SEABROOK STATION
RADIOLOGICAL EMERGENCY PLAN

NEW HAMPSHIRE YANKEE
SEABROOK, NEW HAMPSHIRE

RMD CONTROL COPY# C165

SEABROOK STATION

RADIOLOGICAL EMERGENCY PLAN

(SSREP)

1. Does this manual/manual revision:

a.	Make changes in the facility as described in the FSAR?	☐ Yes ☒ No
b.	Make changes in procedures as described in the FSAR?	☐ Yes ☒ No
c.	Involve tests or experiments not described in the FSAR?	☐ Yes ☒ No
d.	Involve changes to the existing Operating License or require additional license requirements?	☐ Yes ☒ No

2. If any of the above questions are answered yes, a safety evaluation per NHY Procedure 11210 is required.

PREPARED BY: J. A. MacDonald _____ 7-6-90
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SEABROOK STATION
RADIOLOGICAL EMERGENCY PLAN

TABLE OF CONTENTS

TABLE OF CONTENTS
(Continued)

TABLE OF CONTENTS
(Continued)

TABLE OF CONTENTS
(Continued)

TABLE OF CONTENTS
(Continued)

TABLES

FIGURES

FIGURES

SEABROOK STATION
RADIOLOGICAL EMERGENCY PLAN

LIST OF EFFECTIVE PAGES

PAGE		CURRENT DATE/REV. 4
Table of Contents	Page i	5
	Page ii	5
	Page iii	5
	Page iv	5
	Page v	5
	Page vi	5
	Page vii	5
LOEP	Page 1	5
	Page 2	5
	Page 3	5
	Page 4	5
	Page 5	5
	Page 6	5
	Page 7	5
1-1		5
1-2		5
1-3		5
2-1		April 1988
2-2		4
2-3		July 1985
2-4		April 1988
3-1		4
3-2		April 1988
3-3		4
Figure 3.1		4
4-1		5
4-2		5
4-3		5
Table 4.1		5
Table 4.2		5
Table 4.3		Deleted
Table 4.4		5
Figure 4.1		5
Figure 4.2		5
Figure 4.3		5
Figure 4.4		5
Figure 4.5		Deleted
Figure 4.6		5
Figure 4.7		5
Figure 4.8		Undated

PAGE	CURRENT DATE/REV. #
5-1	July 1985
5-2	July 1985
5-3	April 1986
5-4	November 1987
Figure 5.1	4
Figure 5.2	4
Figure 5.3	4
Figure 5.4	4
Figure 5.5	4
Figure 5.6	5
6-1	4
6-2	4
6-3	5
6-4	4
6-5	5
6-6	5
6-7	4
Figure 6.1	4
Figure 6.2	4
Figure 6.3	4
Figure 6.4	4
Figure 6.5	4
Figure 6.6	5
7-1	4
7-2	April 1988
7-3	5
7-4	4
Figure 7.1	4
Figure 7.2	4
Figure 7.3	5
8-1	4
8-2	4
8-3	4
8-4	4
8-5	4
8-6	4
8-7	4
8-8	4

PAGE		CURRENT DATE/REV. #
Figure 8.1		5
Figure 8.2		5
Figure 8.3		4
Figure 8.4		5
Figure 8.5		5
Figure 8.6		4
Figure 8.7		4
Figure 8.9		5
Figure 8.11		4
Figure 8.12		5
Figure 8.13		4
Figure 8.14		5
Figure 8.15	Sheet 1	5
	Sheet 2	5
	Sheet 3	5
	Sheet 4	5
Figure 8.16		5
9-1		5
9-2		5
9-3		5
9-4		5
9-5		5
9-6		5
9-7		5
10-1		5
10-2		5
10-3		5
10-4		5
10-5		5
10-6		5
10-7		5
10-8		5
10-9		5
10-10		5
Table 10.1		5
Table 10.2		5
Table 10.3		5
Figure 10.1		July 1985
Figure 10.2		5
11-1		5
11-2		5
11-3		5
11-4		5

PAGE	REV. #
A-40	5
A-41	5
A-42	5
A-43	5
A-44	5
A-45	5
A-46	5
A-47	5
A-48	5
A-49	5
A-50	5
A-51	5
A-52	5
A-53	5
A-54	5
A-55	5
A-56	5
A-57	5
A-58	5
A-59	5
A-60	5
A-61	5
A-62	5
A-63	5
A-64	5
A-65	5
A-66	5
A-67	5
A-68	5
A-69	5
A-70	5
A-71	5
A-72	5
A-73	5
A-74	5
A-75	5
A-76	5
A-77	5
Appendix B (Cover Page)	3
B-1	3
B-2	3
B-3	3
B-4	3
B-5	3
B-6	3
B-7	3
B-8	3
B-9	3
B-10	3
B-11	3
B-12	3

PAGE	CURRENT DATE/REV. #
Appendix C (Cover Page)	5
C-1	5
C-2	5
Appendix D (Cover Page)	5
Table of Contents	5
D-1	3
D-2	3
D-3	April 1988
D-4	April 1988
D-5	5
D-6	5
D-7	5
D-8	5
D-9	5
D-10	5
D-11	5
D-12	5
D-13	5
D-14	5
D-15	5
D-16	5
D-17	5
Appendix E (Cover Page)	4
E-1	4
E-2	4
E-3	4
E-4	4
E-5	4
E-6	4
E-7	4
E-8	4
E-9	4
E-10	4
E-11	4
E-12	4
E-13	4
E-14	4
E-15	4
Appendix F	5
Appendix G (Cover Page)	5
G-1	5
G-2	5
G-3	5
G-4	5
G-5	5

PAGE	CURRENT DATE/REV. 1
Appendix H (Cover Page)	5
H-1	5
H-2	5
H-3	5
H-4	5
H-5	5
H-6	5
H-7	5
H-8	5

1.0 INTRODUCTION

The Seabrook Station Radiological Emergency Plan (SSREP) was developed in accordance with the requirements of paragraphs 50.34(b) and Appendix E to Title 10 of the Code of Federal Regulations Part 50, "Licensing of Production and Utilization Facilities." In addition, Paragraph 50.47 of 10CFR50 specifies that the Operating License award depends on a finding by the Nuclear Regulatory Commission as to the adequacy of both onsite and offsite emergency preparedness. To meet this requirement, the SSREP has been formulated to address planning elements which have been specified by the Nuclear Regulatory Commission (NRC) and the Federal Emergency Management Agency (FEMA) as essential to the development of an adequate emergency plan.

The purpose of this document is to provide a reference and guidance source to be used during a radiological emergency at Seabrook Station and which:

1) Outlines the New Hampshire Yankee (NHY) Emergency Response Organization (ERO), and specifies the interfaces between and among NHY ERO activities, and State(*), local, Federal and private sector organizations;

2) Assures a standard emergency classification and action level scheme which activates emergency response functions dependent upon the severity of the accident;

3) Specifies the method of notification to the offsite emergency response organizations;

4) Summarizes the emergency facilities and equipment that will support emergency response to an accident by the NHY ERO;

5) Assures that provisions exist for communications among principal response organizations;

6) Defines the station's capability for assessing and monitoring actual or potential offsite radiological consequences of an emergency condition; and

7) Assures that periodic training programs, exercises and drills will be conducted in order to maintain a high level of emergency preparedness at Seabrook Station.

In support of this document, emergency operating procedures will assist the station operating staff in recognizing an emergency condition and will prescribe immediate response actions necessary to correct the condition. The emergency conditions that trigger the use of emergency operating procedures also trigger the use of an emergency classification procedure. The emergency classification procedure initiates activation of this plan in accordance with a prescribed set of emergency response procedures. The emergency implementing procedures will govern the actions undertaken by the NHY ERO.

The SSREP and associated procedures are only a part of the overall preparedness to a possible emergency at Seabrook Station. New Hampshire State agencies and local civil authorities within the plume emergency planning zone (i.e., approximately a 10-mile radius) have worked in conjunction with NHY in establishing a coordinated emergency planning arrangement for the alert and protection of the general public in the event of any radiological emergency at Seabrook Station. This emergency preparedness development and cooperation occurred in the Massachusetts portion of the EPZ until 1986. The current situation is described in Section 1.1 below.

In addition, the support and capabilities of all appropriate Federal agencies would be made available to the station, and State and local governments as specified in the Federal Radiological Emergency Response Plan. Additional technical support and services can be acquired through emergency plan arrangements with industry organizations such as the Westinghouse Energy System Business Unit Emergency Response Team and the Institute of Nuclear Power Operations.

1.1 SEABROOK PLAN FOR MASSACHUSETTS COMMUNITIES

Since 1986, Massachusetts State and local EPZ community authorities have refused to participate in Seabrook Station emergency preparedness planning. Until this refusal, both State and local authorities had worked to develop the necessary emergency preparedness arrangements for Seabrook Station in the same manner as has been the case for the Yankee Atomic, Vermont Yankee and Pilgrim nuclear power plants.

In order to compensate for the lack of Massachusetts State and local participation, however, New Hampshire Yankee has established its own plan, called the Seabrook Plan for Massachusetts Communities (SPMC). The SPMC is designed to provide for protection of public health and safety through the use of New Hampshire Yankee supplied and maintained facilities, equipment and personnel in lieu of that which would normally be provided by Massachusetts State and local authorities. The SPMC was submitted to the NRC in September of 1987 and is designed to be consistent with the provisions of the Commission's rule change to 10CFR50.47(c)(1), which was finalized and published in November, 1987.

Pursuant to explicit provisions of the new rule and the SPMC design, response arrangements for the Massachusetts portion of the Seabrook Station EPZ have been established whereby Seabrook Station operators and emergency response personnel execute emergency response procedures in recognition of the reality, in an actual emergency, that Massachusetts State and local officials will exercise their best efforts to protect public health and safety. The SPMC will be fully activated to provide the compensating measures needed to make this response under the "realism" assumption effective.

In view of the development of the SPMC and the NRC rule change, it should be emphasized that whenever an interface with a Massachusetts State or local authority is mentioned, the SSREP should also be viewed as providing for either simultaneous or parallel interface with the Offsite Response Organization (ORO) described in the SPMC. For example, where this SSREP describes the communications with the Massachusetts State Police or the Massachusetts Department of Health, parallel communication and interface are made with appropriate segments of the ORO.

Rather than amending the SSREP to add an SPMC interface in each instance where there is contact with an element of Massachusetts State or local government, an asterisk (*) has been added in each place where notification of and coordination with both a Massachusetts governmental entity and the SPMC are required.

2.0 DEFINITIONS

1) Alert - An emergency classification which indicates a substantial degradation of station safety margins which could affect on-site personnel safety, could require off-site impact assessment, but is not likely to require off-site public protective action.

2) Assessment Actions - Actions which are taken to effectively define the emergency situation neces sary for decisions on specific emergency measures.

3) Corrective Actions - Emergency measures taken to ameliorate or terminate an emergency situation.

4) Emergency Action Levels (EAL) - Specific instrument readings, system or event observations and/or radiological levels which initiate event classifica tion. These are specific threshold readings or observations indicating system failures or abnormalities.

5) Emergency Classifications - Emergencies are classified into four categories: UNUSUAL EVENT, ALERT, SITE AREA EMERGENCY and GENERAL EMERGENCY.

6) Emergency Operating Procedures - The outline of specific corrective actions to be taken by station operators in response to abnormal operating conditions.

7) Emergency Operating Centers (EOC) - Areas designated by the state (*) and local authorities as Emergency Plan facilities for their respective staffs.

8) Emergency Operations Facility (EOF) - A center established at the Newington Generating Station where station staff directs the actions of the emergency response organization, coordinates the evaluation of offsite radiological conditions with offsite authorities, arrives at protective action recommendations, and establishes a recovery organization.

9) Emergency Planning Zones (EPZ) - The areas for which planning is recommended to assure that prompt and effective actions can be taken to protect the public in the event of an accident. The two zones are the plume exposure pathway zone (about 10 miles in radius) and the ingestion exposure pathway zone (about 50 miles in radius).

10) Emergency Response Organization (ERO) - The integrated collection of station and other personnel to implement this Emergency Plan.

11) Emergency Response Procedures - Procedures that outline specific actions taken by the station staff to activate and implement this Emergency Plan.

12) Engineering Support Center (ESC) - An emergency center established at the Nuclear Services Division (NSD) offices located in Bolton, Massachusetts, to provide engineering support for station assessment and recovery operations.

13) General Emergency - A General Emergency involves substantial core degradation or melting with potential for loss of containment integrity.

14) Ingestion Exposure Pathway - The pathway in which individuals receive a radiation dose due to internal deposition of radioactive materials from ingestion of contaminated water, foods, or milk.

15) Media Center (MC) - A site where news media representatives can obtain emergency news information.

16) New Hampshire Yankee - The organization responsible for the construction and operation of Seabrook Station.

17) Nuclear Production Emergency Response Program Manual - Manual containing all Emergency Plan Response Procedures.

18) Nuclear Services Division (NSD) - The engineering support organization for Seabrook Station.

19) Operational Support Center - An emergency center established for the assembly and dispatch of available skilled emergency personnel (i.e., additional station operations and support personnel) in support of on-site emergency operations.

20) Plume Exposure Pathway - The pathway in which individuals receive a radiation dose due to (a) whole body external exposure due to gamma radiation from the plume and from deposited material, and (b) inhalation exposure from the passing radioactive plume.

21) Projected Dose - The amount of radiation dose estimated at the onset of the accident. It includes all the dose an individual would receive for the duration of the accident assuming no protective measures were undertaken.

22) Protective Actions - Emergency measures to be taken by the public to mitigate the consequences of an accident by minimizing the radiological exposures that may occur if such actions were not undertaken. Protective actions would be warranted provided the reduction in the individual dose is not offset by excessive risks to individual safety in implementing such actions.

23) Protective Action Guides (PAG) - Pre-established radiological dose or dose commitment values to the public which warrant protective actions following an uncontrolled release of radioactive material.

24) Recovery Actions - Actions taken once the emergency condition has been controlled in order to restore stable station conditions.

25) Seabrook Plan for Massachusetts Communities (SPMC) - The New Hampshire Yankee developed and maintained emergency preparedness and response capability as a compensation for the lack of participation by Massachusetts state and local officials.

26) Site - That property situated on a 900 acre tract of land on the western shore of Hampton Harbor in Rockingham County owned by New Hampshire Yankee.

27) Site Area Emergency - A Site Area Emergency indicates an event which involves likely or actual major failures of station functions needed for the protection of the public.

28) Technical Support Center (TSC) - An in-station emergency center established in close proximity to the Control Room that has the capability to acquire parameters for post-accident evaluation by technical and recovery assistance personnel.

29) Unusual Ev it - An Unusual Event indicates a potential degradation of station safety margins which is not likely to affect personnel on-site or the public off-site or result in radioactive releases requiring offsite monitoring.

3.0 RADIOLOGICAL EMERGENCY PLAN SUMMARY

3.1 Introduction

The Seabrook Station Radiological Emergency Plan (SSREP) has been developed to ensure the safety of station staff and the public in the event of degraded or failed station safety systems. The SSREP identifies the emergency response organization, the planned actions of that organization, and the coordination of activities with local, state and federal agencies. The Production Emergency Response Program Manual contains emergency response procedures that implement the responsibilities and actions described in the SSREP.

3.2 Station Emergency Response

Once potential emergency conditions have been identified, the Unit Shift Supervisor notifies the Shift Superintendent. The Shift Superintendent, acting as the Short Term Emergency Director (STED), categorizes the emergency condition into one of four emergency classifications by use of the emergency classification procedure.

Once an emergency has been classified, the STED is responsible for further activation and notification of the station emergency response organization (ERO). The extent of organization and facility activation varies with the severity and classification of the emergency. The STED will insure that the emergency classification announcement over the station public address system is made and that the primary responders are notified via a pager system and the secondary responders are notified via an automatic dial telephone. The STED must also insure New Hampshire and Massachusetts state authorities (*) are notified of the emergency classification within 15 minutes. Notification arrangements are shown in Figure 3.1.

During an Unusual Event, primary responders will report to the Control Room. For emergency classifications of Alert or above, all responders (both primary and secondary) are notified and all emergency response facilities activated. The Technical Support Center (TSC) will be staffed by the technical personnel needed to provide operational and engineering support to control room personnel. The Operational Support Center (OSC) is the location from which maintenance, health physics, operations, chemistry, instrumentation and control, and radwaste operations personnel are dispatched to provide monitoring, support and repair actions. The Emergency Operations Facility (EOF) serves as the location where the off-site consequences of the accident are assessed. At the EOF, dose projections will be made, field monitoring teams will be dispatched, and protective action recommendations made to state authorities (*). This location also serves as the headquarters for the recovery organization. The Media Center serves as the facility where joint utility, state and federal press briefings will be coordinated and held to assure timely and complete accident information is made available to the public via the news media.

When emergency conditions have been terminated, by agreement with off-site authorities, a recovery organization will be established to conduct recovery operations. Reentry into off-site areas which had been subject to radiological effects will be coordinated between the recovery organization and off-site authorities. Public information releases regarding reentry will also be coordinated.

3.3 Local and State (*) Government Responses

Seabrook Station's Radiological Emergency Plan is designed to interface with the state emergency response plans and implementing procedures of Massachusetts (*) and New Hampshire. Local governments, in coordination with the civil defense agencies of these states, have plans which, should the need arise, contain instructions to carry out specific protective measures, dependent upon various emergency conditions.

Seabrook Station is responsible for determining and conveying specific accident information, dose assessment information and protective action recommendations to the State of New Hampshire and Commonwealth of Massachusetts (*). It is the responsibility of the State Departments of Public Health (*) to then evaluate this information and make recommendations regarding appropriate protective action.

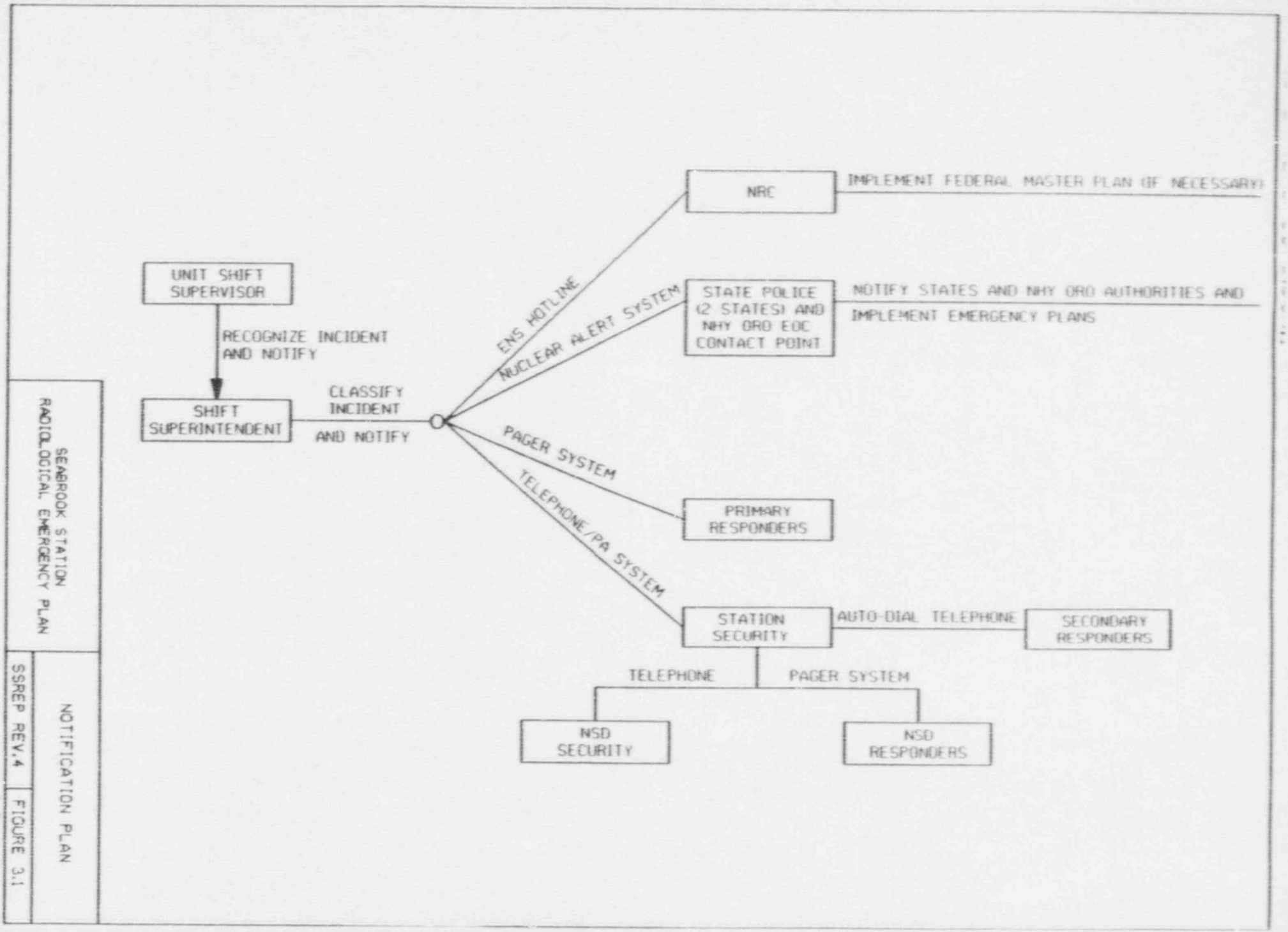
The respective state (*) and local agencies then implement protective actions in accordance with their plans and procedures. The local governments will provide the resources needed to implement these actions. Should local resources be exhausted or additional resources needed to accomplish actions in a timely manner, the state (*) governments will provide any additional support needed.

3.4 Federal Government Response

Once notified of an emergency classification, the NRC will evaluate the situation and determine the appropriate NRC response. Depending on the severity of the accident, the NRC will activate all or part of the federal emergency response organization in accordance with the Federal Radiological Emergency Response Plan (FRERP). The FRERP makes available the resources and capabilities of twelve federal agencies. Principal participants will be the NRC, Department of Energy, Environmental Protection Agency and Federal Emergency Management Agency. Should the federal agencies respond to the site vicinity, they will establish a Federal Radiological Monitoring and Assessment Center to monitor and assess the radiological consequences and a Federal Response Center to coordinate the federal support provided during the emergency. Expected Time of Arrival (ETA) of the NRC Region I response would be approximately 6 hours.

3.5 Technical Support

Technical and personnel support will be provided to Seabrook Station from the Nuclear Services Division, located in Bolton, Massachusetts. Selected Nuclear Services Division personnel are equipped with pagers. Additional manpower and equipment support can also be arranged through the Yankee Emergency Mutual Assistance Agreement. A copy of this agreement is included in Appendix B.


UNIT SHIFT SUPERVISOR
RECOGNIZE INCIDENT AND NOTIFY
SHIFT SUPERINTENDENT
CLASSIFY INCIDENT
AND NOTIFY
ENS HOTLINE
NUCLEAR ALERT SYSTEM
PAGER SYSTEM
TELEPHONE/PA SYSTEM
NRC
IMPLEMENT FEDERAL MASTER PLAN (IF NECESSARY)
STATE POLICE (2 STATES) AND NHY ORO EOC CONTACT POINT
NOTIFY STATES AND NHY ORO AUTHORITIES AND
IMPLEMENT EMERGENCY PLANS
PRIMARY RESPONDERS
STATION SECURITY
AUTO-DIAL TELEPHONE
SECONDARY RESPONDERS
TELEPHONE
PAGER SYSTEM
NSD SECURITY
NSD RESPONDERS
SEABROOK STATION RADIOLOGICAL EMERGENCY PLAN
NOTIFICATION PLAN
SSREP REV.4
FIGURE 3.1

85 X 11

4.0 THE AREA

4.1 THE SITE

Seabrook Station is situated on a 900 acre tract of land on the western shore of Hampton Harbor in Rockingham County, near the northern boundary of the Town of Seabrook, New Hampshire. The site is located approximately eight miles southeast of the Rockingham County seat in Exeter, five miles northeast of Amesbury, Massachusetts, and two miles west of the Hampton Harbor Inlet. The site is bordered on the east by an extensive saltwater marsh and is located on a point of land called "the Rocks," between two small tidal estuaries: the Brown's River and the Hunt's Island Creek. The City of Portsmouth is located approximately eleven miles north of the site while the Boston, Massachusetts metropolitan area is located approximately forty miles south-southwest of the site.

Seabrook Station consists of a four-loop pressurized water reactor. The station exclusion area can generally be described as a circle of 3000 foot radius, as shown in Figure 4.1 "Site Boundaries." All the area within the site boundary, with the exception of the railroad easement, the existing power line easement, and portions of the Brown's River and Hunt's Island Creek, are owned by New Hampshire Yankee.

4.2 AREA CHARACTERISTICS, LAND USE AND DEMOGRAPHY

4.2.1 Area Characteristics

Figure 4.2 "Major Routes In 10 Mile Study Area" shows the major transportation arteries within 10 miles of the site. The location and orientation of principal structures within the site are shown on Figure 4.3 "Station Layout." The control of traffic in case of an emergency on those portions of the Brown's River and Hunt's Island Creek that fall within the site boundary comes under the authority of the State of New Hampshire.

A seasonal, overnight and daily transient population during the summer period is associated with the beaches and other recreational facilities in the vicinity of the Seabrook Station. A total of 18 campground facilities are located within the 10-mile vicinity of Seabrook Station. The coastal beaches within 10 miles of Seabrook Station extend from Plum Island beach in Newbury, Massachusetts to Wallis Sands Beach in Rye, New Hampshire. Table 4.1 "Summary of Peak Population Estimates of Communities within 0 to 10 Miles of the Site" summarizes peak transient population estimates within 0 to 10 miles of the site.

4.2.1 Area Characteristics (Continued)

A commercial dog track, Seabrook Greyhound Park, having an estimated peak capacity of 7,500, is located 2 1/4 miles west of the site. The nearest hospital to the site is the Amesbury Hospital, located about 5 1/2 miles southwest of the site. Information on the location of major medical related facilities, including hospitals and nursing homes, has been compiled for the area within 10 miles of Seabrook Station. Approximately 10% of the total estimated medical related population is located within a 5-mile radial distance from the station. Table 4.2 'Medical Related Facilities within about 10 Miles of Seabrook Station' summarizes major medical related facilities.

The Pow Wow River State Forest occupies approximately 48 acres in the town of South Hampton, NH, approximately seven miles west of the site. Th Parker River National Wildlife Refuge is located in the town of Newb Massachusetts, approximately nine miles south of the site, and h area of 6,403 acres.

4.2.2 Uses of Adjacent Lands and Waters

The Seabrook Station site is bordered on the north, east and south by mar land extending to estuaries, streams and Hampton Harbor. The land to the west is characterized as second growth and scrub land, as is sixty perc of the land within the town of Seabrook. The active farms in Seabroo occupy less than six percent of the land area. Less than twenty percen the land area in the town of Seabrook is characterized as residential. Approximately 1.5 percent of the town is designated as industrial.

Water uses in the area of the plant site are mainly recreational, including the beaches in Salisbury, Seabrook, Hampton, and North Hampton, and boat docks in Hampton Harbor. Boating activity on the Hampton and Black Water Rivers, within a 2-mile radius of Seabrook Station, is concentrated within their lower stretches, in the Hampton Harbor area. Boating activity in the Atlantic Ocean is largely concentrated within two or three miles of Hampton Harbor inlet. Provisions with the U.S. Coast Guard are made by State of New Hampshire authorities to alert and control boating traffic in this area in the event of a radiological emergency at Seabrook Station.

4.2.3 Population Distribution

Data from numerous sources were used in developing distributions and projections of permanent resident and transient populations within 10 miles of the Seabrook Station site. This area includes portions of New Hampshire and Massachusetts. The projected 1989 estimate of resident population distribution is shown in Figure 4.4, '1989 Estimate of Resident Population Distribution within a 0 - 10 Mile Radius of Seabrook Station.'

4.2 AREA CHARACTERISTICS, LAND USE AND DEMOGRAPHY

4.2.3 Population Distribution (Continued)

During the summer period, a transient population is associated with the beaches and other recreational facilities in the vicinity of Seabrook Station. Figure 4.6 represents a capacity type estimate of the peak population associated with the beach area parking lot capacity during summer months.

4.3 EMERGENCY PLANNING ZONES

In accordance with the requirements specified in 10CFR50.33(g), emergency planning zones have been selected based upon the knowledge of the potential consequences, timing and release characteristics of a spectrum of accidents, including core melt scenarios, regardless of their extremely low probability of occurrence. As a result, an emergency planning zone concept was developed, both for the short-term plume exposure and for the longer-term ingestion exposure pathways.

Emergency Planning Zones (EPZ's) are defined as the areas for which planning is needed to assure that prompt and effective actions can be taken to protect the public in the event of an accident. The choice of the size of the Emergency Planning Zones represents a judgement on the extent of detailed planning which should be performed to assure an adequate response. Dependent upon the severity of the accident, protective actions will generally be limited to only portions of the designated EPZ's, but should the need arise, actions can be undertaken for the entire zone.

In accordance with the recommended planning bases, NHY has defined two EPZ's. The plume exposure pathway EPZ, shown in Figure 4.7, is an area designated by the jurisdictional boundaries of those communities which are within a radial distance of about 10 miles from the Station site. Table 4.4 lists communities in each state that are within the plume exposure pathway EPZ. The size of the zone is based primarily on the following considerations:
(1) that the projected doses estimated for most accidents would not exceed plume exposure protective action guide (PAG) levels outside the zone; (2) that detailed planning within this area would provide a substantial base for expansion of response efforts in the unlikely event that this proved necessary; and (3) that planning within this area recognizes all the jurisdictional restraints imposed by the zone designation.

The ingestion exposure pathway EPZ, shown in Figure 4.8, is an area extending radially outward from the station site to a distance of about 50 miles. The size of the zone is based primarily on the consideration that the downwind range within which significant contamination could occur would generally be limited to this distance because of wind shifts and travel periods. In addition, projected doses from contamination outside this zone would not exceed ingestion exposure pathway Protective Action Guide levels. Precautionary control measures relative to livestock feeds, milk products, garden produce and potable water supplies will be implemented in this area to the extent dictated by the release conditions. The State of New Hampshire will notify the State of Maine to coordinate ingestion exposure pathway emergency response actions.

TABLE 4.1

SUMMARY OF PEAK POPULATION
ESTIMATES OF COMMUNITIES WITHIN 0 TO 10 MILES OF THE SITE

Communities	Summer Weekend
Hampton Falls	2126
Seabrook	20059
Hampton Beach South	24099
Salisbury	23640
Amesbury	17913
Kensington	1857
South Hampton	1429
North Hampton	6070
Hampton	23712
Newbury	12220
West Newbury	4249
Newburyport	22068
Merrimac	5793
Kingston	5195
East Kingston	1726
Newton	3469
Brentwood	2163
Exeter	14721
Newfields	1125
Stratham	6063
Greenland	2636
Rye	12038
Portsmouth	31510
New Castle	867

NOTE - Figures are derived from Massachusetts Institute for Social and Economic Research (MISER) 1990 population projections, New Hampshire State Planning Office population estimates projected to 1990, and data compiled by Avis Airmap (July, 1987). These figures are subject to update as part of the continuous planning process.

