GPU Nuclear, Inc.
U.S. Route #9 South
Post Office Box 388
Forked River, NJ 08731-0388
Tel 609-971-4000

November 10, 1999
1940-99-20611

U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555

Dear Sir:

Subject: Oyster Creek Nuclear Generating Station
Docket No. 50-219
Emergency Plan Implementing Procedure Revisions

In accordance with 10 CFR 50, Appendix E, Section V, enclosed is the newly revised Index for the Oyster Creek Emergency Plan Implementing Procedures and the below listed procedures.

Procedure Number	Title	Revision
EPIP-OC-.10	Emergency Radiological Surveys Onsite	8
EPIP-OC-.26	The Technical Support Center	20

If further information is required, please contact Mr. George Busch, Manager Nuclear Safety and Licensing at 609-971-4643.

Very truly yours,

Michael B Roche
Michael B. Roche
Vice President & Director
Oyster Creek

MBR\GWB:gl

Enclosures

cc: Administrator, Region I
NRC Project Manager
NRC Resident Inspector

A045

PDR ADOCK

EPIP SERIES - EMERGENCY PLAN IMPLEMENTING PROCEDURES

PROCEDURE NO.	TITLE	REV. NO.	DATE
EPIP-OC-.01	Classification of Emergency Conditions	6	06/03/99
EPIP-OC-.02	Direction of Emergency Response/Emergency Control Center	24	11/11/99
EPIP-OC-.03	Emergency Notification	23	06/03/99
EPIP-OC-.06	Additional Assistance and Notification	21	09/03/99
EPIP-OC-.10	Emergency Radiological Surveys Onsite	8	11/15/99
EPIP-OC-.11	Emergency Radiological Surveys Offsite	12	06/03/99
EPIP-OC-.12	Personnel Accountability	7	02/21/99
EPIP-OC-.13	Site Evacuation and Personnel Mustering at Remote Assembly Areas	6	11/10/97
EPIP-OC-.25	Emergency Operations Facility (EOF)	21	07/01/99
EPIP-OC-.26	The Technical Support Center	20	11/14/99
EPIP-OC-.27	The Operations Support Center	8	11/11/99
EPIP-OC-.31	Environmental Assessment Command Center	10	03/08/98
EPIP-OC-.33	Core Damage Estimation	3	08/01/97
EPIP-OC-.35	Radiological Controls Emergency Actions	13	07/11/99
EPIP-OC-.40	Site Security Emergency Actions	9	10/04/99
EPIP-OC-.41	Emergency Duty Roster Activation	4	06/21/97
EPIP-OC-.44	Thyroid Blocking	0	03/11/99
EPIP-OC-.45	Classified Emergency Termination/Recovery	0	02/21/99
OEP-ADM-1311.03	Emergency Preparedness Section Administration	3	08/28/99
OEP-ADM-1319.01	Oyster Creek Emergency Preparedness Program	6	05/15/99
OEP-ADM-1319.02	Emergency Response Facilities & Equipment Maintenance	6	09/03/99
OEP-ADM-1319.04	Prompt Notification System	1	05/02/97
OEP-ADM-1319.05	Oyster Creek Emergency Preparedness Program	0	02/20/99

GPU NUCLEAR	OYSTER CREEK EMERGENCY PREPAREDNESS IMPLEMENTING PROCEDURE	Number EPIP-OC-.10
Title Emergency Radiological Surveys Onsite		Revision No. 8
Applicability/Scope Applies to work at Oyster Creek		Responsible Office Emer Prep
This document is within QA plan scope _X_Yes___No Safety Reviews Required _X_Yes___No		Effective Date (11/05/99) 11/15/99

Prior Revision 7 incorporated the following Temporary Changes:

N/A

This Revision 8 incorporates the following Temporary Changes:

N/A

List of Pages (all pgs. rev'd to Rev. 8)

1.0 to 6.0
E1-1 to E1-2
E2-1
E3-1
E4-1
E5-1
E6-1 to E6-2
E7-1
E8-1
E9-1
E10-1
E11-1
E12-1
E13-1

	Signature	Concurring Organization Element	Date
Originator		Lead Emergency Planner	11/3/99
Concurred By		Radiological Controls Director	11/4/99
Approved By	FOR. P. HAYS	Emergency Preparedness Manager, OC	11/4/99

PROCEDURE HISTORY

REV	DATE	ORIGINATOR	SUMMARY OF CHANGE
3	12/94	A. Smith	Add Document History page and correct numbering on Exhibits 18 through 23.
4	09/95	J. Bontempo	Use cellular phones as primary communications for FMT's.
5	01/96	J. Bontempo	Correct references to Exhibits 8 through 21 (previously 9 through 22).
6	03/97	A. Smith	Allow RAC to perform the RCC duties, update survey maps, delete Exhibit 13, recovery of radio communications due to cell phones being primary mode of comm.
D	06/97	J.W. Rayment	Draft - when ready to be rev'd don't forget to put In your summary of change.
7	09/98	J.W. Rayment	•Add initial spaces to section 4.2, delete initial spaces from exhibits 1, 2, & 4. •Allow use of normal Rad Con procedures for surveys. •Change exhibits to reflect normal procedures. •Delete exhibits that do not reflect normal procedures. •Change 1/4 mile offsite map to be more accurate. •Change air sampling default to 1 minute samples. •Change air sampler to Lo volume instead of Hi volume.
8	10/99	A. Smith	Update phone numbers for field teams. Remove reference to EPIP-OC-.04, this procedure was deleted.

1.0 PURPOSE

1.1 This procedure describes the responsibilities and duties of personnel involved in the conduct of Onsite Radiological/Environmental Monitoring.

2.0 APPLICABILITY/SCOPE

2.1 This procedure applies to all emergency response personnel involved in Onsite Radiological/Environmental Monitoring Team activities.

2.2 This procedure is to be initiated upon any of the following conditions:

2.2.1 Alert, Site Area Emergency or General Emergency as determined by Procedure EPIP-OC-.01, Classification of Emergency Conditions.

