the OSC.

If personnel radiation exposure is anticipated above the limits of 10 CFR 20, only volunteers shall be assigned as team members.

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EXHIBIT 3A

SEARCH AND RESCUE ASSIGNMENT CHECKLIST

TIME/INITIALS

- ____/____ 1.0 Notified by Emergency Director or Operations Coordinator of:
- ____ 1.1 Missing person
 - ____ 1.2 Disabled Person
 - ____ 1.3 Trapped Person
- ____/____ 2.0 Identification of Person
- ____ 2.1 Name _____
 - ____ 2.2 Work Section _____
- ____/____ 3.0 Last known work assignment
- ____ 3.1 Building and Elevation _____
 - ____ 3.2 RWP Number _____
- ____/____ 4.0 Emergency Team Number Assignment
- ____/____ 5.0 Functional Area Coordinator briefed
- ____ 5.1 Area: _____
 - ____ 5.2 Rad Con Coordinator _____
- ____/____ 6.0 Results
- ____ 6.1 Located
 - ____ 6.2 Medical Treatment Required
 - ____ 6.3 Trapped

OSC Coordinator Review

Date/Time

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EXHIBIT 3B

SEARCH AND RESCUE GUIDELINES

NOTE

This section provides guidance in Search and Rescue during emergency conditions.

Paperwork required by procedures should be completed AS TIME PERMITS. First aid and rescue actions shall have priority over other actions.

- The OSC Coordinator, upon notification of a missing or trapped individual by the Emergency Director or his designee, shall ensure a team is assigned to Search and Rescue and is dispatched in accordance with Sections 1.0 through 5.0 of Exhibit 3A, Search and Rescue Assignment.
- After the individual has been located and if medical assistance is necessary, the team assigned to search and rescue shall render first aid. The OSC Coordinator shall be informed. The RCC shall be informed and assign response using 6630-ADM-4330.02 Attachment 6630-ADM-4330.02-8, Response to a contaminated injury requiring transit offsite
- Search and rescue operations may be terminated by the Emergency Director or his designee when all of the following conditions are met:
 - All missing persons have been accounted for.
 - All injured or disabled persons are in the care of medical personnel in accordance with applicable medical procedures or have been released by the medical representative.
 - All trapped persons have been rescued and released from their entrapment to return to their duties.
 - Search and rescue teams have returned to their duty station to stand by.

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**EXHIBIT 4A
IN-PLANT EMERGENCY RESPONSE TEAM BRIEFING**

Team #: _____ Destination: _____
Priority #: _____ RWP# _____
(the Emergency RWP enables the ESRD Dose Rate Function)

Purpose/Job Description: _____

Team Members & Resp. Qual. Status & Available Exposure:						(*Team Leader)		
NAME	FFNP	SCBA	EXP. Aval.	EXP. RCV	NAME	FFNP	SCBA	EXP.
_____	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
_____	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
_____	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
_____	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____
_____	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____

Verify Radio Communications Yes No N/A

RADIOLOGICAL DATA

Authorized Stay Time: _____ HRS. Estimated Exposure: _____ mRem
PCs Required: Single PCs Double PCs Single PCs w/wet suit Rubber Boots
 Partial PCs Misc. _____

Resp. Protection: _____ Dosimetry Req: TLD 00 mr SRD 500 mr SRD SRD

Recommended Route: _____

Team authorized to exceed normal limits (Y/N): ___ to what dose _____ mRem
ED approval required for emergency exposure;
Person verifying ED written approval: _____ Print/Sign _____ Date/Time

Special radiological requirements: _____

Reviewed ARM data: Yes No N/A

RCC/Designee: _____ Print/Sign _____ Date/Time

Functional Area coordinator/Designee: _____ Print/Sign _____ Date/Time

OSC Coordinator: _____ Print/Sign _____ Date/Time

Date & Time Dispatched: _____

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EXHIBIT 4B

IN-PLANT EMERGENCY RESPONSE TEAM DEBRIEFING

Team Number: _____ Date: _____

Task Completed: (Y/N) _____ Time Back: _____

Status/Work Performed _____

Observed Abnormal Conditions: (Y/N) _____

Exposure Received: _____

Observed plant hazards (i.e., steam, water, electrical, abnormal radiological conditions)

Confirmation of Route: _____

Debriefing Completed/Time: _____

Assessment of Damage/Comments/Materials Used: _____

Rad Con Coordinator/Designee _____ Date _____ Time _____

Functional Area Coordinator/Designee _____ Date _____ Time _____

OSC Coordinator _____ Date _____ Time _____

JO# _____

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EXHIBIT 4C

EMERGENCY TEAM BRIEFING/DEBRIEFING GUIDELINES
EMERGENCY TEAM BRIEFING

NOTE

The RCC shall identify conditions that do not include radiological concerns (i.e., fire outside RCA, no radiological release in progress and not imminent, etc.). In these instances, direct Rad Con coverage may be deleted with concurrence of the OSC Coordinator.

- All departures from the OSC shall be approved by the OSC Coordinator. Names and team numbers of departing personnel shall be logged in the OSC for personnel accountability.
- OSC Functional Coordinators and/or team leaders shall brief teams using the In-plant Emergency Response Team Briefing Form, Exhibit 4A.
- The Radiological Controls Coordinator, or his designee, shall brief all departing teams in coordination with the team's respective Functional Area Coordinator.
- Functional Area Coordinators shall ensure that job documentation and Briefing Checklists are forwarded to the OSC Coordinator for review upon completion.

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EXHIBIT 4D

EMERGENCY TEAM BRIEFING/DEBRIEFING GUIDELINES
EMERGENCY TEAM DEBRIEFING

- OSC Functional Coordinators and/or Team Leaders shall debrief their respective teams using the In-plant Emergency Response Team Debriefing Form, Exhibit 4B.
- The Radiological Controls Coordinator shall ensure the review of exposures received by Emergency Response Team members to determine whether unanticipated high dose rates were encountered.
- The Radiological Controls Coordinator shall ensure the radiological exposure for each team member is entered in the appropriate records.
- Functional Area Coordinators shall ensure that job documentation, team reports, and debriefing checklists are forwarded to the OSC Coordinator as soon as possible for staff notifications of results, review and record retention.

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9EXHIBIT 5EMERGENCY JOB PLANNING GUIDELINESNOTE

This section provides guidance in job planning during declared emergencies. Documentation required by normal Station Procedures should be completed as TIME PERMITS but may be deferred until the emergency declaration is secured. Repair and maintenance shall have priority over paperwork requirements.

- * Job planning and implementation during emergency conditions will be controlled by EPIP-OC-.27. However, NORMAL PLANT OPERATIONS AND MAINTENANCE PROCEDURES SHOULD NOT BE DEVIATED FROM UNLESS TO PROTECT THE HEALTH AND SAFETY OF THE PUBLIC OR TO PREVENT IMMINENT DAMAGE TO PLANT EQUIPMENT. The Emergency Maintenance Supervisor should identify procedures to be implemented during the work.
- * Component switching and tagging should be controlled by Procedure 108 (Equipment Control). If appropriate to deviated from 108, ensure effective constraints are employed to protect personnel safety and equipment.
- * Work that is to be performed or controlled by EPIP-OC-.27 shall only be activities that are necessary to place the plant in a safe condition or will result in the ultimate termination of the emergency condition should be performed using approved procedures.
- * Work performed, materials installed, testing performed, and configuration changes made, are important information. This information should be documented on the debrief form (Exhibit 4b). After the emergency conditions are secured, a Job Order should be assigned to the debrief form, and the information entered into GMS2.
- * If a job assignment/task cannot be completed as directed, immediately advise the OSC and receive additional instructions. Continue on with the task utilizing this additional information.
- * If personnel radiation exposures in excess of 10 CFR 20 are anticipated, only volunteers shall be assigned as team members. Emergency Director authorization for exposure shall be documented per EPIP-OC-.35, "Radiological Controls Emergency Actions", Exhibit 7, Emergency Dose Authorization.

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EXHIBIT 6A

EVACUATION OF OSC TO THE SOSC
OSC COORDINATOR CHECKLIST

CHECK

- _____ 1.0 OSC evacuation ordered by the Emergency Director.
- _____ 2.0 Advise Functional Area Coordinators to enter SOSC area from doorway identified by the TSC Coordinator.
- _____ 3.0 Direct Functional Area Coordinators to use Exhibit 6B for evacuation of OSC.
- _____ 4.0 Logs, communication documents, needed supplies and equipment collected for evacuation.
- _____ 5.0 OSC evacuated to the SOSC, and communications re-established with the Control Room (ECC) through the TSC.
- _____ 6.0 All personnel/teams dispatched by the OSC have been notified to report to and return to the SOSC.

OSC Coordinator

Date

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EXHIBIT 6B

EVACUATION OF OSC TO THE SOSC
FUNCTIONAL AREA COORDINATORS CHECKLIST

CHECK

- _____ 1.0 Advise the personnel in their respective areas that the OSC is being evacuated and the appropriate evacuation route as recommended by the RCC and prescribed by the OSC Coordinator.
- _____ 2.0 Ensure all assigned responders are advised of the evacuation and appropriate route to SOSC.
- _____ 3.0 Emergency Maintenance Coordinator to ensure personnel assigned to the Tool Room/Cal Lab are informed of the evacuation.
- _____ 4.0 Collect all documentation.
- _____ 5.0 Ensure OSC equipment identified by the OSC Coordinator is transferred to the SOSC.
- _____ 6.0 Advise all telephone contacts of impending evacuation and terminate telephone communications.
- _____ 7.0 Evacuate OSC utilizing route recommended by RCC and prescribed by the OSC Coordinator.

Functional Area Coordinator

Date

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EXHIBIT 7A

ACTIVATION OF SOSC
OSC COORDINATOR CHECKLIST

CHECK

- _____ 1.0 Establish work area for SOSC as suggested in Exhibit 9, SOSC Floor Plan.
- _____ 2.0 Functional Areas staffed:
- _____ 2.1 Emergency Maintenance Coordinator
- _____ 2.2 Rad Con Coordinator
- _____ 2.3 OSC Operations Coordinator
- _____ 2.4 Medical Representative
- _____ 2.5 OSC Communications Coordinator
- _____ 2.6 Chemistry Coordinator
- _____ 3.0 Communications reestablished
- _____ 3.1 OSC Coordinator Line
- _____ 4.0 Report SOSC activated to Operations Coordinator and Emergency Director.
- _____ 4.1 Announce to SOSC staff that center is activated.
- _____ 4.2 Determine plant status and update center staff.
- _____ 5.0 Ensure all personnel accounted for after relocation.

OSC Coordinator_____
Date

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EXHIBIT 7B

ACTIVATION OF SOSC
FUNCTIONAL AREA COORDINATORS CHECKLIST

CHECK

- _____ 1.0 Establish work area for respective work support.
- _____ 2.0 Assist other Functional Area Coordinators in arranging the SOSC (Exhibit 9).
- _____ 3.0 Establish telephone communications for respective emergency line.
- _____ 4.0 Notify the OSC Coordinator that you have assumed your duties in the SOSC.

Functional Area Coordinator

Date

EXHIBIT 8
OSC FLOOR PLAN
TYPICAL ARRANGEMENT

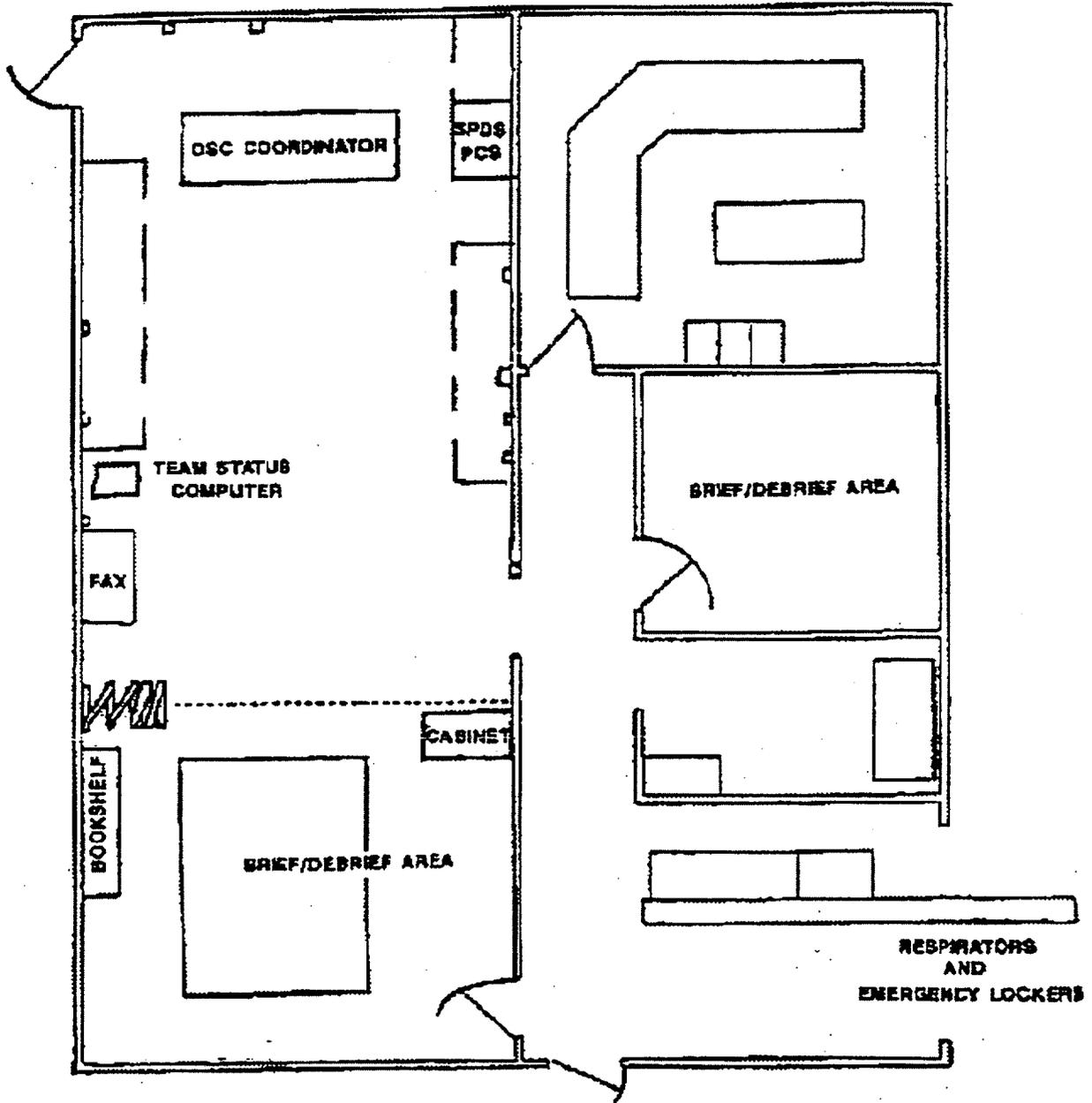
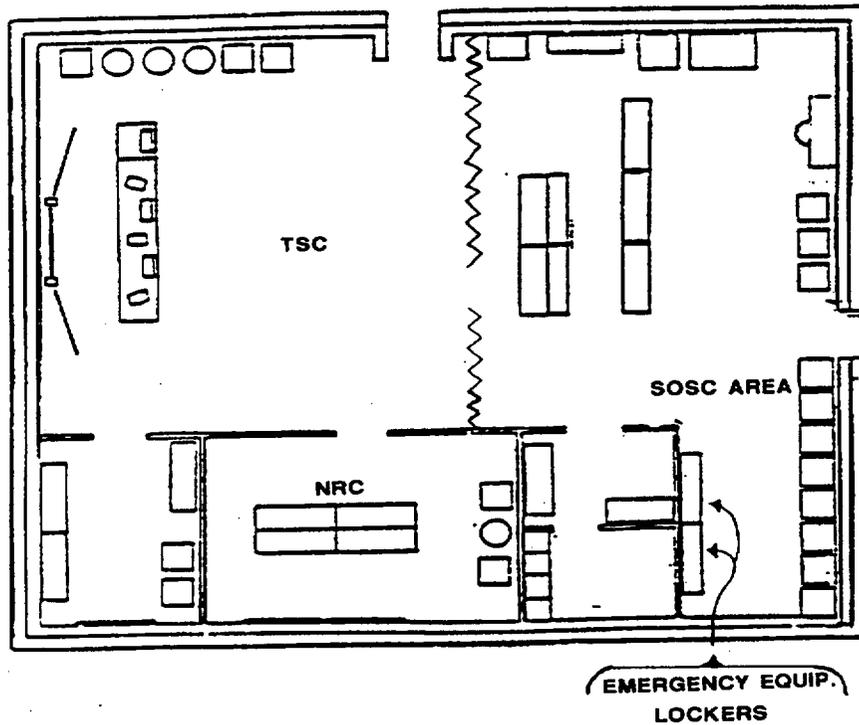


EXHIBIT 9

SOSC FLOOR PLAN
SITE EMERGENCY BUILDING
Secondary Operations Support Center Area
TYPICAL ARRANGEMENT



NOTE

Set up of SOSC will be accomplished by using available tables in that area. Set up should be to accommodate the communication lines As designated in the center.

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EXHIBIT 10

OSC KITS AND LOCKER LOCATIONS

Emergency Chemistry Equipment

<u>Location</u>	<u>Kit/Locker</u>
OSC (Hallway)	Kits #5 and #6

Emergency First Aid and Rescue Equipment

New Radwaste Bldg. Control Room adjacent to door	stretcher
Reactor Building Elevation:	
23 ft. adjacent to Drywell entrance	stretcher
23 ft. adjacent to elevator	stretcher and extrication locker w/trauma kit (RB-EL23)
51 ft. adjacent to elevator	stretcher
73 ft. adjacent to elevator	stretcher
119 ft. adjacent to elevator	stretcher
119 ft. stairwell landing	extrication locker w/trauma kit (RB-EL119)
Turbine Building Elevation:	
0 ft. south, adjacent to Condenser Bay entrance	stretcher
0 ft. north, adjacent to Condenser Bay entrance	stretcher
23 ft. adjacent to elevator	stretcher
46 ft. adjacent to PC change area	stretcher and extrication locker w/trauma kit (TB-EL46)
Main Office Bldg., third floor adjacent to Rad Con monitor and control point	Stretcher

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EXHIBIT 10

OSC KITS AND LOCKER LOCATIONS

Emergency Maintenance Equipment

Location

Kit/Locker

Turbine Building Elevation:

0 ft., north adjacent to east Condenser Bay entrance
3 ft., stairwell adjacent to hi-low conductivity room

Locker #1
Locker #2

Reactor Building Southeast Corner Stairwell Landing:

51 ft. elevation
95 ft. elevation

Locker #3
Locker #4

Emergency Rad Con Equipment

OSC (hallway)

Instrument and
supplies locker
Resp./Equip.

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9EXHIBIT 11OSC COMMUNICATOR - TEAM STATUS TRACKING

- 1.0 Turn on the power to the large NEC monitor in corner.
- 2.0 Turn on power strip under the inside computer cabinet. The team tracking program will load and establish communications with the TSC.
- 3.0 Set time using "Set Time" stamp with PPM.
- 4.0 Select Lotus Notes Application.
- 5.0 When "work space" is available, select "Emergency Preparedness on Notes Server 3".
- 6.0 Select "OSC Communications Coordinator".
- 7.0 Select "OSC Team Tracking".
 - 7.1 Screen will list teams dispatched.
 - 7.2 Screen should be "Refreshed" by striking F9 key occasionally.
- 8.0 Assign the team priority (1-3) according to the following definitions:

Priority 1 - Absolute highest priority. Must be accomplished immediately. All available resources should be focused on priority 1 items.

Priority 2 - Standard priority. Item must be accomplished as soon as possible but can wait for priority 1 items.

Priority 3 - For low priority and long term items.
- 9.0 Enter the team description. Make the description as complete as possible, including member's names. When finished, the team will be transferred to the team listing portion of the screen.
- 10.0 Periodically print copy of teams.

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EXHIBIT 12

OSC COMMUNICATIONS COORDINATOR RESPONSIBILITIES

INITIALS

- _____ 1.0 Report to the OSC Coordinator.
- _____ 2.0 Direct the efforts of the OSC Communicators.
- _____ 3.0 Ensure all phone ringers are set below mid-volume to minimize noise level.
 - 3.1 Verify phones and FAX machines are functional.
- _____ 4.0 Indicate the development of a watch bill for your organization that will support the emergency on a 24 hour/day basis. (Refer to Exhibit 13)
- _____ 5.0 Ensure all communications personnel use tag board.
- _____ 6.0 Report failed communications system to the TSC Communications Coordinator.

NOTE

Provide specific information for each trouble report including: circuit, nature of problem, location of phone, etc.

- 7.0 Call out additional personnel if required.

NOTE

For call out of Duty Roster positions contact Security Shift Commander. For additional staff contact Group Leader Admin Support. If he is not available, use normal department call-out methods.

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EXHIBIT 12
(continued)

OSC COMMUNICATIONS COORDINATOR RESPONSIBILITIES

INITIALS

_____ 8.0 Instructions for use of Team Status Tracking System are found in Exhibit 11. Maintain team status board.

NOTE

If the system fails, continue to track teams manually on the Team Status Sheets and forward the information to the ECC and TSC via fax about every fifteen (15) minutes.

NOTE

Radwaste Operators will be tracked as a team at the "ALERT" level and above if applicable. Briefings and debriefings will be done via telephone or radio.

_____ 9.0 Plant parameters are displayed via Plant Computer System (PCS) in the TSC, OSC, and EOF.

NOTE

If this system fails ensure that the TSC transmits critical plant parameters to the OSC approximately every fifteen (15) minutes or as conditions change. Manually transmitted plant parameters should be displayed on an overhead projector in the OSC or posted in an area where they are available to the OSC Coordinator.

_____ 10.0 Upon termination of the emergency, ensure communications equipment, supplies and procedures are replaced or returned to a ready status.

_____ 11.0 Then forward to the OSC Coordinator, all logs and records.

Signature _____ Date _____
OSC Communication Coord.