TABLE 4.2
(Sheet 1 of 4)

MEDICAL RELATED FACILITIES WITHIN ABOUT 10 MILES OF SEABROOK STATION

Name and Type	Location (Sector)
Hampton	
Seacoast Health Center Inc. (Nursing Home)	22 Tuck Rd. (NNE 3-4)
Salisbury	
Greenleaf House Nursing Home	335 Elm St. (SSW 4-5)
Great Meadow Village	Beach Rd. (SSW 4-5)
Amesbury	
Amesbury Hospital	24 Morrill Place (SW 5-6)
Merrimac Valley Rehab	22 Maple St. (WSW 5-6)
Hillside Rest Home	29 Hillside Ave. (SW 5-6)
Maplewood Manor Nursing Home	6 Morrill Pl. (SW 5-6)
Eastwood Rest Home	39 High St. (SW 5-6)
Heritage Towers	180 Main St. (SW 5-6)
Amesbury House	565 Parhawk St. (SW 5-6)
Heritage Valley	Mason's Ct (SW 5-6)
M.R. Residence	23-25 Winter St. (SW 6-7)
M.I. Residence	119 Highland St. (SW 5-6)
Harbor School	Pleasant Valley Rd. (SW 5-6)
Pow Wow Villa	Summer St. (SW 6-7)

TABLE 4.2
(Sheet 2 of 4)

MEDICAL RELATED FACILITIES WITHIN ABOUT 10 MILES OF SEABROOK STATION

Name and Type	Location (Sector)
Newburyport	
Anna Jaques Hospital	25 Highland Ave. (SSW 6-7)
Brigham Manor Nursing Home	77 High St. (S 6-7)
Country Manor	180 Low St. (SSW 6-7)
Port Rehab and Skilled Nursing and Retirement Home	Low & Hale St. (SSW 5-6)
Jemes Steam Mill Elderly Housing	1 Charles St. (SSW 5-6)
Newburyport Housing Authority Sullivan Building	25 Temple St. (SSW 6-7)
Residence	41 Milk St. (SSW 6-7)
Newburyport Housing Authority Horton Terrace	Horton St. (SSW 6-7)
Heritage House	32 Low St. (SSW 6-7)
Respite	4 Lafayette St. (SSW 5-6)
Newburyport Housing Authority Kelliher Development	Storey Ave. & Park Circle (SSW 6-7)
Residence	93 Storey Ave. (SSW 5-6)
Home for Aged Men	361 High St. (SSW 5-6)
Home for Aged Women	75 High St. (S 6-7)

TABLE 4.2
(Sheet 3 of 4)

MEDICAL RELATED FACILITIES WITHIN ABOUT 10 MILES OF SEABROOK STATION

Name and Type	Location (Sector)
Exeter	
Exeter Hospital	10 Buzell Avenue (NW 7-8)
Exeter Healthcare	131 Court St. (NW 7-8)
Eventide Home	81 High St. (NW 7-8)
Goodwin's Nursing Home	Hampton Rd. (NW 7-8)
Langdon Place of Exeter	Hampton Rd. (NW 7-8)
Rye	
Webster at Rye	795 Washington Rd. (NNE 9-10)
Portsmouth	
Portsmouth Hospital	333 Borthwick Ave. (NNE >10)
Clipper Home	188 Jones Ave. (NNE >10)
Edgewood Centre	928 South St. (NNE >10)
Brentwood	
Rockingham County Nursing Home	North Rd. (NW >10)
Merrimac	
Merrimac House	2 Prospect Hill St. (WSW 8-9)
Merri Village	Middle St. (WSW 8-9)

TABLE 4.2
(Sheet 4 of 4)

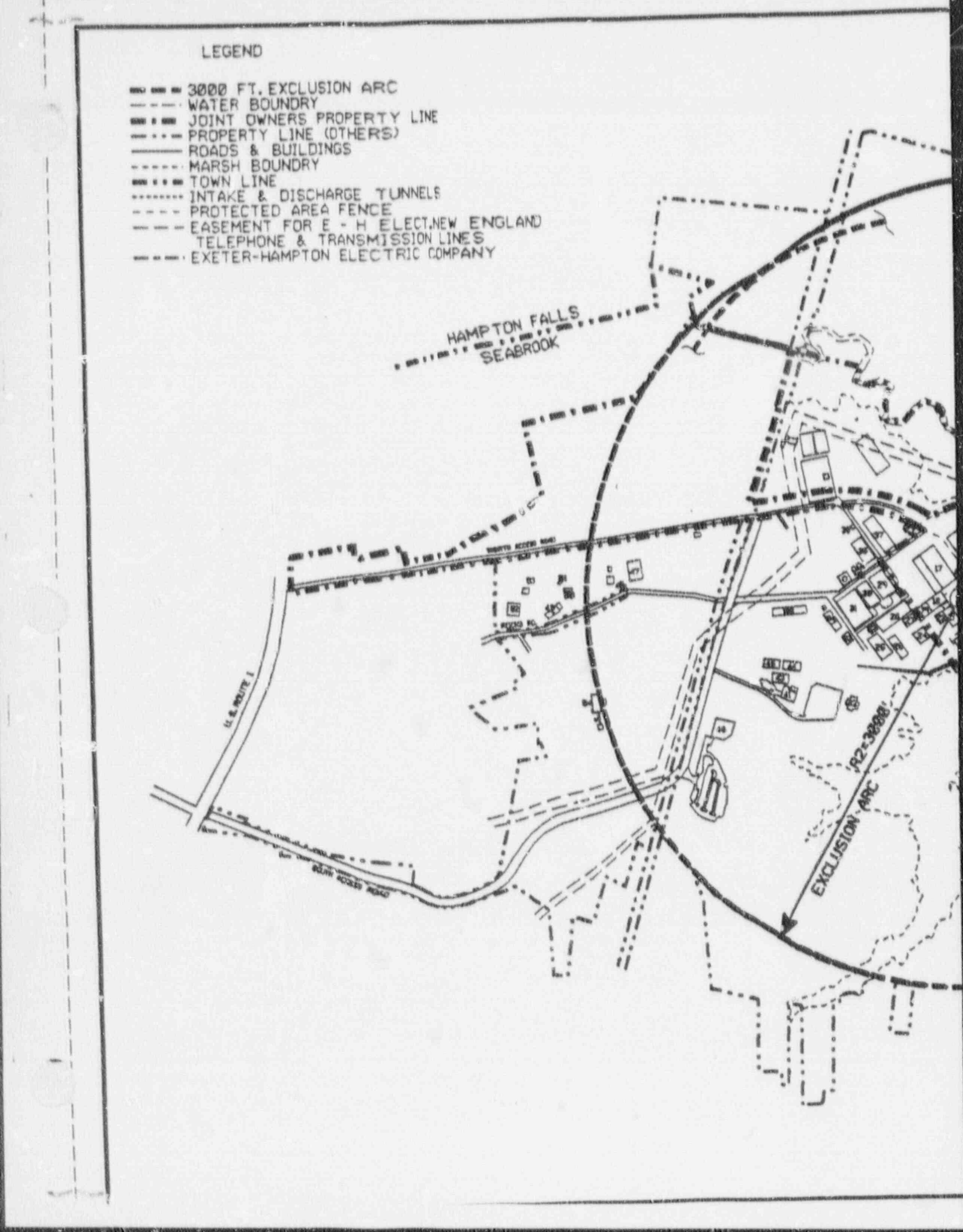
MEDICAL RELATED FACILITIES WITHIN ABOUT 10 MILES OF SEABROOK STATION

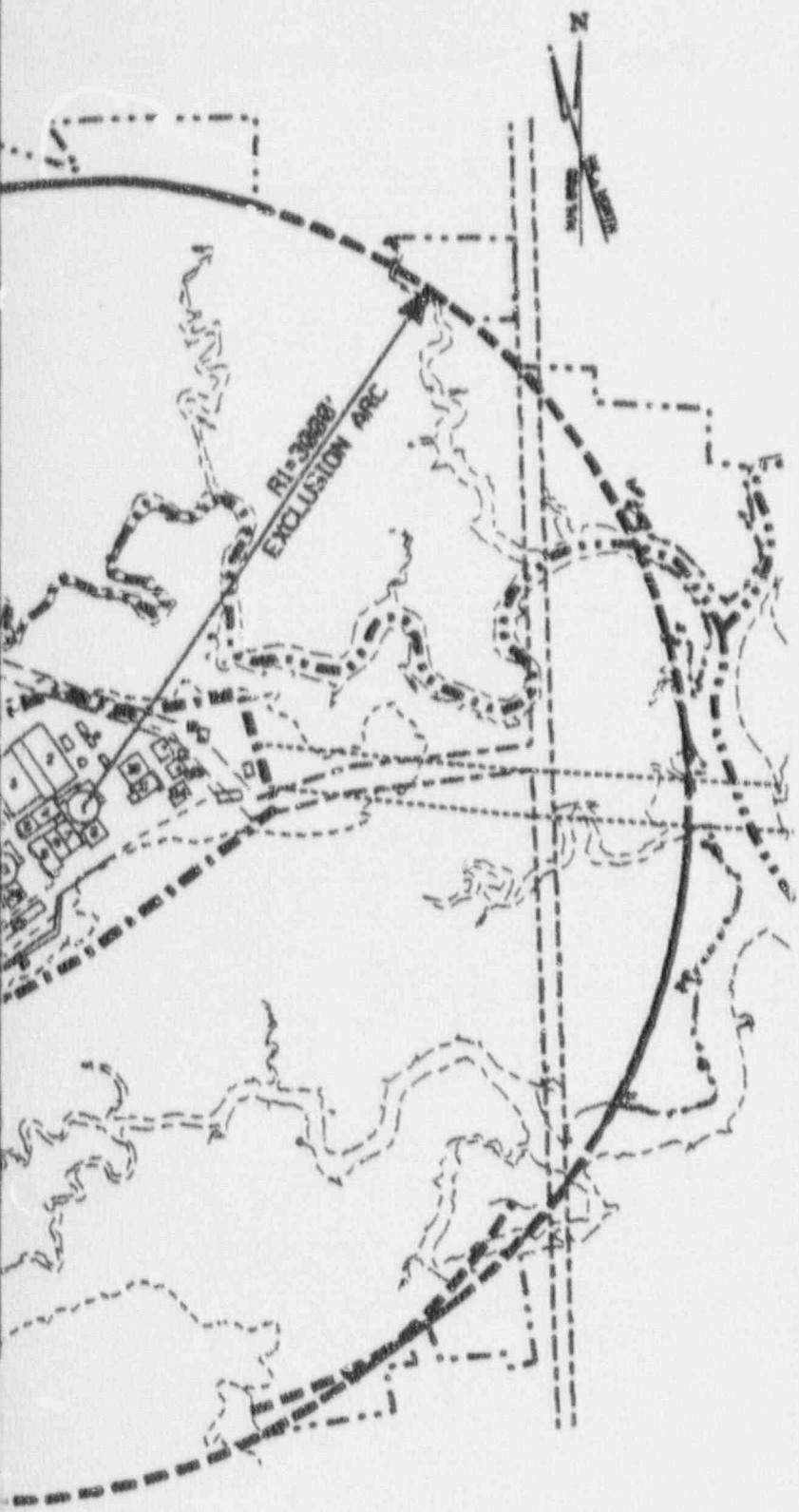
Name and Type	Location (Sector)
Newbury	
Newbury Village Elderly Housing	30 Rolf's Ln. (S 7-8)
Residence Harbor School	24 Rolf's Ln. (S 7-8)
Elderly Housing of Quaker Hill	115 Main St. (S 7-8)
Elderly Housing of Oak Ridge	84 Main St. (S 7-8)
Adelynrood Retreat Center	46 Elm St. (S 8-9)

TABLE 4.4

COMMUNITIES WITHIN THE SEABROOK STATION
PLUME EXPOSURE PATHWAY EMERGENCY PLANNING ZONE

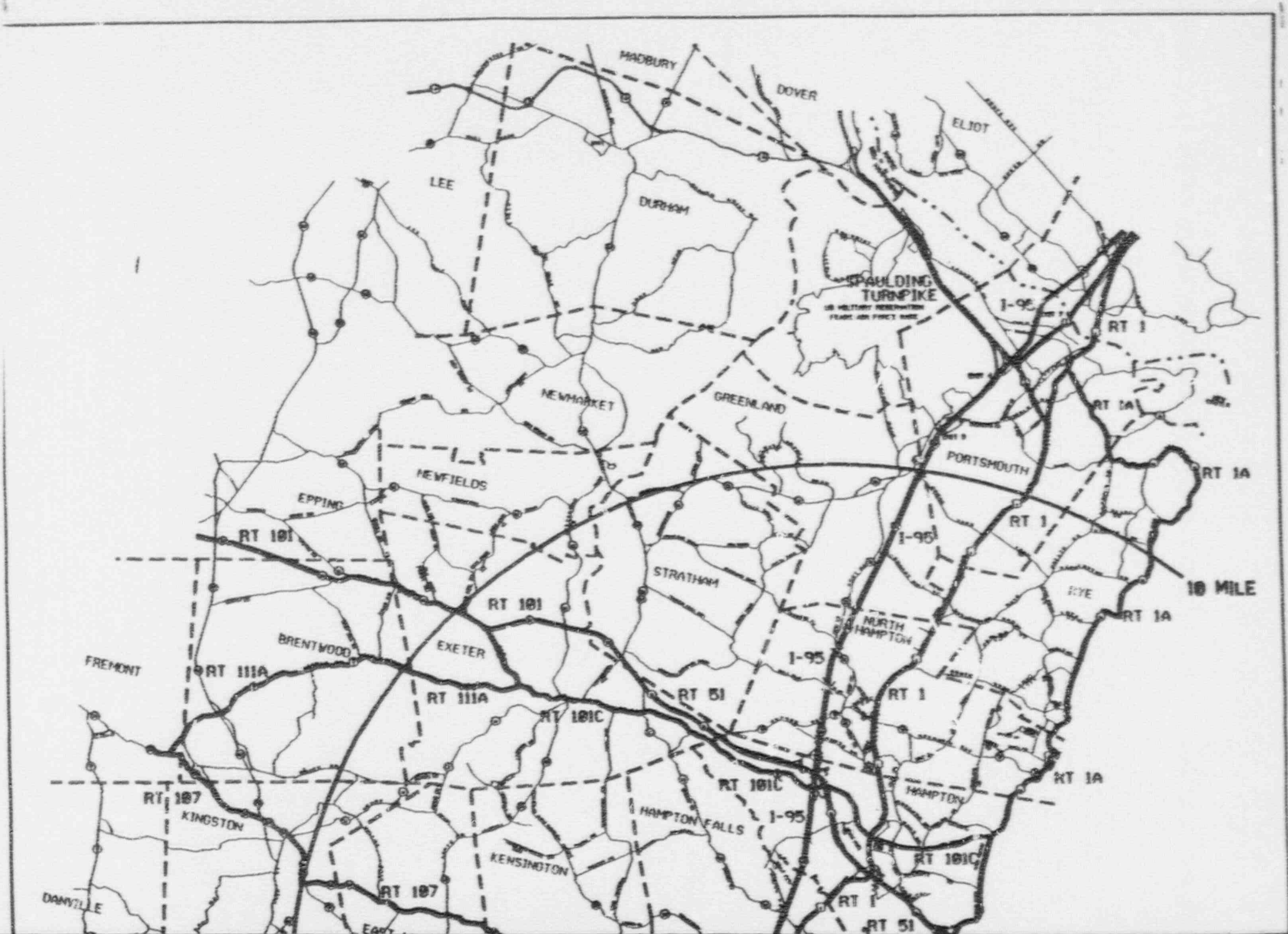
COMMUNITIES INVOLVED	AFFECTED BY WINDS BLOWING FROM
Brentwood - NH	ESE
East Kingston - NH	E-ESE
Exeter - NH	SE
Greenland - NH	S
Hampton - NH	SW-SSE
Hampton Falls - NH	ESE-ST
Hampton Beach - NH	W-WNW
Kensington - NH	ESE-E
Kingston - NH	ESE-E
Newfields - NH	SSE-SE
New Castle - NH	SSW
Newton - NH	E-ENE
North Hampton - NH	S-SSW
Portsmouth - NH	SSW
Rye - NH	SSW
Stratham - NH	NNW-E
South Hampton - NH	E-ENE
Stratham - NH	SSE-S
Amesbury - MA	ENE-NE
Merrimac - MA	ENE
Newbury - MA	NNE-NNW
Newburyport - MA	N-NNE
Salisbury - MA	ENE-NNW
West Newbury - MA	NNE-NE

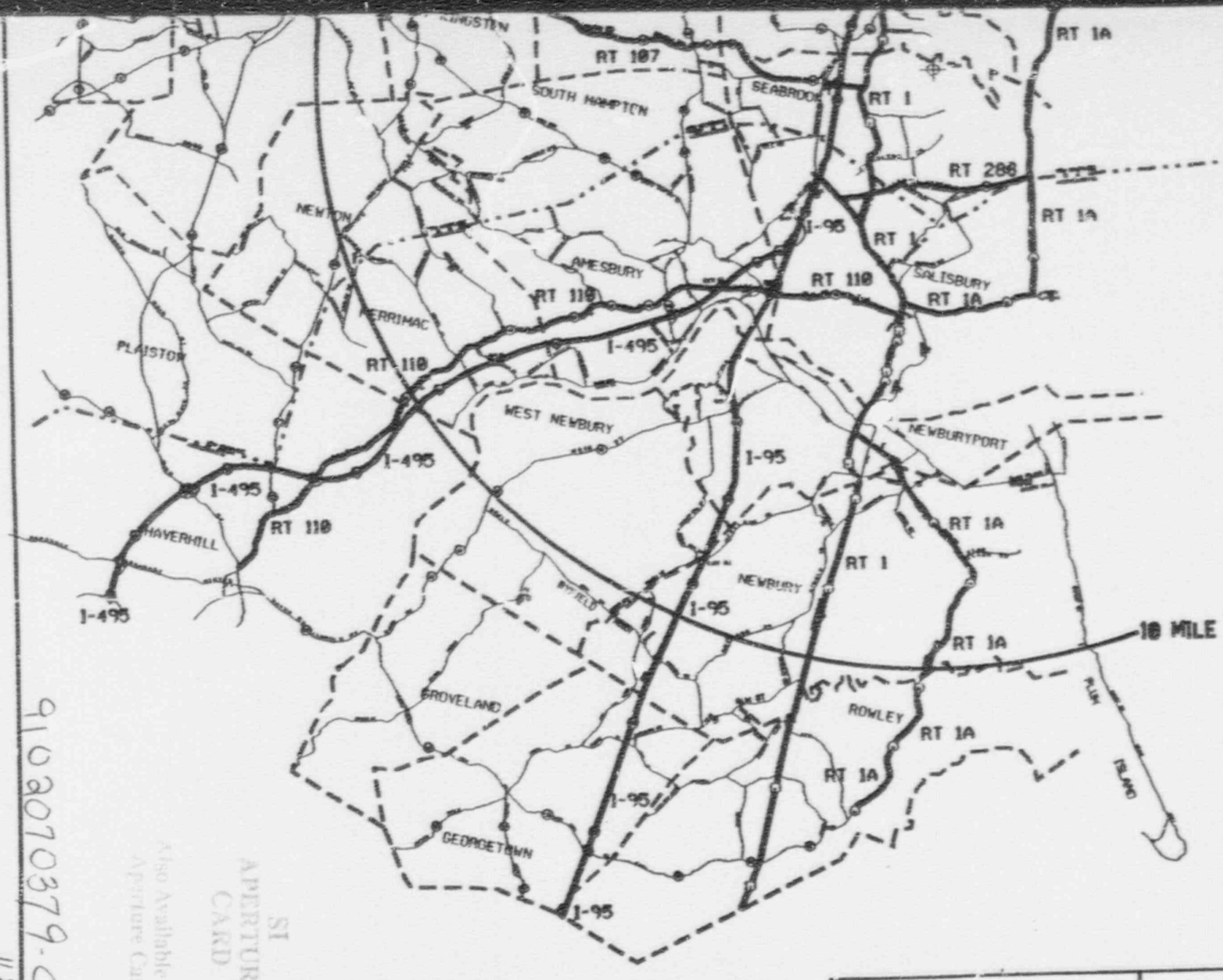

LEGEND
3000 FT. EXCLUSION ARC
WATER BOUNDRY
JOINT OWNERS PROPERTY LINE
PROPERTY LINE (OTHERS)
ROADS & BUILDINGS
MARSH BOUNDRY
TOWN LINE
INTAKE & DISCHARGE TUNNELS
PROTECTED AREA FENCE
EASEMENT FOR E - H ELECT.NEW ENGLAND TELEPHONE & TRANSMISSION LINES
EXETER-HAMPTON ELECTRIC COMPANY
HAMPTON FALLS
SEABROOK
U.S. ROUTE 1
R2=3000'
EXCLUSION ARC



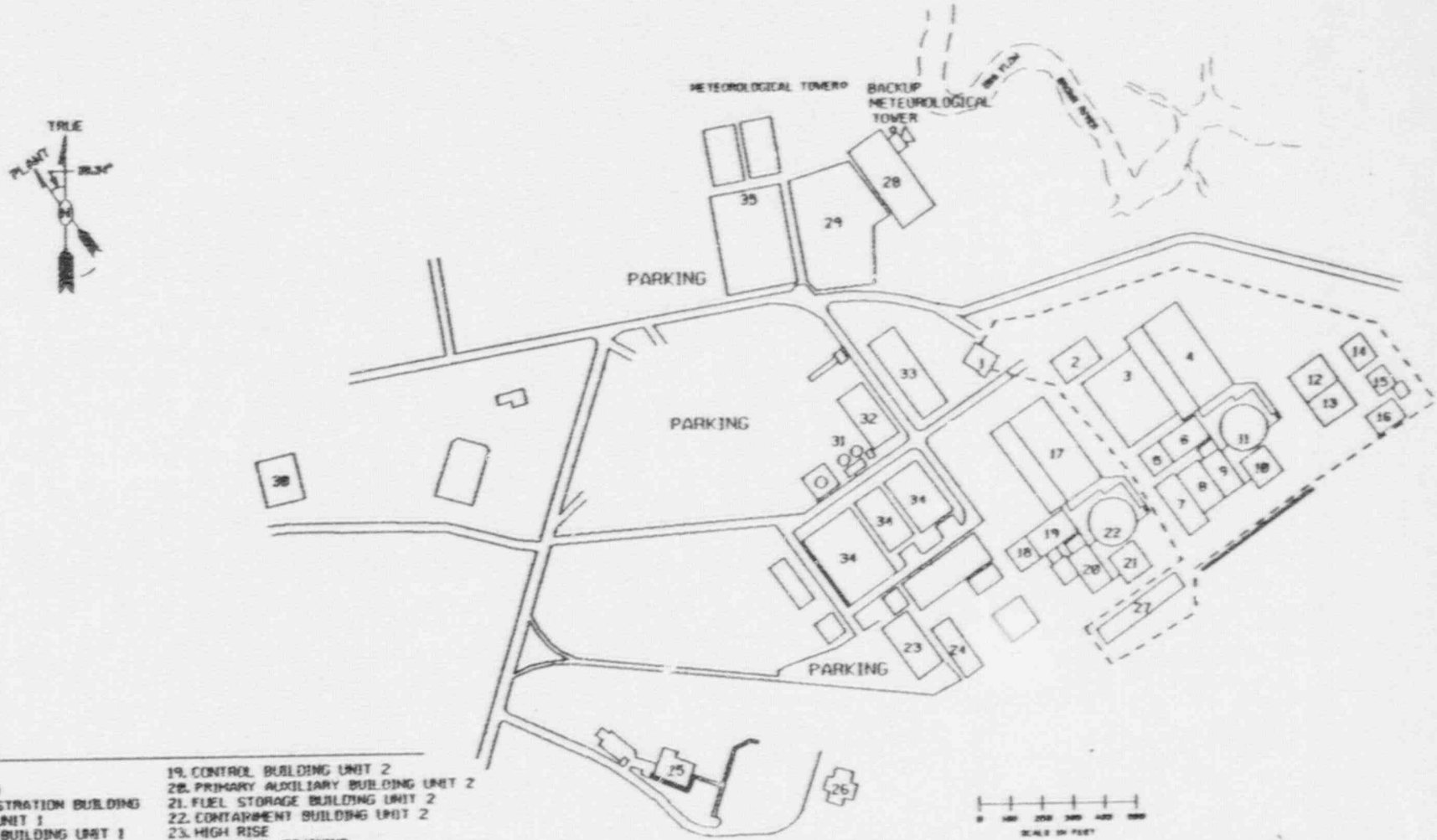
1. UNIT #1 CONTAINMENT BUILDING
2. UNIT #1 TURBINE BUILDING
3. ADMINISTRATION BUILDING
4. UNIT #1 CONTROL ROOM BUILDING
5. UNIT #1 DIESEL GENERATOR BUILDING
6. UNIT #1 FUEL STORAGE BUILDING
7. UNIT #1 PRIMARY AUX BUILDING
8. UNIT #1 WASTE PROCESSING BUILDING
9. UNIT #1 RAD. WASTE STORAGE TANK
10. CIRC. WATER PUMP HOUSE
11. SERVICE WATER PUMP HOUSE
12. DISCHARGE STRUCTURE
13. CALIBRATION BUILDING
14. CHLORINATION BUILDING
15. OMB
16. UNIT #2 CONTAINMENT BUILDING
17. UNIT #2 TURBINE BUILDING
18. UNIT #2 CONTROL ROOM BUILDING
19. UNIT #2 DIESEL GENERATOR BUILDING
20. UNIT #2 FUEL STORAGE BUILDING
21. UNIT #2 PRIMARY AUX. BUILDING
22. UNIT #2 RAD. WASTE STORAGE TANK
23. COOLING TOWER
24. ELECTRICAL SHOP
25. TRAINING ANNEX
26. HI RISE
27. WELDING SHOP
28. PIPE SHOP
29. WAREHOUSE #1
30. WAREHOUSE #2
31. WAREHOUSE #3
32. PTL TESING LAB.
33. IRP STORAGE
34. EQUIPMENT MAINT. SHOP
35. FIRE PUMP HOUSE
36. ENGINEERING OFFICE BUILDING
37. OPERATIONAL SUPPORT BUILDING
38. GUARD HOUSE
39. SECURITY BUILDING
40. CARPENTRY SHOP
41. TRAINING SIMULATOR BUILDING
42. EDUCATION CENTER
43. 20 UNIT STACK-A-SHACK
44. 22 UNIT STACK-A-SHACK
45. 18 UNIT STACK-A-SHACK
46. GENERAL OFFICE BUILDING
47. PRODUCTION WAREHOUSE
48. WHITE HOUSE
49. PAINT SHOP
50. PAC PAINT
51. STEAM CLEAN SHED
52. SHEET METAL SHOP
53. HAZ. WASTE
54. PIPE SUPPORT FAB. SHOP

NEW HAMPSHIRE YANKEE SEABROOK STATION RADIOLOGICAL EMERGENCY PLAN	SITE BOUNDARIES	
	SSREP REV. 5	FIGURE 4.1


MADBURY
DOVER
ELIOT
LEE
DURHAM
SPAULDING TURNPIKE
1-95
RT 1
RT 1A
NEWMARKET
GREENLAND
PORTSMOUTH
NEWFIELDS
EPPING
RT 101
STRATHAM
10 MILE
RYE
NORTH HAMPTON
BRENTWOOD
EXETER
FREMONT
RT 111A
RT 51
RT 101C
HAMPTON
KINGSTON
HAMPTON FALLS
KENSINGTON
RT 107
DANVILLE



NEW HAMPSHIRE YANKEE SEABROOK STATION RADIOLOGICAL EMERGENCY PLAN	MAJOR ROUTES IN 10 MILE STUDY	
	SSREP REV. 5	FIGURE 4.2



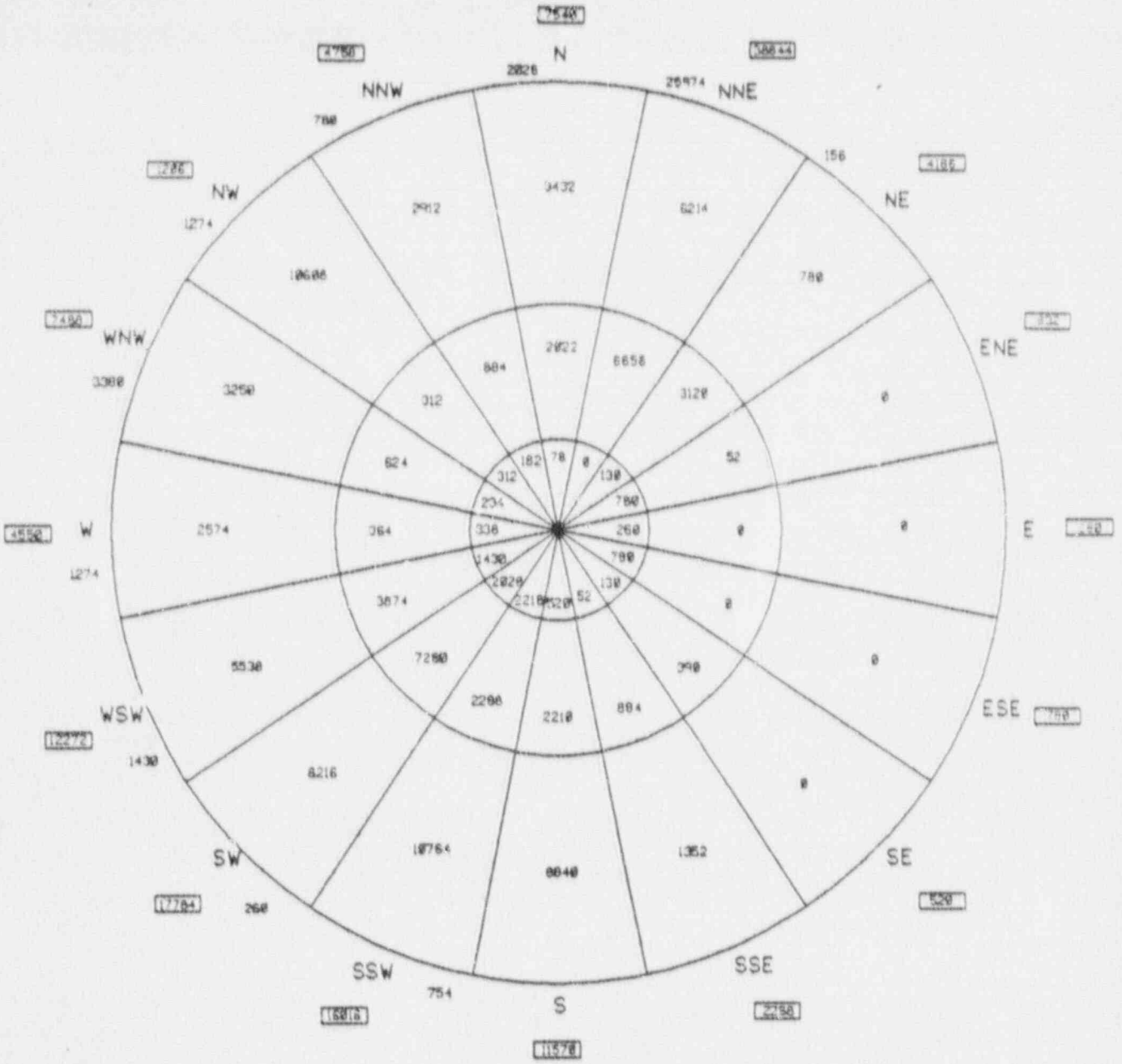
BUILDING LEGEND:

1. GATEHOUSE
2. 345 KV SUBSTATION
3. PRODUCTION ADMINISTRATION BUILDING
4. TURBINE BUILDING UNIT 1
5. DIESEL GENERATOR BUILDING UNIT 1
6. CONTROL BUILDING UNIT 1
7. WASTE PROCESSING BUILDING
8. TANK FARM
9. PRIMARY AUXILIARY BUILDING UNIT 1
10. FUEL STORAGE BUILDING UNIT 1
11. CONTAINMENT BUILDING UNIT 1
12. CIRCULATING WATER PUMP HOUSE
13. SERVICE WATER PUMP HOUSE
14. INTAKE STRUCTURE
15. DISCHARGE STRUCTURE
16. CHLORINATION BUILDING
17. TURBINE BUILDING UNIT 2
18. DIESEL GENERATOR BUILDING UNIT 2
19. CONTROL BUILDING UNIT 2
20. PRIMARY AUXILIARY BUILDING UNIT 2
21. FUEL STORAGE BUILDING UNIT 2
22. CONTAINMENT BUILDING UNIT 2
23. HIGH RISE
24. TECHNICAL TRAINING
25. TRAINING CENTER
26. SCIENCE & NATURE CENTER
27. COOLING TOWERS
28. SETTLING BASIN
29. 345 KV TERMINATION AREA
30. PRODUCTION WAREHOUSE
31. FIRE PROTECTION TANKS & PUMPS
32. CHANGE HOUSE
33. CONSTRUCTION OFFICES
34. WAREHOUSES
35. SEWAGE TREATMENT FACILITY