2.2.2 Upon direction of the Emergency Director.

3.0 DEFINITIONS

3.1 None

4.0 RESPONSIBILITIES

4.1 Onsite RAC

4.1.1 The RAC may perform the responsibilities of the RCC. If that occurs, FMT activities will be reported to the RAC directly until there are personnel resources available to station the RCC function separately. When the resources are available, the RAC may transfer onsite FMT activities to the RCC.

4.2 Onsite Radiological/Environmental Survey Teams

4.2.1 The Onsite Radiological/Environmental Survey Team communicates directly to the RAC/RCC and is responsible for conducting emergency radiological monitoring within the Protected Area and up to 1/4 mile perimeter from the site boundary (Exhibit 12, 1/4 mile Offsite Map).

NOTE

The Onsite Radiological/Environmental Survey Team may be directed beyond the 1/4 mile perimeter to perform offsite radiological monitoring until the Offsite Radiological/Environmental Survey Teams are fully manned and ready to be deployed.

NOTE

Offsite monitoring points are found in Exhibit 12 of Procedure EPIP-OC-.11, Offsite Radiological Environmental Surveys.

INITIALS

4.2.2 Team members shall assemble and complete actions identified in Exhibit 1, "Team Assembly and Formation". _____

4.2.3 Team members shall obtain monitoring instruments and equipment utilizing Exhibit 2, "Monitoring Instruments and Equipment". _____

4.2.4 Team members shall conduct air sampler pre-operational checks in accordance with Reference 6.8. Also, utilizing Exhibit 3, "Emergency Air Sampling". _____

4.2.5 Team members shall prepare the vehicle by completing action identified in Exhibit 4, "Vehicle Preparation". _____

4.2.6 Team members shall utilize survey instruments during cold weather by completing actions identified in Exhibit 5, "Cold Weather Instrument Operations". _____

INITIALS

4.2.7 Team members shall conduct onsite surveys utilizing Exhibit 6, "Conducting on Site Surveys" when so directed. (Refer to Exhibit 10 and Exhibit 13).

4.2.8 Team members shall terminate monitoring activities by completing actions identified in Exhibit 7, "Termination of Monitoring Activities".

4.3 If the onsite team is dispatched offsite beyond the 1/4 mile radius, the team shall suspend use of this procedure and implement the appropriate sections of EPIP-OC-.11 for conducting surveys and collection of air samples.

5.0 PROCEDURE

5.1 Onsite Radiological/Environmental Survey Team(s) members shall implement this procedure during an emergency.

6.0 REFERENCES

6.1 2000-PLN-1300.01, GPU Nuclear Emergency Plan for Oyster Creek Nuclear. 18

6.2 OEP-ADM-1319.02, Emergency Response Facilities and Equipment Maintenance.

6.3 EPIP-OC-.01, Classification of Emergency Conditions.

6.4 Memorandum 9502-88-0098, Field Measurement of Airborne Releases of Radioactive Material, G.M. Lodde, May 25, 1988. 18

6.5 Radiological/Industrial Safety and Health Awareness Report, 89-027, 9-25-89.

6.6 6630-ADM-4200.01, Radiological Surveys.

6.7 6630-ADM-4212.01, Air Sample Collection and Analysis.

7.0 EXHIBITS

7.1 Exhibit 1, Team Assembly and Formation

7.2 Exhibit 2, Monitoring Instruments and Equipment

7.3 Exhibit 3, Emergency Air Sampling

7.4 Exhibit 4, Vehicle Preparation

7.5 Exhibit 5, Cold Weather Instrument Operations

7.6 Exhibit 6, Conducting On-Site Surveys

7.7 Exhibit 7, Termination of Monitoring Activities

7.8 Exhibit 8, Onsite Emergency Monitoring Points

7.9 Exhibit 9, Onsite Monitoring Point Map

7.10 Exhibit 10, Sample Record

7.11 Exhibit 11, Air Activity (Iodine) Nomogram

7.12 Exhibit 12, Approx. 1/4 Mile Offsite Map

7.13 Exhibit 13, Survey Form

EXHIBIT 1

TEAM ASSEMBLY AND FORMATION

1.0 The Onsite Radiological/Environmental Survey Team will consist of two (2) team members. At least one member shall be a Radiological Controls Technician who shall be designated Team Leader.

2.0 The Onsite Radiological/Environmental Survey Team shall mobilize, and report as directed by the RAC/RCC.

3.0 Obtain the emergency monitoring vehicle key. If the key is not available, a backup key may be obtained from the guard at the Main Gate Processing Center.

3.1 Obtain cellular phone from GRCS lock box as primary mode of communications.

3.2 Obtain a portable radio for back up communications (Channel 1 would be used).

3.3 Team members shall conduct cell phone communications (primary) or radio communications (secondary) observing appropriate Radio Communications Protocol.

8

TEAM MEMBERS

NAME		SSN	AVAILABLE DOSE
_____	(Team Leader)	_____	_____
_____		_____	_____
_____		_____	_____

EXHIBIT 1
(continued)

TEAM ASSEMBLY AND FORMATION

NOTE

When operating the phone while in vehicle pedestal the vehicle must be on or the key in the accessory mode in order for the phone to be unlocked, then speed dial can be accomplished. When phone is hand held it operates normally.

3.3 The following is a list of locations, speed dial codes and actual phone numbers used by field teams and their respective contact. | 8

LOCATION	SPEED DIAL	PHONE #	
RAC/ECC	01	609-971-0335	8
RAC/TSC	02	609-971-4156	
EAC/EACC	03	732-367-8805	
	*	732-370-8990	8
FMT "A"	04	609-457-3560	
FMT "B"	05	609-457-3441	
FMT "C"	06	609-457-1525	
ONSITE FMT	07	609-457-3592	
RCC/OSC	08	609-971-4880	
EMERG.	09	911	
ECC	10	609-971-4666	

*732-370-8990 Dial Manually | 8

3.4 Communications and log keeping shall be conducted in accordance with EPIP-OC-.04, Communications and Recordkeeping.

4.0 If the vehicle is not in the assigned parking location, check the Rad Con Field Ops Sign Out Sheet, determining if the user has a radio, and contact the user directing him/her to return the vehicle immediately.