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EXHIBIT 13

Page of

EMERGENCY SHIFT SCHEDULE
TYPICAL

DATE:
Functional Group:
GROUP (eg. Admin.):

TIME:	SHIFT 1	SHIFT 2	SHIFT 3
BEGIN			
END			

	NAME	NAME	NAME
POSITION #			
P H O N E	HOME #		
	WORK #		
	BEEPER #		
POSITION #			
P H O N E	HOME #		
	WORK #		
	BEEPER #		
POSITION #			
P H O N E	HOME #		
	WORK #		
	BEEPER #		
POSITION #			
P H O N E	HOME #		
	WORK #		
	BEEPER #		

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EXHIBIT 15

TYPICAL

Number _____			
Emergency Message			
To: <input type="checkbox"/> OSC	<input type="checkbox"/> TSC	<input type="checkbox"/> EACC	_____
			Staff Position/Other
<input type="checkbox"/> ECC	<input type="checkbox"/> EOF		
Message:			
Originator:	Staff Position	Initials	Time Date
Location:	<input type="checkbox"/> ECC	<input type="checkbox"/> TSC	<input type="checkbox"/> OSC <input type="checkbox"/> EOF
Reply:			
Reply Completed	Staff Position	Initials	Time Date
by: :			

**OYSTER CREEK
EMERGENCY PREPAREDNESS
IMPLEMENTING PROCEDURE**

Number
EPIP-OC-.31

Title ENVIRONMENTAL ASSESSMENT COMMAND CENTER	Revision No. 11
Applicability/Scope Applies to work at Oyster Creek	Responsible Office Emergency Preparedness
This document is within QA plan scope Safety Reviews Required	Effective Date Date of Sale

X Yes ___ No
X Yes ___ No

Prior Revision 10 incorporated the following Temporary Changes:

N/A

This Revision 11 incorporates the following Temporary Changes:

N/A

List of Pages (all pages rev'd to Rev. 11)

- 1.0 to 4.0
- E1-1 TO E1-5
- E2-1 TO E2-11
- E3-1 TO E3-2
- E4-1

**NON-CONTROLLED
This Document Will Not
Be Kept Up To Date
DCC Oyster Creek**

	Signature	Concurring Organization Element	Date
Originator		Emergency Planner	1/5/00
Concurred By	James J. Vought	Manager Environmental Affairs	1/17/2000
	M. J. Stalder	Rad Controls/Safety Dir. OC	1-11-2000
Approved By		Emergency Preparedness Manager	1-17-2000

Title	Revision No.
ENVIRONMENTAL ASSESSMENT COMMAND CENTER	11

PROCEDURE HISTORY

REV.	DATE	ORIGINATOR	SUMMARY OF CHANGE
4	07/94	A. Smith	<p>Exhibit 1 Standardized title of EOF Status board to EOF Status Board</p> <p>Exhibit 2, Step 7.0 Added wording "Using the RAC Program - Field Iodine," to beginning of step.</p> <p>Exhibit 2C Delete-Acquisition of Meteorological Data without telephone use</p> <p>Exhibit 2E step 4.0 Corrected typo "LST" to "EST" step 5.0 added "(2 to 3°F in 15 minutes) to provide guidance to meaning of "Is there a marked decrease"</p> <p>Exhibit 3B Delete Qtr. from Remaining Qtr. Dose, 3rd line below title Corrected units on column 4 from mRem to mRem/hr (Dose rate) Corrected units on column 5 from mR to mR/hr (Dose rate)</p> <p>Exhibit 4 Corrected <1E>T to Temp (T°) in MET DATA section</p>
5	09/94	A. Smith	Delete Parsippany Field Monitoring Team
6	12/94	A. Smith	Modify Exhibit 1, Exhibit 2, Exhibit 2A, Exhibit 3 to remove sign off of repetitive actions.
7	12/95	J. Bontempo	Provide guidance that cell phones are primary means of communication and radio is backup
8	07/96	J. Bontempo	Update Natl. weather service and Lakehurst Naval Air Station phone number.
9	10/96	P. Schwartz	Delete reference to Pinelands Sea Breeze site as a supplemental source of meteorological data. DELETE ACTION TO PERFORM COMPUTER PAR FROM EXH 1.
10	09/97	A. Smith	To incorporate recent changes on the duty roster that eliminated the Environmental Communicator. The duties are combined into the EAC and MDAC checklists respectively.
11	DOS	A. Smith	Change references from GPU to OCNCS.

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ENVIRONMENTAL ASSESSMENT COMMAND CENTER	11

1.0 PURPOSE

1.1 This procedure describes the activation and operation of the Environmental Assessment Command Center (EACC).

2.0 APPLICABILITY/SCOPE

2.1 This procedure applies to EACC personnel during an Alert, Site Area Emergency, General Emergency, or when EACC activation is required by the Emergency Director.

3.0 DEFINITIONS

3.1 NONE

4.0 RESPONSIBILITIES

4.1 The Environmental Assessment Coordinator (EAC) will complete the appropriate EAC Checklists.

4.2 The Met Dose Assessment Coordinator (MDAC) will complete the appropriate MDAC Checklists.

5.0 PROCEDURE

5.1 Environmental Assessment Command Center (EACC) personnel will report to the EACC when they are notified of the activation of the Emergency Support Organization (ESO) and perform the responsibilities identified in their assigned exhibits to this procedure and as requested by their emergency supervisors.

6.0 REFERENCES

6.1 2000-PLN-1300.01, "OCNGS Emergency Plan".

6.2 Oyster Creek Emergency Implementing Procedures.

6.3 6630-ADM-4010.03, "Oyster Creek Emergency Dose Calculation Manual".

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7.0 EXHIBITS

- 7.1 Exhibit 1, EACC Activation Checklist
- 7.2 Exhibit 1A, EAC Checklist
- 7.3 Exhibit 1B, EAC/RAC Turnover Checklist
- 7.4 Exhibit 2, MDAC Checklist
- 7.5 Exhibit 2B, Alternate Sources of Meteorological Data
- 7.6 Exhibit 2C, Acquisition of Meteorological Tower Data without Telephone Use
- 7.7 Exhibit 2D, Determination of Stability Class From Alternate Sources of Meteorology
- 7.8 Exhibit 2E, Determination of Possible Sea Breeze Event at Oyster Creek
- 7.9 Exhibit 2F, National Weather Service Data Acquisition
- 7.10 Exhibit 2G, EACC Meteorological Worksheet
- 7.11 Exhibit 3, Environmental Communications Data Log Sheet
- 7.12 Exhibit 3A, Radio Communications Log Sheet
- 7.13 Exhibit 4, Source Term and Dose Assessment

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EXHIBIT 1

EACC Activation Checklist

Initials

- _____ 1.0 MDAC Present and MDAC Initial Activation Checklist
(Exhibit 2) completed.

NOTE

The EACC may be activated without the MDAC present if the EAC determines the EACC is functional.

- _____ 2.0 Communications established with the RAC by the MDAC or EAC.
- _____ 3.0 EAC-RAC Turnover Checklist (Exhibit 1B) completed.
- _____ 4.0 EACC staff briefed on current conditions and individual responsibilities.
- _____ 5.0 Responsibility assumed for off-site dose projections and Field Monitoring Teams.
- _____ 6.0 Obtain a minimum of four copies of Exhibits 3, and 4.
- _____ 7.0 Establish communications with the FMTs via telephone at EACC and cellular phones at FMT vehicles. Radio is used for backup if phones fail.
- _____ 8.0 Obtain the FMT's names, social security numbers, and remaining dose from the FMT members.
- _____ 9.0 Get an estimated time of departure for the Field Monitoring Teams.
- _____ 10.0 If possible, preposition the Field Monitoring Teams in the down wind direction. One team should be kept near the plant and the other positioned past the predicted plume touchdown point.

EAC Signature _____ Time

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EXHIBIT 1A

EAC Checklist

Initials

- _____ 1.0 Establish an EAC Log.
- _____ 2.0 Complete the EACC Activation Checklist (Exhibit 1A) and declare the EACC operational.
- _____ 3.0 Inform the Group Leader R&EC that the EACC is operational.
- _____ 4.0 If there is no release in progress, pre-position the Field Monitoring Teams downwind, preferably with one team close to the site and the other past the predicted plume touchdown position.
- 5.0 Review the Oyster Creek Emergency Dose Calculation Manual, 6630-ADM-4010.03, as time permits.
- 6.0 With the aid of the MDAC, be prepared to brief the Group Leader R&EC and the ESD on meteorological conditions, including possible sea breeze conditions.
- 7.0 If a release is in progress, use the Field Monitoring Teams to verify the predicted plume position and dose rates. Fixed monitoring points may be used, but emphasis should be placed on plume search techniques. Remember to keep team exposures ALARA.
- 8.0 Evaluate the need for additional FMT's. If necessary, additional team members may be obtained from off-duty duty roster members, or TMI.
- 9.0 Review plant parameters from the Plant Computer System and assess potential releases. Perform contingency calculations if release data is not available or a release appears imminent.
- 10.0 Utilize Exhibit 4 to collect data for dose projections if the automatic data link fails and direct the MDAC to perform the dose projection.

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EXHIBIT 1A (continued)

EAC Checklist

Initials

- 11.0 The EAC may direct FMT's to obtain biota samples. These generally should be taken only after the plume has passed.
- _____ 12.0 Review dose projections performed by the MDAC. Use the hand held remote to transfer the dose projection to the EOF status board if appropriate. Generally contingency calculations should not be posted.
- _____ 13.0 Review all relevant dose projections and FMT data with the Group Leader R&EC.
- _____ 14.0 When the New Jersey Bureau of Nuclear Engineering arrives at the EOF, coordinate with the BNE team leader to supply the BNE with the information they need.
- _____ 15.0 Perform assessment of environmental impact of any (potential) release, continue assessment activities as needed to define scope of the release and provide input to revising the protection action recommendation.

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EXHIBIT 1B
EAC/RAC TURNOVER CHECKLIST

1. Emergency Classification _____
2. Plant Conditions

3. Time of Plant Shutdown _____
4. Time of release (if any) _____
5. Release type _____
6. Flow Rate Information _____
7. Current RAGEMS Readings
Stack Low Range _____
Stack High Range _____
Turbine Bldg. Low Range _____
Turbine Bldg. High Range _____

NOTE

Items 6 and 7 are not needed if the RAC/PCS or RAC/RAGEMS data link is operational.

8. Most recent primary coolant DEI _____ uCi/gm
9. On-site dose rates

10. On-site contamination

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EXHIBIT 1B
EAC/RAC TURNOVER CHECKLIST

- 11. Most recent dose projection (if any)

 - 12. Offsite dose rates (if any)

 - 13. Estimated release duration _____ hrs.
 - 14. Other information

 - 15. Time EACC assumes responsibility for offsite field teams _____
 - 16. Time EACC assumes responsibility for dose projections _____
- EACC Signature _____

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EXHIBIT 2

MDAC CHECKLIST

Initials

- _____ 1.0 RAC computer boots up. Contact made with Met Tower and/or PCS or RAGEMS computer.
- _____ 2.0 RAC printer working and full of paper.
- _____ 3.0 Obtain Met data.
- _____ 4.0 Assess the possibility of a sea breeze condition occurring using exhibit 2E.
- _____ 5.0 Access National Weather Service forecast information as described in Exhibit 2F.
- _____ 6.0 Run an initial dose projection so that met conditions can be displayed on the EOF status board.
- _____ 7.0 Provide this completed checklist to the EAC.
- _____ 8.0 If Met Tower data are not available, obtain data using Exhibits 2B or 2C. Stability class may be estimated using Exhibit 2D.
- _____ 9.0 Be prepared to brief the EAC, Group Leader R&EC, and the ESD on meteorological conditions.

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EXHIBIT 2
MDAC CHECKLIST

Initials

- _____ 10.0 Perform contingency calculations based on analysis of potential releases when directed by the EAC.
- _____ 11.0 Perform dose projections as directed by the EAC or Group Leader R&EC. One copy of the output is to be kept by the MDAC for records.
- _____ 12.0 Keep the EAC informed of current meteorological conditions. This may be done using Exhibit 2G, a status board, or verbally as the EAC wishes.
- _____ 13.0 Advise the EAC on Field Monitoring Team placement based on meteorological conditions.
- _____ 14.0 Review the Oyster Creek Emergency Dose Calculation Manual 6630-ADM-4010.03 as time permits.
- _____ 15.0 Brief summaries of all radio communications should be recorded on Exhibit 3A.
- _____ 16.0 Air sample data should be transcribed to the bottom of Exhibit 4 and given to the MDAC.
- _____ 17.0 If possible, keep track of the FMT's positions on the 10 mile EPZ map.
- _____ 18.0 Periodically, ask the FMT members for their SRD readings and keep track of their dose. If a team member approaches their remaining dose limit, attempt to obtain a replacement.
- _____ 19.0 Using the RAC Program-Field Iodine, calculate thyroid dose based on the information in Exhibit 4. If high thyroid dose rates are being encountered in the field, attempt to track thyroid exposure. Notify the EAC if a FMT's exposure approaches 5 REM.
- _____ 20.0 Based on direction from the EAC and meteorological conditions, direct the Field Monitoring Teams to obtain open and closed window dose rates and air samples. Teams should be used to find the plumes leading edge, touchdown point, boundaries, centerline, and centerline survey and air sample data. Fixed locations may be used, but plume search techniques should be emphasized. Survey and air sample data will be recorded on Exhibit 3. Teams should not be left in the plume any longer than is necessary. Keep exposure ALARA.

MDAC Signature

Time

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EXHIBIT 2B

Alternate Sources of Meteorological Data

- 1) **NATIONAL WEATHER SERVICE FORECAST OFFICE
732 WOODLANE ROAD
MOUNT HOLLY, NJ 08060-9615
(609) 261-6600**

Local Weather Forecast - Obtain from the recording wind direction and speed, general forecast parameters (sky conditions and precipitation) and temperatures. Forecast data available out through the 3-5 day period.

A meteorologist is on duty from 7:30 A.M. through 2:30 P.M. to obtain actual Readings required for dose assessment.

- 2) **NATIONAL WEATHER SERVICE FORECAST OFFICE
732 WOODLANE ROAD
MOUNT HOLLY, NJ 08060-9613**

This is the general office phone number that will allow the user to speak with the staff personnel on duty. The National Weather Service is a 24-hour operation.

State the location of the weather station that one is requesting for information:

Atlantic City
McGuire Air Force Base
Lakehurst, NAS

- 3) **UNITED STATES COAST GUARD STATION
4TH STREET AND BAYVIEW AVENUE
BARNEGAT LIGHT, NEW JERSEY 08006
(609) 494-2661**

Wind Speed, direction and temperature data available for site located on Long Beach Island

Proper drillsmanship should be maintained. Please state your name and the purpose of your phone call. Inform the meteorologist of person on duty that data are required in support of a drill (or real event) at the plant.

METEOROLOGICAL DATA

LOCATION (Atlantic City, Barnegat Light, etc.) _____

Date _____

Time _____

Wind Speed (in miles per hour) _____

Wind Direction (FROM) _____

Temperature (degrees F) _____

Stability Class¹ _____

¹ Refer to Exhibit 2D to determine stability class from sources if NWS DOES NOT provide the appropriate stability class designation.

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EXHIBIT 2C

Acquisition of Meteorological Tower Data Without Telephone Use

Initials

- _____ 1.0 Obtain 2-way radio and copies of this exhibit.
- _____ 2.0 Keys to the met shack are included with keys to the emergency vehicles.
- _____ 3.0 Confirm operability via radio check with the MDAC, EAC or their designee who will inform security of arrival to met shack.
- _____ 4.0 Await for EACC to request data. Use applicable section below for each meteorological parameter. If "A" chart recorders are inoperable at 33 and 380 feet, record pertinent data from the "B" recorders.
 - _____ 4.1 Wind Speed at 33 feet chart recorder
 - 4.1.1 Estimate from the ink trace to the nearest whole number value in miles per hour.
 - 4.1.2 Record on EPIP-OC-.31, Exhibit 2G
 - _____ 4.2 Wind Direction at 33 feet chart recorder
 - 4.2.1 Estimate from the ink trace to the nearest whole number value in degrees.
 - 4.2.2 Record on EPIP-OC-.31, Exhibit 2G
 - _____ 4.3 Wind Speed at 150 feet chart recorder, repeat Procedure 4.1 for the 150 foot chart recorder.
 - _____ 4.4 Wind Direction at 150 feet chart recorder, repeat Procedure 4.2 for the 150 foot chart recorder.
 - _____ 4.5 Wind Speed at 380 feet chart recorder, repeat Procedure 4.1 for the 380 foot chart recorder.
 - _____ 4.6 Wind Direction at 380 feet chart recorder, repeat Procedure 4.2 for the 380 foot chart recorder.

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EXHIBIT 2C (continued)

Initials

- _____ 4.7 Multipoint Temperature Chart Recorder
- 4.7.1 Ambient Temperature at 33 feet
When LED on upper left-hand corner of chart recorder registers a number 1, record value where the pen is located. Use the -40 to 100°F scale and record on sheet.
- _____ 4.7.2 Ambient Temperature at 150 feet
When LED in Step 4.7.1 registers a number 2, record as outlined in Step 4.7.1.
- _____ 4.7.3 Ambient Temperature at 380 feet
When LED in Step 4.7.1 registers a number 3, record as outlined in Step 4.7.1.
- _____ 4.7.4 Delta Temperature for 150-33 feet
When LED in Step 4.7.1 registers a number 4, record as outlined in Step 4.7.1, except use the -8 to 20°F scale.
- _____ 4.7.5 Delta Temperature for 380-33 feet
When LED in Step 4.7.1 registers a number 5, record as outlined in Step 4.7.1, except use the -8 to 20°F scale.
- _____ 5.0 Upon completion of Form EPIP-OC-.31, Exhibit 2G, give meteorological data to EAC or their designee.
- _____ 6.0 Repeat from Step 4.0 with updated information every 15 minutes until instructed to return to the EACC.

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EXHIBIT 2D

Determination of Stability Class from Alternate Sources of Meteorology

1. SKY CONDITION USE COLUMN
Clear I
Scattered II
Broken III
Overcast IV
2. Determine Stability Class based upon column number.

Wind Speed (miles per hour)	<u>DAY</u>			<u>NIGHT</u>	
	I	II or III	IV	I or II	III or IV
<4.4	B	B	B	F	F
4.4 - 6.6	B	B	B	D	F
6.7 - 11.0	B	B	B	D	D
11.1 - 13.2	B	B	D	D	D
>13.2	B	D	D	D	D

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11EXHIBIT 2E

Determination of Possible Sea Breeze Event At Oyster Creek

- 1.0 SKY CONDITION Circle One
- Is the sky condition either clear or scattered? Yes No
- 2.0 PREVAILING WIND DIRECTION
- Is the wind direction from 22° through 200 degrees? Yes No
- 3.0 TIME OF YEAR
- Is the time of year between April 15 and September 30? Yes No
- 4.0 TIME OF DAY
- Is the time of day between 0800 EST and 1800 EST? Yes No

NOTE

If any answer to questions 1 through 4 is NO, a sea breeze event is unlikely. If the answer to all 4 questions is YES, continue with question 5. A sea breeze scenario may exist. Consult with the meteorologist or his designee for the correct air dispersion scenario to be employed with the information based on pages E2-8 and E2-9 of this attachment.

5.0 METEOROLOGICAL ANALYSIS (TEMPERATURE)

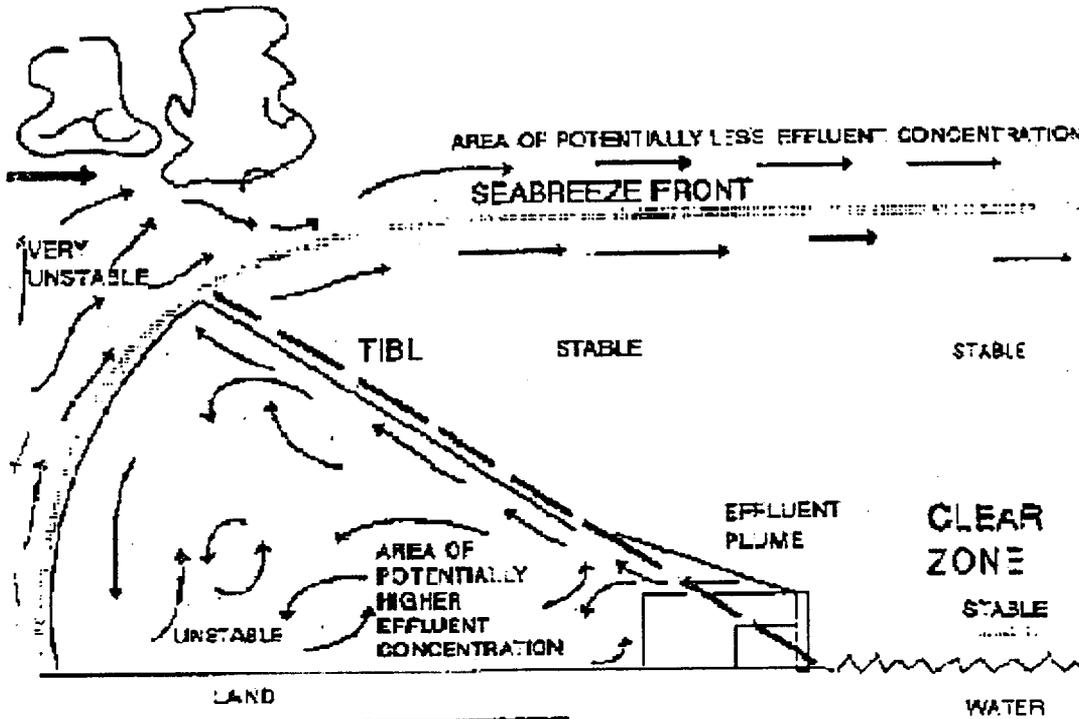
- 5.1 Is there a marked decrease (2 to 3°F in 15 minutes) in ambient temperature at any of the two (2) sites.
- 5.1.1 Barnegat Light Coast Guard Station
- 5.1.2 Forked River

NOTE

Meteorological data from Barnegat Light is obtained through the office of the United States Coast Guard, by placing a phone call at (609) 494-2661 and requesting the wind speed, horizontal wind direction, and ambient temperature.

- 5.2 Is the trend of delta temperature at both levels of the Forked River Meteorological Tower towards a STABLE atmosphere (increasingly positive).
- 5.2.1 (150-33) Foot Level Delta Temperature.
- 5.2.2 (380-33) Foot Level Delta Temperature.

Exhibit 2E (continued)



TOP VIEW

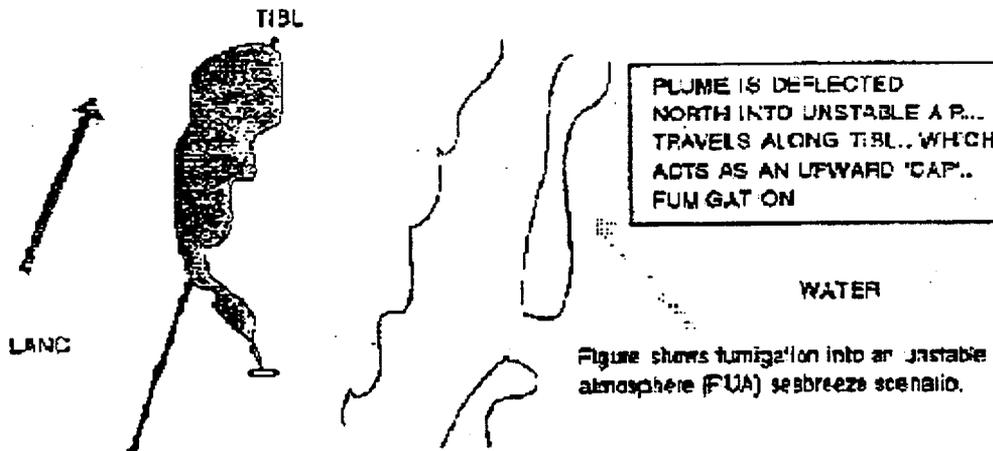
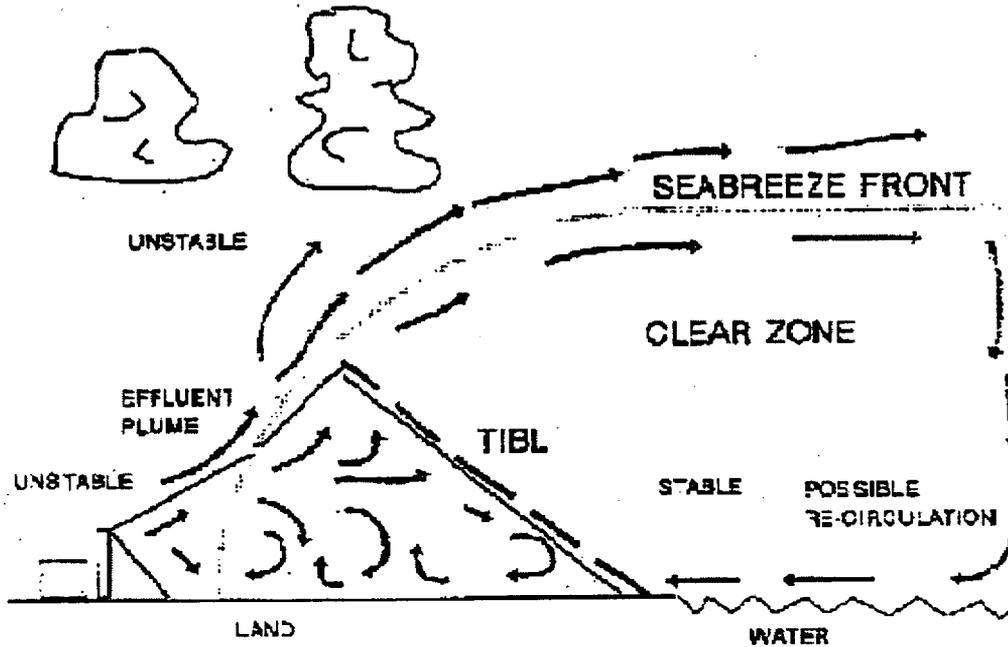


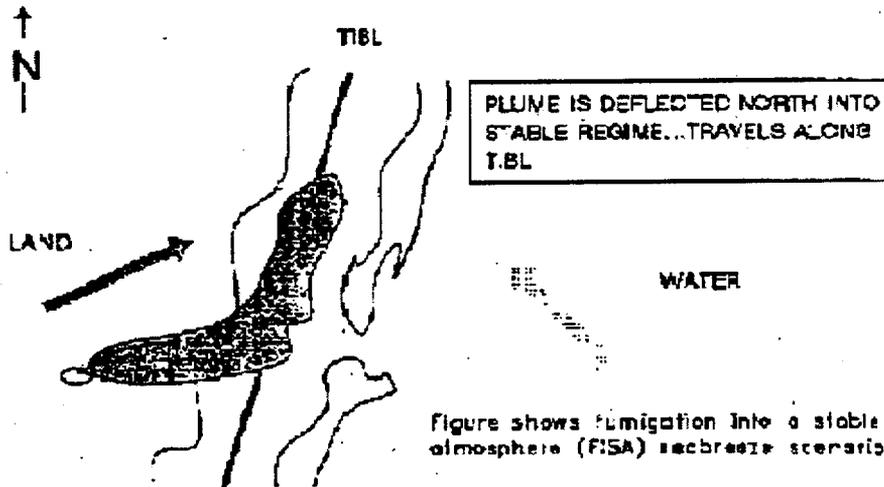
Figure shows fumigation into an unstable atmosphere (FUA) seabreeze scenario.