NEW HAMPSHIRE YANKEE SEABROOK STATION RADIOLOGICAL EMERGENCY PLAN	STATION LAYOUT
SSREP REV. 5	FIGURE 4.3

NHY_EPLAN:EP010270.DGN;1

PERMANENT RESIDENTS*



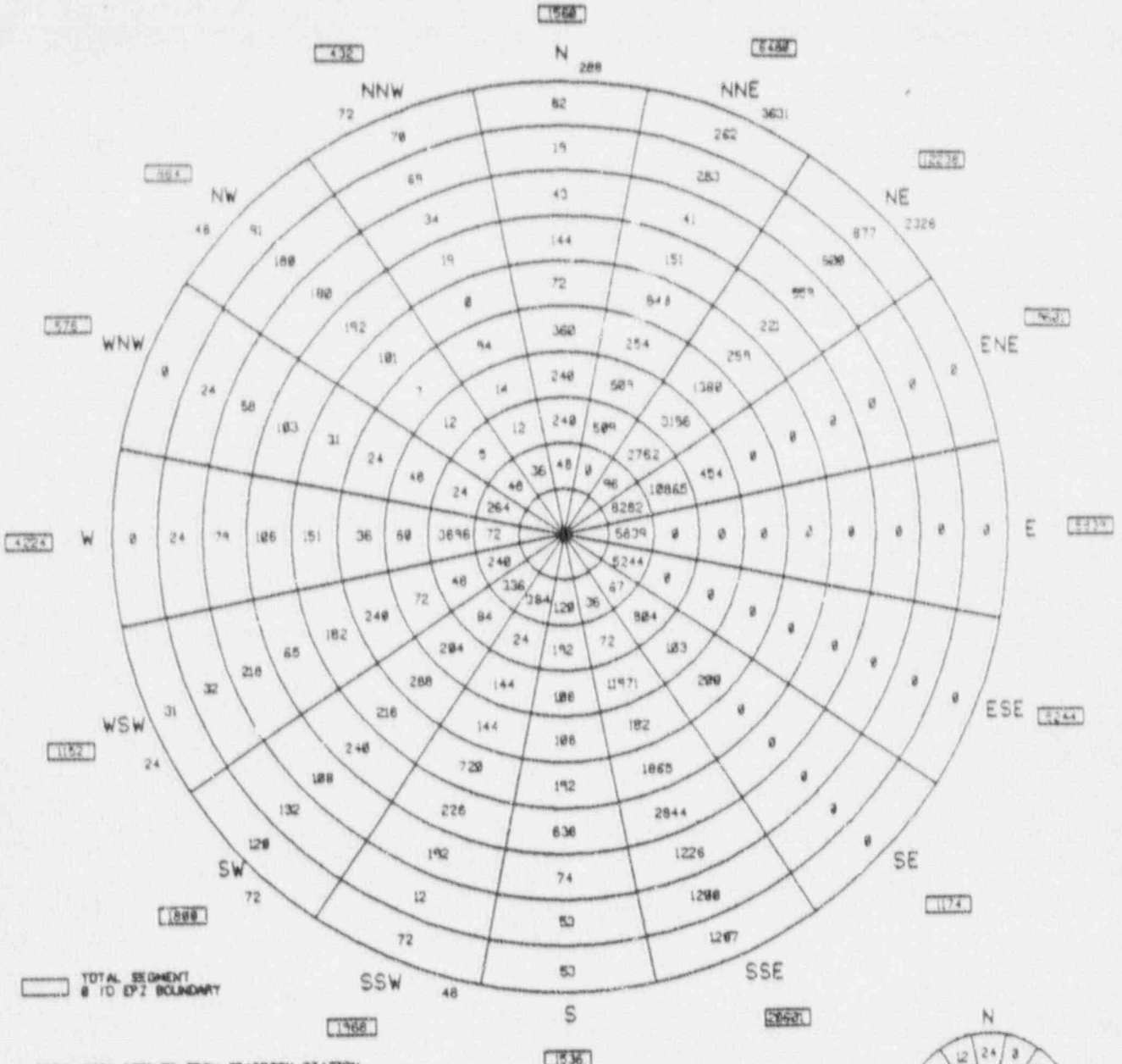
TOTAL SEGMENT POPULATION 0 TO EPZ BOUNDARY

POPULATION TOTALS*			
RING MILES	RING POPULATION	TOTAL MILES	CUMULATIVE POPULATION
0-2	9464	0-2	9464
2-5	38940	2-5	48404
5-10	64480	5-10	104884
10-EPZ	37310	10-EPZ	142194

* POPULATION DERIVED FROM SEABROOK STATION EVACUATION TIME STUDY (1989 UPDATE)

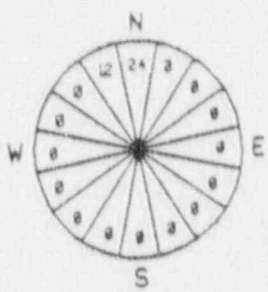
NEW HAMPSHIRE YANKEE SEABROOK STATION RADIOLOGICAL EMERGENCY PLAN	1989 ESTIMATE OF RESIDENT POPULATION DISTRIBUTION WITHIN A 0-10 MILE RADIUS OF SEABROOK STATION	
	SSREP REV 5	FIGURE 4.4

NHY_EPLAN:EP010270.DGN;1



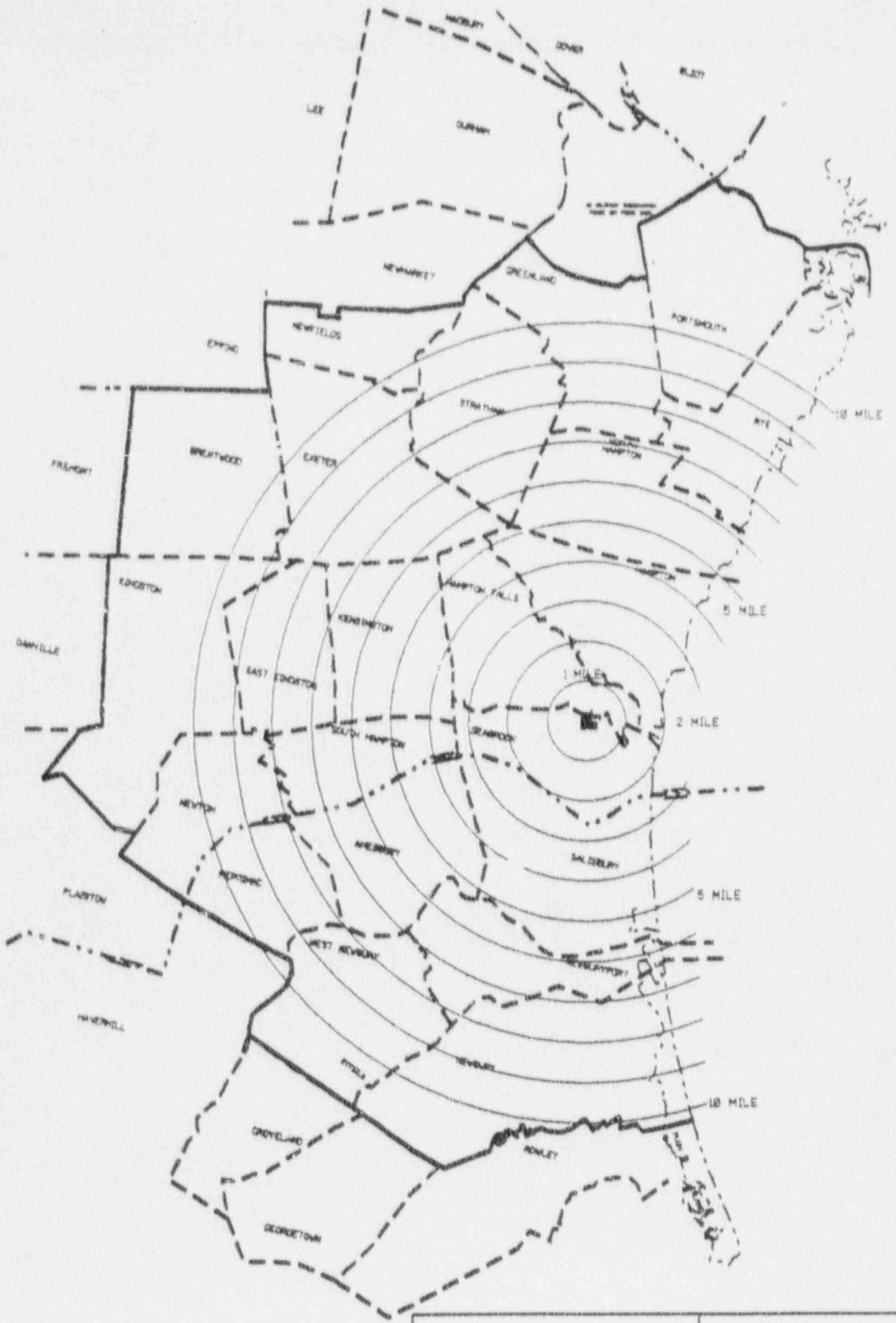
* POPULATION DERIVED FROM SEABROOK STATION EVACUATION TIME STUDY (1989 UPDATED)

POPULATION TOTALS*			
RING MILES	RING POPULATION	TOTAL MILES	CUMULATIVE POPULATION
0-1	36	0-1	36
1-2	21112	0-2	21148
2-3	19337	0-3	40485
3-4	17095	0-4	57580
4-5	3315	0-5	60895
5-6	4629	0-6	65524
6-7	4949	0-7	70473
7-8	2812	0-8	73285
8-9	2628	0-9	75913
9-10	2865	0-10	78778
10-EPZ	6509	0-EPZ	85287

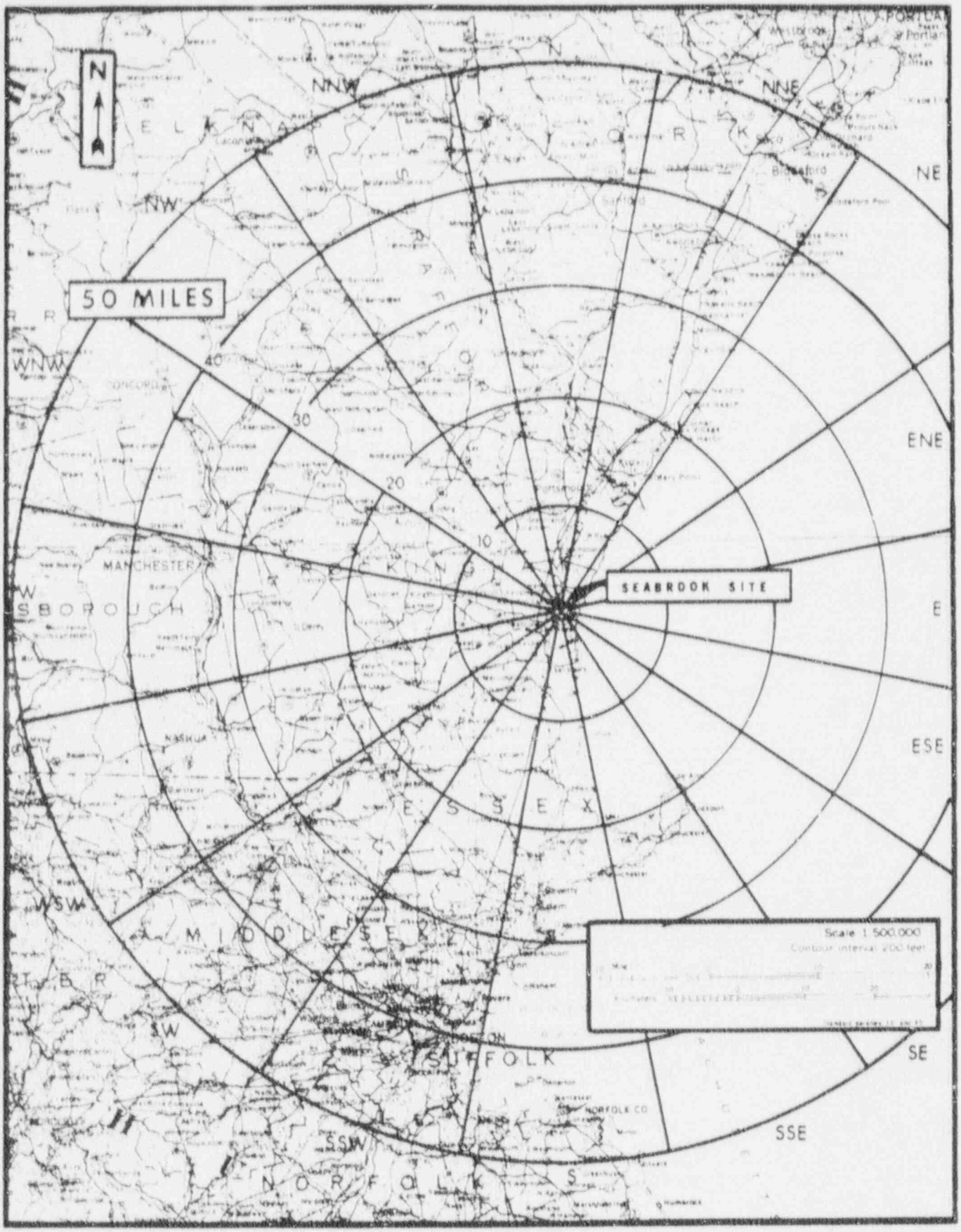


DETAIL OF 1 MILE RING

NEW HAMPSHIRE YANKEE SEABROOK STATION RADIOLOGICAL EMERGENCY PLAN	ESTIMATED PEAK TRANSIENT POPULATION (0 - 10 MILES)	
	SSREP REV 5	FIGURE 4.6



NEW HAMPSHIRE YANKEE SEABROOK STATION RADIOLOGICAL EMERGENCY PLAN	SEABROOK STATION "PLUME EXPOSURE" EMERGENCY PLANNING ZONE	
	SSREP REV 5	FIGURE 4.7



PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE SEABROOK STATION - UNITS 1 & 2 FINAL SAFETY ANALYSIS REPORT RADIOLOGICAL EMERGENCY PLAN	SEABROOK STATION "INGESTION EXPOSURE" EMERGENCY PLANNING ZONE (COUNTY DESIGNATIONS)
	FIGURE 4.8

5.0 EMERGENCY CLASSIFICATION SYSTEM

5.1 Summary

The Seabrook Station Emergency Classification System categorizes a wide spectrum of component or system failures and other occurrences that would reduce station safety margins. One of four emergency classifications is made upon the recognition of an initiating condition which indicates a degraded station status. Many of these initiating conditions are defined by five Critical Safety Function (CSF) color coded status trees which indicate the severity of an off-normal condition and are available to operators on the Safety Parameter Display System. Other initiating conditions are defined by quantitative or observable indications of station conditions called Emergency Action Levels (EAL's).

5.2 Emergency Classifications

Seabrook Station utilizes the four emergency classifications as specified in NUREG-0654/FEMA-REP-1 (November, 1980). In order of increasing severity these are: UNUSUAL EVENT, ALERT, SITE AREA EMERGENCY, and GENERAL EMERGENCY. The following definitions and descriptions of these emergency classes are used at Seabrook Station.

UNUSUAL EVENT -

AN UNUSUAL EVENT INDICATES A POTENTIAL DEGRADATION OF STATION SAFETY MARGINS. NO RELEASE OF RADIOACTIVE MATERIAL REQUIRING OFF-SITE RESPONSE OR MONITORING ARE EXPECTED.

ALERT -

AN ALERT INDICATES AN ACTUAL OR POTENTIAL SUBSTANTIAL DEGRADATION OF STATION SAFETY MARGINS. ANY RELEASES ARE EXPECTED TO BE LIMITED TO SMALL FRACTIONS OF THE EPA PROTECTIVE ACTION GUIDELINE EXPOSURE LEVELS.

SITE AREA EMERGENCY -

A SITE AREA EMERGENCY INDICATES AN EVENT WHICH INVOLVES LIKELY OR ACTUAL MAJOR FAILURES OF STATION FUNCTIONS NEEDED FOR THE PROTECTION OF THE PUBLIC. ANY RELEASES ARE NOT EXPECTED TO EXCEED EPA PROTECTIVE ACTION GUIDELINE EXPOSURE LEVELS EXCEPT NEAR THE SITE BOUNDARY.

GENERAL EMERGENCY -

A GENERAL EMERGENCY INVOLVES ACTUAL OR IMMINENT SUBSTANTIAL CORE DEGRADATION OR MELTING WITH THE POTENTIAL FOR THE LOSS OF CONTAINMENT INTEGRITY. RELEASES CAN BE REASONABLY EXPECTED TO EXCEED EPA PROTECTIVE ACTION GUIDELINE EXPOSURE LEVELS OFF-SITE FOR MORE THAN THE IMMEDIATE AREA.

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5.3 Scope of Classification System

The classification system for Seabrook Station provides the ability to classify approximately sixty discrete symptom-based or miscellaneous events. The system considers and classifies events specified in Appendix 1 of NUREG-0654/FEMA-REP-1; upset conditions defined by the Critical Safety Functions, and the discrete accidents contained in the Seabrook Station Final Safety Analysis Report, Chapter 15, Accident Analysis.

5.4 Symptomatic Approach to Classification

A symptomatic approach has been developed to assist operators in emergency recognition and classification. Critical station process data are condensed on color-coded status trees which allow the operator to recognize an off-normal condition and take appropriate actions. Symptomatic status trees are available to the operator and at the emergency response facilities on the plant process computer displays and on hardcopy.

A wide spectrum of events that represent varying degrees of safety margin reduction are illustrated on the color-coded status trees. The status trees (Figures 5.1 - 5.5) are based on the following five Critical Safety Functions:

S - Subcriticality
C - Core Cooling
H - Heat Sink
P - RCS integrity
Z - Containment Integrity

Color coding is used to identify event priorities for the individual branches of the status trees as follows:

GREEN - The Critical Safety Function is satisfied - No operator action is called for.

YELLOW - The Critical Safety Function is not fully satisfied - Operator action may eventually be needed.

ORANGE - The Critical Safety Function is under severe challenge - Prompt operator action is necessary.

RED - The Critical Safety Function is in jeopardy - Immediate operator action is required.

If a status tree is coded in a color other than green, the control room operators will take corrective action consistent with the Emergency Operating Procedures. In addition, if a status tree (or combination of status trees) is in a condition other than green, the Shift Superintendent will use the Emergency Classification Flowchart (Figure 5.6) to determine whether an Emergency must be declared.

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Figure 5.6 presents the critical safety functions in descending order of importance as one reads down the figure. If more than one classification is reached, the emergency will be classified according to the most severe.

5.5 Miscellaneous Station Conditions

The capability also exists for the classification of emergencies based on conditions that do not challenge a Critical Safety Function. Based on the guidance of Appendix 1 of NUREG-0654/FEMA-REP-1, miscellaneous emergency conditions (e.g., fire, electrical, security, natural events) have been evaluated, initiating conditions identified and Emergency Action Levels developed. The specific miscellaneous initiating conditions are indicated on Figure 5.6.

In some cases a combination of miscellaneous conditions or a complication of a miscellaneous condition with a critical safety function are an indication that an emergency classification has been reached. These combinations and complications are also on Figure 5.6.

5.6 Classification of Emergencies

Classification of an emergency at Seabrook Station is made based on one or more of the conditions listed in Figure 5.6. Specific EAL's (color status trees, meter indications, alarms, or limits) for initiating conditions are provided in an emergency response procedure and in operator training. The specific emergency response procedure is ER1.1 "Classification of Emergencies." This procedure contains the specific EAL's that serve as the basis for an emergency condition classification into one of the four emergency categories. This includes specific definitions of the events (i.e. natural phenomena, man-made occurrences, security threats and discretionary items) under category 18 of Figure 5.6. In all cases, if several emergency classifications are indicated, the most severe emergency classification will be made whether based upon status trees or miscellaneous initiating conditions. 53

5.7 Sample Classifications

To ensure understanding of the emergency classification system, the following sample classifications are presented. These examples explain the process by which the operators would come to the decision to classify an emergency.

EXAMPLE 1 - Condition - Critical Safety Function Core Cooling (Figure 5.2) indicates orange.

First locate C, Core Cooling under the Critical Safety Function column on the left of Figure 5.6. Then moving to the right, find C Orange under the appropriate emergency class. Site Area Emergency.

EXAMPLE 2 - Condition - Critical Safety Functions, Heat Sink (Figure 5.3) indicates red, and Core Cooling (Figure 5.2) indicates orange. 55

Combinations of separate Critical Safety Function indicators sometimes warrant a higher level emergency classification. First locate C, Core Cooling under the Critical Safety Function column on Figure 5.6. Moving to the right, find C Orange (Site Area Emergency), then C Orange plus H Red (General Emergency). Then locate H, Heat Sink. Moving to the right, find H Red (Site Area Emergency). Using the most severe classification, select General Emergency.

EXAMPLE 3 - Condition - Critical Safety Function Heat Sink (Figure 5.3) indicates red and bus E5 and bus E6 cannot be powered from the diesels or an offsite source within 15 minutes.

Complications of other miscellaneous emergency conditions along with Critical Safety Function indicators may also warrant increased levels of emergency classification. From Example 2 recall that H Red indicated a Site Area Emergency.

To consider the electrical problem, locate category 6. Electrical Failures under the Miscellaneous Emergency Conditions column on the left of Figure 5.6. Moving to the right, locate condition 6e (Site Area Emergency). To consider the complication, follow the Heat Sink line to the right and find H Red plus 6e (General Emergency). Using the most severe classification, select General Emergency.

EXAMPLE 4 - Condition - Indication of a steam generator tube rupture by procedure E-3.

First locate the category of condition, Steam Generator Tube Leakage/Rupture under the column labeled Miscellaneous Emergency Conditions on Figure 5.6. Moving to the right, locate condition 7b (Alert). The condition is classified as an Alert.

EXAMPLE 5 - Condition - Indication of a steam generator tube rupture by procedure E-3 and bus E-5 and E-6 cannot be powered from an off-site source.

First locate the classification for the steam generator tube rupture, 7b, as in Example 4 (Alert). Then locate the category, Electrical Failures, and move to the right to condition 6a (Unusual Event). Following either category 6 or 7, find the combination 6a plus 7b (Site Area Emergency). Using the most severe classification, select Site Area Emergency.

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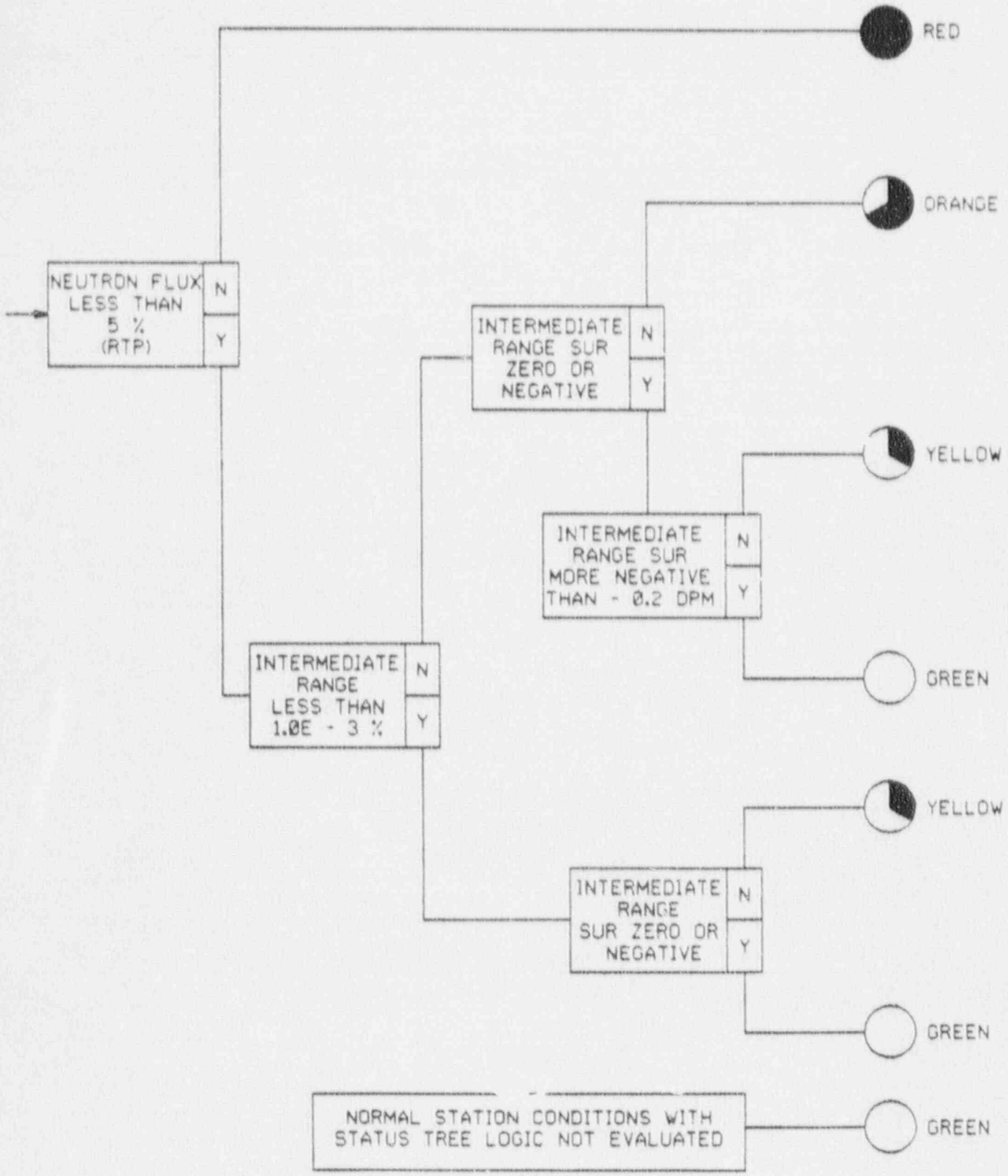

NOTE: USE GAMMA - METRICS

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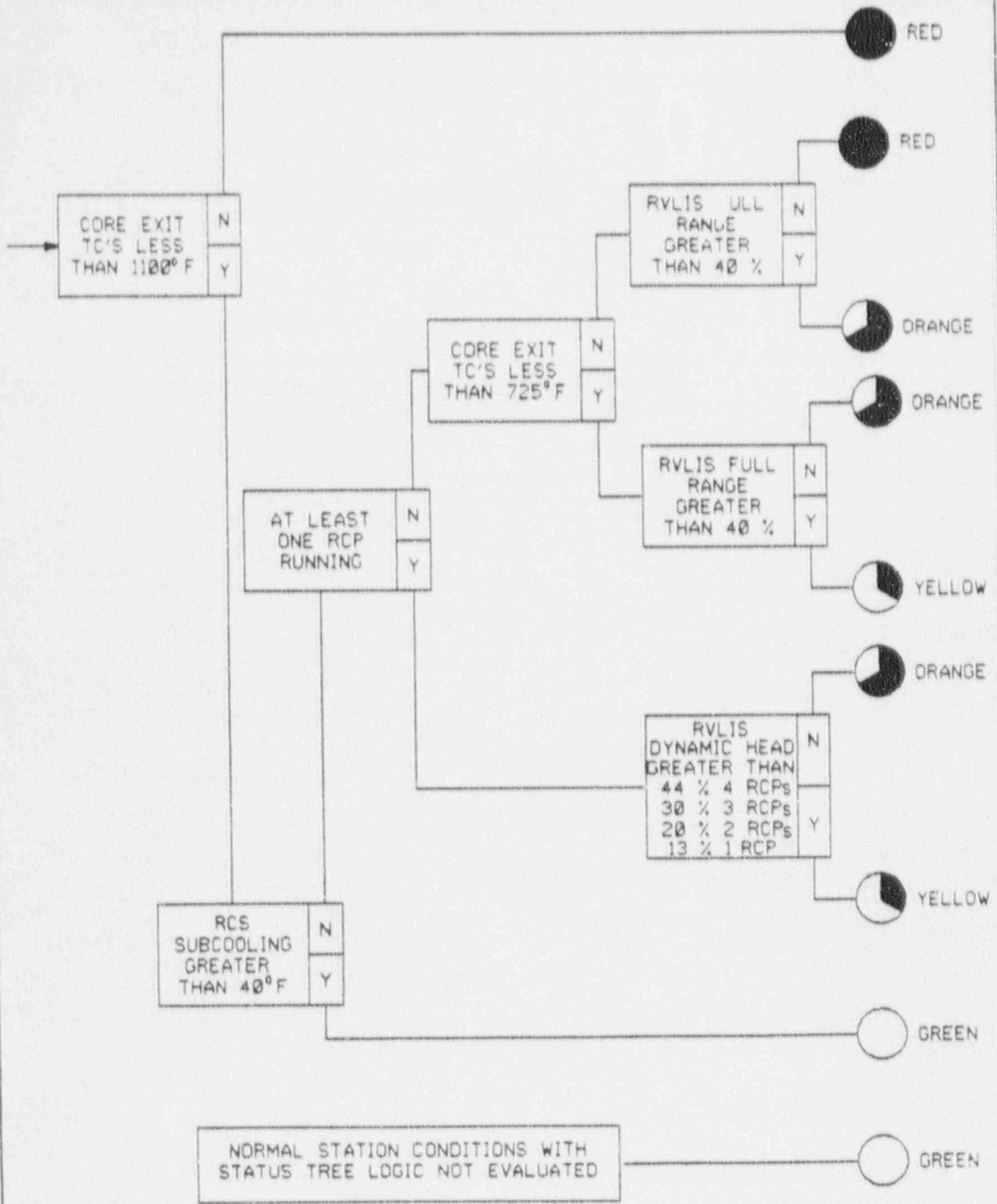
SEABROOK STATION RADIOLOGICAL EMERGENCY PLAN	CRITICAL SAFETY FUNCTION STATUS TREE FOR S - SUBCRITICALITY
	FIGURE 5.1

8.5 X 11

NMY_EPLAN:EP070062.DGN;1



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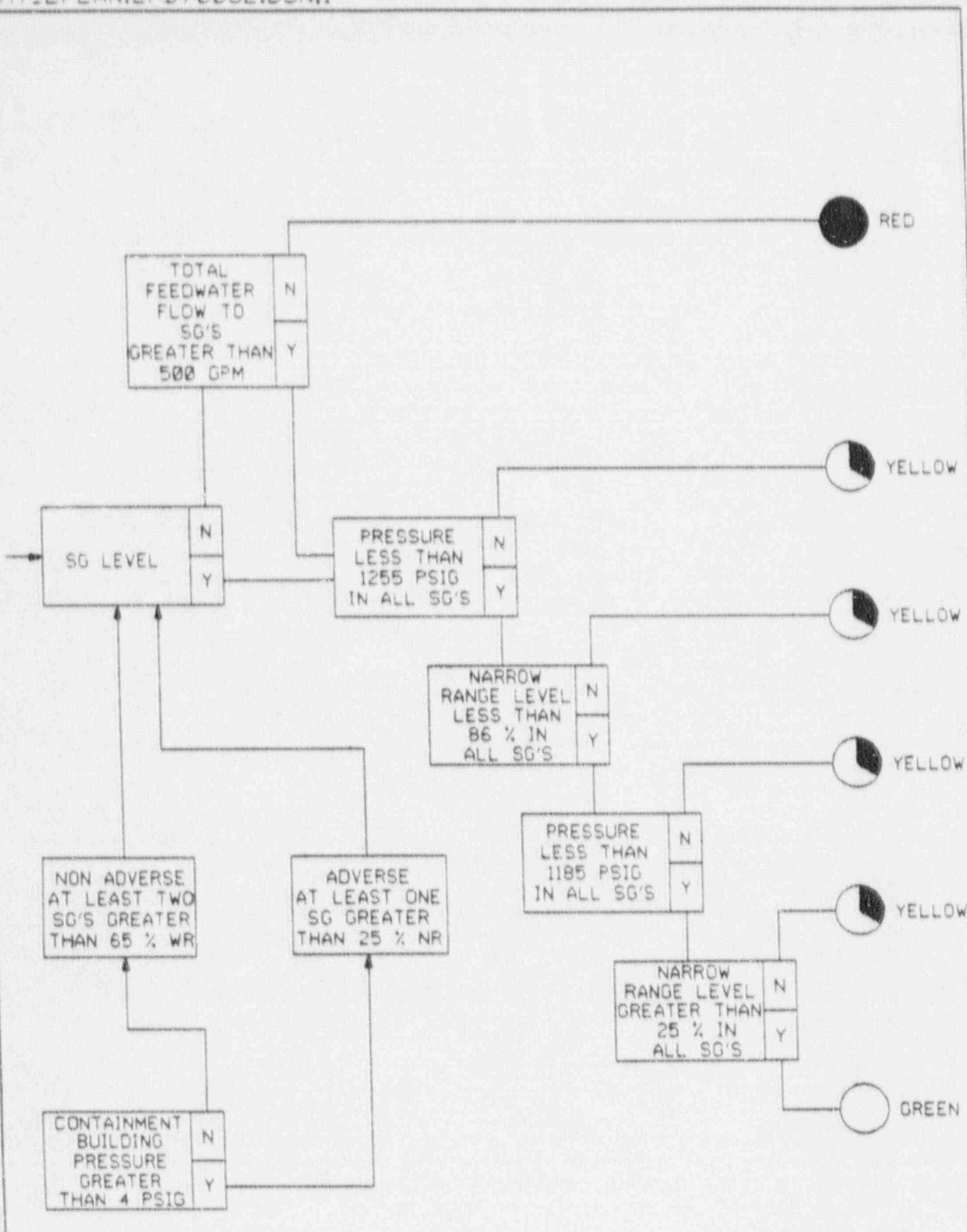
SEABROOK STATION RADIOLOGICAL EMERGENCY PLAN	CRITICAL SAFETY FUNCTION STATUS TREE FOR C - CORE COOLING
	FIGURE 5.2