5.0 If the vehicle cannot be located or returned immediately, inform the RCC/RAC and request further guidance.

EXHIBIT 2

MONITORING INSTRUMENTS AND EQUIPMENT

1.0 The onsite Radiological Survey Team shall ensure the following instruments are available in the onsite van or obtain them, From: (ie. Rad Con Count Room, Radiac Trailer, the OSC monitoring instrument locker), and perform the pre-operational checks as required.

NOTE
OP CS-137 check source is in emergency locker for use if Pre Op checks have not been done already.

1.1 One (1) doserate survey instrument with capability of measuring 0.2 mR/hr and greater and capable of determining Beta readings.

1.2 One (1) countrate survey instrument with a pancake style probe.

1.3 One (1) air sampler (Lo Vol RAS Pump)

1.4 One (1) DC air sampler

EXHIBIT 3

EMERGENCY AIR SAMPLING

NOTE 1

Silver zeolite cartridges to be used for all samples.

NOTE 2

Flow rate on all samples to be 50-62 lpm.

NOTE 3

Verify operation of power inverter in van prior to use.

Initials

1.0 DC Air Sampler Use

_____ 1.1 Ensure the 3 position switch (charge-off-run) is in the OFF position.

_____ 1.2 Ensure the 2 battery clips are connected together to prevent sparking while A/S is being moved or handled.

_____ 1.3 Connect the air sampler battery clips to the appropriate terminals.

1.3.1 Red-Positive, Black-Negative

_____ 1.4 Turn ON A/S and adjust flow as needed.

_____ 1.5 Turn OFF A/S and reconnect the 2 battery clips together.

EXHIBIT 4

VEHICLE PREPARATION

1.0 Verify emergency equipment lockers are locked.

2.0 If the emergency locks are not locked, Conduct an inventory using inventory checklist from Procedure OEP-ADM-1319.02, Emergency Response Facilities and Equipment Maintenance. (Appendix B-2).

3.0 Perform radio check with RAC/RCC.

4.0 Log any deficiencies and report information to RAC/RCC.

NOTE
Team members shall log into Rem-On-Line System or initiate a control point admission ticket. (An ESRD or a 0-200 mR and a 0-1500 mR SRD required.)

EXHIBIT 5

COLD WEATHER INSTRUMENT OPERATIONS

1.0 Caution must be observed to ensure instrument operation is not affected by extreme cold temperatures.

2.0 If ambient temperature is above 32°F (0°C), instrument use is unlimited.

3.0 If ambient temperature is below 32°F (0°C), continuous instrument use should be limited as follows:

Temperature	Continuous Operating Time
0 - 32°F [(-18°C) - (0°C)]	5 minutes
-20° - 0°F [(-28°C) - (-18°C)]	2 minutes

4.0 For operation in temperatures below 32°F (0°C), a battery check should be performed before and after each measurement.

4.1 If the battery check fails in either case, the measurement is not valid.

4.2 Return the instrument to the vehicle and allow the batteries to warm up.

4.3 Repeat the measurement as required.

EXHIBIT 6

CONDUCTING ON-SITE SURVEYS

1.0 If the On-Site Team is dispatched Off-Site beyond the 1/4 mile radius, suspend use of this procedure and implement appropriate sections of EPIP-OC-.11 for surveys.

2.0 The intent is to keep the vehicle within the Protected Area whenever possible. Monitoring Points ESE, SE, and SSE are outside the Protected Area. Due to the time required to enter and exit the Protected Area, verify with the OSC that those monitoring points are required.

3.0 Exhibit 8, "Onsite Emergency Monitoring Points" (describes the onsite locations).

4.0 Exhibit 9, "Onsite Monitoring Point Map" (identifies these locations).

5.0 Perform and document onsite surveys in accordance with established Rad Con procedures. (Exhibit 13: Survey Form - Example - Equivalent Form may be used).

5.1 A baseline perimeter survey should be performed when team is dispatched.

5.2 Perform surveys at the discretion of the RAC/RCC.

5.3 Identify on Survey Form whether survey location may be within the plume or not.

5.3.1 If open window reading is >110% of closed window reading, uncorrected, survey location may be within the plume.

5.4 Label all samples, (smears, air samples, water samples, etc.), with appropriate information (time, location, etc.).

EXHIBIT 6
(continued)

CONDUCTING ON-SITE SURVEYS

5.5 Refer to Exhibit 11, "Air Activity (Iodine) Nomogram", for field counting iodine air samples to estimate air iodine activity.

5.6 Document Survey on Exhibit 13 or Equivalent Form; any water, soil, or air samples to be documented on Exhibit 10 - sample record.

5.7 Communicate all survey results to the RCC/RAC as soon as practical.

NOTE 1

Air samples to be 1 minute samples with a flow between 50 and 62 LPM unless otherwise directed by RCC/RAC.

NOTE 2

In the event that the E-van or a team member becomes contaminated, notify the RCC/RAC for a replacement or directions.

EXHIBIT 7

TERMINATION OF MONITORING ACTIVITIES

INITIALS

1.0 Upon direction of the RAC/RCC to cease monitoring activities.

_____ 1.1 Transport field monitoring samples to the Rad Con Counting Room or as directed by the RAC/RCC.

_____ 1.2 Log off the Rem-On-Line system as appropriate.

_____ 1.3 Inventory and return to storage all the emergency monitoring equipment in accordance with Appendix B of OEP-ADM-1319.02, "Emergency Response Facilities and Equipment Maintenance".

_____ 1.4 Return vehicle and keys to assigned location.

_____ 1.5 Submit team logs and data forms to RAC/RCC for his review and subsequent filing with the Document Control Center.