Exhibit 2E (continued)

Determination of Possible Sea Breeze Event



TOP VIEW



Title

ENVIRONMENTAL ASSESSMENT COMMAND CENTER

Revision No.

11EXHIBIT 2FNational Weather Service Data Acquisition

- 1.0 Upon entering EACC, turn on meteorological data computer (located against the wall to the LEFT) using the main power supply on the surge protector. Ensure the CPU and monitor switches are in the "ON" position.

Initials: _____

- 2.0 After computer loads, the machine will allow an E-Plan default USERID and PASSWORD combination. In addition, the user can input a personal USERID and PASSWORD if necessary.

Initials: _____

- 3.0 The PC will load Windows for Workgroups. A group of ICONS will appear on the screen along with several "folders" that contain executable programs. One such folder is labeled, "EMERGENCY PLANNING". Double click on this icon.

- 4.0 Two such icons that will appear are:

4.1 Weather Text - routine ALDEN weather system program that provides the user with the latest textual weather forecast including hourly conditions as well as prognostication for the next three to five days. Weather text for the Forked River area is selected using the "F3" key in the weather text option.

Initials: _____

4.2 Weather Charts - execution of this icon will produce the list of graphical weather charts to assess precipitation, air dispersion and transport and long-term trends. Entering a two-digit number in the weather chart option chooses charts.

Initials: _____

- 5.0 Communicate for forecast to the R&EC Advisor or their designee and the State Bureau of Nuclear Engineering.

Initials: _____

Title	Revision No.
ENVIRONMENTAL ASSESSMENT COMMAND CENTER	11

EXHIBIT 2G

EACC METEOROLOGICAL WORKSHEET

380-FOOT SPD380 _____ mph DIR380 _____ degrees (from)
 DELTA T/STABILITY CLASS _____/_____.

150-FOOT SPD150 _____ mph DIR150 _____ degrees (from)
 DELTA T/STABILITY CLASS _____/_____.

33-FOOT SPD33 _____ mph DIR33 _____ degrees (from)
 DELTA T/STABILITY CLASS _____/_____.

STABILITY CLASS	DELTA T (380-33FT) ELEVATED	DELTA T (150-33FT) GROUND
A	Step <-3.61	Step <-1.22
B	-3.61 to -3.24	-1.22 to -1.10
C	-3.23 to -2.86	-1.09 to -.97
D	-2.85 to -.96	-.96 to -.33
E	-.95 to 2.84	-.32 to .95
F	2.85 to 7.58	.96 to 2.55
G	>7.59	>2.56

<u>SECTOR DEGREES (to)</u>			<u>SECTOR DEGREES (to)</u>			<u>SECTOR DEGREES (to)</u>		
N	350	11	SE	125	146	W	260	281
NNE	12	34	SSE	147	169	WNW	282	304
NE	35	56	S	170	191	NW	305	326
ENE	57	79	SSW	192	214	NNW	327	349
E	80	101	SW	215	237			
ESE	102	124	WSW	238	259			

EXHIBIT 3

Environmental Communications Data Log Sheet

Date: _____ Survey Team: _____ Team Members 1. _____ 2. _____
 SSN# _____
 Remaining Dose _____ mRem _____ mRem

#	Time	Location	SURVEY		AIR SAMPLE				
			Window Closed mRem/hr	Window Open mR/hr	Background cpm	Particulate Gross cpm	Silver Zeolite Gross cpm	Flow Rate lpm	Run Time Min
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									

E3-1

Title	Revision No.
ENVIRONMENTAL ASSESSMENT COMMAND CENTER	11

EXHIBIT 4

SOURCE TERM and DOSE ASSESSMENT

Time _____

RELEASE DATA

Main Stack _____
Turb. Bldg. Stack _____
Unmonitored _____
Release Duration _____ (hrs)
Flow Rate _____ (cfm)

MET DATA

	<u>380</u>	<u>150</u>	<u>33</u>
WS (mph)	_____	_____	_____
WD (° from)	_____	_____	_____
Temp (T°)	_____	_____	_____

SOURCE TERM

Main Stack		Turbine Bldg.	
RAGEMS Low Range _____ cps		RAGEMS Low Range _____ cpm	
RAGEMS High Range _____ Amps		RAGEMS High Range _____ uCi/cc	
RAGEMS HIGH Range _____ uCi/cc			
Spectrum (choose 1)			
Coolant Spill _____		DEI _____ uCi/gm	
Clad Damage _____			
Fuel Melt _____			

Isotopic Analysis Main Stack _____ Turbine Bldg. _____ Other _____
Sample Time _____ Results

Isotope	Quantity	Isotope	Quantity	Isotope
Kr-85	_____	I-133	_____	Te-131m
Kr-85m	_____	I-134	_____	Te-132
Kr-87	_____	I-135	_____	Sb-127
Kr-88	_____	Sr-89	_____	Sb-129
Xe-131m	_____	Sr-90	_____	Cs-134
Xe-133	_____	Sr-91	_____	Cs-136
Xe-133m	_____	Y-91	_____	Cs-137
Xe-135	_____	Mo-99	_____	Ba-140
Xe-138	_____	Ru-103	_____	La-140
I-131	_____	Ru-106	_____	Ce-144
I-132	_____	Te-129m	_____	Np-239

FLOW RATE

Main Stack Flow Rate _____ cfm	Feed Pump Room Flow Rate _____ cfm
Fan (ON or OFF)	Tb Op. Floor Flow Rate _____ cfm
Reactor Bldg. _____	Lube Oil Bay Flow Rate _____ cfm
Turbine Bldg. _____	
Old Radwaste _____	
New Radwaste _____	
SGTS _____	

FIELD READINGS

Team: _____ Location: _____
Closed Window Dose Rate _____ mR/hr Downwind Distance _____ ft
Open Window Dose Rate _____ mR/hr
Air Sample Time _____
Background _____ cpm Gross Particulate Filter _____ cpm
Gross Silver Zeolite _____ cpm
Sample Flow Rate _____ lpm. Sample Duration _____ minutes.

**OYSTER CREEK
EMERGENCY PREPAREDNESS
IMPLEMENTING PROCEDURE**

Number EPIP-OC-.33
Revision No. 5
Responsible Office Emergency Preparedness
Effective Date Date of Sale

Title Core Damage Estimation
Applicability/Scope Applies to work at Oyster Creek
This document is within QA plan scope Safety Reviews Required

X Yes ___ No
X Yes ___ No

Prior Revision 4 incorporated the following Temporary Changes:
N/A

This Revision 5 incorporates the following Temporary Changes:
N/A

List of Pages (all pages rev'd to Rev. 5)

- 1.0 to 14.0
- E1-1
- E2-1
- E3-1
- E4-1
- E5-1
- E6-1
- E7-1
- E8-1
- E9-1
- E10-1
- E11-1

**NON-CONTROLLED
This Document Will Not
Be Kept Up To Date
DCC Oyster Creek**

	Signature	Concurring Organization Element	Date
Originator		Emergency Planner -	1/5/00
Concurred By		Director, Ops & Mtce.	1-5-00
Approved By		Mgr. Emergency Preparedness	1/11/00

Title
Core Damage Estimation

Revision No.
5

1.0 PURPOSE

- 1.1 This procedure and the referenced computer code provide a method to estimate the degree and type of core damage after an accident at Oyster Creek Nuclear Generating Station. The resulting determination of the degree and type of core damage will be provided to the NRC and New Jersey emergency agencies, when it is requested and when considered appropriate by the ED/ESD.
- 1.2 The post-accident inventory of activity in containment will also be estimated by this procedure. This information may be useful to the ED and ESD in the determination of potential off-site effects in the event of a loss of containment.
- 1.3 This procedure shall be initiated at the request of the ED or the ESD. This procedure may be performed at the Parsippany Engineering Staff or the TSC.

2.0 APPLICABILITY/SCOPE

- 2.1 This procedure applies to all OCNCS personnel performing core damage evaluations for Oyster Creek during a declared emergency at Oyster Creek.

3.0 DEFINITIONS

- 3.1 Core Damage - Core Damage includes both Fuel Melting and Cladding Failure.
- 3.2 Cladding Failure - The rupture or oxidation of the zircalloy fuel rod cladding, which allows complete release of gaseous and/or volatile chemical species of fission products contained in the fuel pin - fuel cladding gap.
- 3.2.1 Cladding Rupture - The loss of fuel pin cladding integrity due to mechanical loads, clad melting or burst at high fuel temperatures.
- 3.2.2 Cladding Oxidation - The loss of cladding integrity due to chemical oxidation of the zircalloy cladding at high fuel temperatures. Zircalloy reacts with steam at high temperatures and produces hydrogen gas.

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Core Damage Estimation

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3.3 Fuel Melt - The physical melting of the uranium dioxide fuel in the fuel rods, which allows the release of fission products contained in the fuel matrix.

3.4 Fuel Failure - The operating (non-accident) fuel cladding perforations or cracks, which allow minor releases of fission products from the fuel pin - fuel cladding gap to the reactor coolant.

3.5 BOC - Beginning of Cycle.

4.0 RESPONSIBILITIES

4.1 The ED may direct the TSC Coordinator to evaluate the extent of core damage using this procedure.

4.2 The ESD may direct the ED to initiate evaluation of the extent of core damage using this procedure.

4.3 The TSC Coordinator may request the Parsippany Engineering Staff to evaluate the extent of core damage or the calculation may be performed at the TSC or other location. The TSC Coordinator may also request other support groups to evaluate core damage using this procedure if Parsippany is unable to perform the task. The TSC Coordinator will communicate to both the ED and ESD the result of any evaluation performed by the TSC or any support group other than the Parsippany Engineering Staff.

4.4 When calculations are performed in Parsippany they will be communicated to the TSC Coordinator, the ED, and the ESD the result of any evaluation performed under this procedure.

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5.0 PROCEDURE

NOTE

If a PASS is requested for the purpose of performing a core damage estimate, samples and analysis in Section 5.1.1 must be capable of being completed within 3 hours. This requirement is based on a commitment made under NUREG-0737 and cannot be revised without regulatory approval.

5.1 Determine the time that the most recent PASS reactor water, drywell gas, torus gas, and torus water samples were taken. If the required samples (identified in 5.1.1) were not taken under current or similar plant conditions, the ED or designee will request the CHEMISTRY COORDINATOR to obtain the necessary PASS sample(s) be taken. The Chemistry Coordinator should consult with the RAC in completing EPIP-OC-.35 Emergency Sample Request Form. If the required PASS results are not available, the methods of 5.6 may be used. It is emphasized that these methods are only to be used until PASS results become available.

NOTE

PASS samples are most representative when the RCS is stable, i.e.; the RCS has been in its current configuration with respect to temperature, level and flow for 4 hours. Consult with the chemistry coordinator.

5.1.1 The following combinations of PASS samples satisfy the minimum requirements of this procedure and NUREG 0737.

5.1.1.1 If LOCA has not taken place:

Reactor Coolant and Containment Atmosphere.

5.1.1.2 If LOCA has taken place:

Reactor Coolant (preferably Torus water), Containment Atmosphere initially, when available. For the purpose of meeting the NUREG 0737 requirement, only the reactor coolant and containment atmosphere samples are required. Sample analysis will be performed on a computer, IAW Section 5.3.

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5.1.2 All sample results used in this procedure must be taken at similar conditions. There cannot have been a major change in reactor status (i.e. samples all taken prior to LOCA, or all samples taken post-LOCA, or all water samples taken prior to recirculation in the torus).

5.1.3 The user may use the optional data collection sheets (Exhibits 2 and 3) to collect data before the code is started. Use of these forms is not needed for documentation, but can assist in organizing the necessary data to minimize computer time if there are other demands on computer usage.

5.2 Obtain data necessary for Core Damage Estimation.

5.2.1 Complete the Core Damage Estimation Data Sheet. (Optional)
(Exhibit 2)

NOTE

If the current power history is not available, a full power history can be used for the initial estimate of core damage.

5.2.2 Complete the Current Cycle Power History (Exhibit 3). The current cycle history should include all power level changes of 300 MW(t) or more that last for two days or more. Each power level change that meets this criteria will constitute a new operating period. Include anytime the reactor is shut down. Duration and nominal power level for each period should be recorded. The following information is required for each operating period. Each operation period is assigned a sequential number, j.

DSS - Time in days since BOC startup to end of operating period j

TJ - Duration in days of operating period j;

$$TJ(1) = DSS (1)$$

$$TJ(j+1) = DSS(j+1) - DSS(j)$$

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For period when reactor is shutdown;

$$TJ(j) = 0$$

TOJ - Time in days between the end of operation period j and current reactor shutdown;

$$TOJ(j) = DSS(JMAX) - DSS(j)$$

PJ - Nominal reactor power in period j, MWT. Enter 0 for periods reactor is shut down.

NOTE

DSS, TJ, TOJ must be updated to current cycle history, however, previous operating periods will not need to be changed. TOJ must be recalculated at the time of the analysis for all operating periods.

5.3 CALCULATIONS USING IBM/PC

5.3.1 All calculations can be performed using an IBM/PC or equivalent with a LOTUS-123 spread sheet provided for this analysis. See Exhibit 11. The spread sheet contains previous cycle power history. Exhibits 2 and 3 match the input format for the spread sheet.

5.3.2 Proceed to step 5.5 following execution of the program.

5.3.3 If the LOTUS program cannot be used, proceed to 5.4.

5.4 CALCULATIONS PERFORMED MANUALLY

5.4.1 For manual calculations, only I-131 and Xe-133 should be used since a long term power history is required for CS-137 and KR-85. Only the last two months of power history are needed for I-131 and Xe-133. Exhibit 4 is provided to record calculation results.

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5.4.2 Correct the concentrations in the gas sample for the relative temperature and pressure differences between the system sampled and ambient conditions. Calculation is performed for both Torus and Containment atmosphere samples.

$$C_{gi} = C_{gi(vial)} \left(\frac{P_2 T_1}{P_1 T_2} \right)$$

where:

C_{gi} = Isotopic concentration

$C_{gi(vial)}$ = Vial isotopic concentration

P_1, T_1 = Sample vial (ambient) pressure and temperature
(psia, °R)

P_2, T_2 = System pressure and temperature at time of sampling
(psia, °R)

NOTE: °R = °F + 460

5.4.3 Correct the measured concentrations for decay to the time of reactor shutdown. Calculation performed for each sample and each isotope C_i (shutdown) = C_i (sample) $e^{-\lambda_i (TSD)}$

λ_i = Decay constant for nuclide i (day⁻¹)

$$I-131 = 8.62E-2 \text{ days}^{-1}$$

$$Xe-133 = 1.32E-1 \text{ days}^{-1}$$

TSD = Time between reactor shutdown and when sample was taken.
(days)

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5.4.4 Calculate the fission product inventory correction factor F_{Ii}

= Calculation performed for each isotope.

$$F_{Ii} = \frac{3651 (1 - e^{-1095 i_i})}{\sum_j [P_j (1 - e^{-i_i T_j}) e^{-T^o}]}$$

Where:

P_j = Average reactor power during period j (MW_t)*

i_i = Decay constant of nuclide i (day^{-1})

T_j = Duration of operating period j (days)*

T^o = Time between end of operating period j and time of final reactor shutdown (days)

3651 = Average reactor power of reference plant (MW_t)

1095 = Time of continuous operation of reference plant (days)

5.4.5 Calculate the average concentration of water and gas samples.

$$CW = \frac{(IRx) 1.97 \times 10^8 \text{ g} + (IT) 2.36 \times 10^9 \text{ g}}{2.56 \times 10^9 \text{ cc}}$$

$$CG = \frac{(Xedg) 5.097 \times 10^9 \text{ cc} + (Xetg) 3.59 \times 10^9 \text{ cc}}{8.69 \times 10^9 \text{ cc}}$$

CW = measured concentration of I-131 in the Oyster Creek coolant (uCi/g) corrected to time of shutdown

CG = measured concentration of Xe-133 in the Oyster Creek containment gas (uCi/cc) corrected to time of shutdown and pressure/temperature

IRx = Concentration of I-131 in Reactor Water, uCi/g

IT = Concentration of I-131 in Torus Water, uCi/g

Xedg = Concentration of Xe-133 in drywell gas, uCi/cc

Xetg = Concentration of Xe-133 in Torus gas, uCi/cc

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5.4.6 Calculate concentrations normalized to reference plant

$$CWREF = CW \times 0.6531 \times F_I$$

$$CGREF = CG \times 0.2173 \times F_{Xe}$$

5.4.7 Using Exhibits 6 and 7, determine best estimates for clad failure and fuel melt from concentrations calculated in 5.4.6. Record results on Exhibit 5.

5.5 GUIDELINES FOR ASSESSING CORE DAMAGE

5.5.1 Following execution of the core damage estimation program, estimates on core damage will be available based on up to four isotopes; I-131, Cs-137, Xe-133 and Kr-85. For each isotope there will be estimates on clad failure and fuel melt. The assessment will include a best estimate value along with a high and low range.

5.5.2 The I-131 and Xe-133 will provide the more accurate estimate soon after the accident since measurements of Cs-137 and Kr-85 activities are not very likely until the reactor has been shut down for longer than a few days. Depending on when the samples are taken, either the I-131 and Xe-133 or all four of the isotopes will be the primary isotopes for assessing core damage.

5.5.3 A straight average of the best estimate values for cladding failure and fuel melt from primary isotopes can be used to arrive at an overall estimate for the extent of core damage.

5.5.4 If the data for an isotope is incomplete, such as the time sample was taken, temperature or pressure data, concentration from only one source, then the isotope should not be used in determining core damage.

5.5.5 If the data for all the isotopes is incomplete, then the extent of core damage should be based on the high estimate unless engineering judgement should dictate otherwise.

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5.5.6 If fuel melt has occurred, there should be the presence of some less volatile elements in the water samples, such as Sr-92, La-140, Ba-140 and Ru-103 (either soluble or insoluble). The presence of these isotopes would confirm fuel melt.

5.6 SECONDARY METHODS

NOTE

The following two methods are meant to be used if there is insufficient data available to use the method of Sections 5.1 to 5.5. It is emphasized that these two methods are not to be used in place of Sections 5.1 to 5.5, but only until sufficient data becomes available.

5.6.1 Hydrogen concentration in containment.

5.6.1.1 Hydrogen may be generated when zircalloy cladding oxidizes at high temperature in the presence of steam. The amount of free hydrogen in the containment can therefore be an indication of the degree of cladding oxidation.

5.6.1.2 Cladding oxidation may lead to cladding failure if it is extensive enough. There is not a direct correlation between cladding oxidation and cladding failure. For example, 1% cladding oxidation does not mean that 1% cladding failure has occurred. If cladding oxidation is above 25% however, it is a good indication that cladding failure will approach 100%.

5.6.1.3 The degree of cladding oxidation is determined by using the containment hydrogen percentage with the curve on Exhibit 8. This curve is unaffected by temperature or pressure since the hydrogen monitor removes condensable steam from its sample stream. The code will also perform this check.

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CAUTION

If there has been a loss of containment or a hydrogen burn inside containment, Exhibit 8 and the code will provide only a lower limit to the degree of cladding oxidation.

5.6.1.4 Use the dashed curves on Exhibit 8 when drywell venting at 3 psig has been performed in accordance with EOP's.

5.6.2 Containment High-Range Radiation Monitor System (CHRRMS)

5.6.2.1 The containment High-Range Radiation Monitors may be used to verify the amount of activity released to the drywell atmosphere. The chief drawback of using the CHRRMS to develop this estimate is that the isotopic distribution which must be assumed to provide the correlation depends upon the specific accident source term - which cannot be known in advance. The CHRRMS therefore provides only a rough check on the results obtained through Sections 5.1 through 5.5.

CAUTION

This method is not valid if venting has taken place if containment spray has been initiated.

5.6.2.2 Exhibit 9 is a family of curves relating CHRRMS dose rates to the percentage of core noble gases released as a function of time after reactor shutdown. These curves include a postulated release of 25% of core iodines into the containment atmosphere, but do not include any plateout on drywell surfaces.

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5.6.2.3 The percentage of noble gases released can then be compared with Exhibit 10, expected Fuel Melt vs. Noble Gas and Iodine Release, to determining the approximate amount of fuel melt which has occurred.

5.7 Results of this analysis should be provided to the ED and ESD using Exhibit 1. Estimates of core damage should be reported in one of four categories for both clad failure and fuel melt. The categories are none (<1%), minor (<10%), intermediate (10-50%) and major (>50%).

5.8 Documentation of this calculation (including the computer printout) should be retained with other TSC or Parsippany emergency documentation and attached to a copy of the completed Exhibit 1.