8.5 X 11

NHY_EPLAN:EP070062.DGN:1

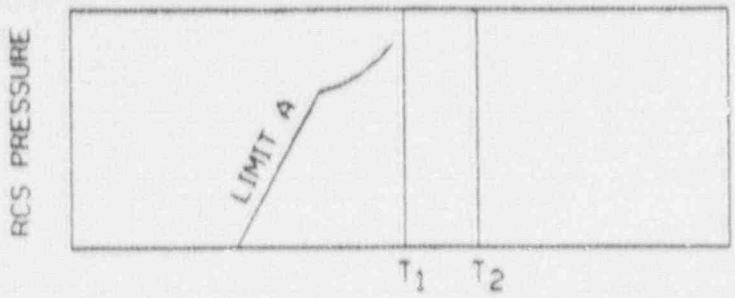


SSREP Rev. 4

SEABROOK STATION RADIOLOGICAL EMERGENCY PLAN	CRITICAL SAFETY FUNCTION STATUS TREE FOR H - HEAT SINK
	FIGURE 5.3

8.5 X 11

NHY_EPLAN:EP070062.DGN;1



RED

ALL RCS PRESSURE-COLD LEG TEMPERATURE POINTS TO RIGHT OF LIMIT A — N / Y

ORANGE

ALL RCS COLD LEG TEMPERATURES GREATER THAN 250°F (T_1) — N / Y

YELLOW

ALL RCS COLD LEG TEMPERATURES GREATER THAN 280°F (T_2) — N / Y

GREEN

TEMPERATURE DECREASE IN ALL COLD LEGS LESS THAN 100°F IN THE LAST 60 MINUTES — N / Y

ORANGE

ALL RCS COLD LEG TEMPERATURES GREATER THAN 250°F (T_1) — N / Y

YELLOW

RCS PRESSURE LESS THAN LTOP PRESSURE LIMIT — N / Y

GREEN

RCS TEMPERATURE GREATER THAN 342°F * — N / Y

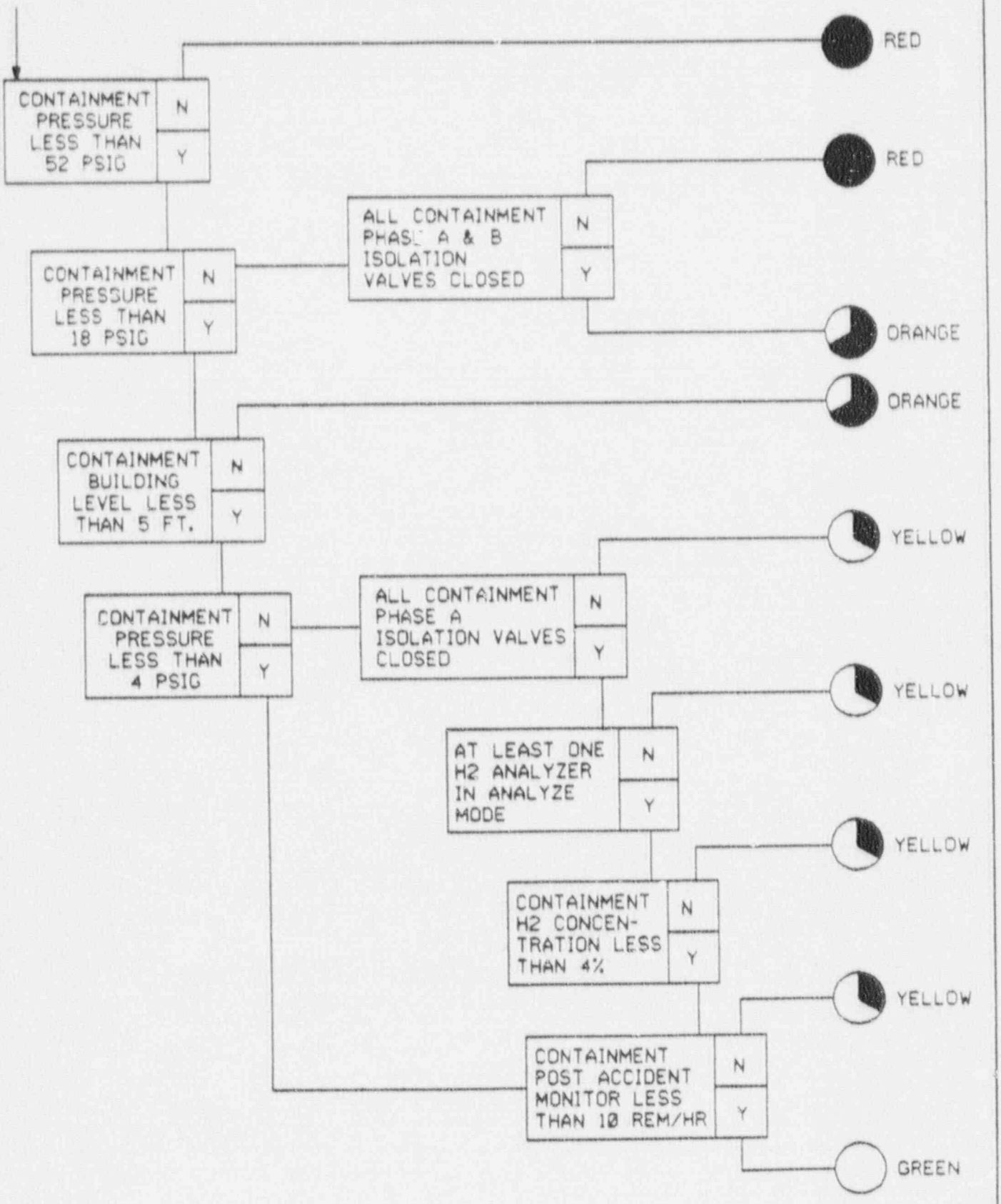
GREEN

* - ARMING BISTABLE SETPOINT

SEABROOK STATION RADIOLOGICAL EMERGENCY PLAN	CRITICAL SAFETY FUNCTION STATUS TREE FOR P - RCS INTEGRITY
	SSREP Rev. 4 | FIGURE 5.4

8.5 X 11

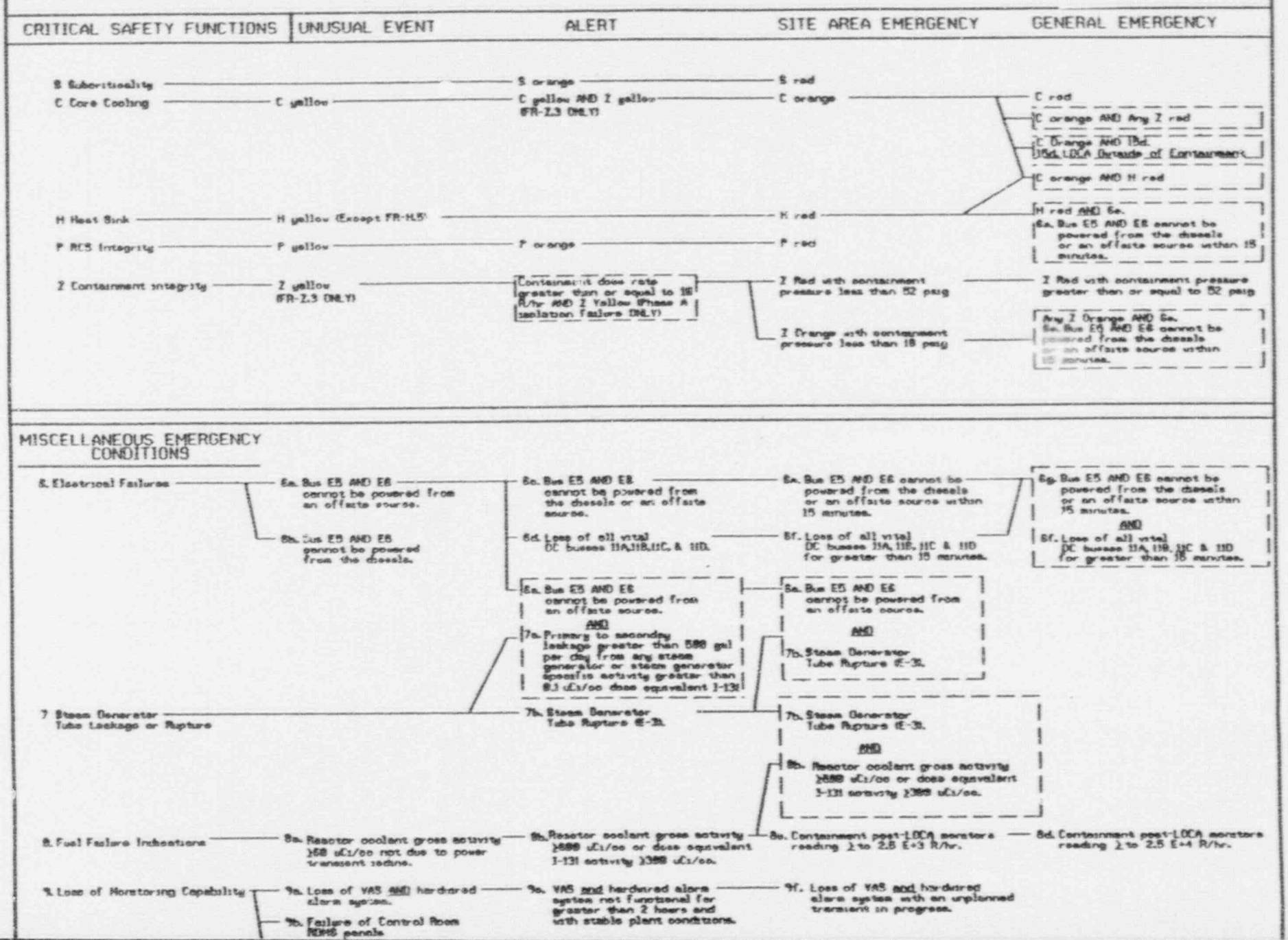
NHY_EPLAN:EP070062.DGN;1

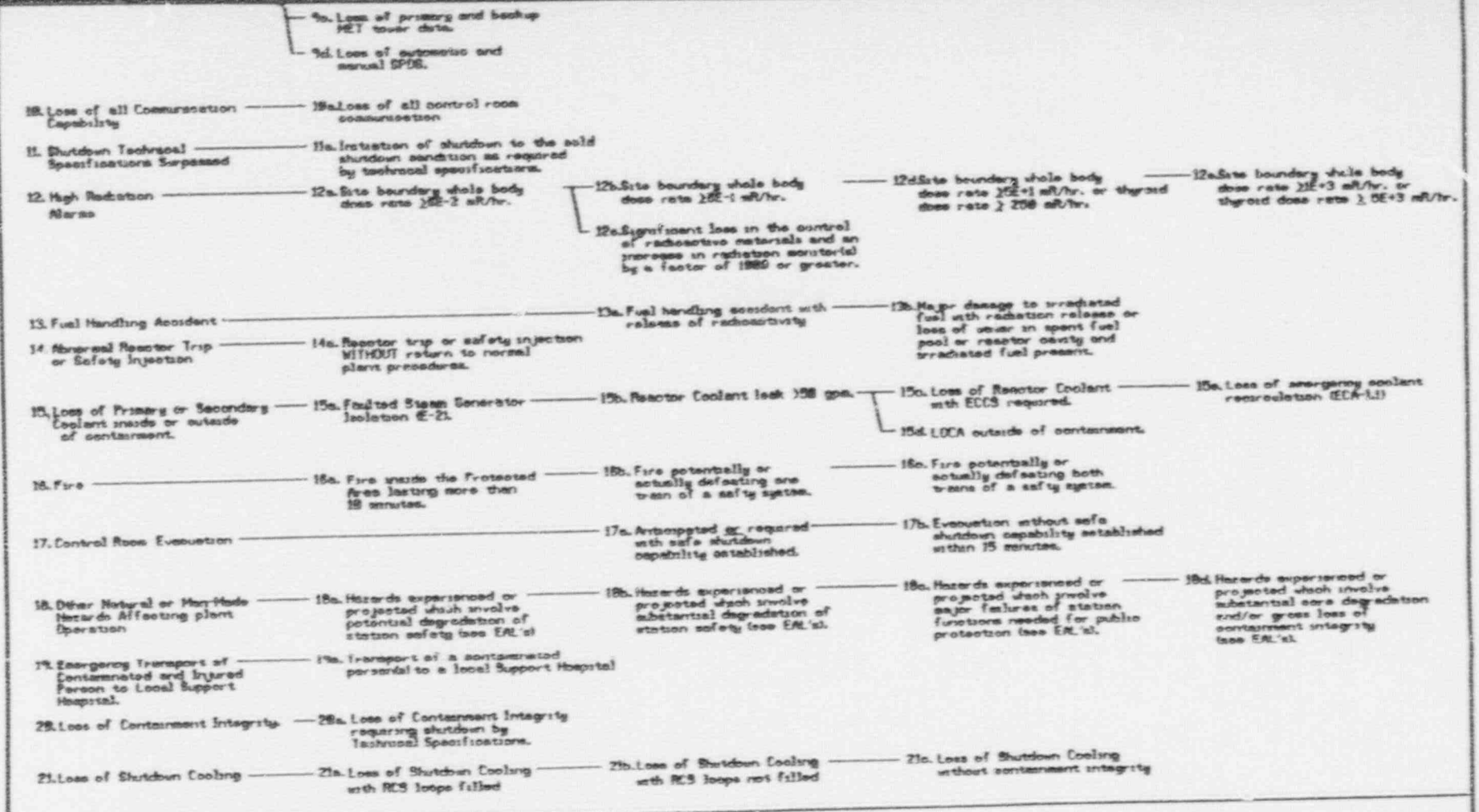


SEABROOK STATION RADIOLOGICAL EMERGENCY PLAN	CRITICAL SAFETY FUNCTION STATUS TREE FOR Z - CONTAINMENT
	SSREP REV 4 | FIGURE 5.5

8.5 X 11

EMERGENCY CLASSIFICATION FLOW CHART





EP01009.DGN:1

FOR THE BELOW LISTED EVENT	IMPLEMENT EMERGENCY PLAN PROCEDURE NO.
UNUSUAL EVENT	ER 1.2
ALERT	ER 1.3
SITE AREA	ER 1.4
GEN. EMERGENCY	ER 1.5

NEW HAMPSHIRE YANKEE
SEABROOK STATION
RADIOLOGICAL EMERGENCY PLAN

EMERGENCY CLASSIFICATION FLOW CHART

FIGURE 5.6 SSREP Rev. 5

6.0 EMERGENCY FACILITIES AND EQUIPMENT

Following the declaration of an emergency, the activation of the Emergency Response Organization (ERO) will be accomplished within a number of dedicated emergency facilities. Figure 4.3 indicates the relative locations of station facilities within the site. Figure 6.1 represents the locations of offsite support organization emergency operations centers relative to the Seabrook Station site. Descriptions of Seabrook Station facilities follow in Section 6.1. A description of emergency equipment and inventories is found in Procedure ER 8.1.

6.1 Emergency Centers

6.1.1 Technical Support Center

A Technical Support Center (TSC) has been established in the Control Building to direct post-accident evaluation and assist in recovery actions. The TSC is habitable to the same degree as the Control Room for postulated accident conditions. The TSC has the capability to access and display station parameters, including the Safety Parameter Display System (SPDS), independent from actions in the Control Room. The TSC is included in the station emergency communications network. The TSC has access to the station Final Safety Analysis Report (FSAR), the Seabrook Station Radiological Emergency Plan (SSREP) and procedures, and a selected set of system prints, system flow diagrams, cable/wiring diagrams and equipment specifications. The TSC has the capability to assess radiological habitability conditions by monitoring for direct radiation and airborne particulates, and sampling for airborne radioiodines. Figure 8.6 defines the TSC organization. A layout of the TSC is provided in Figures 6.2, 6.3, and 6.4. Appendix F lists equipment and supplies that are maintained there.

6.1.2 Operational Support Center

The Operational Support Center (OSC), located on the first floor of the Administration and Service Building, provides a general assembly/dispatch area for assigned station manpower needed to effect protective and corrective actions in support of the emergency situation. The OSC is included in the station emergency communications network. Emergency equipment is provided at the Radiologically Controlled Area (RCA) access point located within the OSC. Should conditions warrant evacuation of this center, the TSC will assume OSC functions; otherwise the OSC will remain active and manned until terminated by the Station Manager (Site Emergency Director). Figure 8.5 defines the OSC organization, and Appendix F lists equipment and supplies that are maintained there. A layout of the OSC is provided in Figure 6.5.

6.1.3 Emergency Operations Facility

An Emergency Operations Facility (EOF) is located at the entrance to the Public Service of New Hampshire generating station known as Newington Station on Gosling Road in Newington, New Hampshire. The EOF shown in Figure 6.6 serves as a base of operations for radiological assessment, overall emergency

response organization management and recovery activities. The State of New Hampshire Incident Field Office and the Emergency Operations Center for the NHY Offsite Response Organization (ORO) are physically co-located with the EOF. This arrangement ensures close coordination with State (*) emergency response staff.

The EOF is included in the station emergency communications network, as described in Section 7.0, which links all emergency response facilities, monitoring and assistance teams dispatched from the EOF, and offsite agencies. The EOF has the capability to access and display station parameters, including the Safety Parameter Display System, independent of both the TSC and Control Room. Backup power to the EOF is available.

Radiological assessment, monitoring and evaluation, and protective action recommendation formulation are directed from the EOF. The EOF organization shown in Figure 8.4 is responsible for continuous evaluation and coordination of all NHY activities related to an emergency having, or potentially having, adverse radiological consequences. Copies of selected building prints and general building arrangements, all emergency planning documents applicable to Seabrook Station, including area maps, emergency response procedures, State (*) and local emergency plans, and the station FSAR are available in the EOF.

The EOF has sufficient assembly space and is designed to accommodate responding representatives from government and industry. The EOF serves as the base of operations for station material control, coordination of industry support, and establishment of a long-term organization to recover from the accident conditions and results. The EOF can serve as a centralized meeting location for key representatives from offsite authorities and station management. The EOF can also act as a focal point for the coordination and acquisition of company resources and liaison with the Seabrook Station Joint Owners, American Nuclear Insurers and Institute of Nuclear Power Operations (INPO).

Emergency equipment maintained at the EOF includes gear necessary to assess radiological habitability. This consists of monitoring for direct radiation, and sampling and analysis for airborne radioparticulates and radioiodines. The EOF provides information needed by Federal, State (*) and local authorities for implementation of offsite emergency plans. Appendix F contains a list of equipment that is maintained at the EOF.

6.1.4 Engineering Support Center

The Engineering Support Center (ESC) is an area established at the Yankee Nuclear Services Division (YNSD) offices in Bolton, Massachusetts. This center will be activated at an Alert, Site Area and General Emergency. This facility maintains direct communications with the Seabrook Station TSC and EOF. It has access to a complete set of as-built drawings and records pertaining to Seabrook Station and maintains extensive computer capability which can be utilized to assess accident conditions at the station. The YNSD has the necessary ability and management expertise to perform a variety of emergency functions, such as engineering analyses, radiological evaluation, and station system assessment in support of the overall accident response and recovery efforts.

The YNSD also maintains an Environmental Laboratory in Westboro, Massachusetts which will provide 24-hour service in the event of an emergency at Seabrook Station. This lab provides capability for emergency environmental sample and personnel dosimetry analysis.

6.1.5 Media Center

This center is located at the Newington Town Hall, Newington, New Hampshire. The center will be activated in order to provide a centralized location for holding joint State (*), Federal and New Hampshire Yankee emergency news briefings. The Emergency News Manager will coordinate activities at this center. An auto ringdown circuit has been established between the EOF and Media Center in order to establish periodic updates on emergency information.

This center will accommodate the media by providing:

1) an assembly or conference room with a public address system;
2) adequate communications;
3) duplicating machines and/or telecopier; and
4) station background literature.

It is expected that State (*) and Federal public information personnel will operate from the Media Center.

6.1.6 Joint Telephone Information Center

The Joint Telephone Information Center (JTIC) is located adjacent to the EOF at Public Service of New Hampshire's Newington Station in Newington, NH. The facility is jointly staffed and operated by members of the New Hampshire Yankee ERO, Offsite Response Organization (ORO), and the State of New Hampshire. The JTIC provides a centralized location to respond to media and public inquiries received by telephone. It also maintains a bank of information lines containing recorded messages regarding the emergency for the public to call. Additionally, the facility has dedicated equipment for the monitoring and recording of television and radio broadcasts.

The nature and level of interest of media inquiries are relayed to the Media Center where they may be addressed in a more comprehensive fashion by subsequent news releases or press briefings. Likewise, rumor trends are provided to the Media Center for formulating a response in later releases or briefings.

6.1.7 Federal Radiological Monitoring and Assessment Center

The Federal Radiological Monitoring and Assessment Center (FRMAC) will be established by the US Department of Energy (DOE) at a suitable facility in proximity to the EOF in response to a request from either State (*) or Federal authorities. The DOE and Environmental Protection Agency (EPA) are prepared to deploy specialized resources and establish a base of operations for offsite radiological monitoring and assessment activities. Environmental data obtained by an array of technical experts operating out of this center will be used by governmental officials in determining the hazard associated with the incident and the appropriate protective actions. DOE is responsible for the coordination of FRMAC emergency activities as described in the Federal Radiological Emergency Response Plan (FRERP).

6.2 Assessment Capability

The activation of this plan and the continual assessment of accident conditions require extensive monitoring and assessment capabilities. The essential monitoring systems needed to allow recognition of abnormal events by the station operators was used in the accident classification methodology. This section briefly describes these monitoring systems as well as other assessment capabilities.

6.2.1 Process Monitors

Station process monitoring capability includes many process monitor indications provided from various sensors located throughout station systems. Parameters monitored include pressure, temperature, flow, level and equipment operating status. These monitoring systems address the requirements of Regulatory Guide 1.97, Revision 2.

6.2.2 Radiation Data Management System

The Radiation Data Management System (RDMS) provides operators with the ability to assess station radiological conditions during normal operations, as well as radiological emergency conditions. The RDMS is a microprocessor-based acquisition and display system. Field mounted detectors communicate individually to their own microprocessor which in turn communicates to two central processing units (CPU) on a redundant communication loop. The various parameters monitored include general area radiation, process radioactivity levels, airborne contamination levels, and effluent radioactivity levels. The quantity and diversity of the parameters monitored, along with the display capabilities of the RDMS, provide the operator with sufficient warning of accident conditions as well as continual accident assessments. However, the primary means of quantitatively evaluating system and plant radioactivity levels will be through a program of collecting physical samples and subjecting these physical samples to laboratory analysis to identify specific isotopes and their relation to the RDMS.

Each of the RDMS monitors alarms in the Control Room and Operational Support Center for a variety of alarm conditions (e.g., alert level, high level, power failure, etc.). This system addresses the requirements of Regulatory Guide 1.97, Revision 2.

6.2.3 Geophysical Phenomena Monitors

6.2.3.1 Meteorological

New Hampshire Yankee maintains a 210-foot-high meteorological tower located near the south edge of Brown's River, as shown in Figure 4.3. The parameters monitored include wind speed and direction at 43 feet and 209 feet above ground level, and vertical temperature difference (delta-T) between 43 feet and 150 feet and between 43 feet and 209 feet. The meteorological data from the tower are scanned and recorded as 15-minute averages by the Main Plant Computer

System (MPCS). These averages are available for on-demand display on MPCS terminals located in the Control Room, TSC, and EOF. Strip Chart recorders located in the Instrument Shed at the base of the tower serve as backup recording mechanisms. (Protected: Ref. NRC IR 85-32(19))

A freestanding 30' backup meteorological tower is located adjacent to the settling basin outlet structure. Sensors used are the same model as the instrumentation associated with the 210-foot tower. The meteorological data from the backup tower are scanned and recorded as 15-minute averages by an independent computer system. These averages for wind speed, wind direction and delta temperature are available for on-demand display on MPCS terminals located in the TSC and EOF, and a stand-alone terminal located in the Control Room. (Protected: Ref. NRC IR 85-32(20))

YNSD maintains a subscription with Weather Services International (WSI). Through the use of a terminal located in the EOF, emergency response personnel can access recent weather data from surrounding weather stations as well as long-range forecasts for the site region. YNSD meteorological services personnel can access and review the same information from the ESC and assist the EOF in interpreting its results. YNSD meteorological services personnel are also available to assist EOF dose assessment personnel in evaluating the effects of Seabrook Station's coastal environment on plume transport and diffusion.

Additional sources of meteorological information include the Portland, ME and Concord, NH National Weather Service (NWS) Offices.

Pease Air Force Base, located approximately 13 miles NNE of Seabrook Station, can also provide backup meteorological measurements should data from both onsite towers be unavailable. Hourly Pease AFB meteorological measurements are available via the WSI System and the Portland and Concord NWS Offices.

The Systems Dispatcher will provide reports concerning natural occurrences or severe weather conditions that may affect the station area.

A dispersion model, METPAC, is available on a minicomputer to produce initial plume transport and diffusion estimates for the plume exposure Emergency Planning Zone. The model produces plume dimensions, position, and relative concentrations at several downwind locations. Using effluent release information and a finite cloud external gamma dose model, estimates of near real-time dose rates will also be available. The model has the graphics capability of drawing plume position over a background map of the site. More information on these calculation techniques is given in Section 10.1.1 of this plan.

6.2.3.2 Seismic

New Hampshire Yankee has installed seismic monitoring equipment with alarms indicated in the Control Room. The equipment consists of:

1) Triaxial Time History Accelerographs capable of measuring and permanently recording the absolute acceleration versus time for both horizontal and vertical motion;

2) Triaxial Response Spectrum Recorders capable of permanently recording peak responses as a function of frequency for both horizontal and vertical motions; and

3) Triaxial Peak Accelerographs capable of permanently recording peak acceleration.

The Control Room alarms will indicate the following:

1) Earthquake in progress; and/or

2) Operating Basis Earthquake exceeded.

6.2.3.3 Hydrologic

Seismic Category I structures that house safety-related equipment have been designed to withstand a depth of still water on the station grade (+20.6 ft. MSL) of 0.6 feet. Access openings in exterior walls that are below the design flood level consist of a railroad door in Unit 1 Fuel Storage Building and man doors in other structures. Flood protection has been provided by means of water-tight doors or curbs around the door openings. In the case of the Fuel Storage Building, curbs have been constructed around vulnerable equipment. All below-grade structures are waterproofed on the exterior face, and sumps have been installed in all buildings. Because of the general design, it was not necessary to install hydrologic monitors, nor will it be necessary to bring the reactor to a cold shutdown for the most severe flood anticipated for the station.

6.2.4 Fire Detection Systems

New Hampshire Yankee maintains an extensive fire detection network which utilizes a combination of smoke detectors, thermal detectors and rate-of-rise detectors as means of providing station operators with complete fire status information.

The fire protection system is comprised of the following basic systems:

1. A pumped water system providing a complete underground looped station fire main with hydrants, hose houses and hose carrier for yard and building exterior protection, and internal sprinklers, hose stations and deluge systems for specific building applications.

2. Portable halon extinguishers in the Control Room complex, and all battery rooms.

3. Portable CO2 fire extinguishers for use in relay room and switchgear areas.

4. Portable CO2 and dry chemical fire extinguishers located throughout the station for immediate use on small fires.

5. Fire pump house ventilation system.

6. Fire pump house and fire tank heating system.

7. Standpipes with hose stations in the containment, control building, primary auxiliary building, fuel storage building, waste processing building and equipment vaults.

6.2.5 Facilities and Equipment For Offsite Monitoring

In addition to offsite monitoring equipment and maps at the EOF as described in Section 6.1.3, New Hampshire Yankee conducts an offsite radiological environmental surveillance program. This program has been established for the site and surrounding area to monitor the environment under normal and accident conditions. Details of the requirements of this program are contained in the station Technical Specifications.

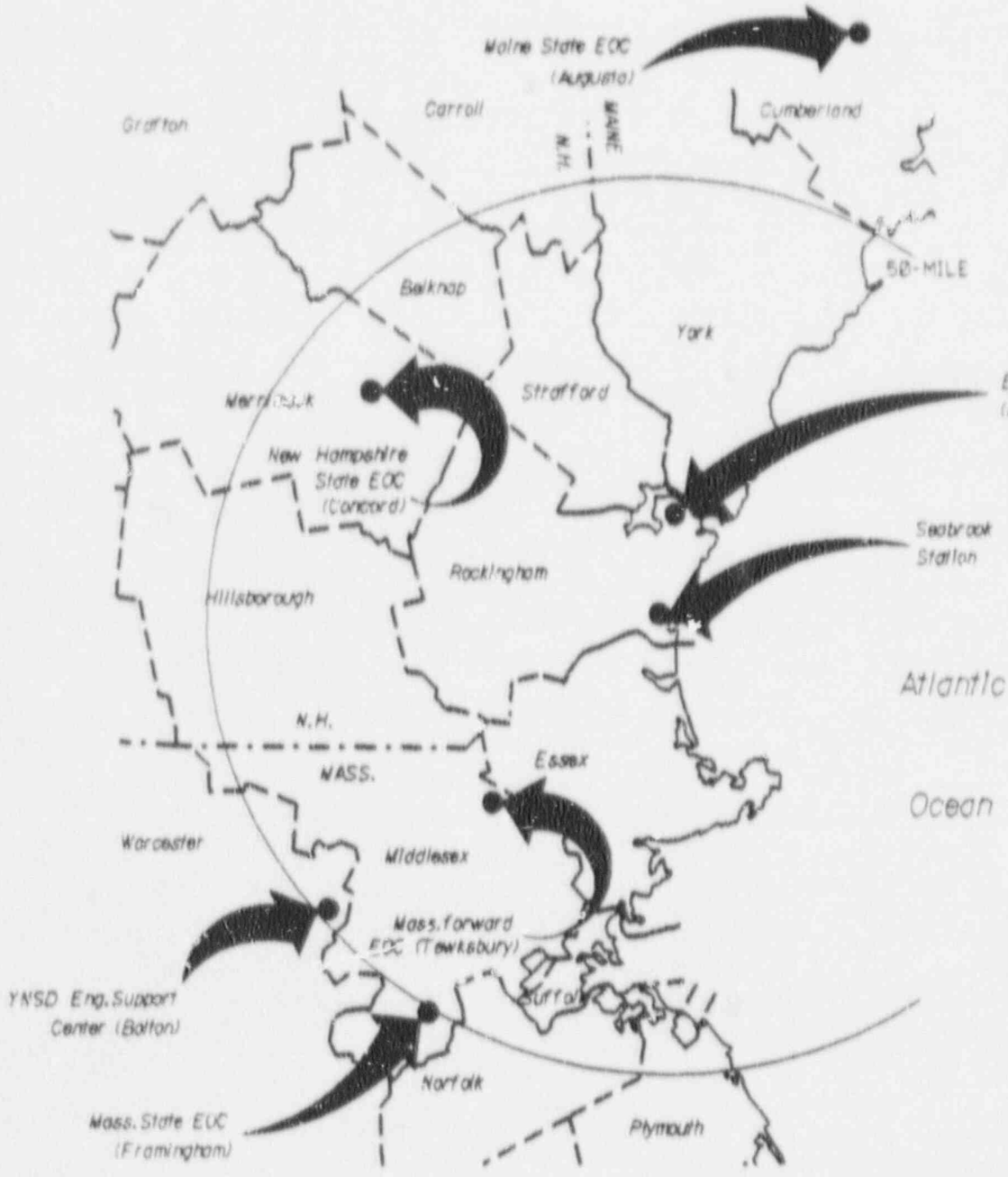
New Hampshire Yankee has full access to the YNSD Mobile Environmental Laboratory and the services of Yankee Environmental Lab in Westboro, Massachusetts, for emergency environmental sample and personnel dosimetry analyses. The mobile equipment includes a four-wheel drive vehicle which can be outfitted with a gamma spectroscopy system with Ge(Li) detector and data processing computer. A high pressure ion chamber for direct gamma measurements can also be included. Also available on a mobile basis are a TLD processor and emergency TLD badge supply. The capabilities of the Westboro environmental lab constitute a full spectrum of analytical radioassay measurements on environmental sample media. A full service TLD processing capability also exists at the lab.

If mobilized, additional offsite monitoring and analysis capability will be provided by Federal agencies in accordance with the Federal Radiological Emergency Response Plan of the Federal government, as discussed in Section 6.1.7. This additional capability would be integrated with the efforts underway in a coordinated manner.