EXHIBIT 8

ONSITE EMERGENCY MONITORING POINTS

Sector	Location	Description
1	N	RCA perimeter road - west of Gate 8
2	NNE	RCA perimeter road - south side of Materials Warehouse
3	NE	RCA perimeter road - east side, halfway between Gate 20 and Materials Warehouse
4	ENE	RCA perimeter road - east side at Gate 20
5	E	RCA perimeter road - south east corner at AOG Building
6	ESE	Main site access road - directly south of AOG Building
7	SE	Main parking lot - first row directly south of Fuel Oil Storage Tank
8	SSE	Main parking log driveway at Main Gate 1
9	S	Auxiliary Office Building eastside adjacent to door
10	SSW	Auxiliary Office Building - westside adjacent to door
11	SW	Diesel Generator Building - eastside adjacent to door
12	WSW	Access road - westside Protected Area, west of transformers
13	W	Access road - westside Protected Area, west of demineralizer water storage tank
14	WNW	Access road - northwest corner, west of Torus Water Storage Tank
15	NW	Access road - adjacent to Gate 10A
16	NNW	Access road - halfway between North Guard House and Materials Warehouse, south of LLRW west corner

EXHIBIT 9

Onsite Monitoring Point Map

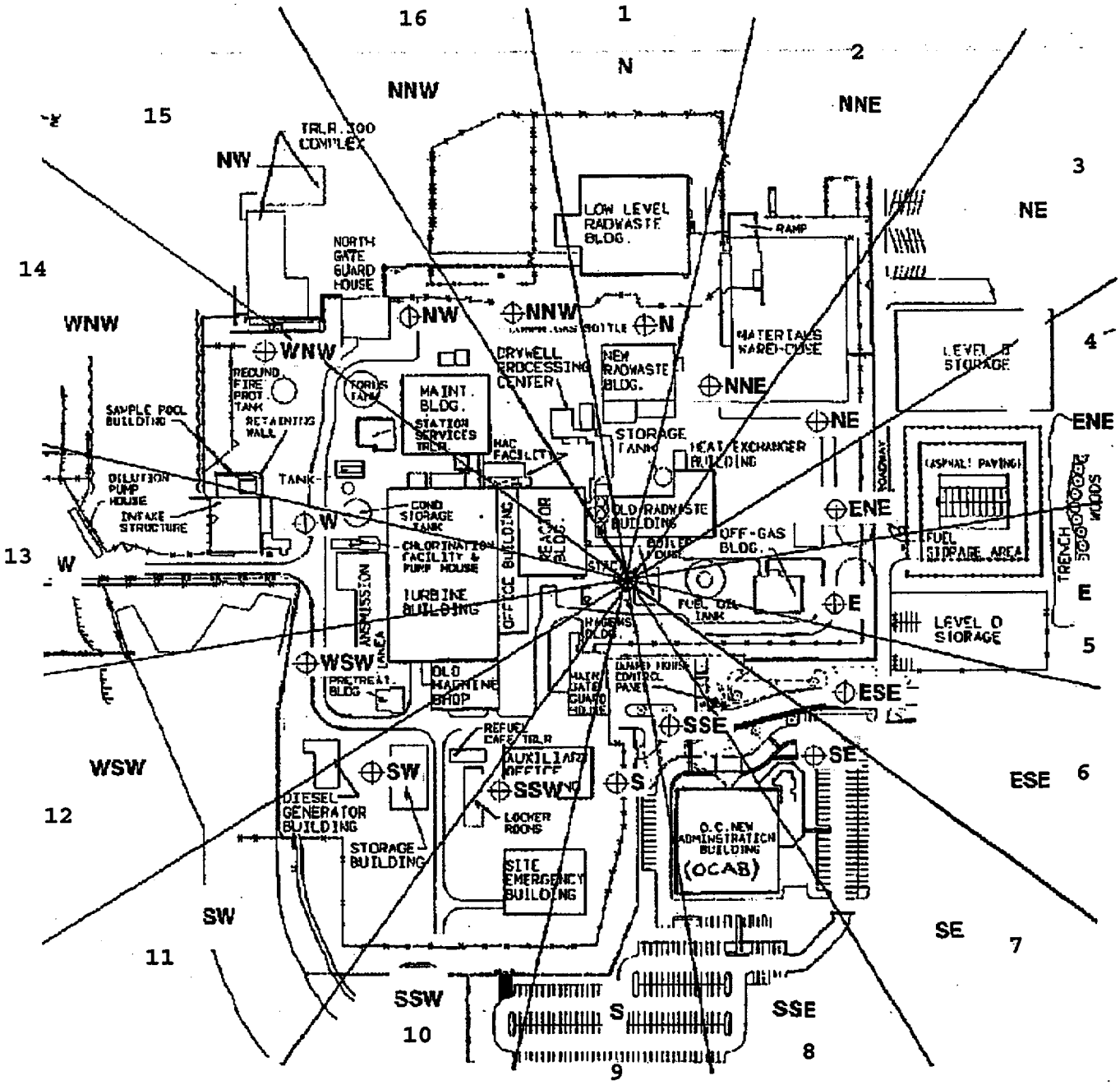


EXHIBIT 10
Sample Record

DATE:_____

#	TIME	LOCATION	SURVEY		AIR SAMPLE				
			WINDOW CLOSED mr/hr	WINDOW OPEN mr/hr	BKG cpm	PART cpm	SILVER ZEOLITE cpm	FLOW RATE Cfm	RUN TIME Min
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									

AIR SAMPLER TYPE_____ SERIAL NO._____ CAL. DUE_____

COUNTING INST. TYPE_____ SERIAL NO._____ CAL. DUE_____

SIGNED_____
TEAM LEADER

EXHIBIT 11

AIR ACTIVITY (IODINE)

5.5 A rough idea of the approximate iodine concentration and DAC value can be obtained from the table below:

NET CPM	IODINE CONC (uCi/cc)	# of DAC's
100	2E-7	10
500	1E-6	50
1000	2E-6	100
5000	1E-5	500
10000	2E-5	1000
50000	1E-4	5000

NOTE

This table is based on 1 minute sample times @ 60 LPM. Divide concentration and # of DAC's for all other sample times. The table is intended to give field teams a rough idea of what they are encountering. This data should not be used to make dose projections for the general public.