6.0 REFERENCES

- 6.1 2240-IMP-831.8 Estimation of Percent Fuel Failure
- 6.2 EPIP-OC-26 Technical Support Center
- 6.3 2240-IMP-831.9 Post-Accident Sampling System Operation
- 6.4 NEDO-22215 Procedures for the Determination of the Extent of Core Damage Under Accident Conditions C.C. Lin -August 1982, General Electric Co.
- 6.5 TDR-496, Rev. 0 "Method for Estimating Extent of Oyster Creek Core Damage Under Accident Conditions" P. Loza - Dec. 22, 1983.
- 6.6 NUREG-0737

7.0 EXHIBITS

- 7.1 Exhibit 1, Core Damage Estimate Transmittal Form
- 7.2 Exhibit 2, Core Damage Estimation Data Sheet
- 7.3 Exhibit 3, Current Cycle Power History
- 7.4 Exhibit 4, Core Damage Estimation Correction Factors
- 7.5 Exhibit 5, Core Damage Estimation
- 7.6 Exhibit 6, I-131 Concentration in Primary Coolant and Extent of Core Damage
- 7.7 Exhibit 7, Xe-131 Concentration in Containment Gas and Extent of Core Damage

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- 7.8 Exhibit 8, Cladding Oxidation as a Function of Containment Hydrogen
- 7.9 Exhibit 9, Noble Gases Released as a Function of CHRRM Reading and Time
- 7.10 Exhibit 10, Expected Fuel Melt vs. Noble Gas and Iodine Release
- 7.11 Exhibit 11, Steps for Use of the Core Damage Assessment LOTUS 123 Program

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EXHIBIT 2

CORE DAMAGE ESTIMATION DATA SHEET

DATE AND TIME OF REACTOR SHUTDOWN AND PASS SAMPLES ANALYZED

	DATE MM/DD/YY	TIME HH:MM
REACTOR SHUTDOWN	_____	_____
REACTOR WATER	_____	_____
TORUS WATER	_____	_____
DRYWELL ATMOSPHERE	_____	_____
TORUS ATMOSPHERE	_____	_____

TIME AFTER SHUTDOWN SAMPLES TAKEN (IN DAYS)

REACTOR WATER	_____	DRYWELL ATMOSPHERE	_____
TORUS WATER	_____	TORUS ATMOSPHERE	_____

	DRYWELL	TORUS
TEMPERATURE (DEG F)	_____	_____
PRESSURE (PSIG)	_____	_____
GAS SAMPLE TEMPERATURE (DEG F)	_____	_____
GAS SAMPLE PRESSURE (PSIG)	_____	_____

ISOTOPE	DECAY CONSTANT (1/DAYS)	CONCENTRATION REACTOR WATER	(MICROCURIE/CC) TORUS WATER
I-131	8.62E-02	_____	_____
CS-137	6.29E-05	_____	_____

ISOTOPE	DECAY CONSTANT (1/DAYS)	CONCENTRATION DRYWELL ATMOS.	(MICROCURIES/CC) TORUS ATMOS.
XE-133	1.32E-01	_____	_____
KR-85	1.77E-04	_____	_____

Title <p style="text-align: center;">Core Damage Estimation</p>	Revision No. <p style="text-align: center;">5</p>
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EXHIBIT 3

CURRENT CYCLE POWER HISTORY

PJ - NOMINAL REACTOR POWER IN PERIOD J (MWT)

TJ - DURATION OF OPERATING PERIOD J (DAYS)

TOJ - TIME BETWEEN THE END OF OPERATING PERIOD J AND CURRENT REACTOR SHUTDOWN (DAYS)

DSS - TIME SINCE THE BOC STARTUP (DAYS) TO END OF PERIOD J

PERIOD J	DSS	TJ	TOJ	PU
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

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EXHIBIT 4

CORE DAMAGE ESTIMATION CORRECTION FACTORS

5.4.2 TEMPERATURE/PRESSURE CORRECTION FACTORS

	DRYWELL	TORUS
XE-133	_____	_____

5.4.3 CORRECTION FOR DECAY TO THE TIME OF REACTOR SHUTDOWN

	REACTOR	TORUS
I-131	_____	_____
	DRYWELL	TORUS
XE-133	_____	_____

5.4.4 FISSION PRODUCT INVENTORY CORRECTION FACTOR

FI(I-131) = _____
FI(XE-133) = _____

5.4.5 AVERAGE CONCENTRATIONS FOR WATER AND GAS SAMPLES

CW(I-131) = _____
CG(XE-133) = _____

5.4.6 CONCENTRATIONS NORMALIZED TO REFERENCE PLANT

CWREF(I-131) = _____
CGREF(XE-133) = _____

NOTE

NUMBERS (5.4.2, 5.4.3, ETC.) REFER TO PROCEDURE STEPS.

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EXHIBIT 5

CORE DAMAGE ESTIMATION

5.4.7 CORE DAMAGE ESTIMATION

<u>ISOTOPE</u>	<u>ESTIMATE</u>	<u>CLAD FAILURE</u>	<u>FUEL MELT</u>
I-131	HIGH	_____	_____
	BEST	_____	_____
	LOW	_____	_____
XE-133	HIGH	_____	_____
	BEST	_____	_____
	LOW	_____	_____

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EXHIBIT 6

I-131 CONCENTRATION IN THE PRIMARY COOLANT (REACTOR WATER
AND TORUS WATER) AND THE EXTENT OF CORE DAMAGE IN REFERENCE PLANT

% Cladding Failure

$$\text{Upper Release Limit (\%)} = 10^{[\text{Log}(x) + 0.602] / 0.982}$$

$$\text{Best Estimate (\%)} = 10^{[\text{Log}(x) - 0.602] / 1.011}$$

$$\text{Lower Release Limit (\%)} = 10^{[\text{Log}(x) - 1.699] / 0.987}$$

% Fuel Melt

$$\text{Upper Release Limit (\%)} = 10^{[\text{Log}(x) - 2.079]}$$

$$\text{Best Estimate (\%)} = 10^{[\text{Log}(x) - 2.342]}$$

$$\text{Lower Release Limit (\%)} = 10^{[\text{Log}(x) - 2.380]}$$

Where X is the I-131 concentration CWREF calculated in section 5.4.6.

If percent release is calculated as greater than 100%, indicate 100% on Exhibit 5.

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EXHIBIT 7

Xe-133 CONCENTRATION IN THE CONTAINMENT GAS (DRYWELL AND
TORUS GAS) AND THE EXTENT OF CORE DAMAGE IN REFERENCE PLANT

% Cladding Failure

$$\text{Upper Release Limit (\%)} = 10^{[\text{Log}(x) + .302]}$$

$$\text{Best Estimate (\%)} = 10^{[\text{Log}(x) + .176]}$$

$$\text{Lower Release Limit (\%)} = 10^{[\text{Log}(x) + .778]}$$

% Fuel Melt

$$\text{Upper Release Limit (\%)} = 10^{[\text{Log}(x) - 1.398] / 1.025}$$

$$\text{Best Estimate (\%)} = 10^{[\text{Log}(x) - 1.602]}$$

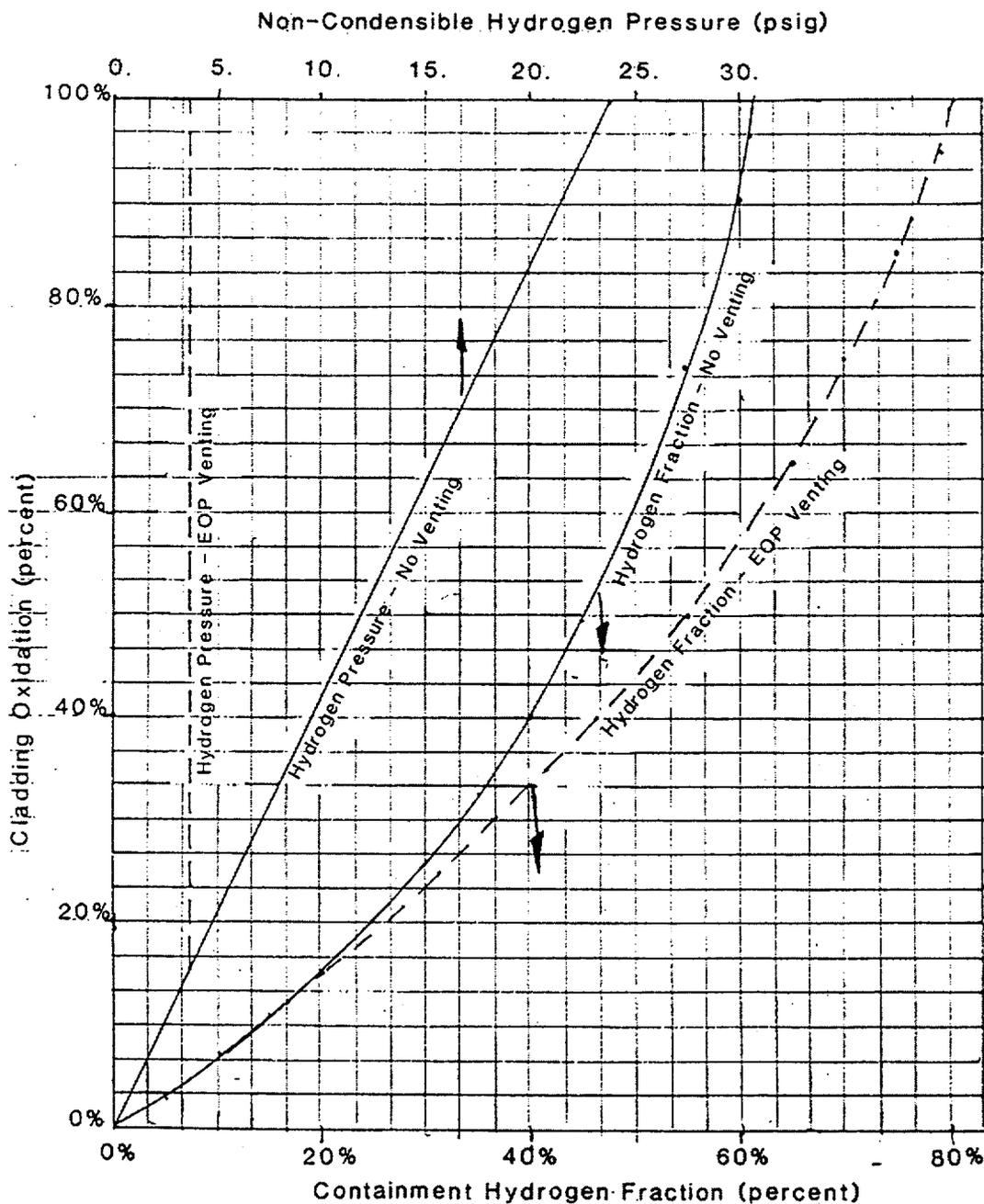
$$\text{Lower Release Limit (\%)} = 10^{[\text{Log}(x) - 1.681]}$$

Where X is the Xe-133 concentration CGREF calculated in section 5.4.6.

If percent release is calculated as greater than 100%, indicate 100% on Exhibit 5.

EXHIBIT 8

CLADDING OXIDATION AS A FUNCTION OF CONTAINMENT HYDROGEN

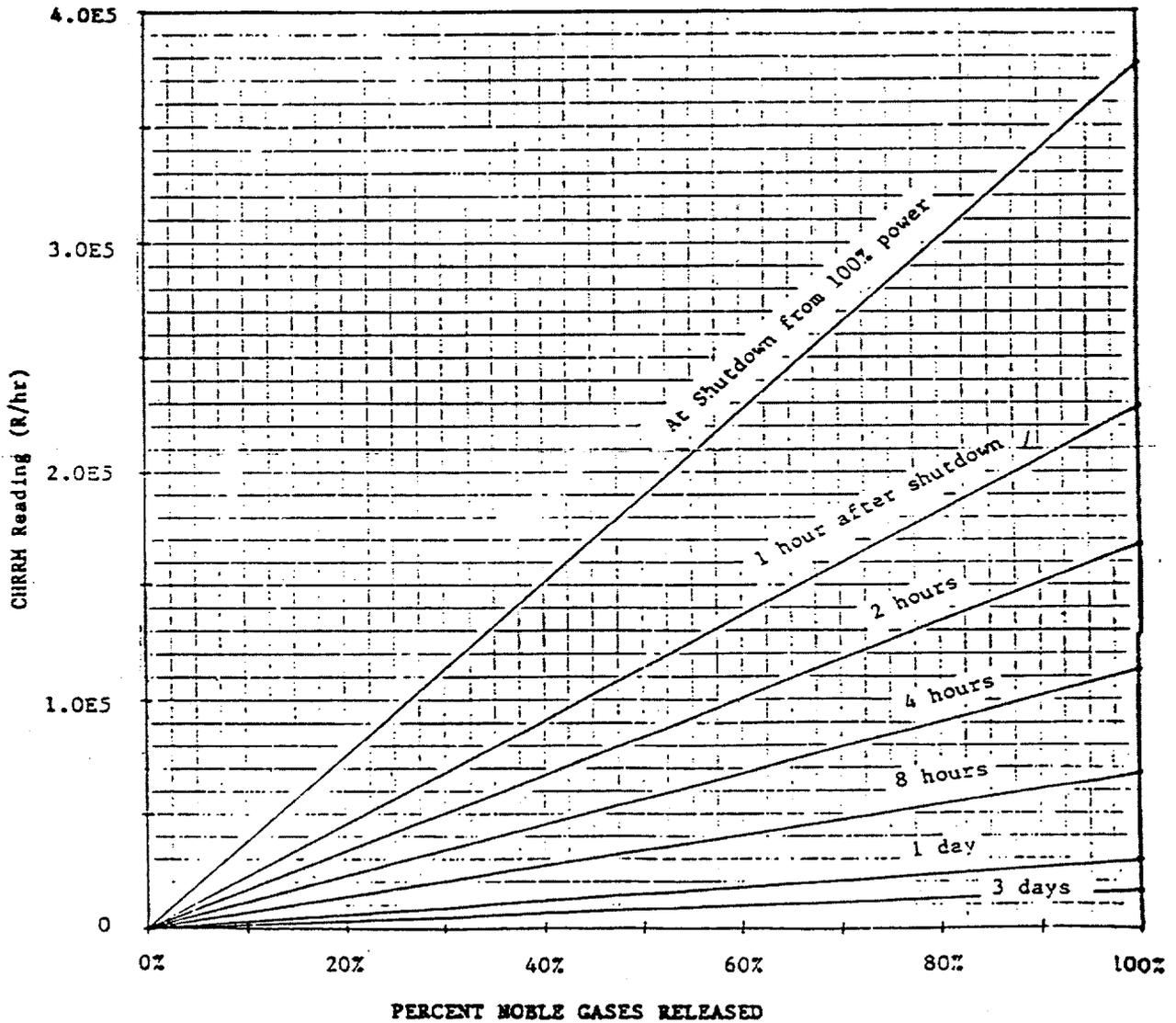


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EXHIBIT 9

NOBLE GASES RELEASED AS A FUNCTION OF CHRRM READING AND TIME

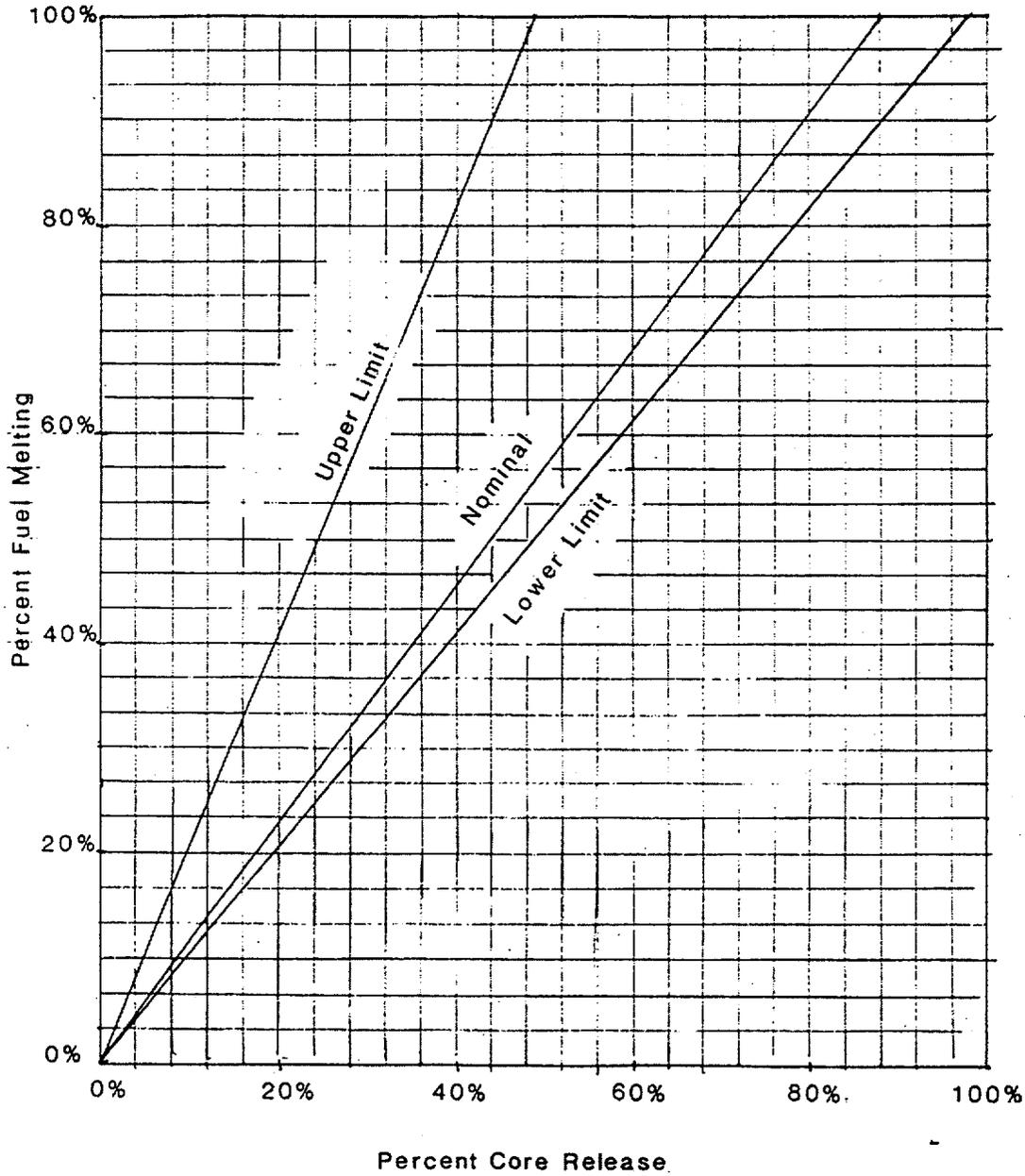


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EXHIBIT 10

EXPECTED FUEL MELT VS. NOBLE GAS AND IODINE RELEASE



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EXHIBIT 11STEPS FOR USE OF THE CORE DAMAGE ASSESSMENT LOTUS-123 PROGRAM*

1. Select the LOTUS-123 application from the network menu or attach to the directory containing the LOTUS-123 software.
2. Place either the 5 1/4 or 3 1/2 in disk containing the Core Damage Assessment spreadsheet in drive A: or B: as appropriate.
3. Enter LOTUS-123.
4. Press /FD and move cursor (arrow keys) to DRILL.WK1 or CYCXXCDE.WK1 (XX is the cycle number) and hit RETURN. Select SAMPLE.WK! for a sample problem. CYCXXCDE.WK1 should be used for actual emergencies or drills occurring during the operating cycle. Drills occurring during an outage should use the DRILL.WK1 spreadsheet which has a nominal full power history.
5. Enter Data. Use the arrow keys to move the cursor to the different data entry points and type in the values. For the date and time entries, a single quote (') must be used first. The use of Exhibits 2 and 3 will make the data entry simpler.
6. After the data is entered, press the F9 key to have program perform calculations. After any change to the data, the F9 key should be pressed. The word "CALC" will appear on the bottom of the screen and will disappear when the F9 key is pressed. Use the PAGE DOWN key to the page containing the core damage estimate.
7. To get a hard copy of the spread sheet, press /PPAG⁺. Optional - a user experienced with LOTUS-123 can add a header.

* The user is assumed to have a basic knowledge of LOTUS-123.

+ The spreadsheet must be set up for the printer being used.



A PECO Energy/British Energy Company

OYSTER CREEK
EMERGENCY PREPAREDNESS
IMPLEMENTING PROCEDURE

Number
EPIP-OC-.35

Title	RADIOLOGICAL CONTROLS EMERGENCY ACTIONS		Revision No.	14
Applicability/Scope	Applies to work at Oyster Creek		Responsible Office	Emergency Preparedness
This document is within QA plan scope	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Effective Date	
Safety Reviews Required	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Date of Sale	

Prior Revision 13 incorporated the following Temporary Changes:

N/A

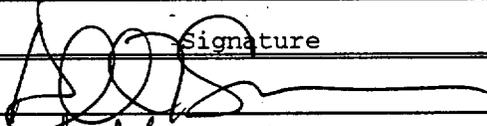
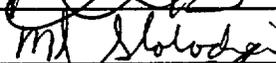
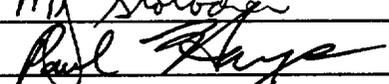
This Revision 14 incorporates the following Temporary Changes:

N/A

List of Pages (all pages rev'd to Rev. 14)

- 1.0 to 8.0
- E1-1 to E1-4
- E2-1 to E2-2
- E3-1 to E3-2
- E4-1
- E5-1 to E5-2
- E6-1
- E7-1 to E7-2
- E8-1
- E9-1
- E10-1 to E10-2
- E11-1 to E11-2
- E12-1
- E13-1
- E14-1
- E15-1
- E16-1 to E16-4
- E17-1
- E18-1 to E18-2
- E19-1 to E19-5
- E20-1
- E21-1
- E22-1

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This Document Will Not
Be Kept Up To Date
DCC Oyster Creek

	Signature	Concurring Organization Element	Date
Originator		EMERGENCY PLANNER	1/5/00
Concurred By		Director Rad Health & Safety	1-11-2000
Approved By		Mgr. Emergency Preparedness	1/13/00

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PROCEDURE HISTORY

REV.	DATE	ORIGINATOR	SUMMARY OF CHANGE
8	10/94	A. T. Smith	Delete Parsippany Field Monitoring Teams.
9	07/95	A. T. Smith	Add note to clarify Radiological Controls Coord. Responsibilities in reference to sending technicians with personnel into radiation areas during emergencies. Add note for use of North Gate only during outages.
10	07/96	J. Bontempo	Update telephone number for INPO.
11	10/96	T. Blount	Change PAR directions to meet NRC guidance of Evacuation as Preferred Recommendation. Incorp RAC/RCC integration of duties> (ref Rev. 12 & 11 of E-Plan).
12	01/99	J. Rayment	Reuse Rad Monitor set points to reflect current status. Deleted 3.1 EREIF. Deleted reference to Radiological Controls support coordinator. Assigned responsibility to RAC for arranging alternate sample analysis that was previously handled by Radiological Controls support coordinator position which has been eliminated. Clarified old A120 procedure references to 6632. Clarified reference designations throughout procedure.
13	05/99	A. T. Smith	Update E-Plan number & title. Change Exhibit 9 request for sample analysis from TMI to "INPO Emerg. Resource Manual".
14	DOS	A. T. Smith	Change references from GPU or GPUN to OCNCS. Remove TMI as listed in Es. 12 for Emerg. Assist. Org.

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1.0 PURPOSE

1.1 This procedure provides guidance for radiological controls during a declared emergency at Oyster Creek Nuclear Generating Station.

2.0 APPLICABILITY/SCOPE

2.1 This procedure applies to all personnel responding in support of an emergency, drill, or exercise.

2.2 This procedure addresses radiological controls during an emergency including:

- *Assessment and Protective Action Recommendations
- *Emergency Dosimetry and Exposure Authorizations
- *Survey and Sample Analysis
- *Protective Clothing Considerations
- *Monitoring and Decontamination

3.0 DEFINITIONS

None.

4.0 RESPONSIBILITIES

4.1 Radiological Assessment Coordinator (RAC) is responsible, initially, for directing the onsite and offsite Radiological/Environmental Survey Teams after they are dispatched, Radiological Engineering Support, and the Radiological Controls Coordinator.

4.1.1 Reports to Group Leader R&EC.

4.1.2 He/she shall coordinate initial on-site and offsite radiological assessment activities, review results, report findings and make recommendations to the Emergency Director.

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- 4.1.2.1 This includes, but is not limited to, performance of dose projections, direction of Onsite and Offsite Radiological/Environmental Survey Teams, onsite protective actions and formulating Protective Action Recommendations (PARs) which are then relayed to the Emergency Director.
- 4.1.2.2 In addition, he shall interface with the Environmental Assessment Coordinator (EAC) to keep him/her current as to plant conditions and radiological source terms.
- 4.1.2.3 The RAC may continue to estimate source terms which will be relayed to the EAC for use in projecting offsite dose using appropriate methods as necessary.

4.2 Radiological Controls Coordinator (RCC)

- 4.2.1 Responsible for coordinating the in-plant radiological controls activities from the OSC and initially dispatching the Radiological/Environmental Survey Teams until they have established communications with the IREO RAC at the TSC. The RCC may maintain control of the Onsite Radiological/Environmental Survey Team as a designee of the RAC or the RAC may assume the RCC duties in conjunction with the RAC duties until such time that additional resources are available to take on the RCC role.
- 4.2.2 His/her functions include supervising the radiological controls technicians in the areas of radiological access control; radiological control coverage for emergency repair, corrective actions, search and rescue, first aid, assembly area monitoring, fire fighting, and personnel monitoring.
- 4.2.3 He/she shall be responsible for prioritizing the immediate radiological controls response in-plant.