6.3 Computer Aided Design and Drafting

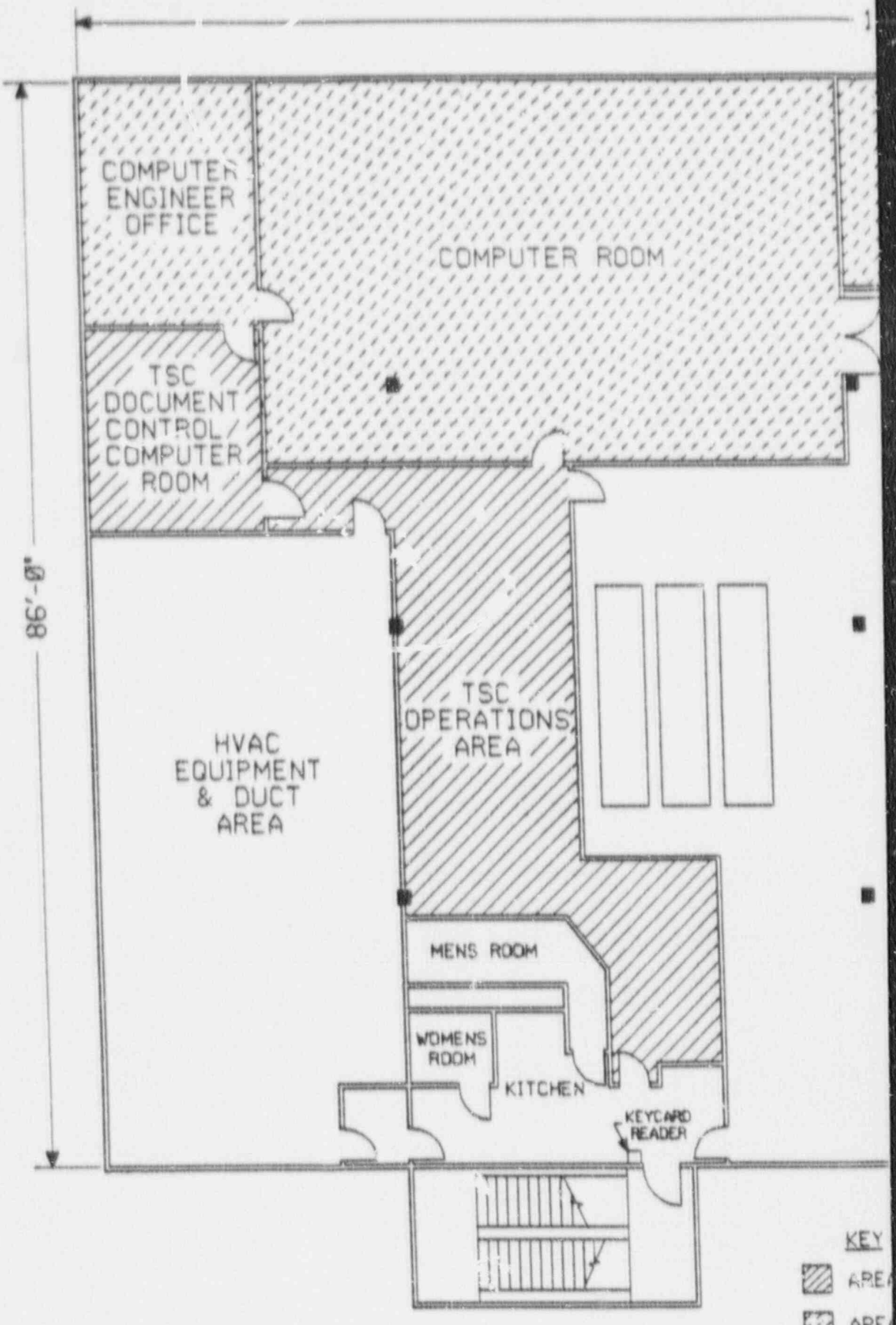
A Computer Aided Design and Drafting (CADD) system is located onsite. This system provides the capability to create or revise graphic materials in a very short time. The plume EPZ base map and additional specialized maps were created and are maintained on this system. Revisions or additions can be made easily ensuring timely information regarding roads or facilities identified on the map. In addition, status boards, organization charts and emergency response facility drawings are maintained on this system.

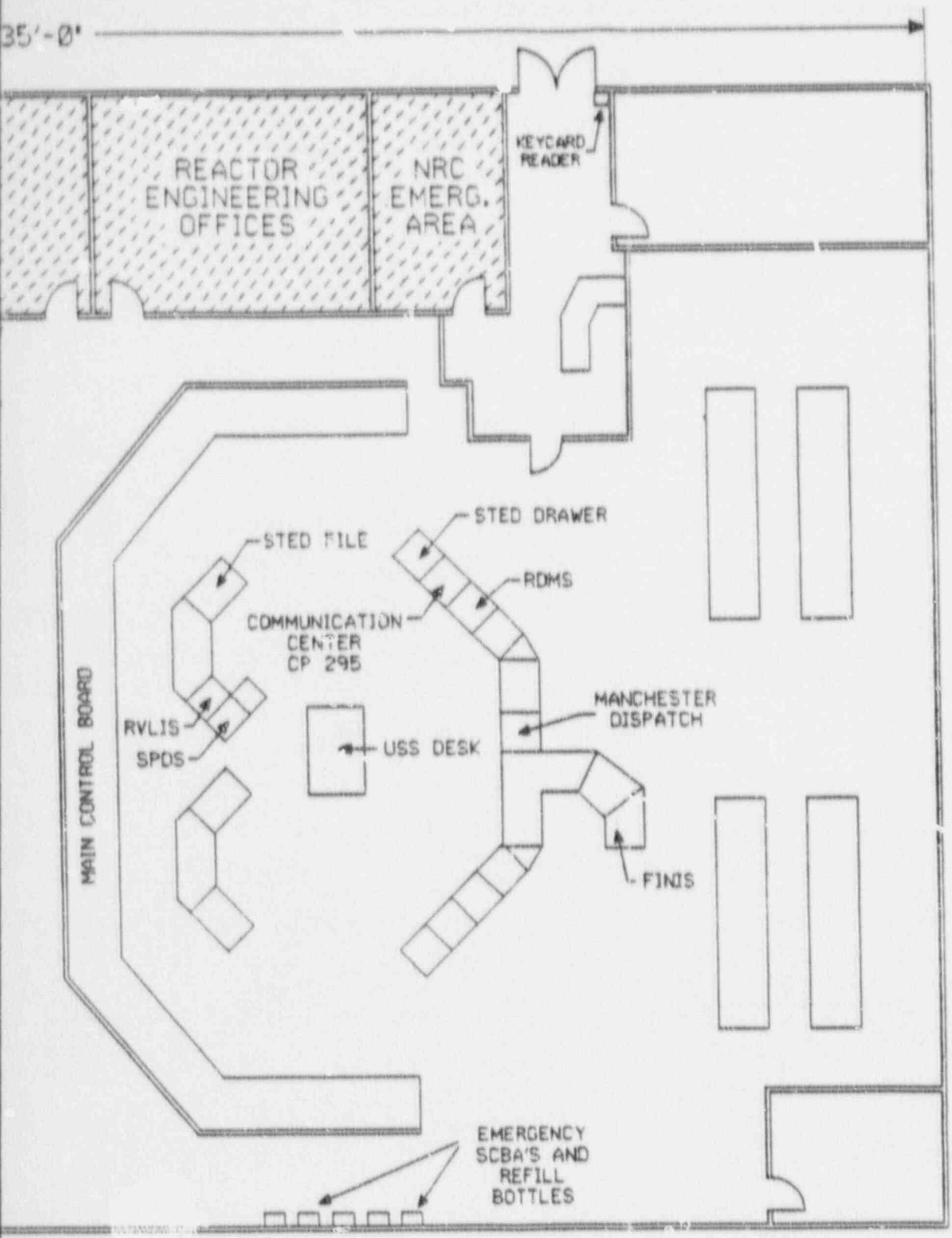
Figures 6.3, 6.4 and 6.5 have been revised and incorporated in Figures 6.2, 6.3, 6.4, 6.5, 6.6 and 6.7 in Amendment 55



Note: Areas designated by County Title

NEW HAMPSHIRE YANKEE SEABROOK STATION RADIOLOGICAL EMERGENCY PLAN	LOCATION OF EMERGENCY OPERATION CENTERS AROUND THE SEABROOK STATION SITE	
	EP01X163.DGN SSREP REV. 4	FIGURE 6.1


COMPUTER ENGINEER OFFICE
COMPUTER ROOM
TSC DOCUMENT CONTROL COMPUTER ROOM
86'-0"
HVAC EQUIPMENT & DUCT AREA
TSC OPERATIONS AREA
MENS ROOM
WOMENS ROOM
KITCHEN
KEYCARD READER
KEY



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A REPRESENTS DEDICATED TSC OPERATION AREA

A REPRESENTS TSC EXPANSION AREA

1: THIS ROOM WILL BE ASSIGNED AS A NRC CONFERENCE AREA.

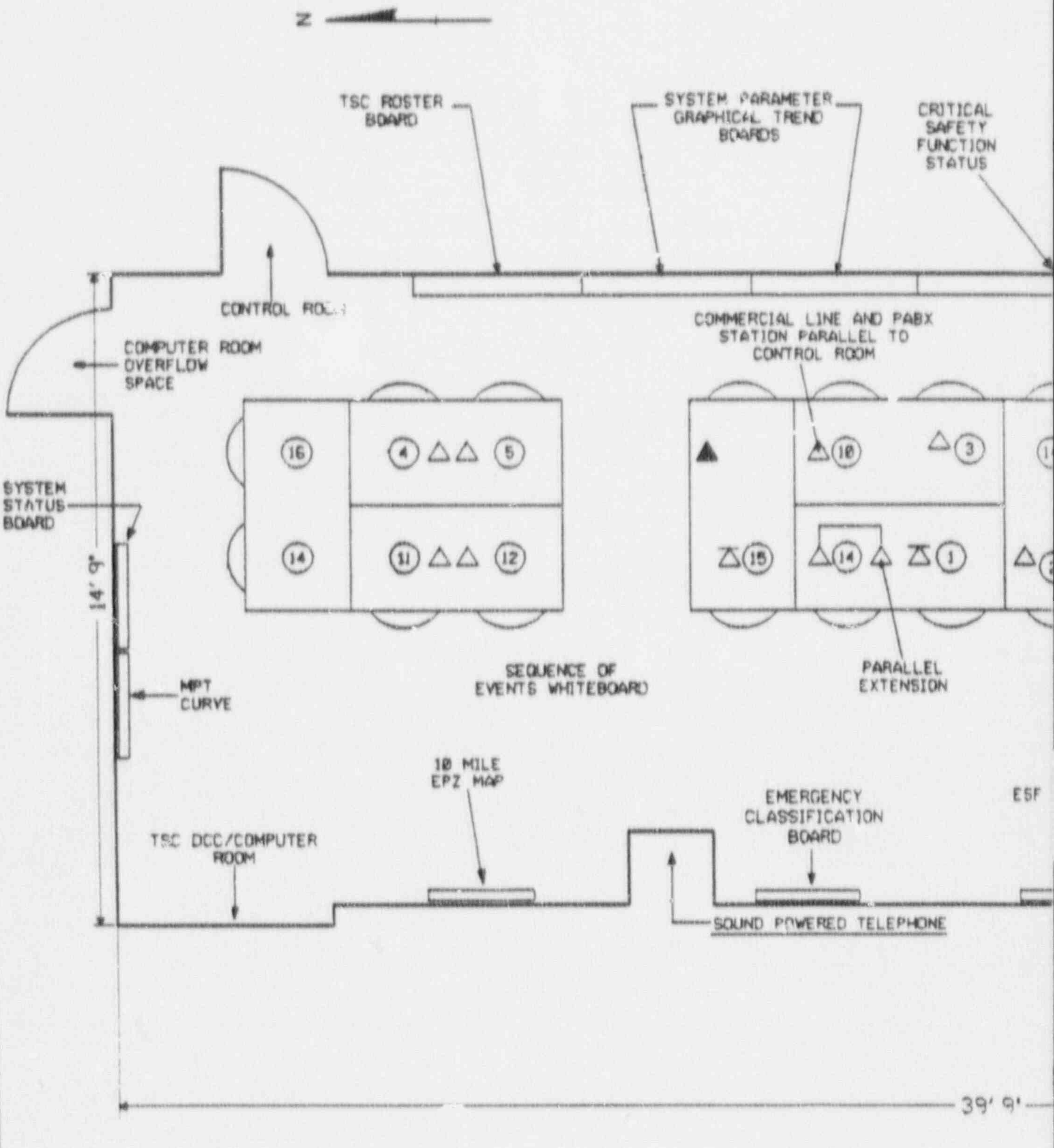
SSREP Rev. 4

NEW HAMPSHIRE YANKEE
SEABROOK STATION
RADIOLOGICAL EMERGENCY PLAN

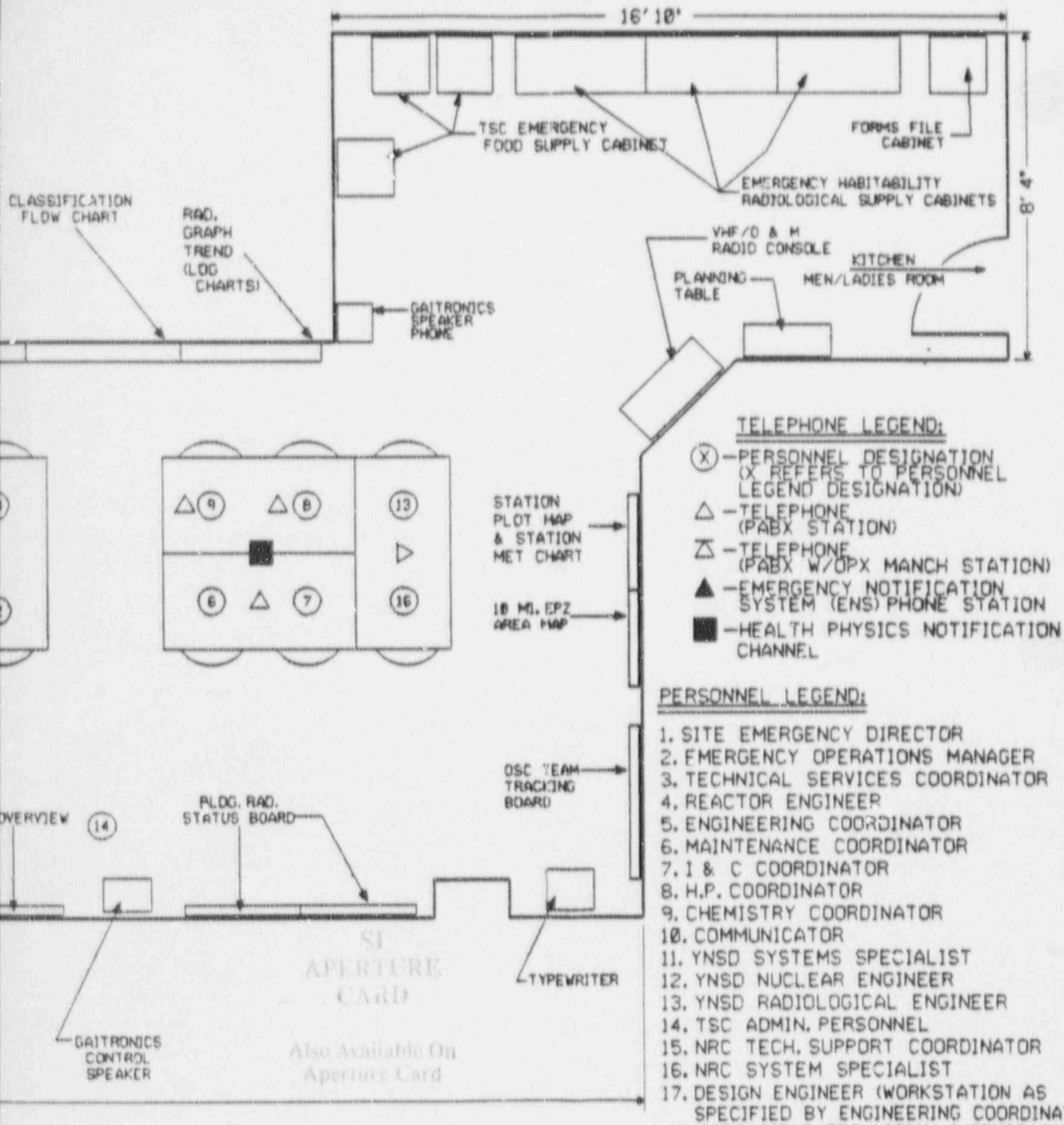
RELATIVE LOCATION OF TECHNICAL SUPPORT WITHIN THE 75' ELEVATION LEVEL OF THE CONTROL BUILDING

FIGURE 6.2

11 X 17



NOTE: LAYOUT IS TYPICAL



TELEPHONE LEGEND:

- (X) – PERSONNEL DESIGNATION (X REFERS TO PERSONNEL LEGEND DESIGNATION)
- △ – TELEPHONE (PABX STATION)
- ⧖ – TELEPHONE (PABX W/OPX MANCH STATION)
- ▲ – EMERGENCY NOTIFICATION SYSTEM (ENS) PHONE STATION
- ■ – HEALTH PHYSICS NOTIFICATION CHANNEL

PERSONNEL LEGEND:

1. SITE EMERGENCY DIRECTOR
2. EMERGENCY OPERATIONS MANAGER
3. TECHNICAL SERVICES COORDINATOR
4. REACTOR ENGINEER
5. ENGINEERING COORDINATOR
6. MAINTENANCE COORDINATOR
7. I & C COORDINATOR
8. H.P. COORDINATOR
9. CHEMISTRY COORDINATOR
10. COMMUNICATOR
11. YNSD SYSTEMS SPECIALIST
12. YNSD NUCLEAR ENGINEER
13. YNSD RADIOLOGICAL ENGINEER
14. TSC ADMIN. PERSONNEL
15. NRC TECH. SUPPORT COORDINATOR
16. NRC SYSTEM SPECIALIST
17. DESIGN ENGINEER (WORKSTATION AS SPECIFIED BY ENGINEERING COORDINATO
18. OPERATIONS TECHNICIAN (WORKSTATION AS SPECIFIED BY EMERGENCY OPERATIONS MANAGER)

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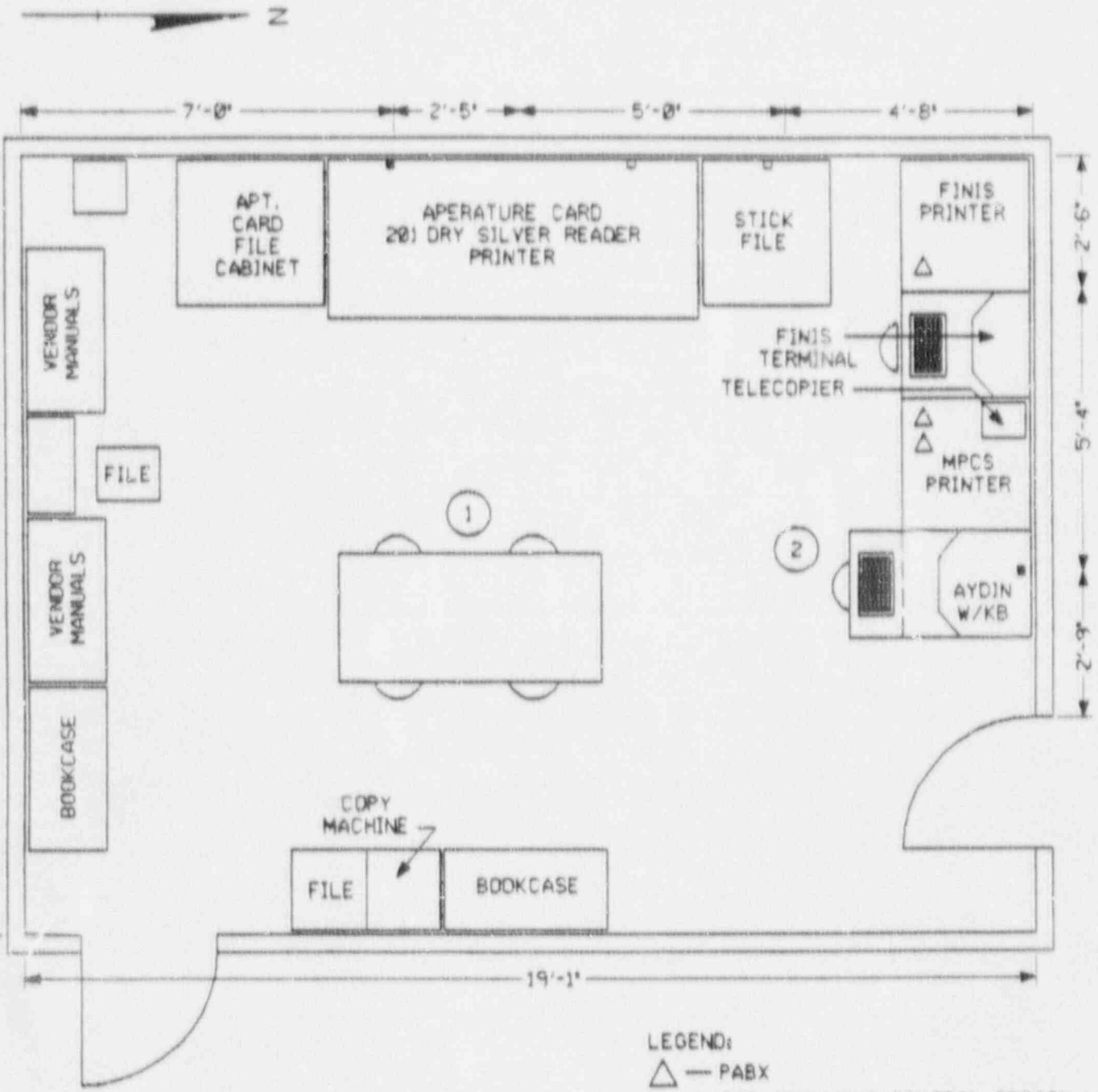
SEABROOK STATION RADIOLOGICAL EMERGENCY PLAN	TECHNICAL SUPPORT CENTER OPERATIONS AREA FLOOR PLA	
	SSREP REV 4	FIGURE 6.3

11 X 17

NHY_EPLAN:EP010005.DGN:1



LEGEND:

△ — PABX

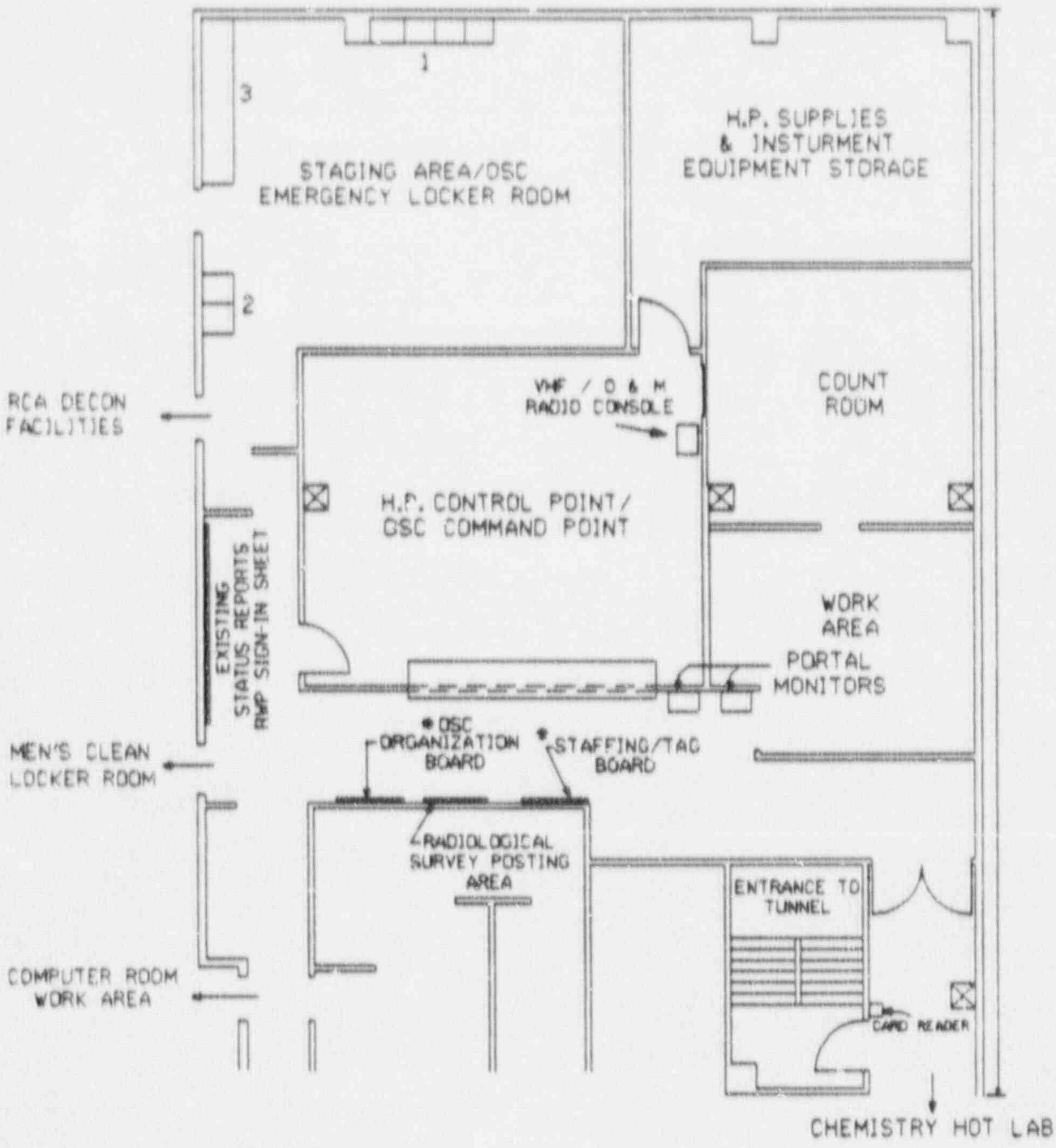
1 — TSC DOCUMENT CONTROL PERSON

2 — TSC COMPUTER ENGINEER

NOTE: LAYOUT IS TYPICAL

NEW HAMPSHIRE YANKEE SEABROOK STATION RADIOLOGICAL EMERGENCY PLAN	TECHNICAL SUPPORT CENTER DOCUMENT CONTROL/COMPUTER AREA FLOOR PLAN
	SSREP Rev. 4 — FIGURE 6.4

8.5 X 11



THE FOLLOWING IS LOCATED AS SHOWN ABOVE:

1. EQUIPMENT LOCKERS (4)
2. OSC TOOL KITS (2)
3. SPARE SCBA BOTTLES (8)

* WILL BE INSTALLED UPON OSC ACTIVATION.

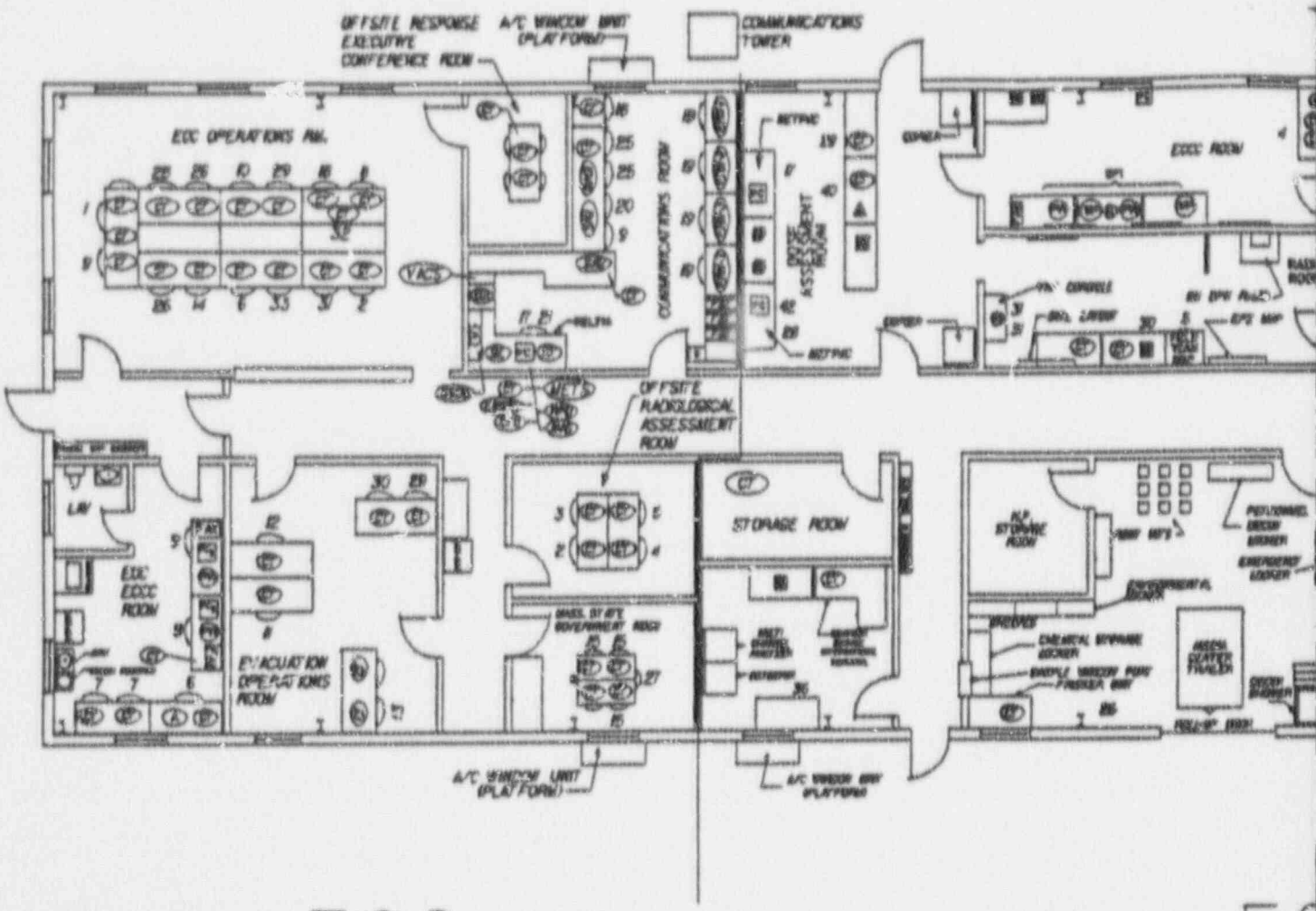
NOTE: LAYOUT IS TYPICAL

SEABROOK STATION RADIOLOGICAL EMERGENCY PLAN	OPERATIONAL SUPPORT CENTER LAYOUT
	SSREP REV 4 FIGURE 6.5

8.5 X 11

FIGU

EMERGENCY OPERATI



EOC

EC

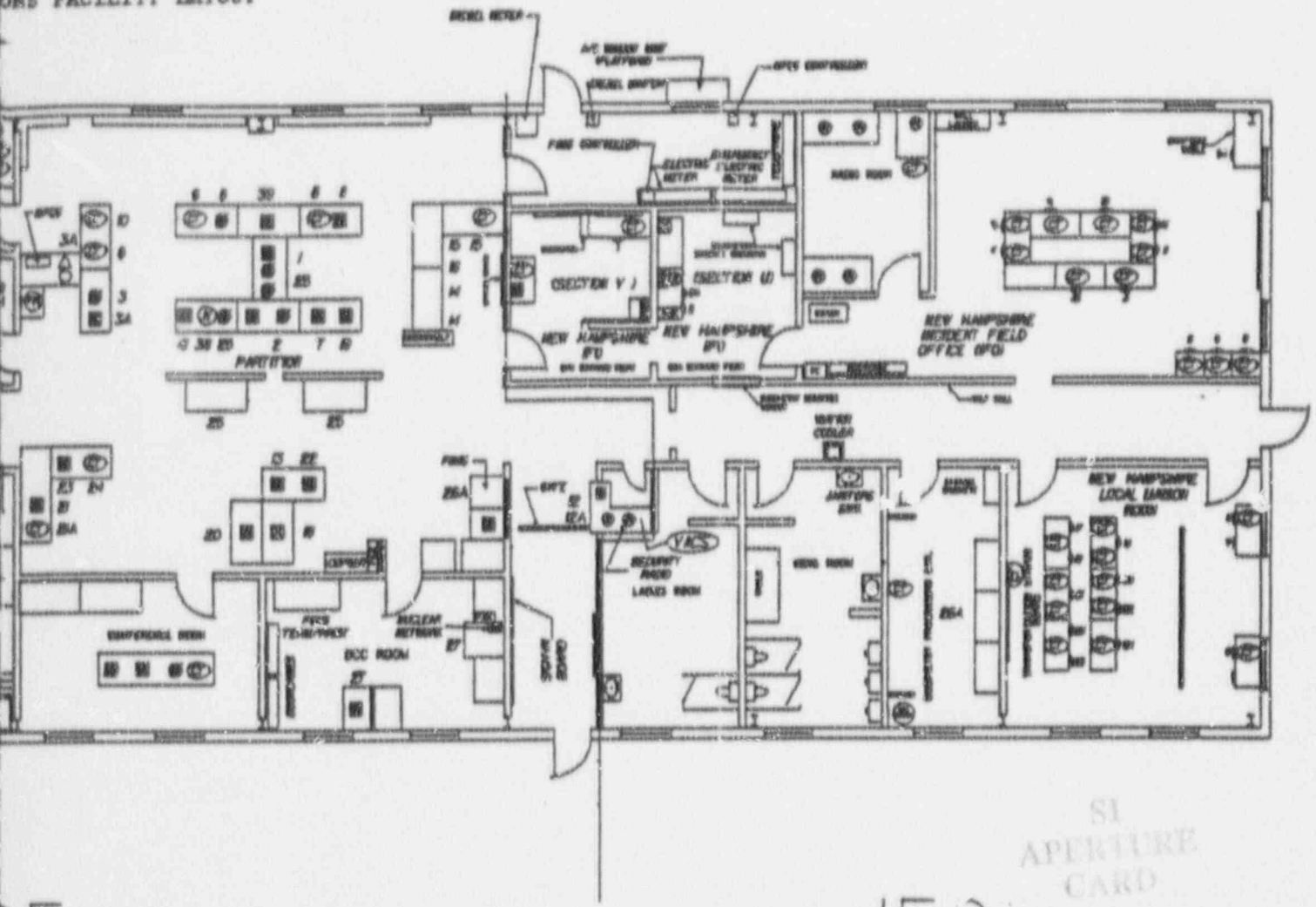
NHY ONO EOC PERSONNEL LEGEND

1 - NHY OFFSITE RESPONSE DIRECTOR
2 - RADIOLOGICAL HEALTH ADVISOR
3 - ACCIDENT ASSESSMENT COORDINATOR
4 - DOSE ASSESSMENT TECHNICIAN
5 - FIELD TEAM DISPATCHER
6 - PUBLIC INFORMATION ADVISOR
7 - PUBLIC INFORMATION STAFF
8 - SUPPORT SERVICES COORDINATOR
9 - ADMINISTRATIVE SUPPORT STAFF
10 - EVACUATION SUPPORT COORDINATOR
11 - SPECIAL POPULATION COORDINATOR
12 - SCHOOL COORDINATOR
13 - BUS COMPANY LIAISON
14 - LOCAL EOC LIAISON COORDINATOR
15 - STATE LIAISONS
16 - FEMA
17 - NHY OFFSITE RESPONSE EOC CONTACT
18 - COMMUNICATIONS COORDINATOR
19 - RADIO OPERATOR
20 - TELEPHONE OPERATOR
21 - NAS COMMUNICATOR
22 - TELEPHONE TECHNICIAN
23 - RADIO REPAIR TECHNICIAN
24 - RESERVED
25 - MASSACHUSETTS GOVERNMENTAL INTERFACE COMMUNICATORS
26 - ASST. OFFSITE RESPONSE DIRECTOR
27 - STATE/LOCAL OFFICIALS
28 - EMERGENCY PREPAREDNESS ADVISOR
29 - RECEPTION CENTER COORDINATOR
30 - ASSISTANT RECEPTION CENTER COORDINATOR
31 - TECHNICAL ADVISOR
32 - AMERICAN RED CROSS COORDINATOR
33 - PUBLIC NOTIFICATION COORDINATOR
34 - NHY RUMOR CONTROL STAFF
35 - SEABROOK STATION RUMOR CONTROL ASSISTANT