EXHIBIT 12

APPROX. 1/4 MILE OFFSITE MAP

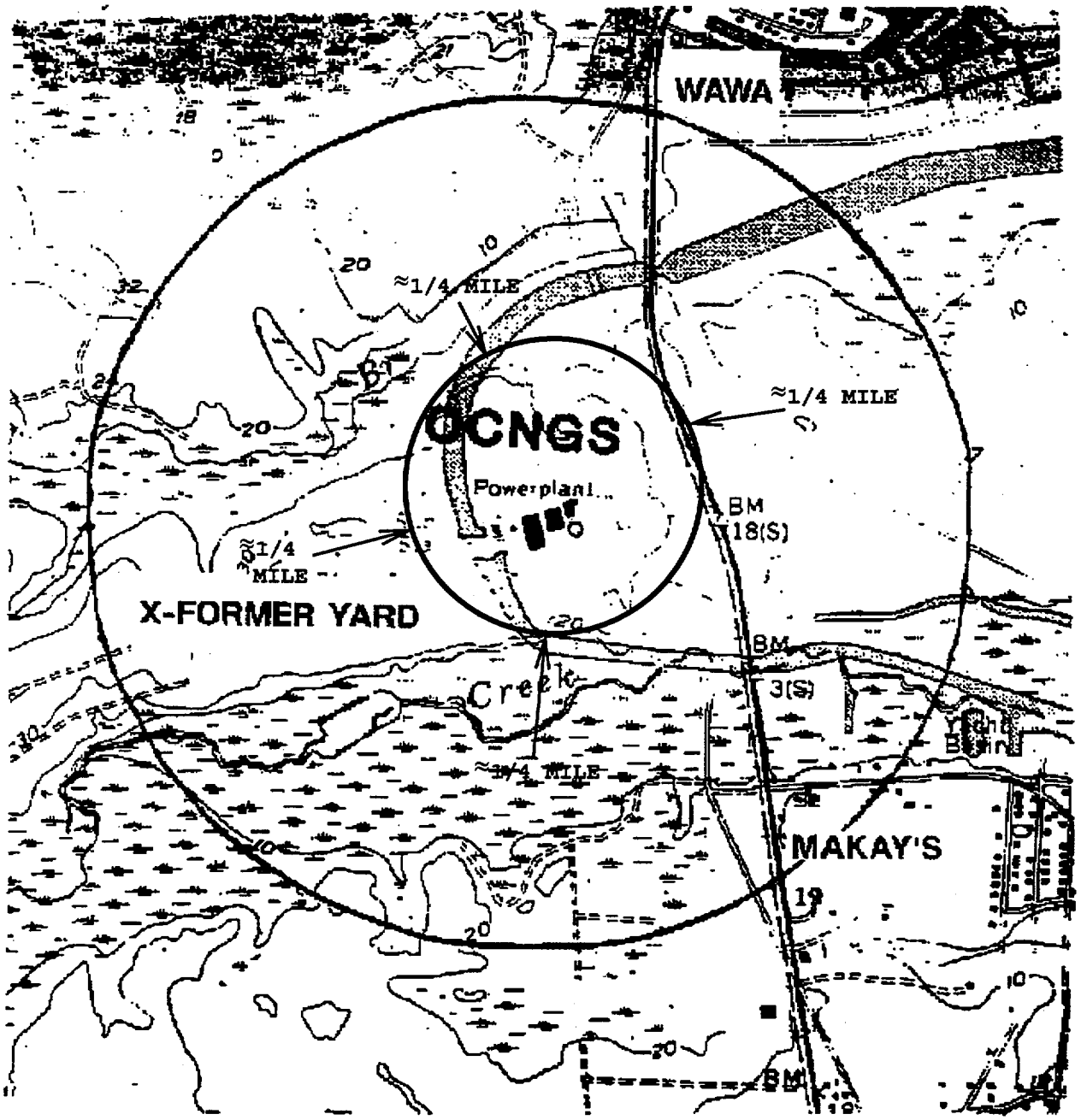
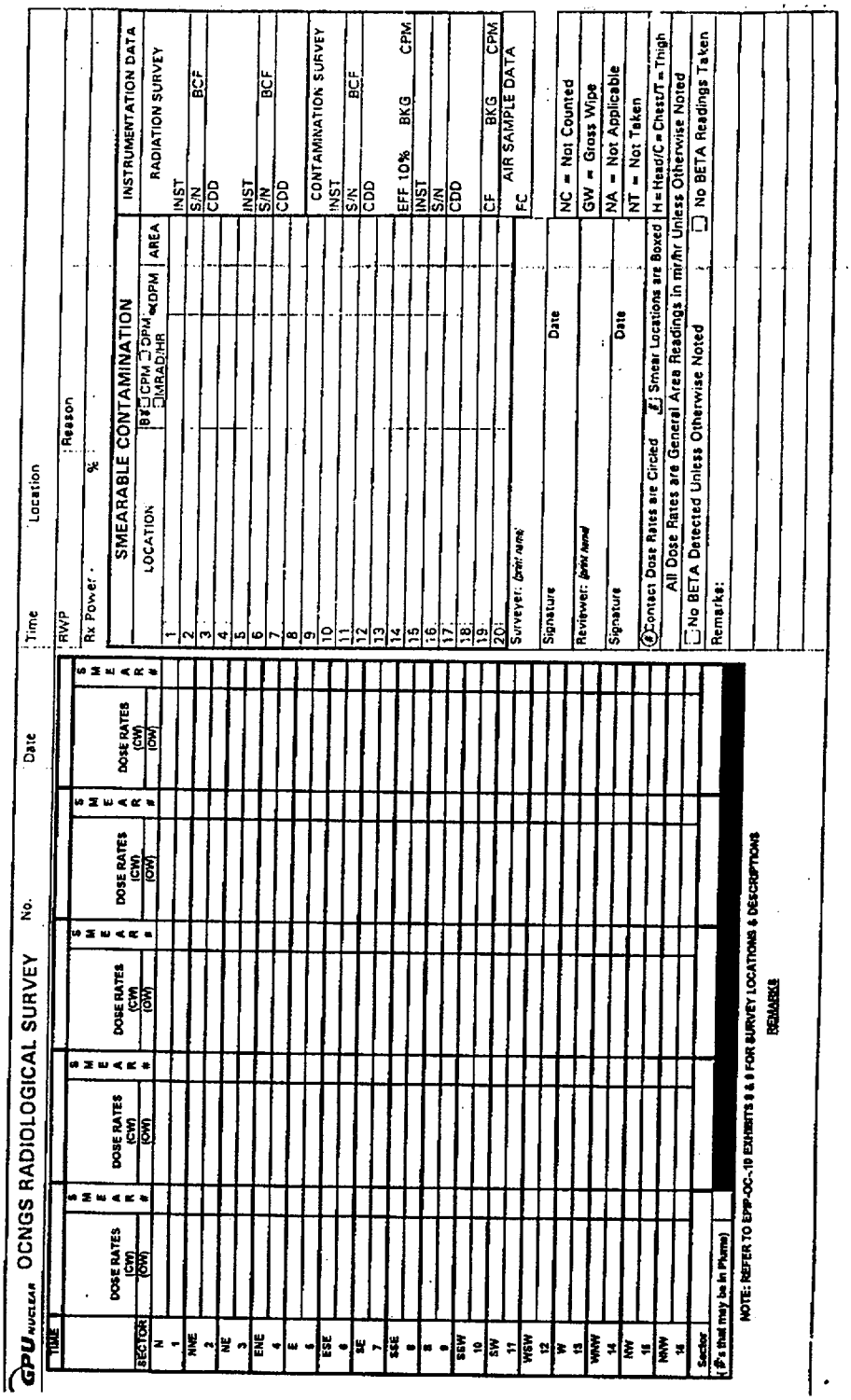