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- 4.2.4 He/she shall advise the RAC of problems (high background, significant backlogs, etc.) with sample analysis.
- 4.2.5 He/she shall keep the RAC advised of radiological conditions, jobs in progress, etc.
- 4.2.6 He/she shall keep the OSC Coordinator advised of the jobs he/she is covering in order to effectively coordinate the on-site radiological control needs with plant operational needs.

4.3 Radiological Engineering Support

- 4.3.1 Assists the RAC in performing dose projection calculations, source term calculations, and other calculations or determinations necessary to assess radiological hazards and to minimize personnel exposure.

5.0 PROCEDURE

NOTE

A minimum of two personnel shall be required for entry into radiation areas during a Site Area Emergency or General Emergency. Two personnel may be required during an Unusual Event or Alert at the direction of the RAC/RCC. The need for a qualified Radiological Controls Technician, GRCS or Radiological Engineer to accompany personnel into radiation areas during emergencies shall be determined by the RCC based on the nature of the emergency and the existing or expected radiological conditions. Where dose limits could reasonably be exceeded, the presence of a Radiological Controls representative is required.

5.1 Radiological Assessment Coordinator

- 5.1.1 The Group Radiological Controls Supervisor (GRCS) assumes the duties of the RAC and the duties of the on-shift RAC/IREO RCC, until relieved by the IREO RAC.
- 5.1.2 Consults and accomplishes applicable portions of Exhibit 1, "Radiological Assessment Coordinator Guide".

NOTE

The on-shift RAC consults and accomplishes applicable portions of Exhibit 3, "On-Shift RAC/IREO Radiological Controls Coordinator (RCC) Guide".

- 5.1.3 Completes Exhibit 6, "Radiological" of the Station Status Form from EPIP-OC-.03, "Emergency Notification".

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- 5.1.4 The RAC shall complete the actions in Exhibit 9 when it is necessary to obtain assistance in completing sample analysis.
- 5.1.5 Consults and accomplishes tasks listed in Exhibit 2 as necessary.
- 5.1.6 Arrange for alternate sample analysis facilities when required. Such facilities may be found in the INPO Emergency Resource Manual (Reference 6.11).
- 5.2 Radiological Controls Coordinator
 - 5.2.1 Consults and accomplishes applicable portions of Exhibit 3, "Radiological Controls Coordinator Guide".
 - 5.2.2 Consults and accomplishes tasks listed in Exhibit 4 as necessary.
- 5.3 Radiological Engineering Support
 - 5.3.1 Consults and accomplishes applicable actions of EPIP-OC-.26, The Technical Support Center, Exhibit 5, "Radiological Engineering Support Checklist".
- 5.4 Dosimetry will be issued in accordance with guidance provided in Exhibit 6, Emergency Dosimetry Guidelines.
- 5.5 The RAC or RCC shall follow the guidance in Exhibit 10 when directing personnel to conduct surveys.
- 5.6 Respiratory protection equipment shall be prescribed in accordance with Exhibit 11, "Respiratory Protection".
- 5.7 Protective clothing shall be prescribed in accordance with Exhibit 14.
- 5.8 The RAC shall perform dose assessment activities in accordance with Exhibit 15.
- 5.9 Contamination monitoring and decontamination practices shall be conducted in accordance with Exhibit 16.

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14**6.0 REFERENCES**

- 6.1 Title 10, Code of Federal Regulations, Part 20.
- 6.2 Procedure 2000-PLN-1300.01, "OCNGS Emergency Plan".
- 6.3 Procedure EPIP-OC-.01, "Classification of Emergency Conditions".
- 6.4 Procedure EPIP-OC-.02, "Direction of Emergency Response".
- 6.5 Procedure EPIP-OC-.13, "Site Evacuation and Personnel Mustering at the Remote Assembly Area".
- 6.6 Procedure EPIP-OC-.25, "Emergency Operations Facility".
- 6.7 Procedure EPIP-OC-.26, "Technical Support Center".
- 6.8 Procedure EPIP-OC-.27, "Operations Support Center".
- 6.9 Procedure OEP-ADM-1319.02, "Emergency Response Facilities and Equipment Maintenance".
- 6.10 Plant Chemistry Procedure 831.11, "Post Accident Sampling and Analysis: Cask Transport Offsite".
- 6.11 INPO 86-032, "Emergency Resources Manual".
- 6.12 Procedure 6630-ADM-4020.01. "Respiratory Protection Program".
- 6.13 Procedure 6632-OPS-4030.07, "Operation of the New Respiratory Equipment Cleaning and Maintenance Facility".
- 6.14 Procedure 6630-OPS-4030.02, "Issue and Control of Respiratory Protection Equipment".
- 6.15 Procedure 6632-OPS-4030.03, "Inspection and Maintenance of Respiratory Protection Equipment".
- 6.16 Procedure 6630-ADM-4020.03, "Use of Respiratory Protective Equipment".
- 6.17 Procedure 6630-ADM-4330.02, "Monitoring for Personnel Contamination".
- 6.18 Procedure 6630-ADM-4200.01, "Radiological Surveys".
- 6.19 Procedure 6630-ADM-4025.01, "Bioassay Program".
- 6.20 Action Item 920197, "Fluid Intake for Emergency Workers."
- 6.21 Memo 6610-94-0016, D. W. Ethridge, Dose To Save A Life (1-14-94).
- 6.22 NRC Letter to M. B. Roche - 4/24/96 - E. P. Meeting of 3/15/96.
- 6.23 Procedure EPIP-OC-.44, "Thyroid Blocking".

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7.0 EXHIBITS

- 7.1 Exhibit 1, "Radiological Assessment Coordinator (RAC) Guide"
- 7.2 Exhibit 2, "Radiological Assessment Coordinator Periodic Tasks"
- 7.3 Exhibit 3, "On-Shift RAC/IREO Radiological Controls Coordinator (RCC) Guide"
- 7.4 Exhibit 4, "Radiological Controls Coordinator (RCC) Periodic Tasks"
- 7.5 Exhibit 5, "Radiological Engineering Support Guide"
- 7.6 Exhibit 6, "Emergency Dosimetry Guidelines"
- 7.7 Exhibit 7, "Emergency Exposure Criteria"
- 7.8 Exhibit 7A, "Dose Limits for Emergency Personnel"
- 7.9 Exhibit 8, "Emergency Dose Authorization"
- 7.10 Exhibit 9, "Actions for Assistance with Analysis Capabilities"
- 7.11 Exhibit 10, "Radiological Surveys"
- 7.12 Exhibit 11, "Respiratory Protection"
- 7.13 Exhibit 12, "Emergency Assistance Organizations"
- 7.14 Exhibit 13, "Emergency Respirator Issue Log"
- 7.15 Exhibit 14, "Protective Clothing"
- 7.16 Exhibit 15, "Dose Assessment"
- 7.17 Exhibit 16, "Contamination Monitoring and Decontamination Practices"
- 7.18 Exhibit 17, "Form EPIP-OC-.35-3, Radiation Monitor Status"
- 7.19 Exhibit 18, "Form EPIP-OC-.35, Radiation Monitor Status"
- 7.20 Exhibit 19, "ARM Location"
- 7.21 Exhibit 20, "PASS Sample Request Identification"
- 7.22 Exhibit 21, "Emergency Sample Request Form"
- 7.23 Exhibit 22, "Emergency Equipment Locations"

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EXHIBIT 1

Radiological Assessment Coordinator (RAC) Guide

NOTE: The on shift RAC shall initiate these actions until relieved by the IREO RAC.

The IREO RAC should report to the TSC and establish communications (either face to face or by telecon) with the on shift RAC for an update on plant conditions prior to assuming duties as RAC.

If the ED has not or is not expected to relocate to the TSC within 10 minutes of the IREO RAC arriving at the TSC the IREO RAC should report to the ECC.

1.0 UPON ARRIVAL AT ECC or TSC

- 1.1 Report to and receive direction from the Emergency Director. After activation of the EOF, he/she will administratively report to the Group Leader R&EC but will continue to provide operational support to the Emergency Director.
- 1.2 Determine if personnel contamination monitoring is required and establish monitoring station at the ECC and TSC. Ensure that the ECC and TSC CAMS and ARMS are operational.
- 1.3 Activate the dose assessment computer and ensure operability.
- 1.4 Initiate and maintain a log of significant events and activities pertinent to radiological controls.
- 1.5 Establish radiological communications as the other Emergency Centers are activated. Maintain a communication log. Use Emergency Message forms to record communications requiring a reply.
- 1.6 Verify that the current emergency classification is consistent with the most serious radiological EAL and advise the ED. (Ref. 6.3-"EPIP-OC-.01")

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EXHIBIT 1 (continued)Radiological Assessment Coordinator (RAC) Guide2.0 DUTIES AT ALERT OR PRECAUTIONARY ACTIVATION

- 2.1 Move to TSC when activated
- 2.2 Monitor the radiological status of the Plant via the CHRRMS, ARMS, effluent monitors, ventilation system status, meteorological data and survey data. Periodically brief the ED and the other emergency centers on the plant radiological status. Use Exhibit 18, EPIP-OC-.35-A, "Radiation Monitor Status" to record ARM data. See Exhibits 17 & 19 for ARM locations.
- 2.3 If requested from other emergency centers, periodically (every 15-30 minutes) transmit CHRRM and ARM readings, wind speed and direction and plant release rate, if applicable, via the Communications Coordinator. Ensure proper clock time is indicated.
- 2.4 Periodically ensure the center radiation and airborne radioactivity levels are monitored.
- 2.5 Periodically request from Radiological Engineering Support parallel assessment of the offsite radiological consequences of the event.
- 2.6 Request an analysis of RAGEMS, PASS, etc. samples (as applicable) to better assess the isotopic composition of any release or potential release. Discuss the desired PASS samples with the Chemistry Coordinator. The Chemistry Coordinator will tell you if these samples are available. Decide sample priorities in concert with the Chemistry Coordinator. Have the ED authorize the desired samples using Exhibit 21. Refine offsite dose projections as isotopic data becomes available.

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EXHIBIT 1
(continued)

Radiological Assessment Coordinator (RAC) Guide

DUTIES AT ALERT OR PRECAUTIONARY ACTIVATION (con't)

- 2.7 Authorize personnel exposure up to 10 CFR 20 limits as necessary. Document in the RAC log. (This is a specific exemption from Procedure 6630-ADM-4000.01, "Administrative Dose Limits").
- 2.7.1 Ensure emergency personnel authorized by the Emergency Director to receive exposure in excess of 10 CFR 20 limits, Exhibit 8, are advised of potential health effects using Exhibit 7A, "Dose Limits For Emergency Personnel". This task may be performed by any Rad Con personnel conducting team briefings.
- 2.8 Direct the activities of the offsite survey teams until relieved by the EACC. [Refer to Procedure EPIP-OC-.11]. On request by the EAC, provide input for the completion of the EAC/RAC Turnover Checklist, EPIP-OC-.31, Exhibit 1B.
- 2.9 The RAC should maintain awareness regarding the status of activation of Onsite and Offsite Monitoring Teams.
- 2.9.1 If team activation is being delayed due to the equipment inventory process, the RAC should evaluate the immediate need for monitoring team dispatch and authorize the waiver or modification of the inventory as appropriate.
- 2.9.2 If the RAC is not immediately available, i.e., within 5 minutes, the RCC may make the determination regarding authorizing the waiver or modification of the inventory.

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3.0 ADDITIONAL DUTIES AT A SITE AREA EMERGENCY:

- 3.1 Recommend to the ED evacuation of the reactor building if the potential exists for high radiation and/or airborne radioactivity. (e.g. initiation of Core Spray, Containment Spray, Iso Condensers, etc.).
- 3.2 Transmit source term and dose projection data to the EACC and to the TSC if not in the TSC. Transmit dose projections until relieved by the EAC. Continue to transmit source term data for the duration of the event.
- 3.3 Perform offsite dose calculations if the release rates have or are expected to exceed normal levels. Review EAL's for appropriate classification based on projection (Ref. 6.3, EPIP-OC-.01).
- 3.4 Designate site evacuation route (north or south) if site evacuation is to be called.
- 3.5 Impact of Radiological conditions on Site Accountability should be evaluated continuously.

4.0 ADDITIONAL DUTIES AT A GENERAL EMERGENCY:

- 4.1 If EOF is not activated, perform offsite dose projections and provide suggested Protective Action Recommendation in accordance with Procedure EPIP-OC.02 to the ED within 15 minutes after declaration of a General Emergency.
 - 4.1.1 In accordance with NRC guidance, Evacuation is the preferred recommendation unless it is KNOWN that Sheltering will offer greater protection. In general-Evacuate a two mile radius and five miles downwind; Shelter any areas of the ten mile EPZ not evacuated. Refer to PAR Logic diagram - EPIP-OC-02. (ref. NRC letter to M. B. Roche dated 4/24/96.

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EXHIBIT 2

Radiological Assessment Coordinator

Periodic Tasks

- 1.0 Monitor the high-range RAGEMS monitors. When the high-range monitors are required, the RAC shall advise the ED that a turbine building exhaust fan (EF-1-6 or EF-1-7) should be started or remain operating to provide the dilution required by the RAGEMS system.
- 2.0 Recommend that the ED request the appropriate radiological PASS samples be taken and analyzed.
- 3.0 Contact the Chemistry Coordinator and discuss the PASS samples desired to assure that the sample is available and to decide sample priorities.
 - 3.1 As appropriate, discuss with the Chemistry Coordinator conduct of necessary radiological surveys in accordance with Procedure 831.8, Post Accident Sampling and Analysis: Estimation of Percent Fuel Failure.
 - 3.2 Inform the Radiological Controls Coordinator of the necessary surveys to be conducted.
- 4.0 Use Exhibit 21, "Emergency Sample Request Form" to avoid confusion over which samples are requested.
- 5.0 Use the PASS sample results in the development and verification of dose projection source terms.
- 6.0 He/she shall advise the Radiological Controls Coordinator when the ED requires activation establishing the operation of the Remote Assembly Area or Forked River Assembly Area including personnel or vehicular monitoring and/or decontamination.

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EXHIBIT 2
(Continued)

Radiological Assessment Coordinator

Periodic Tasks

- 7.0 He/she shall approve emergency exposure upgrades up to 10CFR20 exposure limits and provides input to the ED if emergency authorizations above 10CFR20 limits are requested.
- 8.0 Ensure the PAR Status Board is maintained up-to-date with the current status and emergency conditions.
- 9.0 Personnel conducting duties as response team may be authorized by the RAC to consume liquids to prevent dehydration during periods when "Eating, drinking, and smoking" have been prohibited.
- 9.1 The RAC should designate appropriate control to minimize uptake of radiological materials while personnel consume these liquids.

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EXHIBIT 3

On-Shift RAC/Radiological Controls Coordinator (RCC) Guide

1.0 ALERT OR ACTIVATION:

- 1.1 Report to and receive direction from the RAC.
- 1.2 Maintain liaison with the OSC Coordinator.
- 1.3 Establish personnel contamination monitoring at the OSC. Ensure that the OSC CAM and ARM are operational. Periodically ensure that the radiation and airborne radioactivity levels of the OSC are evaluated.
- 1.4 Establish radiological communications as the other emergency centers become activated. Maintain a communication log. Use Emergency Message forms to record communications requiring a reply.
- 1.5 Initiate and maintain a log of significant events and activities pertinent to radiological controls.
- 1.6 Direct the activities of the onsite survey teams. Periodically advise the RAC and the OSC Coordinator of survey results.
- 1.7 Obtain current copies of the Personnel Exposure Report and the Personnel Qualification Report for OSC use.
- 1.8 The RAC should maintain awareness regarding the status of activation of Onsite and Offsite Monitoring Teams. If team activation is being delayed due to the equipment inventory process and the RAC is immediately unavailable, i.e., within 5 minutes, the RCC may make the determination regarding authorizing the waiver or modification of the inventory.

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EXHIBIT 3

(continued)

On-Shift RAC/Radiological Controls Coordinator (RCC) Guide

2.0 SITE AREA EMERGENCY:

- 2.1 Control access into radiological controlled areas based on actual or expected conditions. Inform the RAC of all RCA entries.
- 2.2 Brief all teams on the expected radiological conditions prior to their entry into the RCA.
- 2.3 Assign Radiological Control Technicians to the Emergency Assembly Area (EAA) to monitor personnel and the facility when site accountability is required by the ED.
- 2.4 Dispatch Rad Techs to the Main and North Gate Processing Centers to determine the habitability of the Processing Centers.

NOTE

North Gate only applicable when the gate is open during outages.

3.0 GENERAL EMERGENCY:

- 3.1 Assign Radiological Control Technicians to the Remote Assembly Area (RAA) or Forked River Assembly Area (FRAA), as required.
- 3.2 Dispatch Rad Techs to the Main and North Gate Processing Centers to determine the habitability of the Processing Centers if Rad Tech not already at each center.

NOTE

North Gate only applicable when the gate is open during outages.

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EXHIBIT 4

Radiological Controls Coordinator

Periodic Tasks

- 1.0 Dispatches Radiological Controls personnel to the Remote Assembly Area or Forked River Assembly Area to implement personnel and vehicle monitoring and decontamination.
- 2.0 Coordinates sample counting between the available Oyster Creek counting rooms and other counting facilities identified for use by the RAC.
- 3.0 When advised by the Radiological Assessment Coordinator that surveys required by Procedure 831.8, Post Accident Sampling and Analysis: Estimation of Percent Fuel Failure are required, assign the appropriate personnel.

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EXHIBIT 5
Radiological Engineering Support Guide

1.0 ALERT OR ACTIVATION:

- 1.1 Report to and receive direction from the Radiological Assessment Coordinator.
- 1.2 Periodically, ensure the TSC radiation and airborne radiation levels are evaluated.

CAUTION

Turn on HEPA filter when continuous air monitor trends upwards.

- 1.3 Perform radiological hazard/ALARA analysis for investigative, corrective, and recovery actions.
- 1.4 Determine source terms for ground and elevated releases.
- 1.5 Perform internal and external personnel exposure evaluations.
- 1.6 Provide technical support and analysis for the radiological aspects in support of radiological control activities.
- 1.7 Monitor the radiological status of the Plant via ARMS Worksheet Data (including CHRMS), effluent monitors, ventilation system status, meteorological data and survey data. Periodically brief the RAC on present and expected radiological conditions both onsite and offsite.
- 1.8 Maintain an open direct communications line on the radiological line in the Control Room, the OSC, and the EACC when the locations are manned.
- 1.9 Recommend onsite and near site protective actions as appropriate.
- 1.10 Perform offsite dose projections and recommend offsite Protective Action Recommendations until relieved of this by the EAC.

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EXHIBIT 5
(continued)

Radiological Engineering Support Guides

- 1.11 Maintain the PAR and Meteorology Status Boards.
- 1.12 Present all documentation generated during the performance of their duties to the TSC Coordinator.
- 1.13 Perform additional task as directed by the RAC.
- 2.0 SITE AREA EMERGENCY:
 - 2.1 Recommend to the RAC evacuation of the Reactor Building if required by actual or expected radiological conditions.
- 3.0 GENERAL EMERGENCY:
 - 3.1 No additional actions.

Title
RADIOLOGICAL CONTROLS EMERGENCY ACTIONS

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14

EXHIBIT 6

Emergency Dosimetry Guidelines

- 1.0 Individual doses should be evaluated for personnel selected for emergency team assignments.
- 2.0 Ensure an individual is designated to review personnel exposure status for personnel requiring entry during an emergency. Administrative exposure limits are not to be exceeded except as indicated below:
 - 2.1 The RAC can verbally authorize exposure in excess of administrative limits up to those allowed by 10CFR20.
 - 2.2 Personnel exposure limits are not to exceed 10CFR20 personnel exposure limits without written authorization from the ED as documented on Exhibit 8, "Emergency Dose Authorization". For planned exposures exceeding 10CFR20 personnel exposure limits, follow emergency exposure criteria provided in Procedure EPIP-OC-.02, "Direction of Emergency Response; Protective Action Recommendation Guide; Emergency Exposure Guidelines".
 - 2.3 Exhibit 7, "Emergency Exposure Criteria" provides Emergency Exposure criteria.
- 3.0 Increases in dose rates above normal background at the Main or North Gates may affect results for dosimetry stored in those locations. RAC should consider relocating dosimetry devices stored in these locations to an area of lower background.
- 4.0 Planned exposure to the whole body and/or specific organs shall not exceed 10CFR20 without Emergency Director approval.

Title
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14

EXHIBIT 7
EMERGENCY EXPOSURE CRITERIA

ADDITIONAL GENERAL CRITERIA

1. Persons authorized to receive exposures listed for Life Saving or Protective Actions (EPIP-OC-.02, Exhibit 1b 1.8A) shall be made aware of the voluntary nature of their assignment and the potential health effects and approximate cancer risks.
2. Persons assigned to receive exposures listed for Life Saving or Protective Actions (EPIP-OC-.02, Exhibit 1b. 1.8B) shall be made aware of the potential health effects and approximate cancer risks. (Exhibit 7A).
3. All reasonable measures must be taken to control contamination and internal exposure.
4. Persons performing emergency activities should be familiar with exposure consequences. (Exhibit 7A).
5. Women capable of reproduction should not take part in actions requiring emergency exposures in accordance with NRC Regulatory Guide 8.13.
6. Retrospective doses shall be evaluated on an individual case basis.

NOTES:

- (1) Authorization to receive these recommended exposures is the sole responsibility of the Emergency Director.
- (2) Thyroid exposure may be minimized to the extent feasible by the use of respirators and/or thyroid prophylaxis (Ref. 6.23-EPIP-OC-.44).

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14

EXHIBIT 7A

POTENTIAL HEALTH EFFECTS BRIEFING GUIDELINE

Emergency personnel should consider the risks involved in accepting the dose verses the benefits of the emergency action prior to volunteering to receive such dose. The table below is provided to assist potential volunteers in deciding whether to volunteer.

HEALTH EFFECTS FROM ACUTE WHOLE BODY DOSES:
(from Rad Health Handbook)

<25 RAD	No Observable Effects
25-100 RAD	Range from No Symptoms to Nausea. Changes in white blood cells are anticipated so the individual is more susceptible to diseases.
110 RAD	10% chance of being lethal with no medical intervention.*
340 RAD	50% chance of being lethal with no medical intervention.*
585 RAD	90% chance of being lethal with no medical intervention.*

*Note that medical intervention will approximately double the chance of survival.

Note: In addition to the acute health effects, the worker may have an increased long-term risk of fatal cancer. This risk is roughly estimated to be about 2% per 25 REM of exposure (based on a risk factor of 8E-4 per REM from Table 4.3, BEIR V). By comparison, natural cancer incidence is about 18%.

Title
RADIOLOGICAL CONTROLS EMERGENCY ACTIONS

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EXHIBIT 8

EMERGENCY DOSE AUTHORIZATION

Time: _____

Date: _____

	<u>Name</u>	<u>Social Security Number</u>
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____
6.	_____	_____
7.	_____	_____

Dosage Authorized:

_____ Total Whole Body (TEDE) _____ Extremities (SDE-E)
_____ Skin of Whole Body (SDE-WB) _____ Internal (CEDE)

For (Action): _____

Reviewed By: _____
 Radiological Assessment Coordinator

Approved By: _____
 Emergency Director

Title RADIOLOGICAL CONTROLS EMERGENCY ACTIONS	Revision No. 14
---	---------------------------

EXHIBIT 9

Actions for Assistance with Analysis Capabilities

- 1.0 Contact the Group Leader Administration at the Emergency Operations Facility (EOF) to request assistance from another utility for sample analysis. This can be accomplished by using the INPO Emergency Resource manual.
- 2.0 Contact Radwaste Shipping Department at the Radwaste Control Room (X-4683) to arrange for offsite transport of samples. PASS samples may be shipped offsite to Babcock & Wilcox for analysis by using Reference 6.10.