ON-SITE EOF EMERGENCY RE

1 - RESPONSE MANAGER
2 - EVF COORDINATOR
3 - TECHNICAL ASSISTANT
3A - TRAINING SUPPORT PERSONNEL
4 - NRC PUBLIC AFFAIRS COORDINATOR
5 - NRC DIRECTOR OF SITE OPERATIONS
6 - NRC PROTECTIVE MEASURES COORDINATOR
7 - NRC EMERGENCY RESPONSE COORDINATOR
8 - NRC STATE LIAISON
9 - NRC REACTOR SAFETY COORDINATOR
10 - NRC OPERATIONS TEAM LEADER
11 - SECURITY COORDINATOR
12 - SECURITY OFFICER
12A - ACCESS AUTHORIZATION OFFICER
13 - INDUSTRY LIAISON
14 - STATE
15 - STATE
16 - FEMA
17 - METPA
18 - EOF
19 - ADMIN
20 - MAT
21 - YNSD
21A - YNSD
22 - YNSD
23 - ME &
24 - WEST
25 - EOF
26 - RAD

RE 6.6
ONS FACILITY LAYOUT



OF

IFO

SPONSE ORGANIZATION PERSONNEL LEGEND

- CO LIAISON
- DPH LIAISON
- LIAISON
- C OPERATOR
- PERATOR
- SSISTANT SERVICE COORDINATOR
- OGISTICS COORDINATOR
- -PLAN ENG
- MD PROTECT ENG
- LD COORDINATOR
- S REPRESENTATIVE
- ASHOUSE REPRESENTATIVE
- DMIN STAFF
- SSISTANT

- 29A- DOSIMETRY ANALYSIS PERSONNEL
- 29 - ECC COORDINATOR
- 29 - DOSE ASSESSMENT SPECIALIST
- 29 - NRC ENV TEAM LEADER
- 30 - OFF SITE MONITORING COORDINATOR
- 31 - COMMUNICATOR
- 32 - EMERGENCY COMMUNICATIONS COORDINATOR
- 33 - ECCC WRITER/COMMUNICATOR
- 34 - TECHNICAL ADVISOR
- 35 - NSD MOBILE E-VAN COORDINATOR
- 36 - SAMPLE ANALYST
- 37 - JOINT OWNER LIAISON
- 38 - CORPORATE SUPPORT MANAGER
- 39 - LICENSING COORDINATOR
- 40 - HEALTH AND SAFETY COORDINATOR
- 41 - TECHNICAL ADVISOR
- 42 - DOSE ASSESSMENT PERSONNEL

EQUIPMENT SYMBOLS

- PARALLEL MEASURED BUSINESS LINE
- SECRETARY ANSWERING UNIT
- NUCLEAR ALERT
- EMERGENCY NOTIFICATION SYSTEM
- OPX OFF SEABROOK
- RADIO
- MEASURED BUSINESS LINE
- NEWINGTON PBX
- AUTO RING DOWN
- HEALTH PHYSICS NETWORK
- WORD PROCESSOR
- FILE CABINET
- PRINTER
- FAX
- DICTAPHONE
- COMMERCIAL TELEPHONE
- EMERGENCY RADIO NETWORK
- PERSONAL COMPUTER
- SIREN STATUS DISPLAY BOARD

NEW HAMPSHIRE IFO PERSONNEL LEGEND

1. DPH REPRESENTATIVE
2. RAD EXPOSURE CLERK
3. DPH REPRESENTATIVE
4. STATE FISH AND GAME
5. NH DEPT OF TRANSPORTATION
6. STATE OF MAINE REPRESENTATIVES
7-8. STATE LIAISON (SPECIAL NEEDS)
9. IFO CONTROLLER
10. ASST. IFO CONTROLLER
11. DRED/CAP CONTROLLER
12. STATE CO
13. NATIONAL GUARD
14. COAST GUARD
15. STATE POLICE
16. PUBLIC WORKS REPRESENTATIVE
17-25. LOCAL LIAISONS

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NEW HAMPSHIRE YANKEE SEABROOK STATION RADIOLOGICAL EMERGENCY PLAN	IRF LAYOUT
	RERP REV. 9 | FIGURE 6.6

7.0 COMMUNICATIONS

Seabrook Station has established an emergency communications network for notifying and coordinating activities with offsite and onsite emergency response organizations which includes 24 hour per day manning of communications links. A summary of the communication network is presented below.

7.1 Nuclear Alert System

The Nuclear Alert System, originating in the Control Room, is a microwave and leased telephone line system used to notify the State Police of New Hampshire and Massachusetts(*) (see Figure 7.1) of any event which has been classified as an emergency in accordance with the emergency classification system. In addition to the Control Room and State Police Agencies, this system has been installed in the two states' Emergency Operation Centers (EOC's)(*), the MA forward EOC in Tewksbury, the NH Rockingham County warning point in Brentwood, the Emergency Operations Facility (EOF), and the Engineering Support Center at the Nuclear Services Division. The system can serve as a back-up communication system for coordination between the locations as shown on Figure 7.2. Back-up to this system is the regular telephone system. Additional back-up to the State Police notification is provided via Station Security net.

Provisions are made for backup power to the Nuclear Alert System.

This system is manned on a 24 hour basis on both ends - the station and the state police dispatching points (*). The system is tested monthly between the states and the station.

7.2 Station Radio System

Figure 7.3 provides a summary of the existing Seabrook Station radio communications network. Each subsystem is described below.

7.2.1 VHF Radio System

This system is utilized as a primary means for two-way communications with the radiological survey teams.

New Hampshire Yankee utilizes a commercially provided VHF low-band paging system. Through activation by commercial telephones, primary response personnel can be paged via digital display pagers. Pagers may be activated collectively by a group call number or individually. This system is serviced by multiple transmitter sites within a twenty-five-mile radius of Seabrook Station.

VHF remote control consoles exist in the Control Room, the Technical Support Center, the Operational Support Center and the Emergency Operations Facility. These locations will control on-site and off-site VHF radio base stations in a single frequency simplex transmission mode of operations. Mobile units are also available in selected station vehicles. Portable units are available at the Emergency Operations Facility.

7.2.2 UHF Operating and Maintenance System

This system is utilized for two-way communications by station Operations and Maintenance department personnel and between the Operational Support Center and dispatched on-site corrective action teams.

The system is dual frequency which normally operates through a common onsite repeater base station for improved transmission capability or directly from the control stations to remote portables should there be a repeater base station failure.

Remote control consoles located at the Control Room, the Operational Support Center and the Technical Support Center operate through a common control station located in the Radio Room.

7.2.3 Security System

This system is utilized for two-way communications between the Central Alarm Station (CAS), the Secondary Alarm Station (SAS) and the Guard Island and security personnel for base to portable/mobile and for portable to portable communications. Control stations exist at the above locations.

This system is dual frequency which normally operates through a common onsite repeater base station for improved transmission capability. If necessary, direct control station to remote unit communication is available.

7.3 Telephone System

The Telephone System is used as a means of communications for notification and coordination with onsite and offsite organizations/teams. The telephone system is interconnected with the public address system and the microwave communication systems, as described in the sections below. If power is lost temporarily to the station PABX, certain extensions located in the Control Room, TSC and Guard Island will be automatically connected to the public telephone exchange network directly. Through microwave circuitry, the Control Room, TSC and OSC can directly access Manchester PABX extensions to provide additional communications in the event of a temporary loss of power. Restoration of the PABX would be restored promptly through activation of a dedicated diesel generator.

7.4 Station Paging System

A versatile paging system is used for alerting station personnel of emergencies. A central control panel is located in the Control Room. The primary means of accessing the paging system is through the station telephone system. The secondary means of access is through dedicated paging system handsets which are located throughout the station including the Control Room, Technical Support Center, Operational Support Center, and Security Guard House.

7.4 STATION PAGING SYSTEM (Continued)

The system consists of four channels, and is utilized as a page/talk system under normal operations. During emergency situations, the system can be used for (1) alerting station personnel; (2) coordinating activities between onsite response teams and the Technical Support Center; (3) calling missing persons that may be in the station; (4) coordinating activities between Control Room and Technical Support Center; and (5) communicating between certain station centers as shown in Figure 7.3.

A multi-tone generator is associated with the paging system. This generator produces the various alarms designated to alert station personnel of emergency situations. Alerting is ensured by the location of the page system speakers. In high background noise areas, beacon lights or similar devices supplement the speakers. The alerting signal is manually initiated from the Control Room by keying the appropriate alarm station. The evacuation alarm takes priority over all other transmissions.

Power to the paging system is provided by uninterruptible power supplies, independent from the power supply for the telephone system. The paging system is used daily and the alerting alarm is tested weekly.

7.5 SOUND-POWERED TELEPHONE SYSTEM

The station has been equipped with a multiple loop sound-powered telephone system. Jack locations have been provided near many major pieces of equipment and on control panels, instrument racks, motor control centers, unit sub-stations and switchgear. Switching panels are provided in the Control Room to enable the loops to be connected together. A supply of sound powered telephone handsets and cables are available in the Control Room emergency supply room. Since no external power is necessary for operation, the system is available during an emergency; however, its greatest application would occur during a recovery phase.

7.6 NRC DEDICATED COMMUNICATIONS CHANNELS

A dedicated telephone (ENS red phone) is installed between the Nuclear Regulatory Commission Headquarters Operations Center in Bethesda, MD and the Control Room with extensions in the Technical Support Center, Emergency Operations Facility and the NRC Resident Inspector's office. This is an automatic ringing system designed to contact the NRC Headquarters Operations Center in an emergency condition. The system has a 24-hour manning capability at both organizations.

Designated commercial telephones are installed in the Emergency Operations Facility and the Technical Support Center for use as the Health Physics Network. These telephones will be used for the sole purpose of reporting and coordinating radiological and environmental matters to the NRC. Additional commercial line capability has been designated in each response center for NRC regional response team members.

7.7 Microwave Communication System

Two microwave transmitter-receiver units in a loop system arrangement for high system reliability are installed at Seabrook Station. The system provides both voice and data channels. The voice channels provide direct communication between the Control Room and system dispatcher and for contacting the Nuclear Services Division in Bolton, Massachusetts.

7.8 Station Dedicated Communication Channels

Voice auto-ringdown circuits exist between the Emergency Operations Facility and the Media Center for the purpose of coordinating accurate accounts of emergency information. To maintain a rumor control network for the general public, 800 service numbers are available at the Media Center.

SEABROOK STATION
RADIOLOGICAL EMERGENCY PLAN

EMERGENCY NOTIFICATION

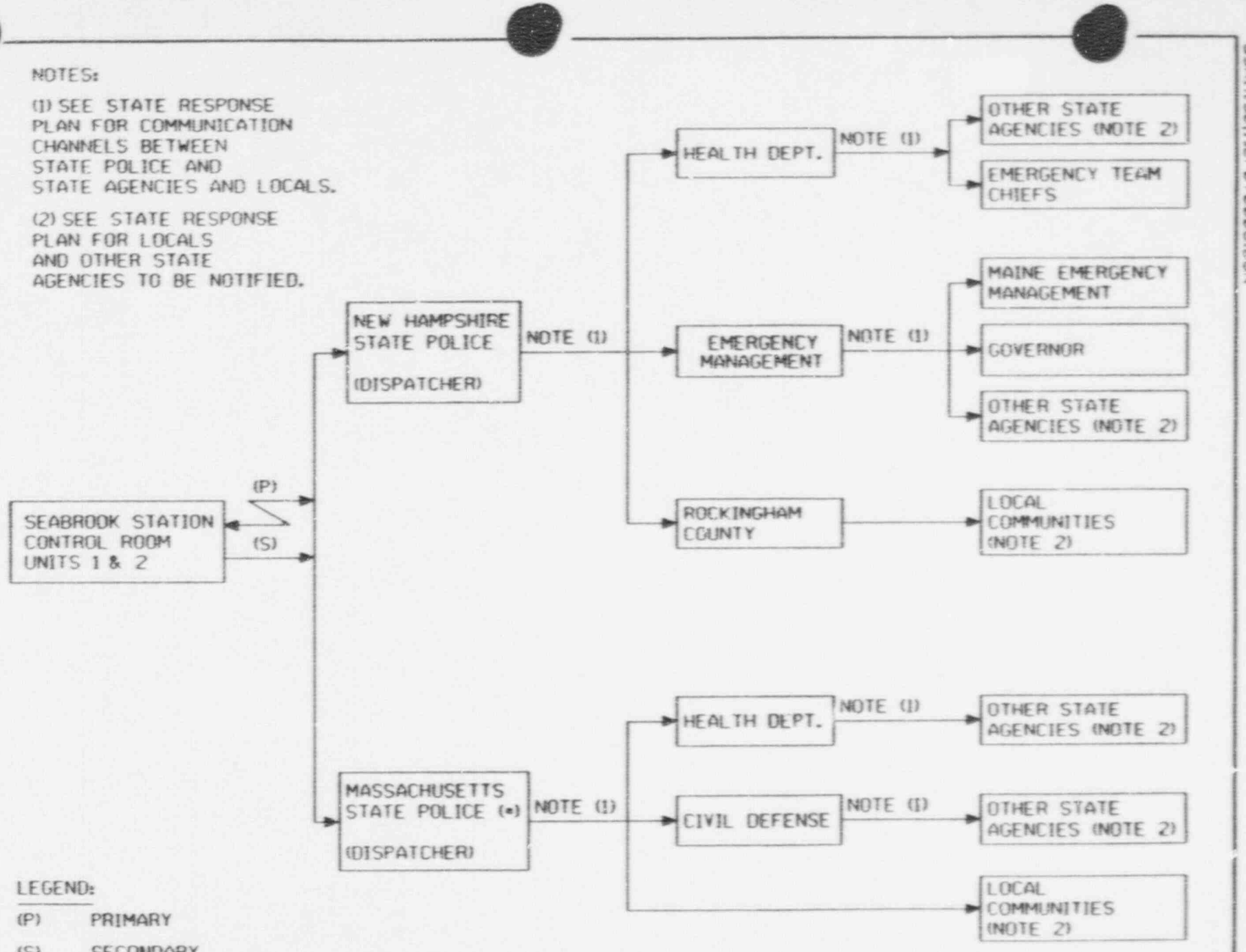
SSREP Rev. 4

FIGURE 7.1

NOTES:

(1) SEE STATE RESPONSE PLAN FOR COMMUNICATION CHANNELS BETWEEN STATE POLICE AND STATE AGENCIES AND LOCALS.

(2) SEE STATE RESPONSE PLAN FOR LOCALS AND OTHER STATE AGENCIES TO BE NOTIFIED.



LEGEND:

(P) PRIMARY

(S) SECONDARY

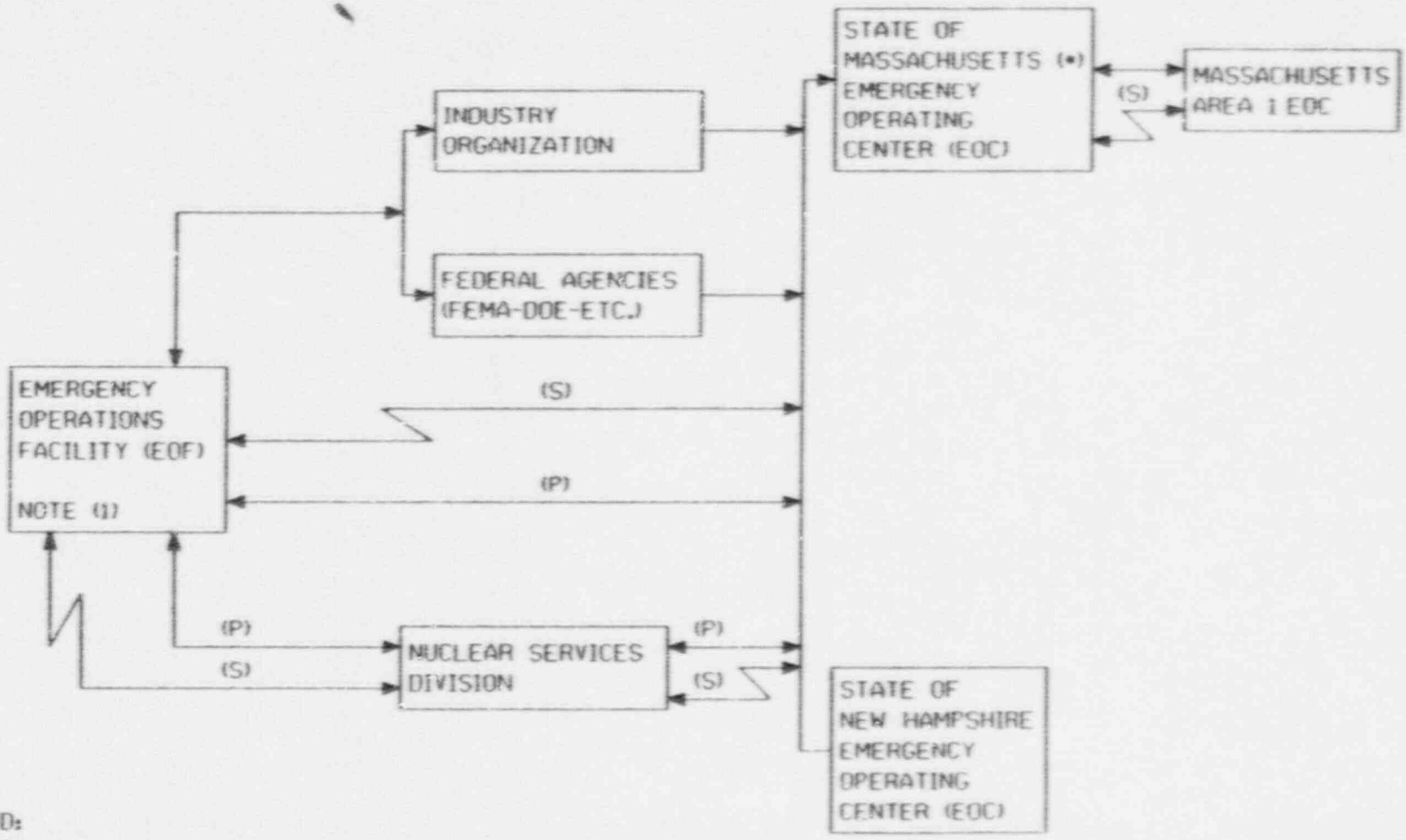
TELEPHONE

NUCLEAR ALERT SYSTEM

DSA1\50\JEP07000B.DGN

NOTE:

(1) SEE STATE RESPONSE PLANS FOR COMMUNICATION CHANNELS BETWEEN STATE EOC'S AND FORWARDEOC'S.



LEGEND:

(P) PRIMARY

(S) SECONDARY

——— TELEPHONE

NUCLEAR ALERT SYSTEM

SEABROOK STATION
RADIOLOGICAL EMERGENCY PLAN

COORDINATION CHANNELS WITH STATES

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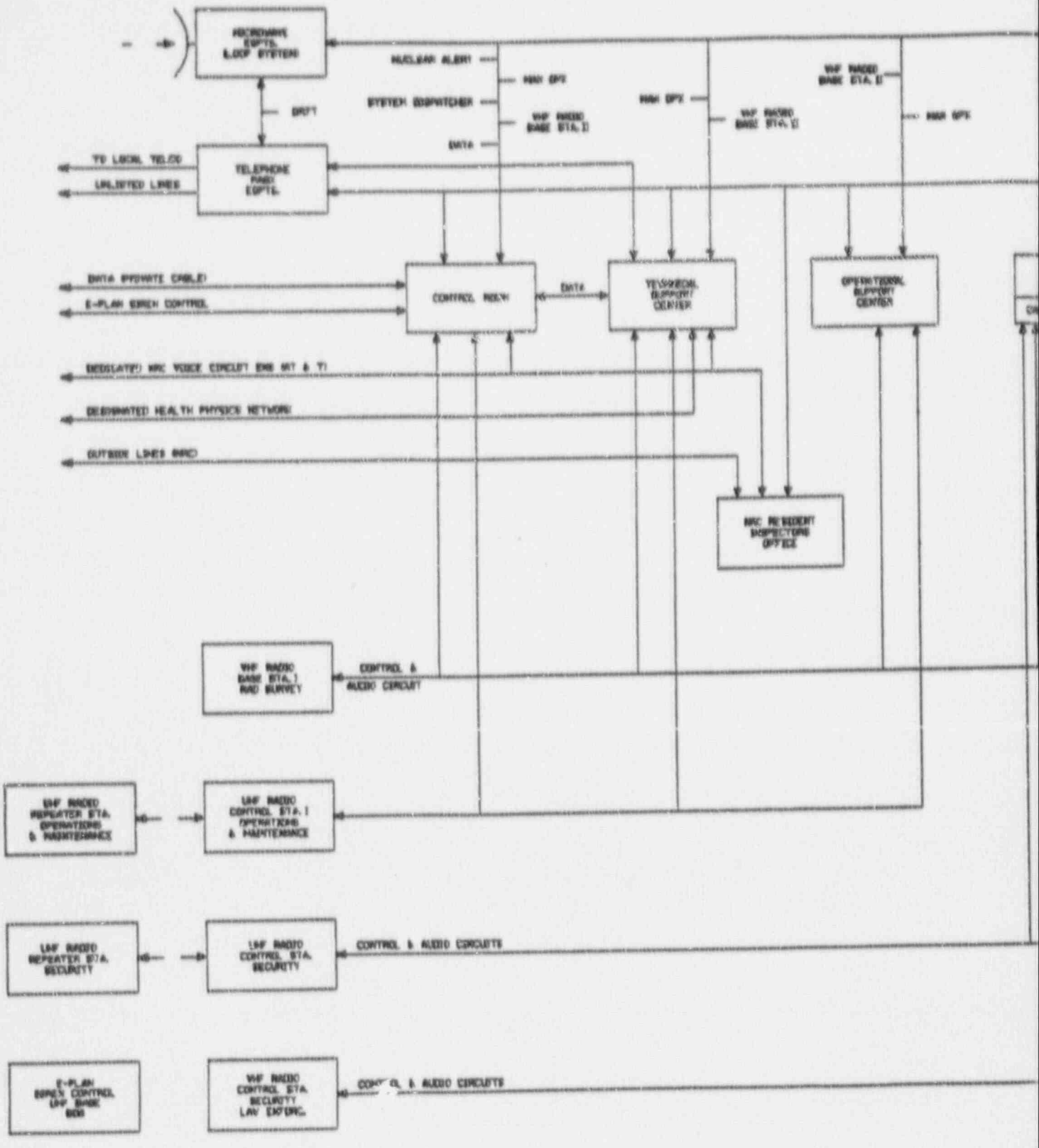
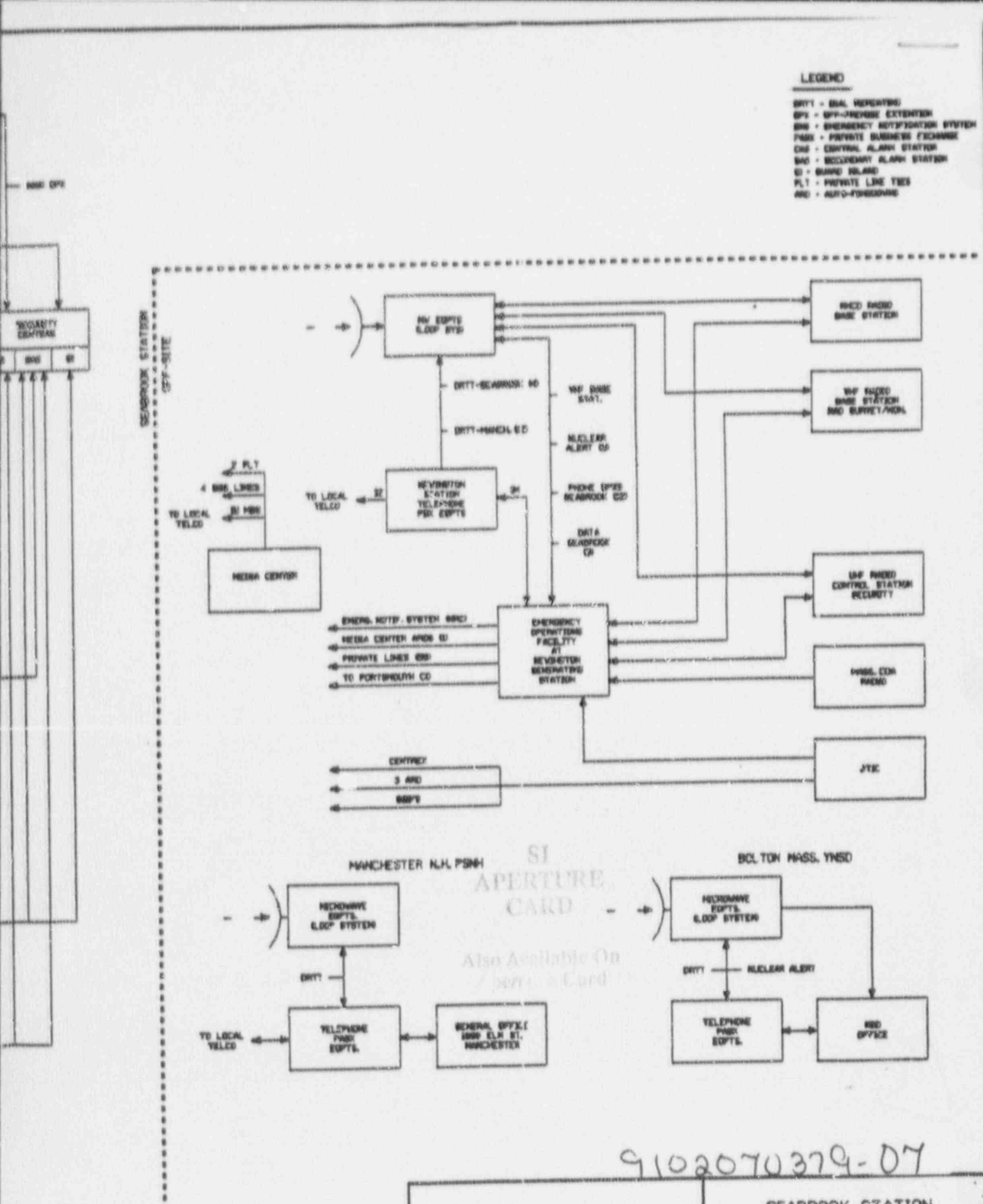
FIGURE 7.2

NHY EPLAN\EP07\0220.DGN


NUCLEAR ALERT
SYSTEM DISPATCHER
DATA
DRCT
TO LOCAL TELCO
UNLISTED LINES
TELEPHONE RADIO EQPTS.
VHF RADIO BASE STA. 2
VHF RADIO BASE STA. 3
DATA (PRIVATE CABLE)
E-PLAN SCREEN CONTROL
CONTROL ROOM
DATA
OPERATIONAL SUPPORT CENTER
DEDICATED NRC VOICE CIRCUIT EMB MT & TI
DESIGNATED HEALTH PHYSICS NETWORK
OUTSIDE LINES (NRC)
NRC RESIDENT INSPECTORS OFFICE
VHF RADIO BASE STA. 1 RAD SURVEY
CONTROL & AUDIO CIRCUIT
UHF RADIO REPEATER STA. OPERATIONS & MAINTENANCE
UHF RADIO CONTROL STA. 1 OPERATIONS & MAINTENANCE
UHF RADIO REPEATER STA. SECURITY
UHF RADIO CONTROL STA. SECURITY
CONTROL & AUDIO CIRCUITS
E-PLAN SCREEN CONTROL UHF BASE RADIO
VHF RADIO CONTROL STA. SECURITY LAW ENFORC.



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SEABROOK STATION RADIOLOGICAL EMERGENCY PLAN	SEABROOK STATION EMERGENCY COMMUNICATIONS NETWORK
	SSREP REV 5 | FIGURE 7.3

8.0 ORGANIZATION

8.1 Introduction

An Emergency Response Organization (ERO) has been established to respond to radiological emergencies at Seabrook Station. This organization includes on-shift personnel, additional station personnel, corporate personnel, Yankee Nuclear Services Division (YNSD) personnel, local services support, and private organization support.

The structure of the emergency response organization may vary depending on the time of day, the severity of the incident, and the emergency classification. In the initial phases of an accident an On-Shift ERO (See Figure 8.1) consisting of personnel from the normal station organization will be responsible for event classification and completion of primary emergency actions. In the following phases of emergency response, the Augmented ERO for either the Unusual Event (See Figure 8.2) or Alert, Site Area Emergency, and General Emergency (See Figure 8.3) will be activated with the capability of continuous, 24-hour-per-day operations for a protracted period. Figure 8.15 provides a comparison of the NUREG-0654 Table B-1 emergency response staffing requirements with the New Hampshire Yankee on-shift ERO.

8.2 Normal Station Organization

The normal station organization will vary depending on the time of day and mode of operation. During backshifts and weekends, the operations crew consists of: one Shift Superintendent, one Unit Shift Supervisor, two Control Room Operators, two Auxiliary Operators, and five Fire Brigade personnel. During the day shift (normally between 7:00 a.m. and 4:30 p.m.) additional administrative and management personnel are present onsite. During any shift, the normal station organization will support the On-Shift ERO. For Modes 5 and 6 only, the Shift Superintendent and one of the Auxiliary Operators are not required.

8.3 Emergency Response Organization

The structure for the ERO which would be activated to respond to an incident at Seabrook Station is provided in Figures 8.1 through 8.11. Appendix A describes the positions listed on these figures along with activation level, response location and responsibilities. Appendix A also correlates the normal station title of assigned personnel to the emergency title for each position.

8.3.1 On-Shift Emergency Response Organization

The Unit Shift Supervisor has the responsibility to recognize potential emergency conditions and notify the Shift Superintendent. The Shift Superintendent has the authority and responsibility to classify the observed conditions in accordance with the emergency classification system. The classification of an emergency initiates the activation of the station On-Shift ERO (See Figure 8.1).

Once the ERO is activated, the Shift Superintendent assumes the position of Short Term Emergency Director (STED). The Unit Shift Supervisor assumes the duties of the STED until the Shift Superintendent responds to the Control Room.