EXHIBIT 13
SURVEY FORM



GPU NUCLEAR	OYSTER CREEK EMERGENCY PLAN IMPLEMENTING PROCEDURE	Number EPIP-OC-.26
Title The Technical Support Center		Revision No. 20
Applicability/Scope Applies to work at Oyster Creek Division & Support Divisions		Responsible Office Emergency Preparedness
This document is within QA plan scope X Yes ___ No Safety Reviews Required X Yes ___ No		Effective Date (11/04/99) 11/14/99

Prior Revision 19 incorporated the following Temporary Changes:

N/A

This Revision 20 incorporates the following Temporary Changes:

N/A

List of Pages (all pages rev'd to Rev. 20)

	Signature	Concurring Organization Element	Date
Originator		Emergency Planner	11/2/99
Concurred By		Director, Ops/Mtce.	11-3-99
Approved By	For P. HAYS	Emergency Preparedness Mgr, O.C.	11/4/99

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.

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.

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 GPUN 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, GPUN/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.

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.

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.

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.

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, GPUN/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 GPUN press releases are provided to the state police representative at the Media Center for review and agreement.

EXHIBIT 1
Emergency 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.

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 GPUN should attempt to obtain agreement from the NJBNE and NRC on the PAR. However, whether agreement is or is not reached, GPUN 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 (≈ 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.

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.

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

Initials

_____ 9.4 As time permits, discuss with the senior NRC person in the TSC the GPUN 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, GPUN 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_____

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) _____

_____

_____

EXHIBIT 1A (Continued)
EMERGENCY DIRECTOR TURNOVER CHECKLIST

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 _____

_____

EXHIBIT 1A (Continued)

EMERGENCY DIRECTOR TURNOVER CHECKLIST

Are there any open technical issues? YES - NO

Specify _____

_____

News releases issued ATTACHED

NOTES:

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

When finished sign below:

_____ _____ _____

Emergency Director Time Date

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.

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).