Title

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EXHIBIT 10

Radiological Surveys

- 1.0 The RAC or RCC shall direct personnel to locations where radiation measurements are required.
- 2.0 A team briefing shall be conducted in accordance with Procedure EPIP-OC-.27, "OSC; Emergency Team Briefing".
 - 2.1 Prior to team entry, the RCC shall ensure an initial evaluation of the Area Radiation Monitor (ARM) status. This data may be obtained from the Plant Computer System Terminal available in the OSC, Control Room (ECC) or the RAC/Radiological Engineering Support (TSC).

NOTE

If the ARMs are offscale, further evaluation of the affected building shall be performed by the RAC prior to entry.

- 2.2 Silver zeolite cartridges should be dose rate surveyed prior to gamma spectroscopy analysis. This ensures that radioiodine quantification is accurate and dead time counting losses are kept within acceptable limits. To accomplish this, the "loaded side" of the cartridge face shall be measured on contact, closed window with an Eberline RO-2. Cartridge iodine content will be approximately 0.3 uCi per mrem/hr assuming a clad damage iodine mix. Use a counting shelf which keeps the dose rate to the detector <1.5 mR/hr.

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EXHIBIT 10

Radiological Surveys (Continued)

When iodine concentrations are known or projected, use a sampling runtime/flowrate that will result in a cartridge activity that will not exceed 1.5 mR/hr to the counting detector.

CAUTION

Do not use dehydrated silver zeolite in environments where a potential exists for hydrogen concentrations above 4% and oxygen concentrations above 5%. A fire or explosion can occur when used in combustible environments.

- 3.0 The RCC shall designate the proper surveys to be conducted, i.e., dose rate, smear, and/or air sample.
- 3.1 The assigned survey team shall conduct the designated surveys, document the results, transmit the results to the RCC, and retain all appropriate samples.

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EXHIBIT 11
Respiratory Protection

NOTE

Only NIOSH certified respiratory protection equipment which has been approved by the Respiratory Protection Supervisor is to be issued for use.

NOTE

Individuals issuing or supervising the issue of respiratory protective equipment must be trained in the proper application and operation of the equipment for routine, outage, and emergency situations.

NOTE

If a Respirator Maintenance Technician is not available or an immediate response is needed to a plant emergency, respiratory equipment may be issued by Radiological Controls personnel in accordance with Reference 6.14.

NOTE

Emergency respiratory equipment to be issued shall be specified in a valid, up-to-date RWP or NRP when time permits. Respiratory equipment may be issued at the direction of the ED/RAC/RCC and documented in Exhibit 13, "Emergency Respirator Issue Log".

Title
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EXHIBIT 11

Respiratory Protection (Continued)

- 1.0 The RCC (RAC) shall request that the OSC Coordinator arrange for callout of qualified RMT personnel as necessary to support respiratory equipment issue.
- 2.0 If outside respiratory protection equipment should be required, the ED/ESD, in cooperation with the Respiratory Protection Supervisor and the Group Leader R&EC, may contact one or more of the organizations in Exhibit 12, "Emergency Assistance Organization".
- 3.0 When issuing respirators, the following conditions should be met for the purpose of controlling inventory in addition to the normal process:
 - 3.1 The emergency respirator cabinet(s) shall remain locked except when respirators are being issued, inventoried, or restocked.
 - 3.2 The Emergency Respirator Issue Log, Form Exhibit 13, shall be kept in the Emergency Respirator Issue Cabinets (e.g., TSC, OSC).
- 4.0 Issue of Respiratory Equipment
 - 4.1 Issue of respiratory protective equipment from the EREIF shall be performed by assigned RMT's or Radiological Controls Technicians in accordance with Reference 6.15.

NOTE

The respirators are located in Bldg. 14, in the Training Respirator Issue cabinet. These may be used in cases when on-site respiratory issue location is not habitable.

- 4.2 All issued respiratory protective equipment shall be returned to the Respirator Maintenance Facility or a designated alternate collection point in accordance with Reference 6.15.

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EXHIBIT 12

EMERGENCY ASSISTANCE ORGANIZATIONS

INSTITUTE OF NUCLEAR POWER OPERATIONS (INPO)

MEMBER UTILITIES OF THE "INPO NUCLEAR POWER PLANT
EMERGENCY RESPONSE VOLUNTARY ASSISTANCE PROGRAM"
INPO--(800) 321-0614

MINE SAFETY APPLIANCES (MSA)

MSA NUCLEAR EMERGENCY STOCK PROGRAM
(800) MSA-5555

Title

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EXHIBIT 14

Protective Clothing

- 1.0 Protective clothing is maintained at the various emergency centers for donning as required.
- 2.0 Protective clothing may be worn by personnel entering an emergency center as a reverse contamination control process, i.e., if personnel outside a center cannot monitor for contamination, protective clothing may be donned at the discretion of the senior Rad Con representative present in the emergency center by personnel entering from a potentially contaminated area.
 - 2.1 Gloves should be donned first to minimize the potential for spreading contamination.
 - 2.2 Shoe covers should then be donned.
 - 2.3 Coveralls should then be donned.
- 3.0 The RCC, with input from the RAC as necessary, shall prescribe the necessary protective clothing for emergency response teams and record this information on the Emergency Team Briefing EPIP-OC-.27, Exhibit 4A.

Title

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EXHIBIT 15

Dose Assessment

1.0 Onsite Dose Assessment

1.1 The RCC, in coordination with the RAC, shall direct the onsite field monitoring team(s) in an effort to detect and quantify any radiological releases.

2.0 Offsite Dose Assessment

2.1 Until relieved of offsite dose projection responsibility by the EAC, the RAC will perform dose projections using the RAC computer code. RAGEMS data shall be monitored and used for source term determination when appropriate. Other indications, such as ARM readings, process monitor readings, field samples, etc., shall be used to determine a source term when no RAGEMS data or RAGEMS stack sample data are available.

2.2 When the EACC is activated, the RAC will be relieved of responsibility for offsite dose projections which are based on RAGEMS data. The RAC is then responsible for ensuring that RAGEMS data are relayed to the EAC and should focus dose projection efforts on non-RAGEMS based source term generation (contingency calculations). All dose projections should be relayed to the Group Leader R&EC after the EOF is activated.

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RADIOLOGICAL CONTROLS EMERGENCY ACTIONS	14

EXHIBIT 16

Contamination Monitoring and Decontamination Practices

1.0 Personnel

- 1.1 Radiological Controls personnel shall establish personnel frisking at each emergency facility that is being utilized.
- 1.2 Radiological Controls personnel shall establish an area for personnel monitoring at the south entry to the RAA from the parking lot when the RAA is activated or in the vicinity of Building 18 if the Forked River Assembly Area is activated.
- 1.3 Personnel monitoring shall be performed in accordance with Reference 6.18.
 - 1.3.1 A log shall be kept listing all personnel determined to be contaminated, contamination levels in cpm location of contamination and disposition to decontaminate individual.
- 1.4 The RCC (RAC) should arrange for personnel suspected of internal deposition to be monitored in accordance with Reference 6.20.

2.0 Equipment

- 2.1 Potentially contaminated equipment shall be monitored for contamination prior to being returned to emergency kits, lockers, or other storage facilities.

3.0 Facilities

- 3.1 Radiological Controls personnel shall conduct facility habitability surveys periodically to determine if radiological conditions warrant protective measures.

EXHIBIT 16

Contamination Monitoring and Decontamination Practices

(Continued)

4.0 Vehicles

- 4.1 Radiological Controls personnel shall monitor vehicles onsite, in use offsite, and at the RAA as required when contamination is suspected.
- 4.2 Radiological Controls personnel shall survey and segregate vehicles arriving at the RAA or Forked River Assembly Area (Ref. 6.5-EPIP-OC-.13).
- 4.2.1 Direct occupants to remain in vehicle.
- 4.2.2 Contaminated areas of the vehicle shall be marked with tape and annotated on the survey record.
- 4.2.3 Vehicle survey records shall include:
- License plate number
 - Date/time
 - Survey location
- 4.2.4 Results for the following areas shall be recorded:
- Tires
 - Vehicle interior
 - Inside door handles
 - Steering wheels
 - Accessible dashboard controls
 - Pedals and accessible floor board areas

Title
RADIOLOGICAL CONTROLS EMERGENCY ACTIONS

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EXHIBIT 16

Contamination Monitoring and Decontamination Practices

(Continued)

- 5.0 Contaminated vehicles shall be processed on the following basis:
- 5.1 The RAC should establish a location and methodology for decontamination of contaminated vehicles located at the Oyster Creek or Forked River sites on a case by case situation.
 - 5.2 Vehicles at the RAA or Forked River Assembly Area required for immediate use:
 - 5.2.1 Wash (or spot decontamination if appropriate).
The Repair and Wash Bay is to be used if at the RAA.
 - 5.2.2 Resurvey vehicle per 4.2.
 - 5.2.3 If vehicle is no longer contaminated, move to parking area north or west of the RAA or other designated area if not at the RAA.
 - 5.2.4 If the vehicle remains contaminated, disposition shall be directed by the Radiological Assessment Coordinator or on a case-by-case basis.
 - 5.3 Vehicles at the RAA or Forked River Assembly Area not required for immediate use:
 - 5.3.1 Vehicle may remain parked for four (4) or more hours then resurvey.

EXHIBIT 16

Contamination Monitoring and Decontamination Practices

(Continued)

- 5.3.2 If vehicle is found to be contaminated, follow the action described in Paragraph 5.2 when vehicle is required or as time and personnel becomes available.
- 5.3.3 If vehicle is no longer contaminated, move to parking area north or west of the RAA or other designated area if not at the RAA.

EXHIBIT 17 EPIP-OC-.35 RADIATION MONITOR PANEL LAYOUT

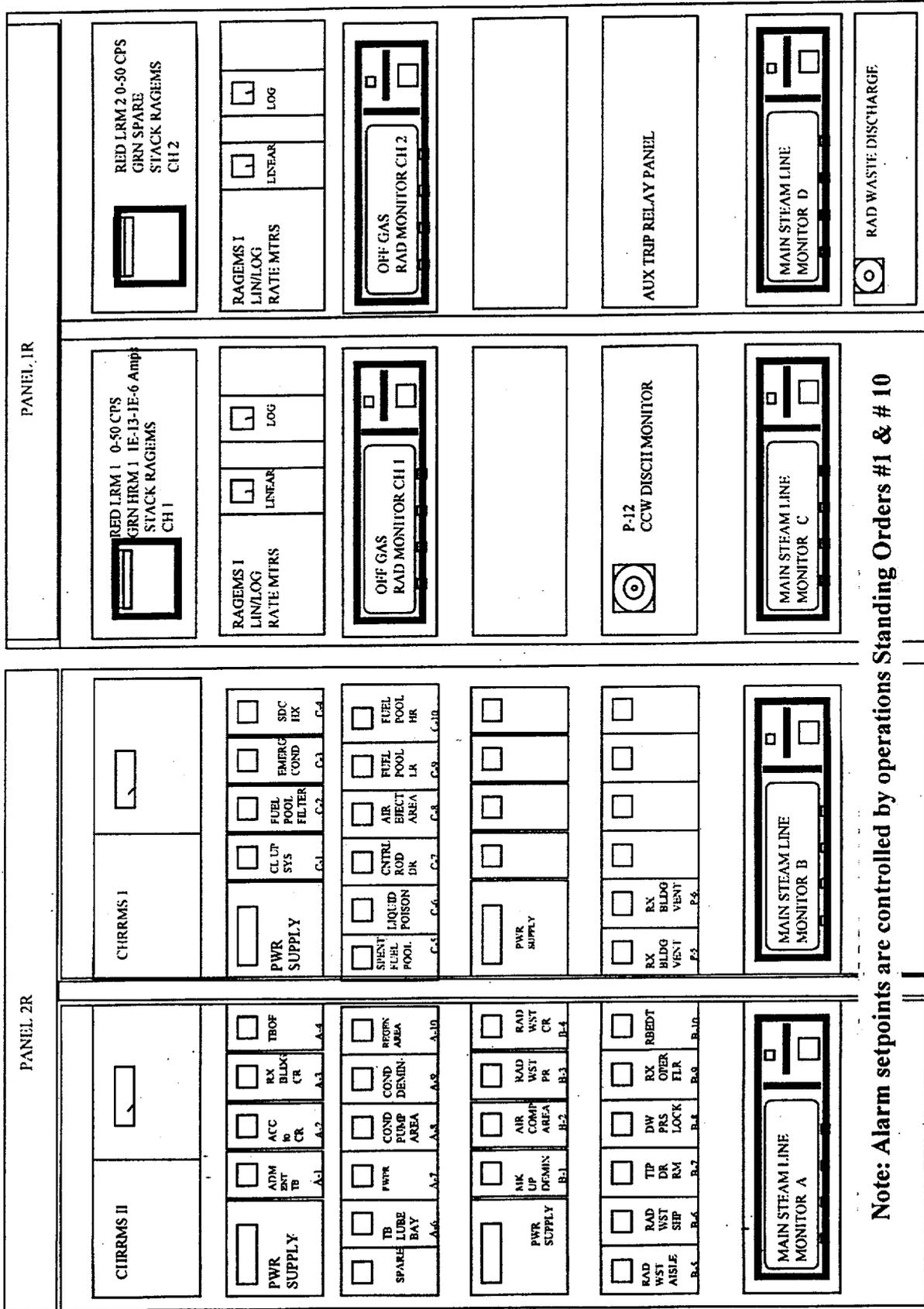


EXHIBIT 18 EPIP-OC-.35 RADIATION MONITOR STATUS

DATE: _____

E18-1

Monitor	RANGE	Panel	Time	Reading (mr/hr)**	A*									
A-1: ADM. ENT. TB	0.01-100	2R												
A-2: ACC. TO CR	0.01-100	2R												
A-3: RX BLDG CR	0.01-100	2R												
A-4: TBOF	0.1-1000	2R												
A-5: TB LUBE OIL BAY	0.1-1000	2R												
A-7: FWPR	0.1-1000	2R												
A-8: COND PUMP AREA	0.1-1000	2R												
A-9: COND DEMIN	0.1-1000	2R												
A-10: REGEN AREA	0.1-1000	2R												
B-1: MK UP DEMIN	0.1-1000	2R												
B-2: AIR COMP AREA	0.1-1000	2R												
B-3: RAD WST PR	0.1-1000	2R												
B-4: RAD WST CR	0.1-1000	2R												
B-5: RAD WST AISLE	0.1-1000	2R												
B-6: RAD WST SHP	0.1-1000	2R												
B-7: TIP DRIVE RM	0.1-1000	2R												
B-8: DW PRS LOCK	0.1-1000	2R												
B-9: RX OPER FLOOR	0.1-1000	2R												
B-10: RBEDT RM	0.1-1000	2R												
C-1: CLN UP SYS	0.1-1000	2R												
C-2: FUEL POOL FILTER	0.1-1000	2R												
C-3: EMER COND	0.1-1000	2R												
C-4: SDC HX	0.1-1000	2R												
C-5: SPENT FUEL POOL	0.1-1000	2R												
C-6: LIQUID POISON	0.1-1000	2R												
C-7: CNTRL ROD DRIVE	0.1-1000	2R												
C-8: AIR EJECT AREA	0.1-1000	2R												
C-9: FUEL POOL LR	0.1-1000	2R												
C-10: FUEL POOL HR	10-1E6	2R												

*✓ indicates Alarm is in ** readings are in mr/hr unless otherwise noted

NOTE: OSH indicates Off Scale High reading

EXHIBIT 18 EPIP-OC-.35-4 RADIATION MONITOR STATUS

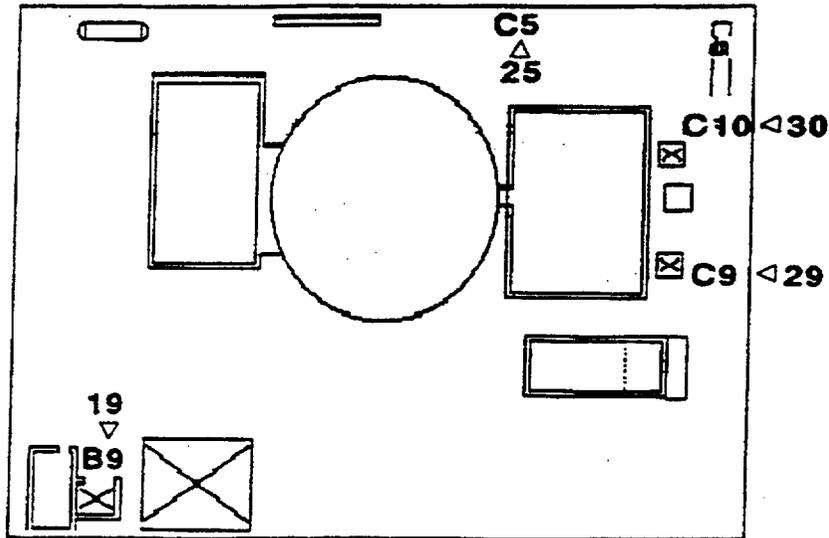
Monitor	RANGE	Panel	Time	Reading(NOTE 1)	A* ✓									
CHRRMS II (R/hr)	1-1E7	2R												
CHRRMS I (R/hr)	1-1E7	2R												
CH1: RX BLDG VENT(mr/hr)	0.1-1000	2R												
CH2: RX BLDG VENT(mr/hr)	0.1-1000	2R												
NS LINE MONITOR A(units)	1-1E8	2R												
NS LINE MONITOR B(units)	1-1E8	2R												
NS LINE MONITOR C(units)	1-1E8	1R												
NS LINE MONITOR D(units)	1-1E8	1R												
QG RAD MONITOR CH 1(mr/hr)	1-1E8	1R												
QG RAD MONITOR CH 2(mr/hr)	1-1E8	1R												
RAGEMS CH 1 (HIGH RANGE)	1E-13-1E-6amps	1R												
RAGEMS CH 1C (LOW RANGE)	0-100CPG	1R												
RX WATER LEVEL (In. TAF)(NOTE 3)	N/A	1F/2F												
RX PRESSURE (psig)	N/A	4F												
RX POWER (W)	N/A	3R-5R												
DW PRESSURE (PSI)(NOTE 3)	N/A	1F/2F												
RX BLDG PRESSURE (In H ₂ O)	N/A	11R												
CONT SPRAY STATUS		PANEL	TIME	SPRAY MODE	ON ?									
CONT SPRAY SYS 1	N/A	1F/2F		DW/TORUS	Y/N									
CONT SPRAY SYS 2	N/A	1F/2F		DW/TORUS	Y/N									
PAN STATUS		PANEL	TIME	ON ?										
EF 1-6	N/A	11R		Y/N			Y/N			Y/N			Y/N	
EF 1-6	N/A	11R		Y/N			Y/N			Y/N			Y/N	
EF 1-7	N/A	11R		Y/N			Y/N			Y/N			Y/N	
EF 1-8	N/A	11R		Y/N			Y/N			Y/N			Y/N	
EF 1-9	N/A	11R		Y/N			Y/N			Y/N			Y/N	
EF 1-10	N/A	NRW		Y/N			Y/N			Y/N			Y/N	
EF 1-17	N/A	NRW		Y/N			Y/N			Y/N			Y/N	
EF 1-21A	N/A	NRW		Y/N			Y/N			Y/N			Y/N	
EF 1-33B	N/A	NRW		Y/N			Y/N			Y/N			Y/N	
EF 1-33(TBOF)	N/A	11R		Y/N			Y/N			Y/N			Y/N	

* ✓ Indicates Alarm in In. NOTE 1: "OSH" Indicates Off Scale High reading. NOTE 2: Digital display on 4F only goes down to 85In. NOTE 3: Digital display on 4F only goes up to 4.0psi

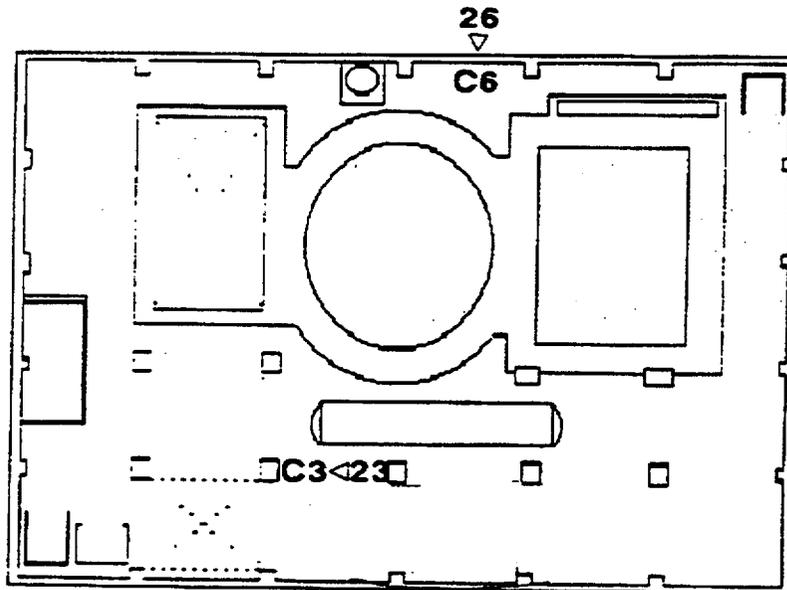
E18-2

EXHIBIT 19

ARM Locations



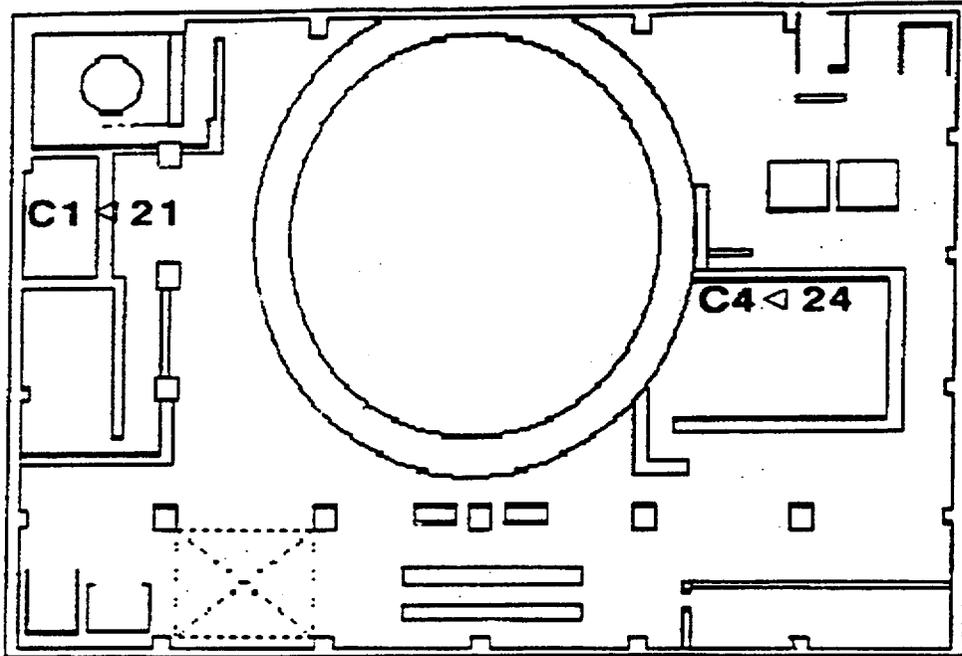
**REACTOR BLDG
119' ELEVATION**



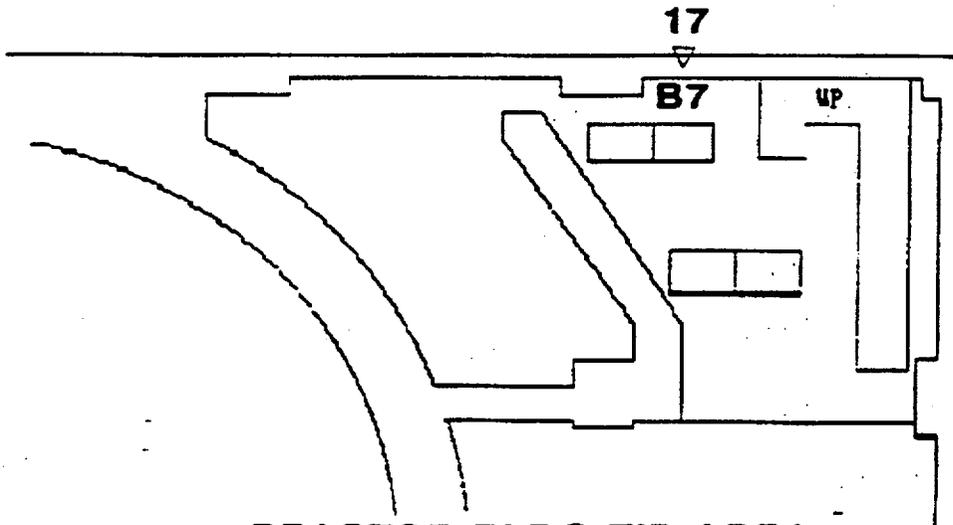
**REACTOR BLDG
95' ELEVATION**

EXHIBIT 19
(con't)

ARM Locations



**REACTOR BLDG
51' ELEVATION**



**REACTOR BLDG TIP AREA
33' ELEVATION**

Title

RADIOLOGICAL CONTROLS EMERGENCY ACTIONS

Revision No.