Additional on-shift personnel assume emergency duties in the On-Shift Emergency Response Organization shown on Figure 8.1. Actions include assistance in initial emergency classification or reclassification, notification of State (*) and NRC personnel, recommendation of offsite protective actions, and operational activities to achieve and maintain station safety.

8.3.2 Augmented Emergency Response Organization

Following classification of an emergency, the On-Shift ERO will evolve to an Augmented ERO. The composition of the Augmented ERO depends upon the emergency classification level declared.

8.3.2.1 Unusual Event Augmented Emergency Response Organization

During an Unusual Event, a limited number of essential ERO members, shown in Figure 8.2, report to their assigned Emergency Response Facility (ERF) or are notified to assist the on-shift staff with the emergency response. These individuals are referred to as Primary Responders. The STED will transfer overall management responsibility to the arriving Site Emergency Director. As part of this transfer, the Site Emergency Director will be fully briefed by the STED on the status of the station, accident mitigation and corrective actions taken, offsite notifications and the status of the ERO.

Upon assuming command, the Site Emergency Director will notify appropriate ERO members of the transfer. Independent of the arrival of the Site Emergency Director, the Unusual Event Augmented ERO will carry out its responsibilities as outlined in the appropriate position descriptions of Appendix A. These actions are directed towards termination of emergency conditions, assessment of onsite radiological conditions, technical support, coordination of station activities with offsite authorities [State (*) and Federal], and provision of medical and other requested assistance.

If the condition(s) that caused the Unusual Event completely clears prior to the Control Room notifying the Primary Responders, the STED may determine which, if any, of the Primary Responders need to report to the site. If not, these individuals will complete their assigned tasks on the following business day.

8.3.2.2 Alert, Site Area Emergency and General Emergency Augmented Emergency Response Organization

Upon declaration of an Alert, Site Area Emergency, or General Emergency, there is a full augmentation of the On-Shift ERO. The fully augmented Alert, Site Area Emergency, General Emergency Augmented Emergency Response Organizations are shown on Figures 8.3 through 8.11. The augmented emergency response organizations will carry out the responsibilities listed for the appropriate positions in Appendix A.

The Site Emergency Director will transfer command of the overall emergency response to the Response Manager. As part of this transfer, the Site Emergency Director will fully brief the Response Manager on the status of the station, accident mitigation, corrective actions taken, status of the ERO, and the protective action recommendations, if any, provided to offsite authorities. The Site Emergency Director will continue to direct all onsite response activities.

The Response Manager position will be assumed by a member of New Hampshire Yankee senior management. This person has the authority, management ability and technical background to organize and manage response and recovery operations. The Response Manager is responsible for providing overall direction and guidance to the Site Emergency Director in the effort to return the station to a safe condition.

For Alert, Site Area Emergency, and General Emergency declarations, the Response Manager will report to the EOF and this position will remain in effect until emergency conditions and subsequent recovery activities have been terminated.

The remaining station ERO staff will report to locations identified in Appendix A and shown in Figures 8.3 through 8.11. This may involve the relocation of some ERO staff from Unusual Event response locations to Alert, Site Area Emergency, and General Emergency response locations.

8.4 Emergency Public Information Organization

The Emergency Public Information Organization is responsible for providing factual and timely information to the public regarding emergency conditions at Seabrook Station. The Emergency Communications Coordinator is responsible for transferring news releases and emergency status reports to the Emergency News Manager. The Emergency News Manager directs the Media Center organization shown in Figure 8.9.

8.5 New Hampshire Yankee Corporate Support

NHY Corporate Support is integrated into specific ERO positions. These positions respond as part of an Augmented ERO. Position descriptions are contained in Appendix A.

8.6 Yankee Nuclear Services Division Engineering Support Center

Upon notification of an emergency at Seabrook Station requiring its assistance, the Engineering Support Center Director will organize an Engineering Support Center (ESC) to enable the use of the expertise and resources of YNSD to support the emergency response and recovery. This organization is presented in Figure 8.11.

Positions and/or functions of this organization are as follows:

8.6.1 Engineering Support Center Director

An officer of YNSD assumes overall responsibility for providing the Response Manager with the expertise and resources available within YNSD. The functional responsibilities include but are not limited to the following:

1) Coordinate YNSD emergency assistance with the station emergency response as requested by the Response Manager;

2) Provide support for planning and execution of reentry and recovery operations;

3) Coordinate the identification and/or review of station modifications needed for recovery; and

4) Supervise the Engineering Support Center.

8.6.2 Administrative Asristant

The Administrative Assistant is responsible for coordinating the acquisition of manpower and equipment from within the YNSD to serve the needs of the YNSD ERO. The functional responsibilities include:

1) Assist the Engineering Support Center organization;

2) Assist the station and New Hampshire Yankee Emergency Response Organizations in purchasing materials and arranging financial and legal assistance; and

3) Provide general office support such as telephone operators, typing and reproduction.

8.6.3 Nuclear Engineering

The Nuclear Engineering staff analyzes station core parameters and offers advice to the station ERO concerning corrective measures required for the protection of the core. This group's functional responsibilities include:

1) Review core parameters to determine current conditions of the core;

2) Review proposed station operations with respect to the effect on core conditions; and

3) Develop recommendations for station operations that would yield safer core conditions.

8.6.4 Computer Services

The Computer Services staff is responsible for the accumulation, retention, and retrieval of information needed by the YNSD ERO. Its responsibility includes coordinating communications services within the Engineering Support Center.

8.6.5 Emergency Preparedness

The Emergency Preparedness staff provides liaison and assistance with State (*) and Federal emergency response organizations regarding YNSD response efforts. It also implements appropriate portions of the Yankee Mutual Assistance Agreement when requested.

8.6.6 Operational Programs and Licensing

The Operational Programs Department staff is responsible for analyzing problems associated with the operation of station systems and equipment and provide recovery recommendations.

The Electrical Systems staff analyzes accident effects on the station electrical supply systems and assists recovery operations with recommendations for modifications or additions to the station electrical supply system.

The Mechanical Engineering staff analyzes accident effects on station structures and piping, and assists recovery operations with recommendations for modifications or additions to the station.

The Instrumentation and Control staff analyzes accident effects on station instrumentation and control systems, and assists recovery operations with recommendations for modifications or additions to these systems.

8.6.7 Environmental Engineering

The Environmental Engineering staff is responsible for assisting in the coordination of the environmental monitoring program and providing interpretation of the data, as well as assistance in the calculation of doses based on projected releases. This group provides the following services in two general radiological areas of emergency response and associated station recovery:

1) Station radiological concerns in connection with personnel radiation protection; and

2) Environmental radiological concerns associated with offsite emergency measures for the public.

8.7 Recovery Organization

The emergency measures presented in this plan are actions designed to mitigate the consequences of the accident in a manner that will afford maximum protection to the public. The emergency response organization described in Section 8.3 provides the foundation for the recovery organization. This organization provides the necessary capabilities during the recovery phase to restore normal station activity.

The emergency condition shall be deemed to have terminated by agreement between the authorities of Massachusetts (*) and New Hampshire, Federal authorities, and the Response Manager. Until such a declaration, the Site Emergency Director and the entire ERO will concentrate their efforts on returning the station to a safe and stable condition. After the emergency has been terminated, they then direct their efforts to restoring the station to a condition such that normal operations can be resumed.

8.7.1 Establishment and Management of the Recovery Organization

The flexibility of a recovery organization is essential. Planning for the recovery mode of operations involves development of general principles and an organizational capability that can be adapted to any accident situation.

Once the response phase of the emergency is terminated, the Response Manager assumes command of recovery efforts. A recovery organization will be formed consisting of members of the ERO, YNSD and, if necessary, personnel from regional utilities, nuclear industry groups and consultants/vendors.

The Response Manager is directly supported by the staff at the EOF. Expertise in the disciplines of Engineering, Operational Support and Quality Assurance will be available during the recovery phase. Additionally, the New Hampshire Yankee Training Center staff will be available to evaluate and test proposed operating sequences and recovery actions using the Training Center simulator and technical resources.

8.8 Extensions of New Hampshire Yankee Emergency Response Organization

8.8.1 Local Services

Arrangements have been made for the extension of organizational capabilities for handling emergencies. These include:

1) Transportation of injured personnel using the Town of Seabrook Fire Department ambulance service;

2) Treatment of radioactively contaminated and injured personnel at Exeter Hospital and of over-exposed personnel at Brigham and Women's Hospital in Boston, MA; and

3) Fire support services by the Town of Seabrook Fire Department and, if necessary, mutual aid.

Letters of agreement with participating local service organizations are maintained in Appendix D to this plan.

8.8.2 Federal Government Support

All the resources of federal agencies appropriate to the emergency condition would be made available in accordance with the Federal Radiological Emergency Response Plan (FRERP). This plan and the resources behind it are activated through station notification of the NRC. Many resources would be available, including offsite radiological assessment, under the leadership of the Department of Energy. This effort would involve manpower and equipment for extensive plume measurement, including aerial monitoring and tracking, and sampling and analysis of ingestion pathway media. The Short Term Emergency Director, Site Emergency Director and Response Manager have the authority to request Federal assistance.

8.8.3 Private Organization Support

Depending upon the emergency conditions and the response needs, the New Hampshire Yankee ERO can be augmented by manpower and equipment support from the remainder of the Yankee-related organization. This includes, in addition to the support resources of the YNSD Engineering Organization described in Section 8.6, response assistance from other Yankee plants (Yankee Rowe, Vermont Yankee and Maine Yankee). Yankee-related support capabilities are specified in the Yankee Mutual Assistance Agreement, a copy of which is included in Appendix B.

Should response support beyond this level be required, additional support from other nuclear industry organizations can be requested through the Institute of Nuclear Power Operations (INPO). The Response Manager and/or the Site Emergency Director will be responsible for the decision to request industry response through INPO. All industry organizations reporting to the station will be required to report to station emergency management who will specify the authorities, responsibilities and limits on the actions of these organizations. All response organizations will be required to adhere to all existing station procedures while completing their activities.

8.9 Coordination with State Government Authorities

Because of the location of Seabrook Station, the planning and/or action responsibilities at the state level involves two states, New Hampshire and Massachusetts (*).

Both New Hampshire and Massachusetts (*), as well as the localities within the plume EPZ, have prepared plans for a response to an emergency at Seabrook Station. In addition, the State of Maine, which lies within the ingestion EPZ has the capability to carry out appropriate response actions. These plans describe their respective responsibilities, authorities, capabilities, and emergency functions.

The Seabrook Station Radiological Emergency Plan has been developed to provide for a coordinated response with the plans of offsite governmental agencies.

Section 7.0 of this plan describes the communications network that has been developed between New Hampshire Yankee and these states as a means of promptly notifying appropriate authorities of station emergency conditions. The Short Term Emergency Director notifies New Hampshire and Massachusetts (*) State Police using the dedicated microwave Nuclear Alert System (NAS). This notification keys mobilization of various levels of emergency response dependent on the emergency classification.

Dependent upon the emergency classification, both New Hampshire and Massachusetts (*) would dispatch radiological health and emergency management representatives to the EOF for first-hand emergency information.

The EOF Coordinator coordinates radiological accident information and its meaning with both State (*) and Federal emergency response organizations. Government requests for non-radiological information and specifically those regarding emergency management issues will be addressed by the Response Manager. Based on accident assessment, protective measures will be recommended by NHY and implemented by each state (*) according to actions prescribed by each state's Radiological Emergency Response Plan (*).

Figures 8.13 and 8.14 provide a summary of the radiological emergency responsibilities and functions assigned to various Massachusetts and New Hampshire state authorities. The station maintains an updated copy of each state's (*) Emergency Plan.

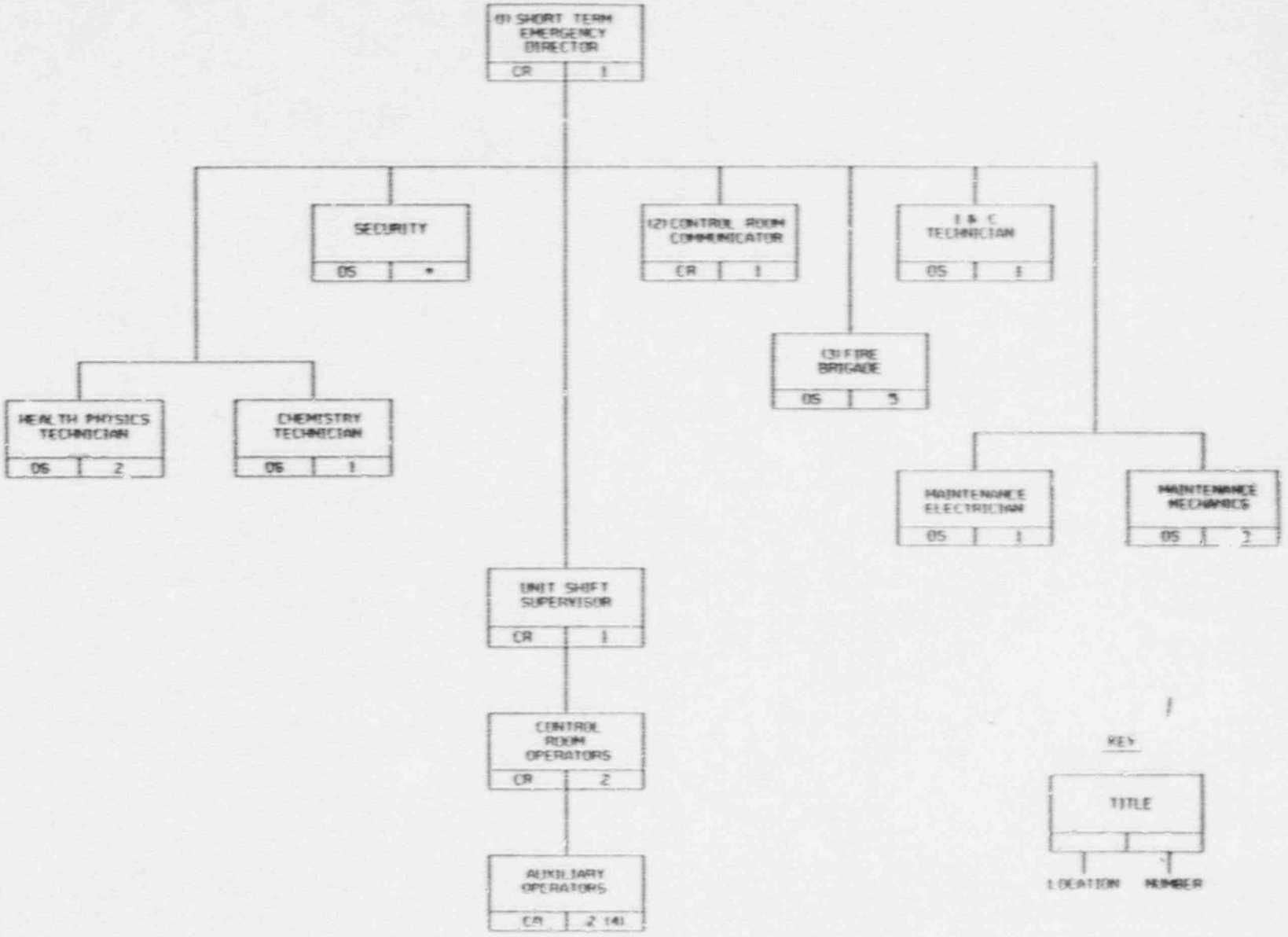
Information is coordinated with the Maine Emergency Management Agency by New Hampshire authorities for ingestion pathway considerations. Additional state support can be called upon from participating states in the New England Compact on Radiological Health Protection.

NEW HAMPSHIRE YANKEE
SEABROOK STATION
RADIOLOGICAL EMERGENCY PLAN

ON SHIFT EMERGENCY
RESPONSE ORGANIZATION

SSREP REV. 5

FIGURE 8.1

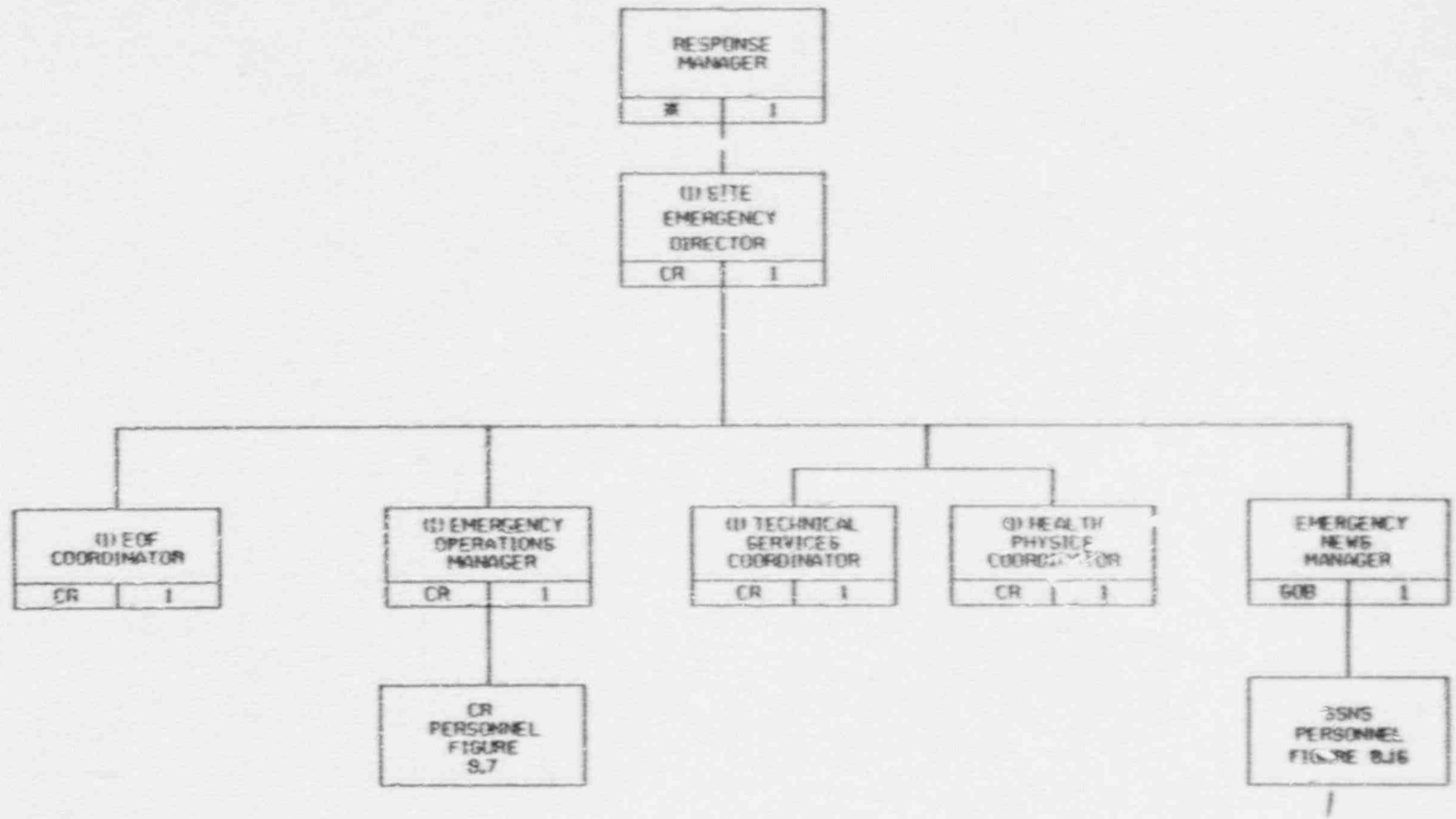


(1) Shift Superintendent or Unit Shift Supervisor.
(2) Control Room Communicator is a trained on-shift I & C Technician
(3) At least one is EMT qualified
(4) 1 in modes 5 and 6

CR - CONTROL ROOM
OS - ON SITE
* - STAFFING PER SECURITY PLAN

(Protected: Ref. NRC IR 85-32(3))

0SA1K28,18EF[illegible].DGN1



KEY

TITLE — LOCATION | NUMBER

CR - CONTROL ROOM
GOB - GENERAL OFFICE BUILDING
* -DOES NOT REPORT TO SITE

NOTE (1):
IF THE CONDITION(S) WHICH CAUSED THE UNUSUAL EVENT COMPLETELY CLEARS PRIOR TO PRIMARY RESPONDER NOTIFICATION, THE STED MAY DETERMINE WHICH, IF ANY, OF THESE INDIVIDUALS NEED TO REPORT TO THE SITE.

(Protected: Ref. NRC IR 85-32(3))

NEW HAMPSHIRE YANKEE
SEABROOK STATION
RADIOLOGICAL EMERGENCY PLAN

AUGMENTED EMERGENCY RESPONSE ORGANIZATION FOR UNUSUAL EVENT

SSREP REV. 5

FIGURE 8.2

NEW HAMPSHIRE YANKEE

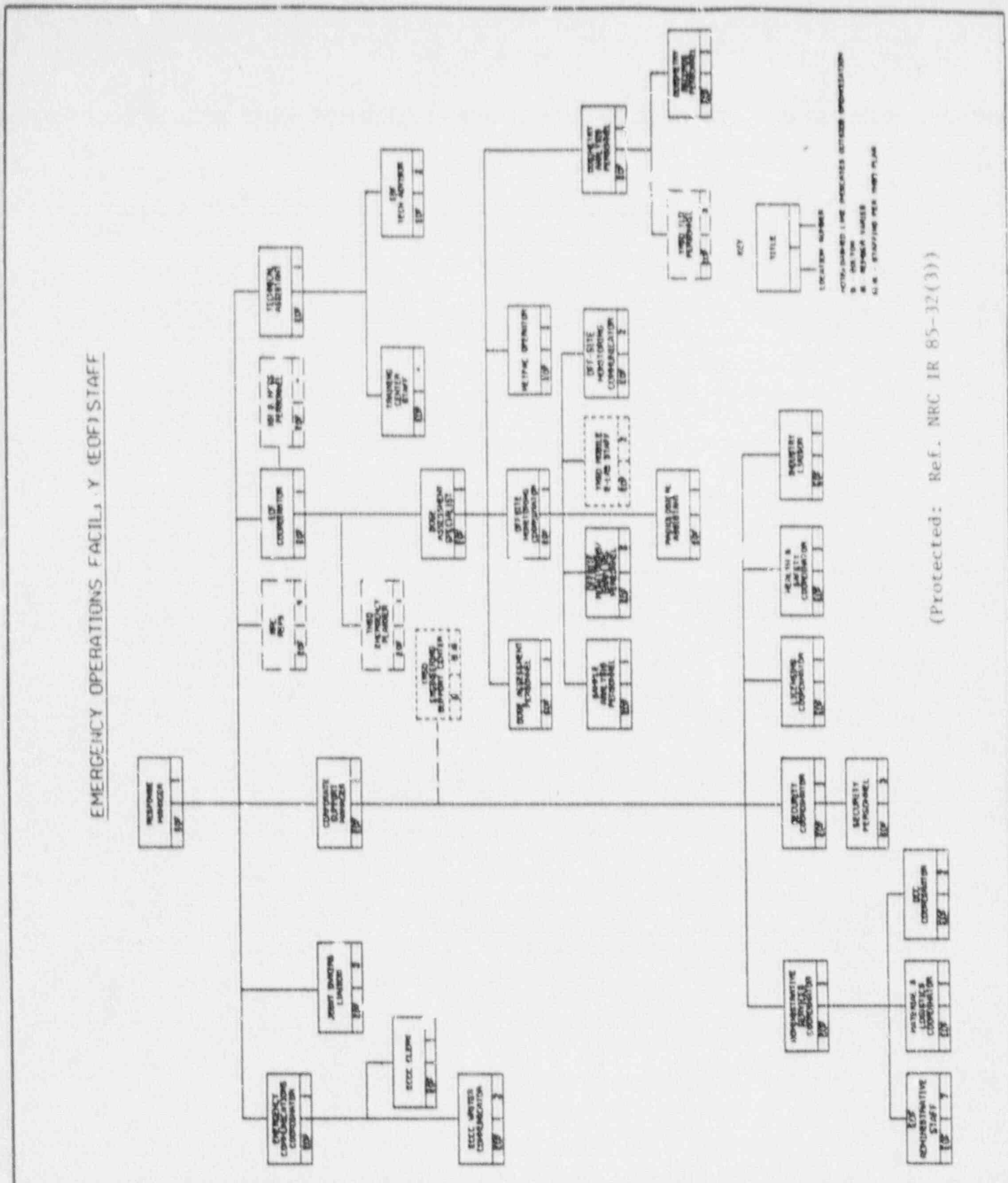
SEABROOK STATION

RADIOLOGICAL EMERGENCY PLAN

AUGMENTED EMERGENCY RESPONSE ORGANIZATION FOR ALERT, SITE AREA EMERGENCY, AND GENERAL EMERGENCY

SSREP Rev. 4

FIGURE 8.3



NEW HAMPSHIRE YANKEE
SEABROOK STATION
RADIOLOGICAL EMERGENCY PLAN

EMERGENCY OPERATIONS FACILITY (EOF) STAFF

SSREP REV. 5

FIGURE 8.4

NEW HAMPSHIRE YANKEE

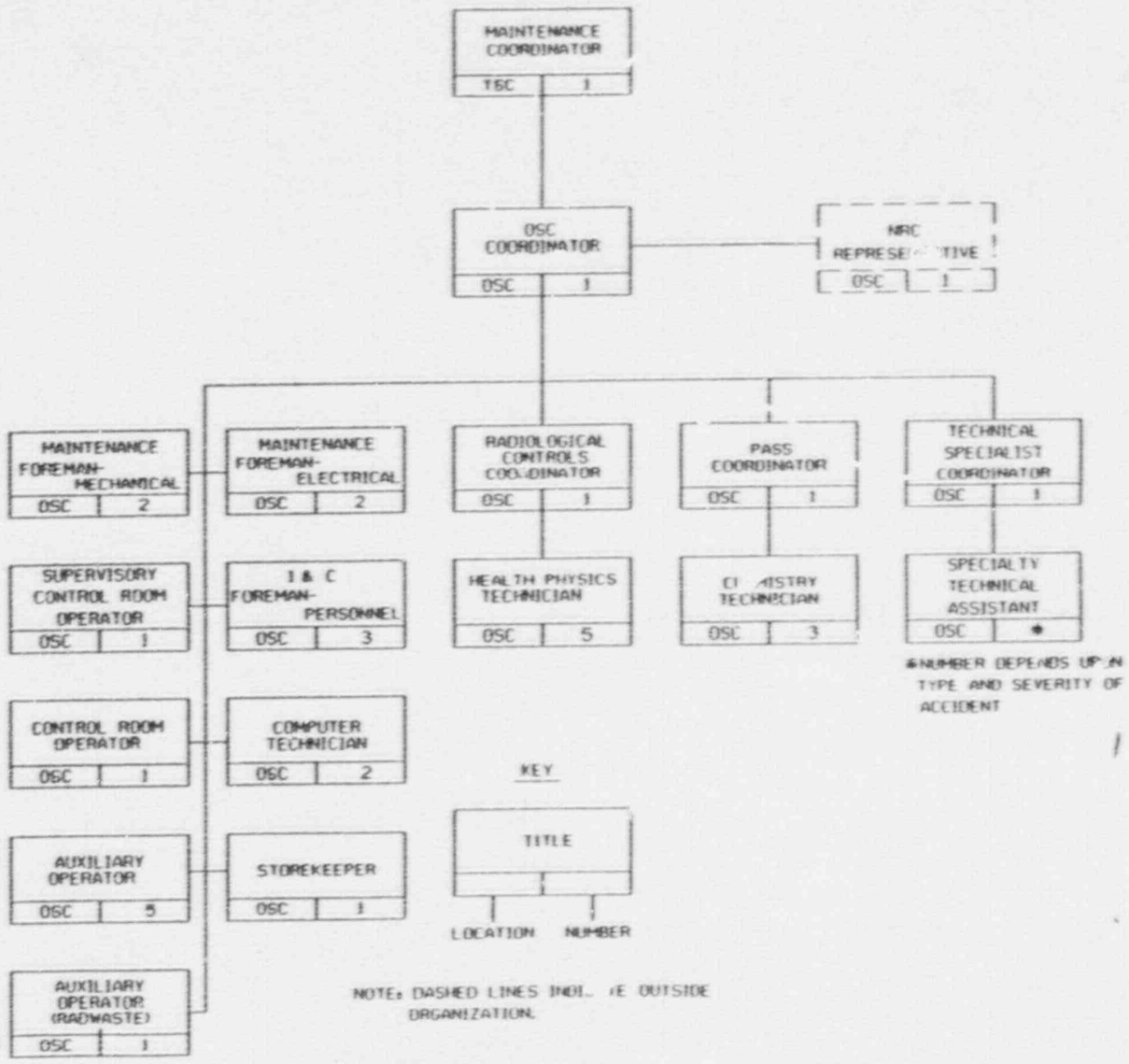
SEABROOK STATION

RADIOLOGICAL EMERGENCY PLAN

OPERATIONAL SUPPORT CENTER (OSC) STAFF

SSREP REV 5

FIGURE 8.5



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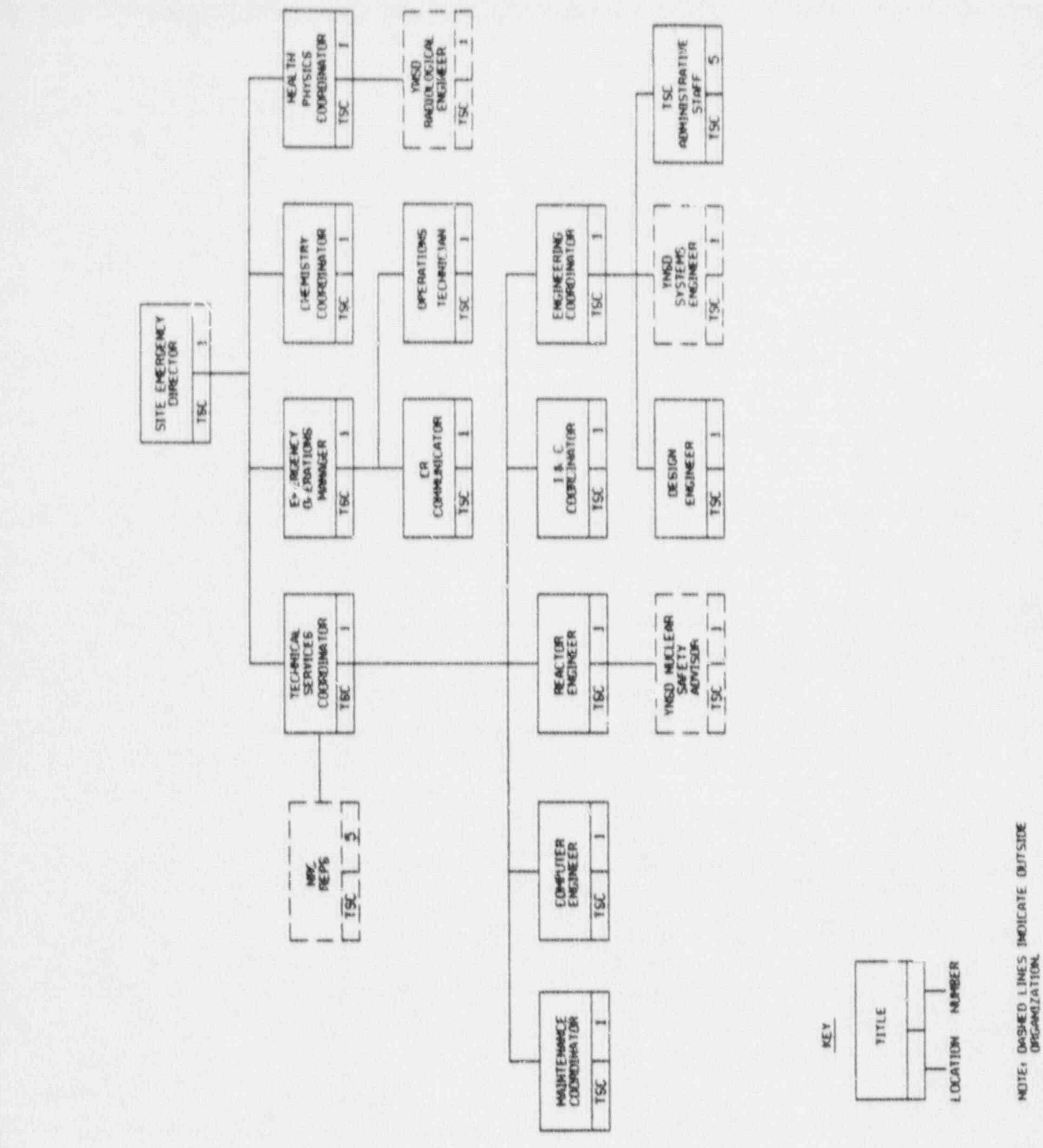