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

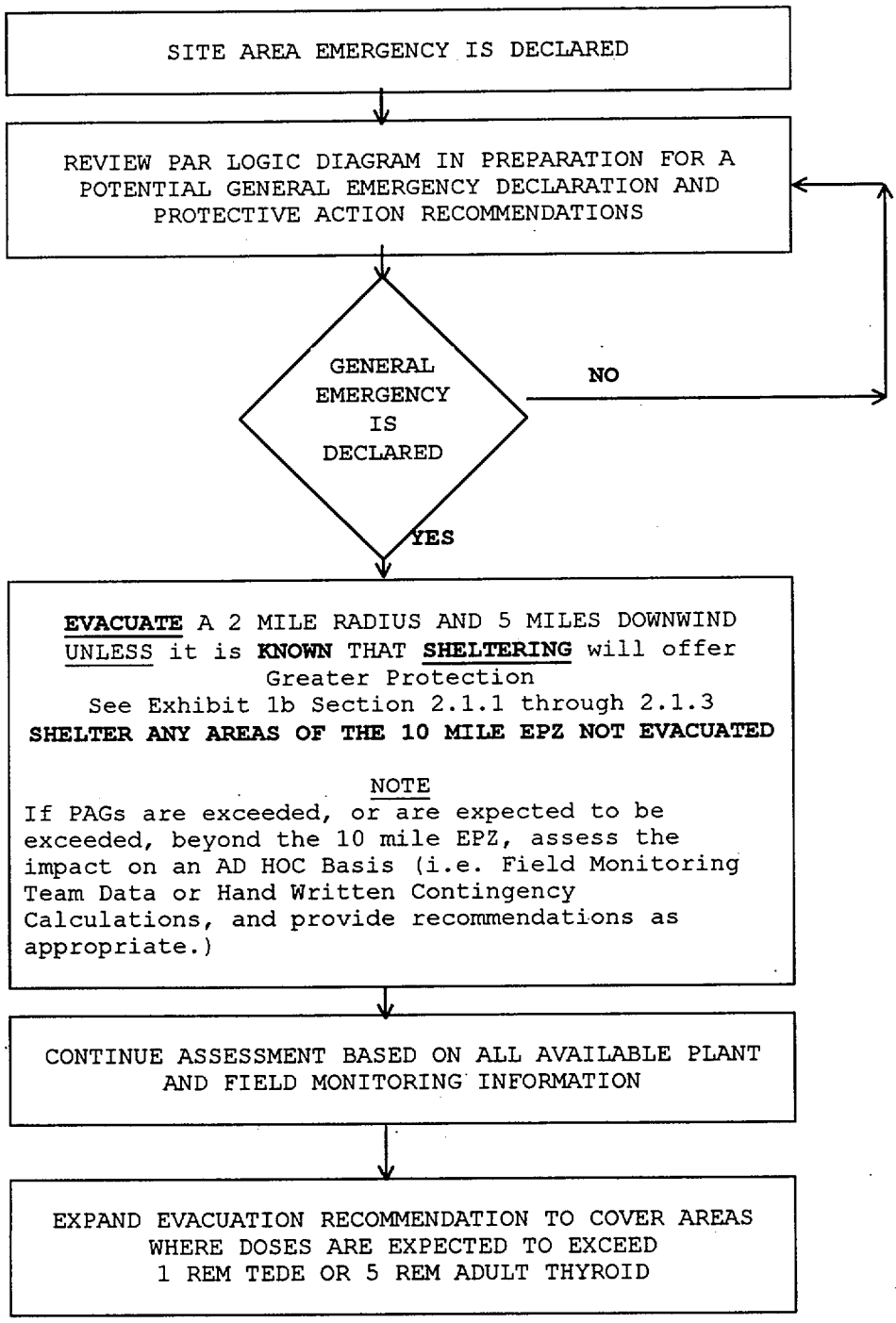


EXHIBIT 1D

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.

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 posses 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.

EXHIBIT 1E

GPUN/NRC EMERGENCY RESPONSE INTERFACE CRITERIA

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

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 GPUNC 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 GPUN 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.

GPUN/NRC EMERGENCY RESPONSE INTERFACE CRITERIA

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.

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 measurers. 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.

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

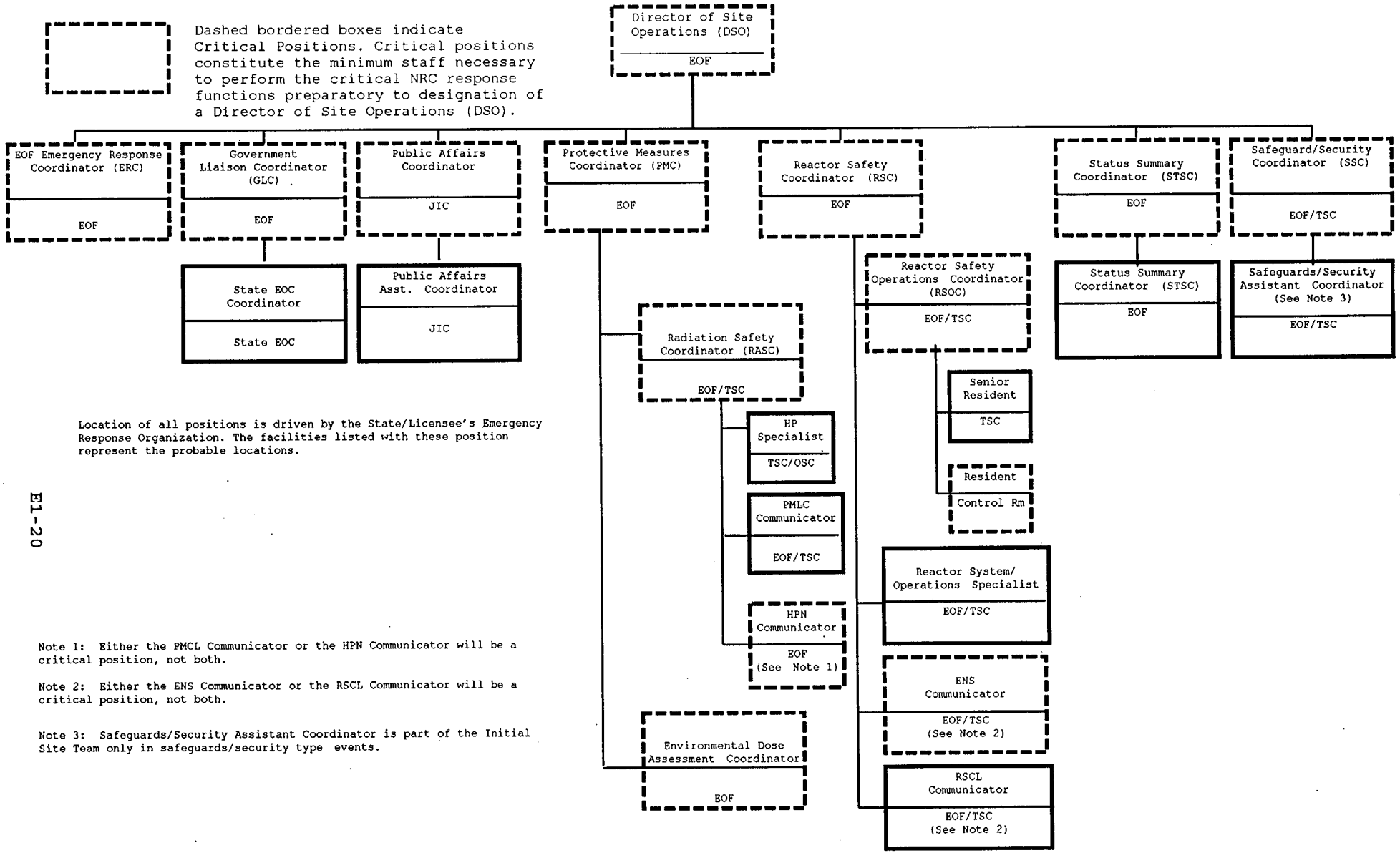
The NRC responsibility during an emergency, as during normal operations, is to ensure that protection of public health and safety is adequate. One aspect of exercise of this responsibility is to provide Protective Action Recommendations or advice to off-site authorities. This may take the form of an 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

Dashed bordered boxes indicate Critical Positions. Critical positions constitute the minimum staff necessary to perform the critical NRC response functions preparatory to designation of a Director of Site Operations (DSO).