14

EXHIBIT 19
(con't)
ARM Locations

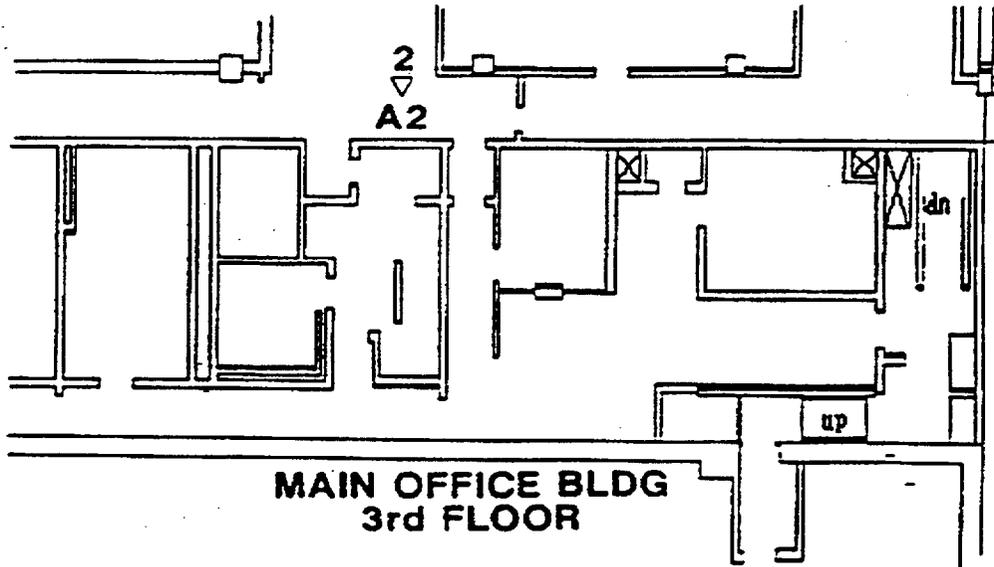
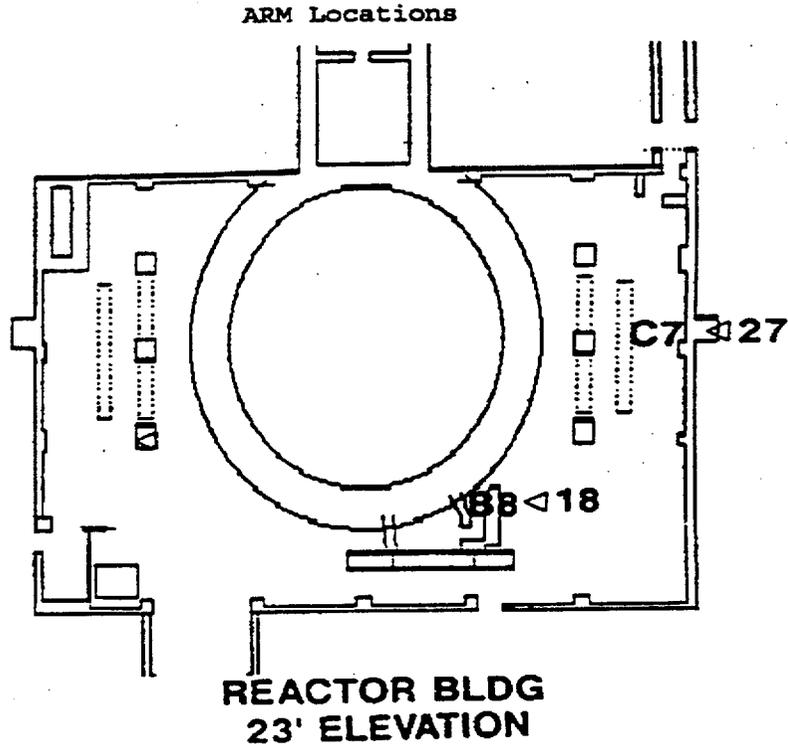
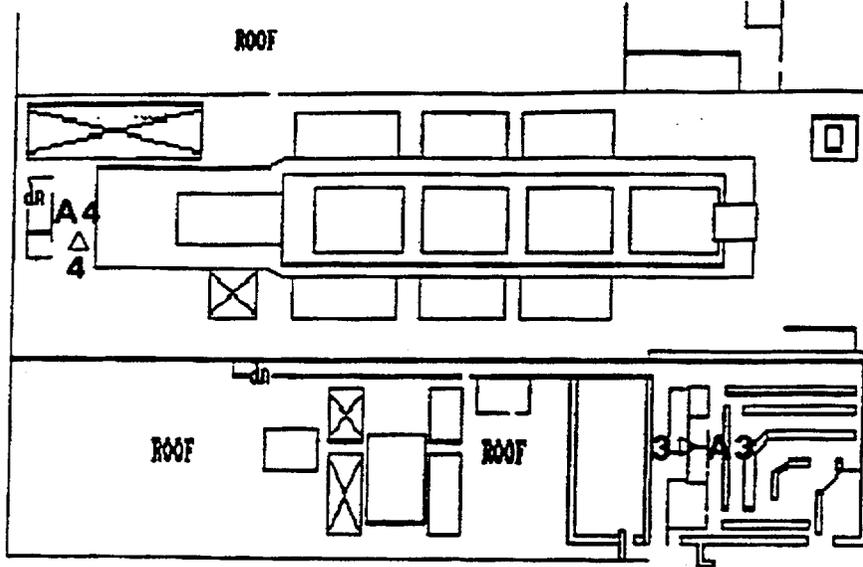
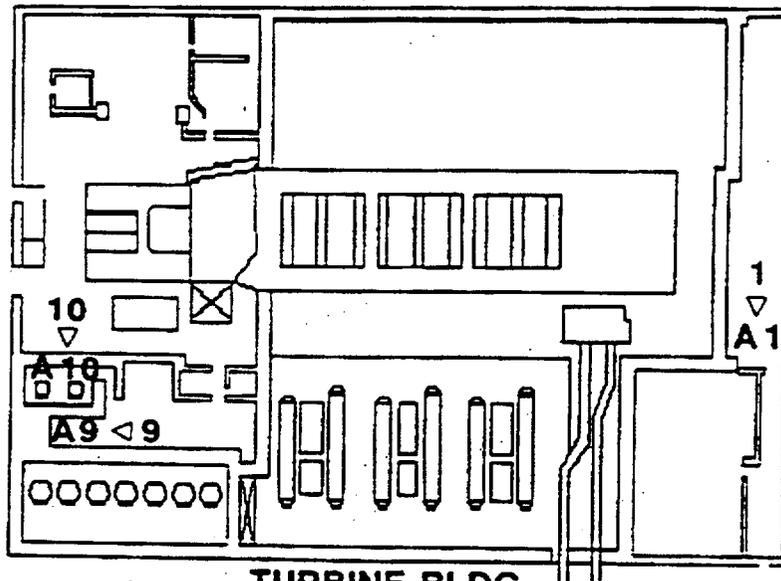


EXHIBIT 19
(con't)

ARM Locations



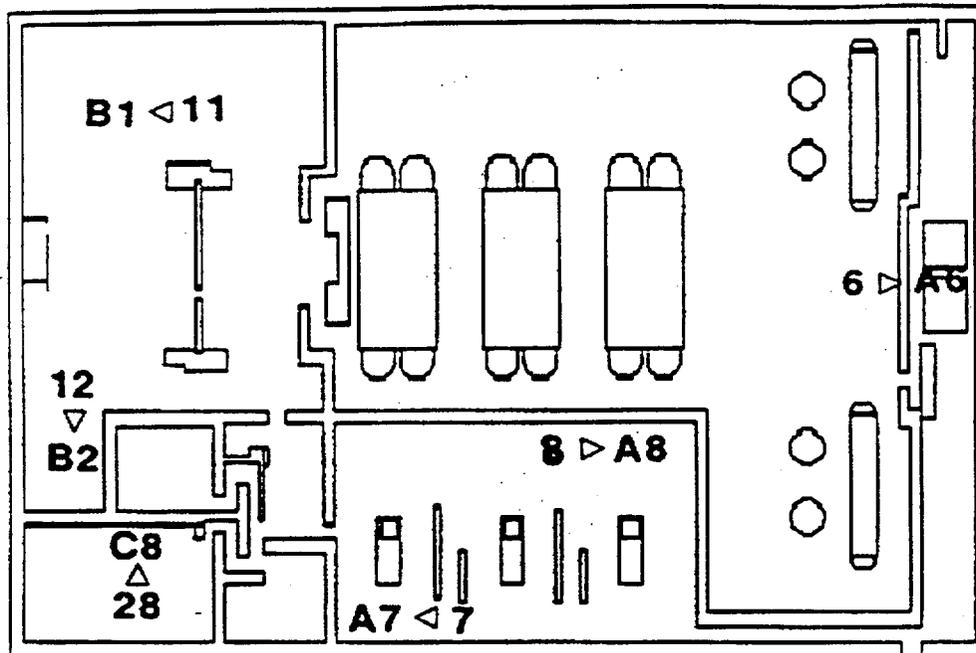
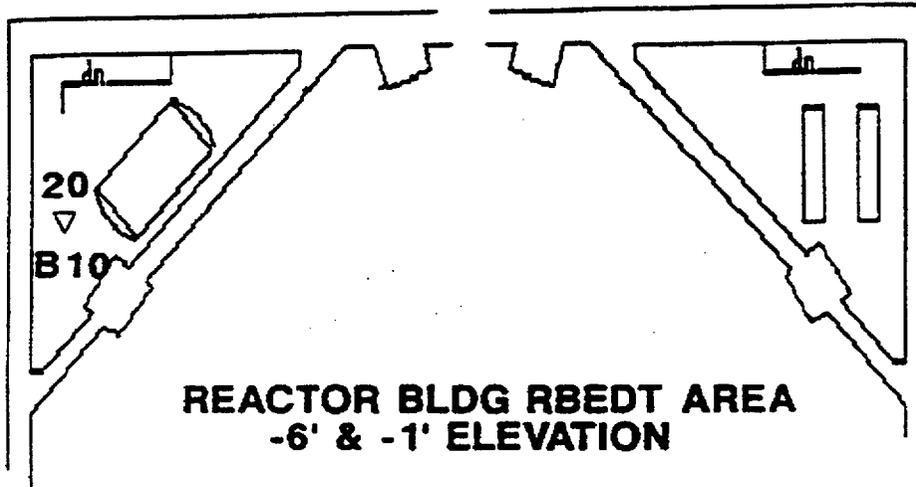
**TURBINE BLDG
OPERATING FLOOR
46' ELEVATION**



**TURBINE BLDG
MEZZANINE FLOOR
23' ELEVATION**

EXHIBIT 19
(con't)

ARM Locations



**TURBINE BLDG
BASEMENT FLOOR
0' & 3' ELEVATION**

Title

RADIOLOGICAL CONTROLS EMERGENCY ACTIONS

Revision No.

14EXHIBIT 20

PASS Sample Request Identification

- 1)* PASS Drywell Atmosphere Isotopic
 - a) Noble Gases
 - b) Iodines
 - c) Particulates
- 2)* PASS Torus Atmosphere Isotopic
 - a) Noble Gases
 - b) Iodines
 - c) Particulates
- 3) PASS Reactor Water Isotopic
- 4) PASS Torus Water Isotopic
- 5)* RAGEMS Isotopic
 - a) Noble Gases
 - b) Iodines
 - c) Particulates
- 6)* PASS Reactor Building Isotopic
 - a) Noble Gases
 - b) Iodines
 - c) Particulates

Samples are to be requested by sample identification number (i.e., 6b and 2a) to avoid confusion and desired samples must be discussed with the Chemistry Coordinator (via the Chemistry Line) before obtaining ED approval.

*NOTE: Gaseous isotopic samples must be analyzed separately for Noble Gases, Iodines, and Particulates. Particulate and iodine samples may be drawn at the same time, but analysis of all three samples will take (roughly) three times as long. If a quick turnaround is vital, request analysis only for the species you are most interested in.

Title

RADIOLOGICAL CONTROLS EMERGENCY ACTIONS

Revision No.

14

EXHIBIT 21
EMERGENCY SAMPLE REQUEST FORM

*Priority

Requestor/Position: _____ Location: _____

Date: _____ Time: _____

Sample Requested: I P N.G.

Liquid: Rx Water

Torus Water

Gas: Drywell Atmosphere (ringheader)

Drywell Atmosphere (drywell head)

Torus Atmosphere

Secondary Containment

Other: _____

Description: _____

NOTE: Gaseous samples must be analyzed separately for noble gases, iodines and particulates. Particulate and iodine samples may be drawn at the same time, but analysis of all three (3) samples will take (roughly) three (3) times as long. Request analysis only for the species you are most interested in or prioritize them.

**Reason (be specific): _____

Remarks: _____

***Approved: _____

Results Reported to Chem. Coord.: _____ Date: _____ Time: _____

- * 1 Urgent / 2 Supportive / 3 Information (may be changed by ED)
- ** Include final objective
- *** Chemistry Coordinator

Title

RADIOLOGICAL CONTROLS EMERGENCY ACTIONS

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EXHIBIT 22

Emergency Equipment Locations

	<u>FFNP w/GMI-H</u>	<u>Scott Pak</u>
Machine Shop		2
O.S.C.	35	8
Primary Water		2
TSC	10	
Main Gate	12	
AOG		2
NRW		2
480 Switch		2
4160 Switch		2
Spare Exciter		5
Monitor & Change		2
51' Firelocker		5
Control Room	10	4
Emergency Battery		2
Offsite Monitoring Team		
Lockers B-12 F.R.	6	
Onsite Monitoring Van	4	
Fire Van		5
Total	<u>77</u>	<u>43</u>



A PECO Energy/British Energy Company

**OYSTER CREEK
EMERGENCY PREPAREDNESS
IMPLEMENTING PROCEDURE**

Number
EPIP-OC-.40

Title SITE SECURITY EMERGENCY ACTIONS	Revision No. 10
Applicability/Scope Applies to work at Oyster Creek	Responsible Office Emergency Preparedness
This document is within QA plan scope Safety Reviews Required	Effective Date Date of Sale

Prior Revision 9 incorporated the following Temporary Changes:

N/A

This Revision 10 incorporates the following Temporary Changes:

N/A

List of Pages (all pages rev'd to Rev. 10)

1.0 to 4.0
E1-1 to-E1-8
E2-1

**NON-CONTROLLED
This Document Will Not
Be Kept Up To Date
DCC Oyster Creek**

	Signature	Concurring Organization Element	Date
Originator		Emergency Planner	1/11/00
Concurred By		Security Manager	1/14/2000
Approved By		Director, Ops & Maint.	1-12-00
		Mgr., Emergency Preparedness	1/19/00

Title SITE SECURITY EMERGENCY ACTIONS	Revision No. 10
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DOCUMENT HISTORY

REV.	DATE	ORIGINATOR	SUMMARY OF CHANGE
3	06/94	A. Smith	Instructions for alternate TSC and OSC locations for arriving IREO team members should the site not be habitable. Also Exhibit 2 Alternative Emergency Response Facilities.
4	06/95	D. Van Nortwick	To redirect arriving IREO members to report to cafeteria in OCAB instead of Trl 250 or 300. Remove 8.3.4 and Energy Spectrum.
5	05/97	A. Smith	AEOF removed from E-Plan 1000-PLN-1300.01 in Rev. 11.
6	05/98	D. Van Nortwick	Remove reference to EPIP-OC-.07 (procedure deleted), move Section 8.3 to Section 8.0. Delete term "Accu-chirp"
7	01/99	D. Van Nortwick	Clarify instructions for use of Forked River page for notification of remote personnel. Clarify steps to reroute guard patrols at each declaration.
8	08/99	D. Van Nortwick	Add requirements for Security to open gate to F.R. and open Bldg. 12 for Access Duty Drills and emergencies.
9	09/99	D. Van Nortwick	Move section 6.1 & 6.1.1 to 1.11 & 1.11.1 for clarify & to make it more obvious.
10	DOS	A. Smith	Change references from GPU or GPUN to OCNCS.

Title	Revision No.
SITE SECURITY EMERGENCY ACTIONS	10

1.0 PURPOSE

1.1 This procedure provides Oyster Creek Security with guidance on emergency response/support actions during a declared or simulated emergency.

2.0 APPLICABILITY/SCOPE

2.1 This procedure applies to Oyster Creek Security under the direction of the Security Shift Supervisor during declared or simulated emergencies.

3.0 DEFINITIONS

None

4.0 RESPONSIBILITIES

4.1 The Security Shift Supervisor is responsible for completing Exhibit 1.

5.0 PROCEDURE

5.1 The Security Shift Supervisor will complete appropriate portions of the Security Shift Supervisor Checklist upon declaration and throughout the course of an emergency.

5.2 When directed by E.D. complete Section 8.0 of the Security Shift Supervisor Checklist. This action is restricted to situations requiring Control Room Evacuation.

6.0 REFERENCES

- 6.1 2000-PLN-1300.01, OCNCS Emergency Plan.
- 6.2 EPIP-OC-.01, "Classification of Emergency Conditions".
- 6.3 EPIP-OC-.03, "Emergency Notification".
- 6.4 EPIP-OC-.12, "Personnel Accountability".

Title SITE SECURITY EMERGENCY ACTIONS	Revision No. 10
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- 6.5 EPIP-OC-.13, "Site Evacuation and Personnel Mustering at the Remote Assembly Area".
- 6.6 EPIP-OC-.27, "The Operations Support Center".
- 6.7 EPIP-OC-.41, "Emergency Duty Roster Activation".
- 6.8 OCNCS Modified and Amended Physical Security Plan
- 6.9 EPIP-OC-.26, "The Technical Support Center"
- 7.0 EXHIBITS
 - 7.1 Security Shift Supervisor Checklist (Exhibit 1).
 - 7.2 Alternate Emergency Response Facilities (Exhibit 2).

Title
SITE SECURITY EMERGENCY ACTIONS

Revision No.
10

EXHIBIT 1

SECURITY SHIFT SUPERVISORS CHECKLIST

Time/Initials

- 1.0 Upon notification by the Emergency Director (or his designee) of a declared emergency the Security Shift Supervisor will:
- / 1.1 Ensure that Security Officers are receiving station emergency announcements and periodically provide them with status updates.
 - / 1.2 Determine whether the incident is the result of sabotage or a malicious act. This shall be accomplished through consultation with the GSS/SSM, ED, or ED Assistant. If the event is determined to be the result of sabotage or malicious act, the Security Shift Supervisor shall implement the Security Contingency Procedure (OSEC-CON-1530.55). Inform the G.S.S., ED, or ED Assistant that they should consult the Security Contingency Procedures (OSEC-CON-1530.53).
 - / 1.3 Ensure that the Gates to the Forked River site are OPEN and that Building #12 is UNLOCKED.
 - / 1.4 Secure security computer access points #113 through #117 (accountability key card readers).
 - 1.5 Utilize the Forked River Page System to notify personnel in areas remote from the OC Plant Page System. Personnel in remote areas should be informed of Emergency Classifications and pertinent personnel control activities.
 - / 1.5.1 Unusual Event
 - / 1.5.2 Alert
 - / 1.5.3 Site Area Emergency
 - / 1.5.4 General Emergency
 - 1.6 Operationally test the emergency communications equipment at the Main and North Gate Processing Centers.
 - / 1.6.1 Station Security Line at the North and Main Gates
 - / 1.6.2 EP radio units
 - / 1.6.3 State EMRAD remote base unit

Title SITE SECURITY EMERGENCY ACTIONS	Revision No. 10
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EXHIBIT 1 (continued)

SECURITY SHIFT SUPERVISORS CHECKLIST

Time/Initials

2.0 Classification of Emergency Conditions, refer to EPIP-OC-.01.

2.1 Unusual Event

_____/_____
_____/_____

2.1.1 -Non Security Related

2.1.2 -Security related - Attempted entry/sabotage-Owner controlled area.

2.2 Alert

_____/_____
_____/_____

2.1.1 -Non Security Related

2.1.2 -Security Related - Compromise on site, outside P.A., Sabotage which results in actual/potential degradation of plant safety.

2.3 Site Area Emergency

_____/_____
_____/_____

2.3.1 Non Security Related.

2.3.2 Security Related - V/A threatened - P/A penetration - Sabotage which results in actual or likely major failure of plant functions needed for the protection of the public.

2.4 General Emergency

_____/_____
_____/_____

2.4.1 Non Security Related.

2.4.2 Security Related - Loss of physical security control or sabotage which results in imminent cladding failure or fuel melting with the potential loss of containment integrity or for significant radioactive release.

_____/_____

2.5 Continue assessment of in-plant, onsite and offsite security emergency conditions that may prompt emergency reclassification or escalation.

Title SITE SECURITY EMERGENCY ACTIONS	Revision No. 10
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EXHIBIT 1 (continued)

SECURITY SHIFT SUPERVISORS CHECKLIST

Time/Initials

3.0 Contaminated Injury.

- _____/_____ 3.1 Receive direction from the Emergency Director on the mode of transport for the injured person(s) and any other needed instruction.
- _____/_____ 3.2 Dosimetry issued to offsite ambulance personnel.
- _____/_____ 3.3 Provide offsite First Aid squads escort to the building entry closest to the injured person(s) location.

4.0 Personnel Accountability, refer to EPIP-OC-.12.

- _____/_____ 4.1 Complete the Personnel Accountability Checklist in EPIP-OC-.12. (Implement Section 6.4 as necessary).

5.0 Site Evacuation, refer to EPIP-OC-.13.

- _____/_____ 5.1 Complete the Site Evacuation Checklist in EPIP-OC-.13. Direct personnel in remote areas to evacuate the site using the Forked River page and/or security patrols as necessary.

NOTE

Refer to Security Procedure OSEC-CON-1530.58 for guidance concerning Security Force Evacuation.

6.0 Damage Control and Emergency Team Organization, refer to EPIP-OC-.27.

- _____/_____ 6.1 Assist OSC Coordinator and/or team leaders in pre-planning team entries into Security Access Controlled Areas.
- _____/_____ 6.2 Coordinate security team in-plant entries with the OSC Coordinator.
- _____/_____ 6.3 Search and Rescue
 - 6.3.1 Coordinate security support of search and rescue operations with OSC Coordinator.