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

Note 1: Either the PMCL Communicator or the HPN 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.

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.

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.

EXHIBIT 3 (Continued)
TSC Coordinators Checklist

_____ 1.5 Ensure the RASE has performed continuos 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

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.

20

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

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.

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 GPUN HQ's Engineering Support and assess their status and resources. Engineering requests suited for HQ's 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.

EXHIBIT 3 (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

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.

EXHIBIT 4
(continued)

TSC COMMUNICATIONS COORDINATOR CHECKLIST

INITIALS

_____ 10.0 If the Plant Computer System fails, ensure that the ECC transmits critical plant parameters to the TSC every 15 minutes or as conditions change. The TSC should retransmit plant parameters to the EOF and OSC in as timely a manner as possible.

_____ 11.0 Upon termination of the emergency, if notification were made from the TSC ensure those agencies previously notified in EPIP-OC-.03 have been advised of the termination.

11.1 If Off-site notifications responsibility has been transferred, this responsibility should be transferred also, verify completion with appropriate Communication Coordinator.

_____ 12.0 Ensure communications equipment, supplies and procedures are replaced or returned to a ready status.

_____ 13.0 Forward all completed logs and records to the Emergency Preparedness Dept.

Signature _____ Date _____
TSC Communication Coord.

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.

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.

EXHIBIT 6

TSC Chemistry Coordinator Responsibilities

NOTE

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.

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-0C-.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.

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.

EXHIBIT 8
TSC Radiological Assessment Support Engineer Checklist
(cont'd)

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.

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., 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 GPUNC 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.

EXHIBIT 9 (cont'd)

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 GPUN 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.

EXHIBIT 10
PLAN 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 GPUN 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 $ft.^3$ of liquid before reaching its flooded volume capacity of 213,000 $ft._3$.

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 OCNGS 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.

II. 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 Containment

Reactor 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.

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 OCNGS 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, OCNGS or the permission of the Manager of Chemistry).

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:

TO SAMPLE	USE	LOCATION
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?

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).

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.

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.

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.

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.).

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.

EXHIBIT 13
EMERGENCY DIRECTOR AUTHORIZATION FORM
FOR DEVIATIONS FROM REQUIREMENTS

TYPE 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.

EXHIBIT 13
EMERGENCY DIRECTOR AUTHORIZATION FORM
FOR DEVIATIONS FROM REQUIREMENTS

DEVIATION JUSTIFICATION

TYPE I II (circle)	TYPE I II	TYPE I II
Deviation From	Deviation From	Deviation From
__Procedure _____	__ Procedure _____ __	Procedure _____
__Tech Spec _____	__ Tech Spec _____ __	Tech Spec _____
__Operating License (includes EOP's) ____	__ Operating License (includes EOP's) ____	__ Operating License (includes EOP's) ____
__License Condition (See E13-3&4) _____	__ License Condition (See E13-3&4) _____	__ License Condition (See E13-3&4) _____
__NRC Rules, Reg or Orders _____	__ NRC Rules, Reg or Orders _____	__ NRC Rules, Reg or Orders _____
__Other _____	__ Other _____	__ Other _____
Deviation Justification	Deviation Justification	Deviation Justification
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
Alternatives Considered	Alternatives Considered	Alternatives Considered
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
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 NOT- * 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 form 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.

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.

EXHIBIT 14
CORE 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. 20

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.

EXHIBIT 15
SITE ACCESS POLICY FOR MEDIA DURING EMERGENCIES

Providing reasonable site access to the media during a plant emergency is in the best interest of GPU Nuclear Corp. 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 GPU Nuclear.

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.

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.

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 #				
PHONE	HOME #			
	WORK #			
	BEEPER #			
POSITION #				
PHONE	HOME #			
	WORK #			
	BEEPER #			
POSITION #				
PHONE	HOME #			
	WORK #			
	BEEPER #			
POSITION #				
PHONE	HOME #			
	WORK #			
	BEEPER #			

EXHIBIT 17 HIFAX LOG
EXAMPLE

MESSAGE	TIME	SEND INITIAL	TSC	OSC	EOF	PARS. ENG.	ECC	COMMENTS
			TSC	OSC	EOF	PARS. ENG.	ECC	COMMENTS

EXHIBIT 18
EXAMPLE

OYSTER CREEK NUCLEAR GENERATING STATION

EMERGENCY COMMUNICATIONS

Communicator Log

Location: _____ **Date:** _____
ERF
Circuit: _____
Name: _____

Time:	Remarks:

EXHIBIT 19
EXAMPLE

Number _____

GPU Nuclear Emergency Message

To: ☐ OSC ☐ TSC ☐ EACC _____ Staff Position Other
☐ ECC ☐ EOF ☐ PARSIPPANY ENG.

Message:

Originator: _____ _____ _____ _____
Staff Position Initials Time Date

Location: ☐ **ECC** ☐ **TSC** ☐ **OSC** ☐ **EACC** ☐ **EOF** ☐ **PARSIPPANY ENG.**

Reply:

Reply Completed by: _____ _____ _____ _____
Staff Position/Other Initials Time Date

A0001731 10-84

EXHIBIT 20

MEDIA ACCESS BRIEFING FORM

GPU Nuclear Corporation has briefed me 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._____