Title
SITE SECURITY EMERGENCY ACTIONS

Revision No.
10

EXHIBIT 1 (continued)

SECURITY SHIFT SUPERVISORS CHECKLIST

Time/Initials

7.0 Emergency Duty Roster Activation, refer to EPIP-OC-.41.

_____/____ 7.1 Complete the Emergency Duty Roster Activation Checklist in EPIP-OC-.41.

8.0 Emergency Center Habitability

_____/____ 8.1 If the Tech. Support Center (TSC) is not habitable (fire, explosion, etc.) Security should direct arriving ERO TSC members as follows: The ED support staff which includes the ED, ED Assistant, RAC, RASE and PI Rep. proceed to the Control Room (ECC). The Tech Support staff which includes the TSC Coordinator, TSC Engineers, Communication Coordinator, Communicators and the Tech Assistant proceed to the OSC. The Core Engineer would initially report to the Control Room, but if his services are not needed, he will be sent to the OSC. (Refer to EPIP-OC-.26 for specific direction).

_____/____ 8.2 For Security incidents that preclude site access the Security Shift Supervisor and the arriving IREO ED shall discuss appropriate actions for gaining access to the site, the decision shall be approved by the ED (GSS). The Security Shift Supervisor shall direct other arriving IREO members to the Cafeteria in the Oyster Creek Administrative Building.

_____/____ 8.3 If the Operations Support Center (OSC) is not habitable (fire, explosion, etc.) Security should direct arriving ERO OSC members as follows: All OSC personnel shall proceed to the SOSOC which is located in the rear of the TSC. (Refer to EPIP-OC-.27 for specific direction).

_____/____ 8.4 A description of evacuation preplanning for Alternate Emergency Response Facilities is provided in Exhibit 2.

Title
SITE SECURITY EMERGENCY ACTIONS

Revision No.
10

EXHIBIT 1 (continued)

SECURITY SHIFT SUPERVISORS CHECKLIST

Time/Initials

9.0 Control Room Evacuation

_____/_____
Page
Completed By

9.1 Notify station personnel using the plant page located in the Secondary Alarm Station. Select the appropriate message below. If appropriate, preface and end the announcement with, "This is a drill, this is a drill."

Obtain ED's Verbal approval before making any page announcement.

_____/_____
ED Approval
(Verbal)

"An Alert has been declared. All On-Duty members of the Emergency Response Organization report to Emergency Centers. All other personnel should continue with their normal duties pending further instructions. The Control Room has been evacuated. Eating Drinking and Smoking is prohibited until further notice."

_____/_____
ED Approval
(Verbal)

"A Site Area Emergency has been declared. Personnel Accountability shall be conducted. All On-Duty members of the Emergency Response Organization report to Emergency Centers. All other personnel in the protected area report to the Emergency Assembly Area in the Material Management Warehouse. Personnel in Radiation Work Permit Areas located within the reactor and turbine buildings proceed to the Monitor and Control Area and muster with Security. The Control Room has been evacuated. Eating, Drinking and Smoking is prohibited until further notice."

NOTE

This section shall be performed in accordance with appropriate time requirements.

_____/_____ 9.2 Notify the following Off-Site Agencies:

*N.J. State Police: _____/_____
(Person Contacted) Time

**N.R.C.: _____/_____
(Person Contacted) Time

(609) 882-4201
(609) 882-2000

**NOTE: Required within
15 minutes.**

Primary
(301) 816-5100
Backup
(301) 951-0550

**NOTE: Required within
1 hour of
Emergency
Declaration**

Title SITE SECURITY EMERGENCY ACTIONS	Revision No. 10
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EXHIBIT 1 (continued)

SECURITY SHIFT SUPERVISORS CHECKLIST

Provide the following message:

"This is not a drill - I repeat, This is not a drill"

_____ / _____
ED Verbal Approval Time

Or

"This is a drill - This is a drill"

_____ / _____
ED Verbal Approval Time

"This is _____ at Oyster Creek Nuclear Generating
Name/Title

Station. A(n) (Alert)(Site Area Emergency) was declared at _____
Select one (Time-24hr clock)

on _____ based on evacuation of the Plant Control Room.
Date

This is an Initial Notification only. Further information will be provided within the hour. Please state your name." To verify this message Call - (609) 971-4954"

_____ / _____ Notification Complete
Communicators Signature Time

Time/Initials

9.3 Activate the Emergency Response Organization in accordance with EPIP-OC-.41 as appropriate.

_____ / _____

Title
SITE SECURITY EMERGENCY ACTIONS

Revision No.
10

EXHIBIT 1 (continued)

SECURITY SHIFT SUPERVISORS CHECKLIST

Time/Initials

10.0 Termination of emergency condition.

_____/____ 10.1 Receive notification from the Emergency Director or designee of the termination of the emergency condition.

_____/____ 10.2 Ensure that all emergency packets and other related equipment is returned to its normal storage area, in a "Ready" condition.

_____/____ 10.3 Ensure that an adequate supply of blank EPIP Procedure Checklists are available for procedures:

[] EPIP-OC-.12

[] EPIP-OC-.13

[] EPIP-OC-.40

[] EPIP-OC-.41

_____/____ 10.4 Forward all completed EP records (e.g., EPIPs, etc.) to the Emergency Preparedness Department.

Signature: _____ Date: _____
Security Shift Supervisor

Title
SITE SECURITY EMERGENCY ACTIONS

Revision No.
10

EXHIBIT 2

ALTERNATE EMERGENCY RESPONSE FACILITIES

This exhibit provides for a description of evacuation preplanning for Alternate Emergency Response Facilities as follows:

1. Control Room/ECC - Evacuation of Control Room - the Operators control the plant from remote shutdown panels and the GSS directs plant operations from the TSC. All other ECC IREO members are integrated into the TSC organization. (Refer to 2000-ABN-3200.30 for specific direction).
2. OSC - Evacuation of OSC - all OSC personnel are evacuated to the SOSC which is located in the rear of the TSC. (Refer to EPIP-OC-.27 for specific direction.)
3. TSC - Evacuation of TSC - the ED support staff which includes the ED, ED Assistant, RAC, RASE, and PI Rep. evacuate to the Control Room (ECC). The Tech Support staff which includes the TSC Coordinator, TSC Engineers, Communication Coordinator, Communicators and the Tech Assistant evacuate to the OSC. The Core Engineer would initially report to the Control Room, but if his services are not needed, he will be sent to the OSC. (Refer to EPIP-OC-.26 for specific direction).
4. Remote Assembly Area - Evacuation of RAA's - if the Forked River Bldg. 14 RAA is not available then relocate to the Berkeley Line Station and vice versa.
5. Emergency Assembly Area - The EAA may be redirected to the Forked River Assembly Area or to the Remote Assembly Area at Berkeley Line as directed by management. In this case Site Accountability is conducted as personnel exit the site.
6. EOF - There are no backup facilities for the EOF because it is remote from the site and it is unlikely that a nuclear related incident would affect both the plant and this center.

OYSTER CREEK EMERGENCY PREPAREDNESS IMPLEMENTING PROCEDURE

Number

EPIP-OC-.41

Title	Revision No.
EMERGENCY DUTY ROSTER ACTIVATION	5
Applicability/Scope	Responsible Office
Applies to work at Oyster Creek	Emergency Preparedness
This document is within QA plan scope	Effective Date
Safety Reviews Required	Date of Sale
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

Prior Revision 4 incorporated the following Temporary Changes:

N/A

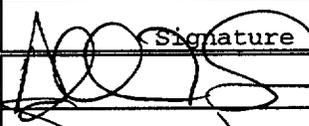
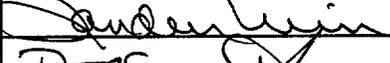
This Revision 5 incorporates the following Temporary Changes:

N/A

List of Pages (all pages rev'd to Rev. 5)

1.0 to 3.0
E1-1

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IRMC OYSTER CREEK**

	Signature	Concurring Organization Element	Date
Originator		Emergency Planner	1/5/00
Concurred By		Director, Ops. & Maintenance	1-7-00
Approved By		Security Manager, OC	1-11-2000
		Emergency Preparedness Manager OC	1-11-2000

Title
EMERGENCY DUTY ROSTER ACTIVATION

Revision No.
5

DOCUMENT HISTORY

PREPARED BY:
REVIEWED BY:
APPROVED BY:

REV	EFFECTIVE DATE	DESCRIPTION OF CHANGE	
2	05/94	Expand instructions for operating autodialer.	
3	05/96	Remove instructions for activating teleclerk which will be provided by memo to appropriate organizations.	D. VanNortwick
4	06/97	Include Teleclerk activation utilizing Security memo # 016-97. Include new activation code number messages.	D. VanNortwick
5	DOS	Required due to sale of Oyster Creek.	A. Smith

Title	Revision No.
EMERGENCY DUTY ROSTER ACTIVATION	5

1.0 PURPOSE

1.1 This procedure provides instructions for security actions for the notification of Emergency Duty Roster personnel and for the activation of Emergency Response Facilities.

2.0 APPLICABILITY/SCOPE

2.1 This procedure applies to Oyster Creek Security for use in declared or simulated emergencies.

3.0 DEFINITIONS

None

4.0 RESPONSIBILITIES

4.1 The Security Shift Commander is responsible to implement Exhibit 1.

5.0 PROCEDURE

5.1 When the Security Shift Commander is notified of the declaration of an emergency, he shall complete Exhibit 1.

6.0 REFERENCES

6.1 EPIP-OC-.25

7.0 EXHIBITS

7.1 Exhibit I, "Security Shift Commander Checklist"

Title
EMERGENCY DUTY ROSTER ACTIVATION

Revision No.
5

EXHIBIT I

SECURITY SHIFT SUPERVISOR CHECKLIST

Time /Initials

- _____/_____ 1.0 Activate Teleclerk System per Security memo #016-97.
- _____/_____ 2.0 Call group page number and enter password per Security memo #016-97.
- _____/_____ 2.1 Enter appropriate notification code message
- NO. MESSAGE
1. 777777# - UNUSUAL EVENT
2. 999999# - ALERT OR HIGHER
3. 000000# - STAND-DOWN
- _____/_____ 3.0 Roster "Filled Position Reports" are automatically generated and are sent via fax to TSC and Security.
- _____/_____ 4.0 If Teleclerk fails to operate or an emergency center has requested personnel to fill open positions, then as manpower permits, attempt to fill positions by using the confidential telephone listing.
- _____/_____ 5.0 If pagers fail to activate. Teleclerk will begin to call team members after approximately 15 minutes using work numbers, and home numbers in that order.

CAUTION

Do not turn off Teleclerk prior to terminating scenario.

- _____/_____ 6.0 If it is necessary to terminate Teleclerk activity:
- 6.1 Press "C" and ENTER, this terminates scenario.
- 6.2 Status report will automatically print.
- _____/_____ 7.0 Report the status of Emergency Duty Roster/personnel callout and facility activation to the GOS/ED Assistant within 45 minutes. Include any vacant positions as well as any facility activation problems as might exist.

Signature: _____ Date: _____

Title THYROID BLOCKING	Revision No. 1
Applicability/Scope Applies to work at Oyster Creek	Responsible Office Emergency Preparedness
This document is within QA plan scope Safety Reviews Required	Effective Date Date of Sale

Prior Revision 0 incorporated the following Temporary Changes:

N/A

This Revision 1 incorporates the following Temporary Changes:

N/A

List of Pages (all pages rev'd to Rev. 1)

- 1.0 to 3.0
- E1-1
- E2-1
- E3-1
- E4-1

**NON-CONTROLLED
This Document Will Not
Be Kept Up To Date
DCC Oyster Creek**

	Signature	Concurring Organization Element	Date
Originator	<i>[Signature]</i>	EMERGENCY PLANNER	1/16/00
Concurred By	<i>[Signature]</i>	Director Rad Health & Safety	1-11-2000
	<i>[Signature]</i>	Medical Director	1-14-2000
Approved By	<i>[Signature]</i>	Director Ops & Maintenance	1-14-00
	<i>[Signature]</i>	Emerg. Preparedness Manager OC	1/17/00

Title THYROID BLOCKING	Revision No. 1
----------------------------------	--------------------------

REV.	DATE	ORIGINATOR	SUMMARY OF CHANGE
0	02/99	A. Smith	Change EPIP-COM-.44 Thyroid Blocking to EPIP-OC-.44 making it Oyster Creek specific. Also add Procedure History page. The change does not affect the contents of the procedure, only the numbering.
1	DOS	A. Smith	Change references from GPU or GPUN to OCNGS.

Title	Revision No.
THYROID BLOCKING	1

1.0 PURPOSE

1.1 The purpose of this procedure is to provide guidance to site personnel for the administration of potassium iodide tablets as a thyroid blocking agent in the event of actual inhalation or ingestion by site personnel of large quantities of radioiodine.

2.0 APPLICABILITY/SCOPE

2.1 This procedure applies to all personnel involved in emergency or recovery related activities at Oyster Creek.

3.0 DEFINITIONS

3.1 Radioiodine - Any of the radioactive isotopes of iodine.

4.0 RESPONSIBILITIES

4.1 Radiological Assessment Coordinator (RAC) is responsible for completing Exhibit 1.

4.2 Medical Representative is responsible for completing Exhibits 2 and 3.

5.0 PROCEDURE

5.1 Implementation Criteria

5.1.1 This procedure is to be initiated upon verification by the RAC that person(s) have been exposed to quantities of radioiodine resulting in a thyroid committed dose equivalent (CDE) of greater than or equal to (25 REM).

6.0 REFERENCES

6.1 2000-PLN-1300.01 OCNCS Emergency Plan

7.0 EXHIBITS

- Exhibit 1 - Radiological Assessment Coordinator Checklist
- Exhibit 2 - Medical Representative Checklist
- Exhibit 3 - Thyroid Blocking Agent Administration Form
- Exhibit 4 - Thyroid Blocking Agent Precautions

Title THYROID BLOCKING	Revision No. 1
----------------------------------	--------------------------

EXHIBIT 1

Radiological Assessment Coordinator Checklist

Initials

- _____ 1.0 Determine if one or more individuals have received an uptake of radioiodine resulting in a thyroid committed dose equivalent (CDE) of greater than or equal to (25 REM). Consult with the Medical Representative on the benefits of administering stable iodine (KI).

NOTE

The Thyroid Dose to an individual may be determined as follows:

- A. Using an air sample, the thyroid dose is calculated as 25 mrem per DAC-hr.
- B. Having the individual get a whole body count if the whole body counter is available. The whole body counter software will calculate the thyroid dose.

NOTE

Potassium iodide is not to be used in lieu of proper respiratory protection (i.e., as a prophylactic). Potassium iodide is only to be used to block the thyroid gland shortly after accidental or unavoidable inhalation or ingestion of radioiodine.

- _____ 2.0 If the decision is to administer stable iodine, (KI) arrange for an escort to transport the exposed individual(s) to the Medical Representative's location, if needed.
- _____ 3.0 Arrange for a bioassay to be performed on each exposed individual of concern after issuance or refusal of the thyroid blocking agent.

Title THYROID BLOCKING	Revision No. 1
----------------------------------	--------------------------

EXHIBIT 2

Medical Representative Checklist

Initials

- _____ 1.0 Upon the decision to administer stable iodine (KI), notify the OCNCS Medical Director. Consult with the OCNCS Medical Director or other medical authority, as appropriate, concerning the efficiency of potassium iodide usage in regards to duration of exposure, magnitude of exposure, and time since exposure for each individual.
- _____ 2.0 Upon assembling the exposed individual(s), direct the exposed individual(s) to read the thyroid blocking agent precaution leaflet (Exhibit 4) and sign the Thyroid Blocking Agent Administration Form (Exhibit 3). This signature verifies that the individual has read and understands the leaflet, understands that taking thyroid blocking agent is voluntary, and has no known allergy to Iodine. All exposed individuals will be offered thyroid blocking agent whether or not they refuse to sign Exhibit 3.
- _____ 3.0 Issue one sealed container of thyroid blocking agent (14 tablets potassium iodide) to each individual and instruct them to follow the label instructions. Label instructions may be altered only by a qualified Physician.

NOTE

Thyroid blocking agent is stored in the Medical Department Office.

- _____ 4.0 Verify by signature on Exhibit 3 that thyroid blocking agent was issued to the exposed individual or if refused, note the refusal on Exhibit 3 (if possible, record refusal reason on reverse side of form).
- _____ 5.0 Keep all completed Administration Forms (Exhibit 3) in the persons medical file.

Title THYROID BLOCKING	Revision No. 1
----------------------------------	--------------------------

EXHIBIT 3

THYROID BLOCKING AGENT ADMINISTRATION FORM

Name of Exposed Individual _____
Last First Middle

Social Security Number _____

Badge Number _____

TLD Number _____

Duration of Exposure _____ Hours

Iodine DAC Fraction _____

Estimated DAC-hrs _____ DAC-hrs

Estimated Thyroid Dose _____ mrem (i.e., DAC-hr x 25)

Date of Exposure _____

Time Exposure Ended _____

RWP Number (if applicable) _____

Respiratory Protection worn during Exposure _____

NOTE

Obtain exposure information from the Rad Con Coordinator.

NOTE

Although 10 CFR 20 allows up to 50 Rem per year, EPA and FDA guidance recommend considering the use of KI for acute exposures of 25 Rem or greater (CDE) to the adult thyroid in order to maintain exposures As Low As Reasonably Achievable.

I verify that I have read and understand the precaution leaflet and understand that taking thyroid blocking agent is voluntary. I also verify that I have no known allergy to Iodine. I accept/refuse (circle one) thyroid blocking agent.

_____/_____
*Signature of Exposed Individual Date

Potassium Iodide tablet issued by:

_____/_____/_____
*Signature of Medical Representative Date Time

Whole Body Count Schedule at: _____/_____
Time Date

Whole Body Count Completed at: _____/_____/_____
Time Date Signature of-WB Count Tech

*If the exposed individual refuses to sign but desires to take the thyroid blocking agent, issue the thyroid blocking agent and note the refusal to sign in the signature block.

Title

THYROID BLOCKING

Revision No.

1

EXHIBIT 4

THYROID BLOCKING AGENT PRECAUTIONS

HOW POTASSIUM IODIDE WORKS

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

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

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

WHO SHOULD NOT TAKE POTASSIUM IODIDE

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

HOW AND WHEN TO TAKE POTASSIUM IODIDE

Potassium Iodide should be taken as soon as possible after medical personnel tell you. You should take one dose every 24 hours. More will not help you because the thyroid can "hold" only limited amounts of iodine. Larger doses will increase the risk of side effects. You will probably be told not to take the drug for more than 10 days.

SIDE EFFECTS

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

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

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

**OYSTER CREEK
EMERGENCY PREPAREDNESS
IMPLEMENTING PROCEDURE**

Number
EPIP-OC-.45

Title CLASSIFIED EMERGENCY TERMINATION/RECOVERY	Revision No. 1
Applicability/Scope Applies to work at Oyster Creek	Responsible Office Emergency Preparedness
This document is within QA plan scope <u>X</u> Yes ___ No Safety Reviews Required <u>X</u> Yes ___ No	Effective Date Date of Sale

Prior Revision 0 incorporated the following Temporary Changes:

N/A

This Revision 1 incorporates the following Temporary Changes:

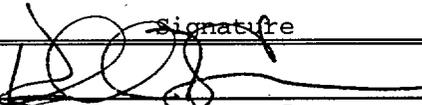
N/A

List of Pages (all pages rev'd to Rev. 1)

1.0 to 3.0
E1-1 to E1-3

This procedures replaces EPIP-COM-.45

**NON-CONTROLLED
This Document Will Not
Be Kept Up To Date
DCC Oyster Creek**

	Signature	Concurring Organization Element	Date
Originator		EMERGENCY PLANNER	1/6/00
Concurred By		Director Ops & Maintenance	1-7-00
Approved By		Emerg. Preparedness Manager OC	1/11/00

Title
CLASSIFIED EMERGENCY TERMINATION/RECOVERY

Revision No.
1

REV.	DATE	ORIGINATOR	SUMMARY OF CHANGE
0	02/99	A. Smith	Convert EPIP-COM-.45 which is common between TMI & OC to a site specific for Oyster Creek and TMI. The content is exactly the same except for reference related to TMI which is deleted. The new number for OC is EPIP-OC-.45
1	DOS	A. Smith	Change references from GPU or GPUN to OCNGS.

Title

CLASSIFIED EMERGENCY TERMINATION/RECOVERY

Revision No.

1

1.0 PURPOSE

1.1 This procedure provides guidance for emergency termination/recovery at the Oyster creek Nuclear Generating Station.

2.0 APPLICABILITY/SCOPE

2.1 This procedure is applicable for Emergency Plan implementation of emergency classifications at the Alert or higher levels.

3.0 DEFINITIONS

3.1 None

4.0 RESPONSIBILITIES

4.1 The Emergency Director/Emergency Support Director is responsible for completion of actions required by Exhibit 1.

5.0 PROCEDURE

5.1 Complete Exhibit 1

6.0 REFERENCES

6.1 OCNGS Emergency Plan

7.0 EXHIBITS

Exhibit 1 - Classified Emergency Termination/Recovery Checklist

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CLASSIFIED EMERGENCY TERMINATION/RECOVERY

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EXHIBIT 1

CLASSIFIED EMERGENCY TERMINATION/RECOVERY CHECKLIST

NOTE

The recovery phase of an emergency is intended to be instituted if long term corrective actions are needed to return the plant to near normal or decommissioning conditions. It would be expected that this would be necessary only subsequent to an incident characterized by a General Emergency or a site Area Emergency. If the plant can be returned to normal conditions without major repairs, there is no need to enter the "Recover Mode". In this case, the emergency may be terminated by following the criteria in this checklist.

- 1.0 Determine when to enter recover, de-escalate or terminate (closeout) a classified emergency based on the following conditions:

NOTE

If a General Emergency has been declared, the only option is to meet the recovery criteria. De-escalation or termination is **NOT** permitted from a General Emergency.

- 1.1 Enter recovery if all of the following conditions have been met.
- 1.1.1 Radiation levels in all in-plant areas are stable or decreasing.
 - 1.1.2 Radiological releases to the environment are under control or have ceased.
 - 1.1.3 Containment pressure is normal or near normal and as expected for post accident conditions.
 - 1.1.4 The reactor is stable and in a safe shutdown condition.
 - 1.1.5 Any fire, flood or similar emergency conditions affecting the plant are controlled or have ceased.
- 1.2 If **NOT** in a General Emergency, de-escalate the emergency if lower emergency action level criteria apply.
- 1.3 If **NOT** in a General Emergency, terminate (close out) the emergency based on the following criteria.
- 1.3.1 The plant is in a stable configuration and
 - 1.3.2 **NO** emergency action level criteria apply.

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EXHIBIT 1
(continued)

CLASSIFIED EMERGENCY TERMINATION/RECOVERY CHECKLIST

2.0 Based on the evaluation for recovery, de-escalation or termination perform the following:

Initials

- 2.1 If the **RECOVERY** criteria have been met:
 - 2.1.1 Discuss recovery plans with the "Office of the President".
 - 2.1.2 Discuss recovery plans with the
 - 2.1.2.1 NRC and
 - 2.1.2.2 State
 - 2.1.3 Establish a Recovery Organization, taking into account the condition and concerns at the plant.
 - 2.1.4 Ensure that significant efforts being performed by the Emergency Organization are transferred to the Recovery Organization.
 - 2.1.5 Declare recovery and direct the following:
 - 2.1.5.1 Onsite page announcements
 - 2.1.5.2 Offsite notifications
 - 2.1.5.3 Issuance of a press release

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EXHIBIT 1
(continued)

CLASSIFIED EMERGENCY TERMINATION/RECOVERY CHECKLIST

Initials

2.2 **DE-ESCALATION** of the emergency

2.2.1 If **NOT** in a General Emergency, re-classify the emergency to a lower level.

2.2.2 Discuss de-escalation with the STATE.

2.2.3 Direct the following:

2.2.3.1 Onsite page announcement

2.2.3.2 Offsite notifications

2.2.3.3 Issuance of a press release

2.2.3.4 Manning of all applicable facilities for the emergency classification per the Emergency Plan.

2.3 **TERMINATION** (Close Out) of the Emergency

2.3.1 Discuss termination with the STATE.

2.3.2 Direct the following:

2.3.2.1 Termination (close out)

2.3.2.2 Onsite page announcement

2.3.2.3 Offsite notifications

2.3.2.4 Issuance of a press release