NEW HAMPSHIRE YANKEE
SEABROOK STATION
RADIOLOGICAL EMERGENCY PLAN

TECHNICAL SUPPORT CENTER (TSC) STAFF

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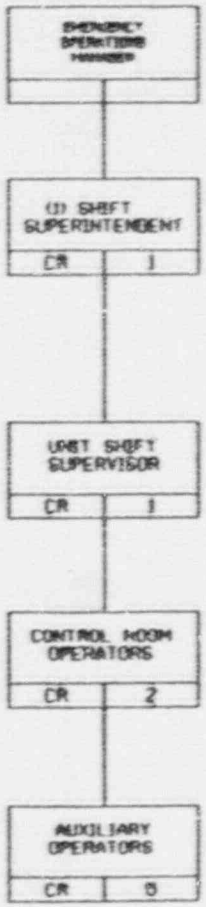
FIGURE 8.6

NEW HAMPSHIRE YANKEE

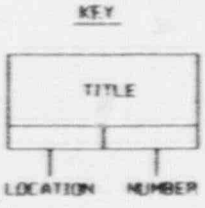
SEABROOK STATION

RADIOLOGICAL EMERGENCY PLAN

CONTROL ROOM STAFF



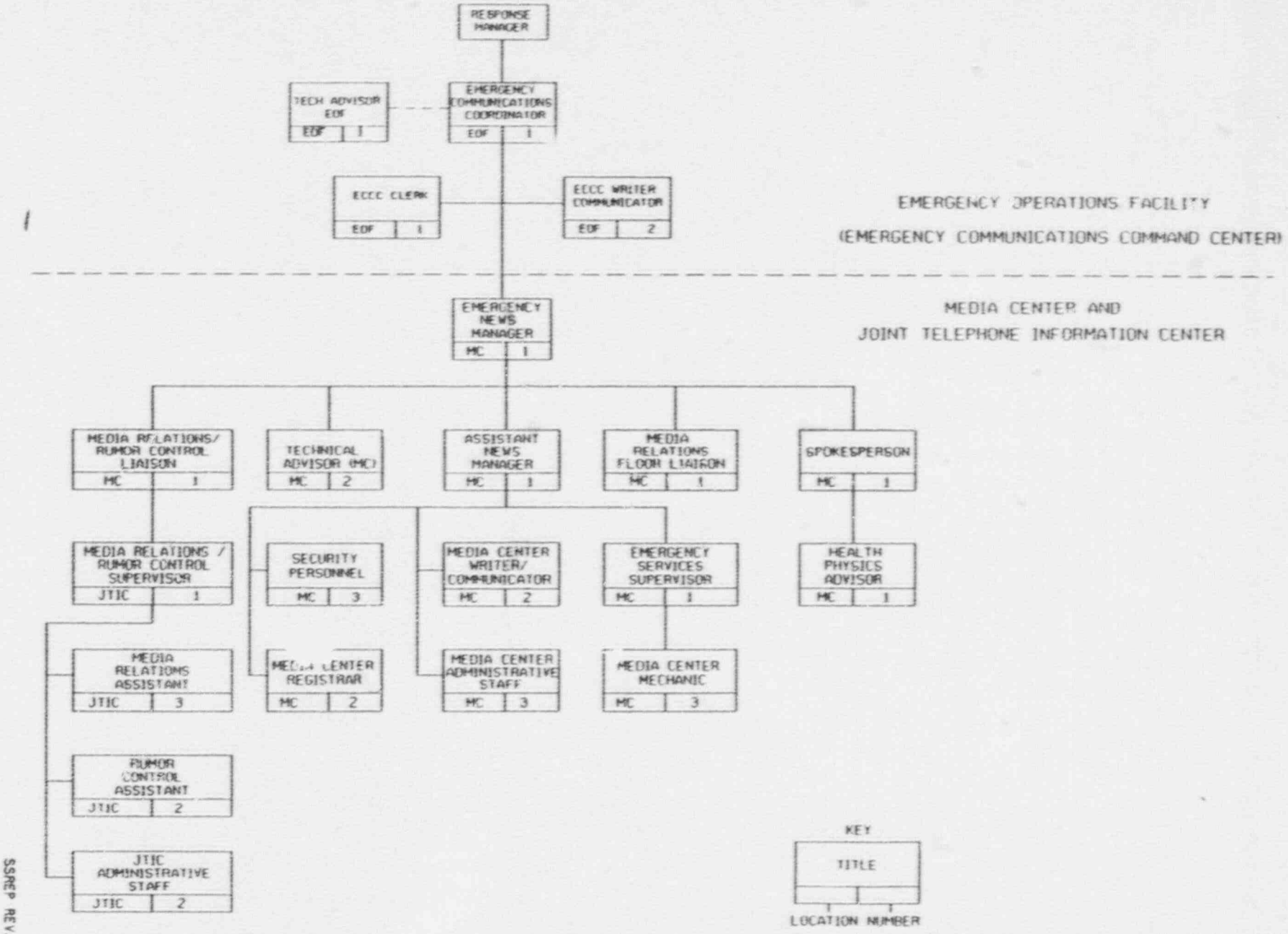
(1) - ALSO SERVES AS SHIFT TECHNICAL ADVISOR



SSREP Rev. 4

FIGURE 8.7

EMERGENCY COMMUNICATIONS ORGANIZATION



(Protected: Ref. NRC IR 85-32(3))

NEW HAMPSHIRE YANKEE
SEABROOK STATION
RADIOLOGICAL EMERGENCY PLAN

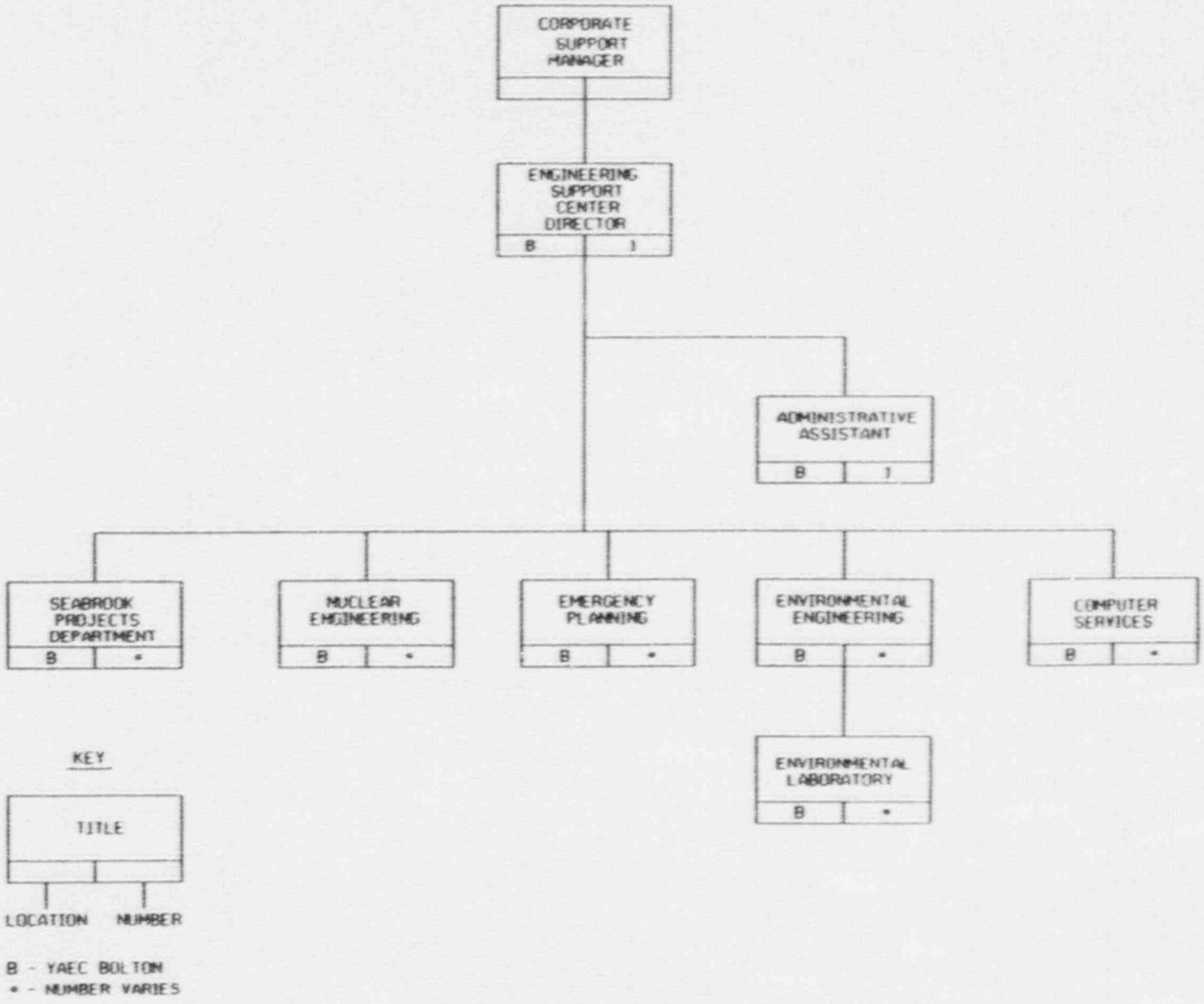
EMERGENCY COMMUNICATIONS ORGANIZATION

FIGURE 8.9

SSREP REV. 5

NHY EPLAN\EP878022.DGN\

NEW HAMPSHIRE YANKEE
SEABROOK STATION
RADIOLOGICAL EMERGENCY PLAN



YANKEE NUCLEAR SERVICES DIVISION
(YNSD) SUPPORT PERSONNEL OF
YANKEE ATOMIC ELECTRIC COMPANY

SSREP Rev. 4

FIGURE 8.11

FIGURE 8.12
ON-SHIFT EMERGENCY RESPONSE ORGANIZATION ACTIONS

SHIFT SUPERINTENDENT
(Short Term Emergency Director)

1. Review Station conditions and define emergency classification.
2. Notify Station personnel by Station announcement.
3. Request additional assistance, as required.
4. Project consequences of potential or actual airborne radioactivity releases, when applicable.
5. Notify State and NRC authorities of accident.
6. Evaluate system failures and recommend interim operating procedures/Station modifications.

UNIT SHIFT SUPERVISOR

1. Recognize accident conditions and notify Shift Superintendent.
2. Command activities of Control Room staff to restore Station to a safe operating condition.

CONTROL ROOM OPERATORS

1. Implement appropriate procedures and actions to maintain reactor safety.
2. Monitor operational parameter trends.
3. Advise Unit Shift Supervisor of operating conditions.

AUXILIARY OPERATORS

1. Perform operational activities required to maintain Station safety.
2. Provide Station status reports to the Control Room, as required.

HEALTH PHYSICS TECHNICIAN (respond to OSC)

1. Provide radiological monitoring capability.
2. Assist STED with in-plant radiological advice.

SECURITY PERSONNEL

1. Activate ERO notification scheme (secondary responders).
2. Monitor personnel accountability.
3. Provide Station access and egress control measures.
4. Notify YNSD and corporate officials of emergency, as required.

I&C TECHNICIAN (one report to the Control Room)

1. Assume role of communicator.
2. Implement communicator checklist responsibilities.
3. Notify primary responders.

I&C TECHNICIAN (one report to the OSC)

1. Provide assistance to the OSC Coordinator in defining system failures.

MAINTENANCE PERSONNEL (respond to OSC)

1. Perform maintenance activities required to maintain Station safety.

CHEMISTRY TECHNICIAN (respond to OSC)

1. Analyze RCS activity samples, when applicable.
2. Assist in radiological monitoring actions.

KEY

P = PRIMARY
S = SUPPORT

THE NEW HAMPSHIRE YANKEE OFFSITE RESPONSE ORGANIZATION MAY ASSUME RESPONSIBILITY FOR IMPLEMENTATION OF PRIMARY OR SUPPORT FUNCTIONS WHEN AUTHORIZED BY THE GOVERNOR OF MASSACHUSETTS.

	AGENCY	RESPONSIBILITY: COMMAND AND CONTROL	COMMUNICATIONS	NOTIFICATION	PUBLIC ALERTING	PUBLIC INFORMATION	ACCIDENT ASSESSMENT	SHELTER-IN-PLACE	EVACUATION	ACCESS AND TRAFFIC CONTROL	FOOD, WATER AND MILK CONTROL	RADIOLOGICAL EXPOSURE CONTROL	EMERGENCY MEDICAL SERVICES	MASS CARE	LAW ENFORCEMENT	FIRE AND RESCUE	PUBLIC HEALTH AND SANITATION	REENTRY AND RECOVERY
STATE	GOVERNOR	P				P		P	P									P
	CIVIL DEFENSE	S	P	S	P	S	S	S	S	S	S	S	S	S	S	S	S	S
	DEPARTMENT PUBLIC HEALTH			S		S	P	S	S		P	P	P				P	S
	STATE POLICE		S	P	S			S	S	P					P			S
	DEPARTMENT PUBLIC WORKS		S							S								
	MASS. NATIONAL GUARD		S						S	S		S			S			
	DEPT. ENV. QUALITY ENGINEERING						S				S							
	DEPT. ENVIRONMENTAL MANAGEMENT				S			S	S									
	DEPT. FOOD AND AGRICULTURE						S				S							
	DEPT. FISH, WILDLIFE & P.C. VEHICLES										S							
	NUCLEAR INCIDENT ADVISORY TEAM						S											
	MASS. BAY TRANSPORTATION AUTH.								S									
LOCAL	CHIEF EXECUTIVE	P			P	P		P	P									P
	CIVIL DEFENSE	S	S	S	S	S		S	S	S		P						S
	EMERGENCY RESPONSE ORGANIZATION		P	P	S			S	S	P	S	S	P		P	P	S	S
	RECEPTION COMMUNITIES													P			S	
PRIV.	AMERICAN RED CROSS													P				
	OPERATING UTILITY		S	P	S	S	S							S				
FED	U. S. COAST GUARD				S					S								
	FEDERAL EMERGENCY MGT AGENCY	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S

NEW HAMPSHIRE YANKEE
SEABROOK STATION
RADIOLOGICAL EMERGENCY PLAN

SUMMARY OF THE
RADIOLOGICAL EMERGENCY
RESPONSIBILITIES AND FUNCTIONS OF
MASSACHUSETTS STATE AUTHORITIES

SSREP REV. 4 | FIGURE 8.13

NEW HAMPSHIRE YANKEE
SEABROOK STATION
RADIOLOGICAL EMERGENCY PLAN

SUMMARY OF THE
RADIOLOGICAL EMERGENCY
RESPONSIBILITIES AND FUNCTIONS OF
NEW HAMPSHIRE STATE AUTHORITIES

SSREP REV 5

FIGURE 8.1-4

KEY

P = PRIMARY

S = SECONDARY

AGENCY / RESPONSIBILITY	COMMAND AND CONTROL	NOTIFICATION PROCEDURES	EMERGENCY COMMUNICATIONS	PUBLIC ALERT	PUBLIC INFORMATION	EMERGENCY FACILITIES	ACCIDENT ASSESSMENT	PROTECTIVE RESPONSE	RADIOLOG. EXP. CONTROL	TRANSPORTATION	RECEPTION CENTERS	MASS CARE FACILITIES	MEDICAL SERVICES	SOCIAL SERVICES	TRAFFIC & ACCESS CONTROL	LAW ENFORCEMENT SUPPORT	RESCUE SUPPORT	RECOVERY AND RE-ENTRY	TRAINING	EXERCISES AND DRILLS	PROGRAM MAINTENANCE	COORD. WITH OTHER STATES
GOVERNOR'S OFFICE	P				P			P										P				P
NEW HAMPSHIRE OFFICE OF EMERGENCY MANAGEMENT (NHOEM)	S	S	P	P	S	P	S	S	S	P	S	S					S	S	P	P	P	S
PUBLIC HEALTH (DPHS)		S				S	P	S	P	S	S		P				P	S	S	S	S	S
STATE POLICE		P	S	P				S							P	P						S
TRANSPORTATION								S		S					S							
PUPIL TRANSPORTATION SAFETY								S		S		S										
DIVISION OF HUMAN SERVICES								S			P	S		P								
NATIONAL GUARD				S				S	S	S					S	S	S					
CIVIL AIR PATROL			S					S														
RESOURCES AND ECONOMIC DEVELOPMENT				S											S							
DEPARTMENT OF AGRICULTURE				S			S	S										S				
WATER SUPPLY DIVISION				S			S	S										S				
BOATING SAFETY				S																		
FISH AND GAME DEPARTMENT			S	S											S							
U. S. COAST GUARD				S											S							
FEDERAL AVIATION ADMINISTRATION				S											S							
RED CROSS								S				P		S								
EDUCATION		S				S		S				S										
PUBLIC UTILITIES COMMISSION							S															

FIGURE 8.15

COMPARISON OF NUREG-0654 EMERGENCY RESPONSE STAFFING REQUIREMENTS

WITH THE

NEW HAMPSHIRE YANKEE ON-SHIFT EMERGENCY RESPONSE ORGANIZATION (ERO)

NUREG-0654 Table B-1					
Major Functional Area	Major Tasks	Position Title or Expertise	On Shift	Number	NHY On-Shift ERO Title
Plant Operations and Assessment of Operational Aspects		Shift Supervisor (SRO)	1	1	Unit Shift Supervisor
		Shift Foreman (SRO)	1	1	Shift Superintendent
		Control Room Operators	2	2	Control Room Operators
		Auxiliary Operators	2	2	Auxiliary Operators
Emergency Direction and Control (Emergency Coordinator)***		Shift Technical Advisor, Shift Supervisor or designated facility manager	1**	1**	Shift Superintendent
Notification/ Communication****	Notify licensee, State, local and federal personnel and maintain communication		1	2	Control Room Communicator, Security Officer
Radiological Accident Assessment & Support of Operational Accident Assessment	Emergency Operations Facility (EOF) Director	Senior Manager	--	--	
	Offsite Dose Assessment	Senior Health Physics (HP) Expertise			
	Offsite Surveys		--	--	
	Onsite (out-of-plant)		--	--	
	In-plant surveys	HP Technicians	1	1	Health Physics Technician
	Chemistry/Radiochemistry	Rad/Chem Technicians	1	1	Chemistry Technician
Plant System Engineering, Repair and Corrective Actions	Technical Support	Shift Technical Advisor	1	1**	Shift Superintendent
		Core/Thermal Hydraulics	--	--	
		Electrical	--	--	
		Mechanical	--	--	
	Repair & Corrective Actions	Mechanical Maintenance/ Rad Waste Operator	1**	2	Maintenance Mechanic
		Electrical Maintenance/	1**	1	Maintenance Electrician
		Instrument & Control (I&C) Technician	--	1	I&C Technician

FIGURE 8.15

COMPARISON OF NUREG-0654 EMERGENCY RESPONSE STAFFING REQUIREMENTS

WITH THE

NEW HAMPSHIRE YANKEE ON-SHIFT EMERGENCY RESPONSE ORGANIZATION (ERO)

(Continued)

	NUREG-0654 Table B-1				
Major Functional Area	Major Tasks	Position Title or Expertise	On Shift	Number	NHY On-Shift ERO Title
Protective Actions (In-Plant)	Radiation Protection a. Access Control b. HP Coverage for repair, corrective actions, search and rescue first-aid & firefighting c. Personnel monitoring d. Dosimetry	HP Technicians	2**	2**	Health Physics Technicians
Firefighting	--	--	Fire Brigade per Technical Specifications	Per Technical Specifications	
Rescue Operations and First-Aid	--	--	2**	2**	
Site Access Control and Personnel Accountability	Security, firefighting communications, personnel accountability	Security Personnel	All per Security Plan	Per Security Plan	
		Total	10	14	

Notes:

* For each unaffected nuclear unit in operation, maintain at least one shift foreman, one control room operator and one auxiliary operator except that units sharing a control room may share a shift foreman if all functions are covered.

** May be provided by shift personnel assigned other functions.

*** Overall direction of facility response to be assumed by EOF director when all centers are fully manned. Director of minute-to-minute facility operations remain with senior manager in technical support center or control room.

**** May be performed by engineering aide to shift supervisor.

COMPARISON OF NUREG-0654 E[illegible]Y RESPONSE STAFFING REQUIREMENTS
WITH THE
NEW HAMPSHIRE YANKEE AUGMENTED EMERGENCY RESPONSE ORGANIZATION (ERO)

NUREG-0654 Table B-1			Capability for Additions			NHY Augmented ERO
Major Functional Area	Major Tasks	Position Title or Expertise	30 min	60 min	Number	Title
Plant Operations and Assessment of Operational Aspects		Shift Supervisor (SRO)	--	--	--	
		Shift Foreman (SRO)	--	--	--	
		Control Room Operators	--	--	1	Spare Control Room Operator
		Auxiliary Operators	--	--	2	Spare Auxiliary Operator
Emergency Direction and Control (Emergency Coordinator)***		Shift Technical Advisor, Shift Supervisor or designated facility manager	--	--	--	
Notification/ Communication****	Notify licensee, State, local and Federal personnel and maintain communication		1	2	3**	Emergency Operations Manager, EOF Coordinator, Communicator
Radiological Accident Assessment & Support of Operational Accident Assessment	Emergency Operations Facility (EOF) Director	Senior Manager	--	1	1	Response Manager
	Offsite Dose Assessment	Senior Health Physics (HP) Expertise	1	--	2	EOF Coordinator, Dose Assessment Specialist
	Offsite Surveys		2	2	6	Offsite Monitoring Sampling Personnel (3 HP Techs/3 Drivers)
	Onsite (out-of-plant)		1	1	2	Health Physics Technician
	In-plant surveys	HP Technicians	1	1	3	Health Physics Technician
	Chemistry/Radiochemistry	Rad/Chem Technicians	--	1	4	PASS Coordinator/Chemistry Technicians
Plant System Engineering, Repair and Corrective Actions	Technical Support	Shift Technical Advisor	--	--	--	
		Core/Thermal Hydraulics	1	--	1	Reactor Engineer
		Electrical	--	1	1	I&C Coordinator
		Mechanical	--	1	1	Engineering Coordinator
	Repair & Corrective Actions	Mechanical Maintenance/	--	1	2	Maintenance Personnel
		Rad Waste Operator	--	1	1	Auxiliary Operator
		Electrical Maintenance/	1	1	2	Maintenance Personnel
		Instrument & Control (I&C) Technician	1	--	2	I&C Technician

COMPARISON OF NUREG-0654 [illegible]NCY RESPONSE STAFFING REQUIREMENTS
WITH THE
NEW HAMPSHIRE YANKEE AUGMENTED EMERGENCY RESPONSE ORGANIZATION (ERO)

(Continued)

NUREG-0654 Table B-1			Capability for Additions			NHY Augmented ERO
Major Functional Area	Major Tasks	Position Title or Expertise	30 min	60 min	Number	Title
Protective Actions (In-Plant)	Radiation Protection a. Access Control b. HP Coverage for repair, corrective actions, search and rescue first-aid & firefighting c. Personnel monitoring d. Dosimetry	HP Technicians	2	2	4	Health Physics Coordinator, Health Physics Technicians
Firefighting	--	--	Local Support			Fire Brigade
Rescue Operations and First-Aid	--	--	Local Support			Firefighter/EMT
Site Access Control and Personnel Accountability	Security, firefighting communications, personnel accountability	Security Personnel				
		Total	11	15	38+	

Notes:

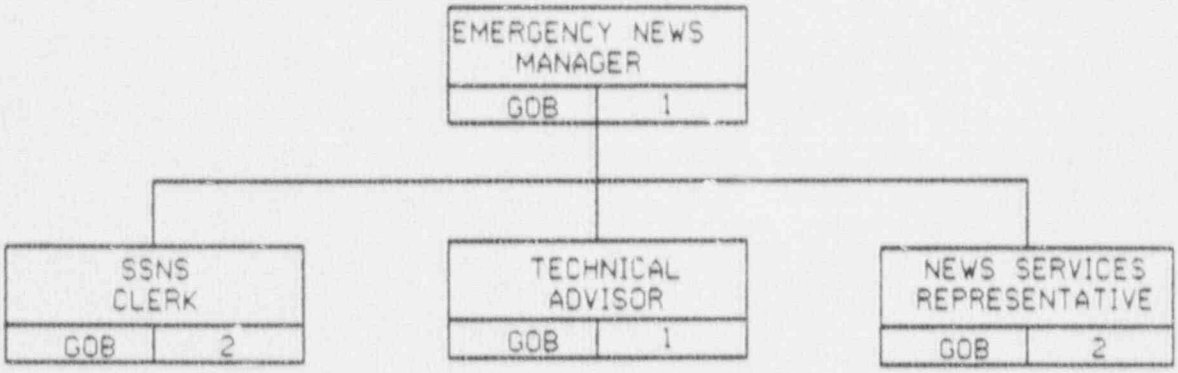
* For each unaffected nuclear unit in operation, maintain at least one shift foreman, one control room operator and one auxiliary operator except that units sharing a control room may share a shift foreman if all functions are covered.

** May be provided by shift personnel assigned other functions.

*** Overall direction of facility response to be assumed by EOF director when all centers are fully manned. Director of minute-to-minute facility operations remain with senior manager in technical support center or control room.

**** May be performed by engineering aide to shift supervisor.

\+ The Seabrook Station augmented ERO includes approximately 71 station staff. ERO titles which do not correspond to Table B-1 categories (i.e., OSC Coordinator, Administrative Staff) have not been listed.



KEY

TITLE	
LOCATION	NUMBER

(Protected: Ref. NRC IR 85-32(3))

NEW HAMPSHIRE YANKEE SEABROOK STATION RADIOLOGICAL EMERGENCY PLAN	SEABROOK STATION NEWS SERVICES STAFF
	SSREP. REV.5 | FIGURE 8.16

9.0 EMERGENCY RESPONSE OUTLINE

9.1 INITIATION

Upon the recognition of abnormal station conditions either through initiation of Emergency Operating Procedures (EOPs) or other sources of information, the condition will be classified in accordance with the method described in Section 5.0. Once an emergency is classified, the response actions are directed by Emergency Response (ER) procedures contained in the Production Emergency Response Manual (NPER). Procedures exist that direct the appropriate response for each of the four emergency classifications.

9.2 ACTIVATION OF THE EMERGENCY ORGANIZATION

The Unit Shift Supervisor is responsible for recognizing potential emergency conditions and notifying the Shift Superintendent. The Unit Shift Supervisor will assume the duties and responsibilities of the Short Term Emergency Director (STED) until the Shift Superintendent responds to the Control Room. With an emergency declared in accordance with Procedure ER 1.1, "Classification of Emergencies," the Shift Superintendent assumes the role of STED and ensures the activation of the Emergency Response Organization (ERO) according to Section 8.0.

Upon declaration of an emergency, the STED will implement the actions in one of the following procedures: ER 1.2 "Unusual Event," ER 1.3 "Alert," ER 1.4 "Site Area Emergency" or ER 1.5 "General Emergency." The STED will relinquish direction of the ERO upon the arrival and briefing of the Site Emergency Director.

9.2.1 Unusual Event Response

Upon the declaration of an Unusual Event, the STED will direct the notification of station personnel (via the station public address system) and the primary emergency responders (via the digital paging system). The primary emergency responders are the "Augmented Emergency Response Organization (ERO)-Unusual Event" (Figure 8.2) and are the supplementary personnel designated to assist the on shift staff in an Unusual Event. Included in this augmented organization is the Site Emergency Director who relieves the STED of emergency response duties.

9.2 ACTIVATION OF THE EMERGENCY ORGANIZATION

9.2.1 Unusual Event Response (Continued)

Unusual Event augmented ERO personnel respond to the Control Room except for the Response Manager and Emergency News Manager. The Response Manager calls the Control Room, but does not report to the site. The Response Manager is also responsible for notifying NHY Executive Management and the New Hampshire Public Utilities Commission (PUC). The Emergency News Manager reports to the General Office Building to coordinate public information needs. The Health Physics Coordinator calls the Control Room and may report if the event has actual or potential radiological consequences. No station emergency response facilities are automatically activated during an Unusual Event, although the Site Emergency Director may, at his discretion, activate any or all facilities. Offsite emergency organizations are notified in accordance with Procedure ER 1.2, "Unusual Event." Assistance from offsite fire, medical and law enforcement organizations will be requested, as necessary. Following notification by the STED, security personnel will notify key Yankee Atomic Electric Company (YAEC) personnel.

The response required as a result of this declaration varies according to the specific event, but a general summary of actions taken is described below:

1) On duty operating and selected station personnel will assume the duties specified in Section 8.0 as directed by the STED;

2) The STED will ensure that New Hampshire and Massachusetts (*) State Police have been notified. In turn, the State Police will notify the appropriate authorities (*) designated in their plans;

3) The STED will ensure that the NRC has been notified using the Emergency Notification System (red phone) and that this communication channel remains open until the condition has been terminated (unless permission is granted to establish a callback time);

4) The STED will direct the activities of the On-Shift Emergency Response Organization;

5) The STED will direct the activation of the digital paging system to initiate emergency notification;

6) The primary ERO members will call the station for the emergency classification and time declared and then report to the Control Room or General Office Building, as required. (NOTE: The Site Emergency Director, having reviewed station conditions, will assume command of the emergency organization);

9.2 ACTIVATION OF THE EMERGENCY ORGANIZATION

9.2.1 Unusual Event Response

7) Should it be necessary, the Site Emergency Director would direct additional notifications by telephone to augment the existing ERO to the level required by the nature of the emergency condition;

8) If necessary, appropriate emergency medical, fire department or law enforcement agencies will be notified and requested to respond;

9) The Emergency News Manager will direct preparation of public information releases appropriate to the event; and

10) The Site Emergency Director will close out the event with a verbal summary to offsite authorities or escalate to a more severe class.

9.2.2 Alert Response

Upon the declaration of or escalation to an Alert, offsite emergency organizations are notified in accordance with Procedure ER 1.3, "Alert." The station emergency response organization becomes fully activated and the following actions are taken in addition to those described in Section 9.2.1

Secondary responders are notified via an automatic telephone dialer, the station public address system, and/or security personnel. The Augmented Emergency Response Organization is shown in Figure 8.3. Additional details regarding the augmented Emergency Response Organization are provided in Figures 8.4 through 8.11.

The Technical Support Center (TSC), Operational Support Center (OSC), Emergency Operations Facility (EOF), Yankee Nuclear Services Division (YNSD) Engineering Support Center (ESC), Joint Telephone Information Center (JTIC), and the Media Center (MC) will be activated and staffed. Staffing assignments for the Emergency Response Organization are listed in detail in Appendix A of this Plan, "Emergency Response Organization Position Definitions."

The Assembly Area for backup emergency response organization personnel is located outside the Protected Area in the Inprocessing Center. For emergencies declared during normal working hours, this facility is activated at an Alert or Site Area Emergency or General Emergency, depending upon event meteorological and radiological conditions. The purpose for this facility is to (1) ensure that adequate manpower exists for the staffing of all emergency facilities, (2) develop a roster of available second shift personnel and (3) disseminate reporting information to second shift personnel (e.g., when and where to report).

9.2.2 Alert Response (continued)

During an Alert, personnel without emergency assignments will evacuate the site and personnel accountability will be implemented.

The following additional actions will be completed in the event of an Alert classification:

1) The Response Manager will report to the EOF and assume responsibility for providing overall emergency response organization direction to restore station stability;

2) The Massachusetts (*) and New Hampshire state emergency response teams are alerted, and specific representatives will be dispatched to the station EOF;

3) The YNSD ERO will be radio paged and respond as outlined in Section 8.6;

4) The EOF Coordinator will provide offsite authorities with periodic meteorological assessments and, if releases are occurring, projected whole body dose estimates (NOTE: If radiological releases are occurring, monitoring teams will be dispatched to determine actual area dose rates);

5) Information will be coordinated, as necessary, with ANI and INPO; and

6) The Response Manager or his designee will close out the event or escalate to a Site Area or General Emergency.

9.2.3 Site Area Emergency Response

Upon the declaration of or escalation to a Site Area Emergency offsite emergency organizations are notified in accordance with Procedure ER 1.4, "Site Area Emergency" or if the EOF is activated, Procedure ER 3.3, "Emergency Operations Facility Operations." The station emergency response organization takes the following actions in addition to those described in Sections 9.2.1 and 9.2.2.

1) Offsite monitoring teams will be dispatched from the EOF;

2) YNSD resources will be activated in support of the station and a YNSD response team will be dispatched to the TSC to provide radiological and engineering support;

3) The Response Manager's staff will notify contracted service organizations, sponsor utilities and other industry resources which will be requested to render assistance, as appropriate;

9.2 ACTIVATION OF THE EMERGENCY ORGANIZATION

9.2.3 Site Area Emergency Response

4) State resources will be fully mobilized in accordance with planning arrangements set forth in Massachusetts (*) and New Hampshire State Radiological Emergency Response Plans. Included in these planning arrangements is the activation of the Public Alert and Notification System (PANS);

5) Station conditions will be continually assessed and protective action recommendations to offsite authorities will be made on the basis of this assessment according to Procedure ER 5.4, "Protective Action Recommendations." This could involve station conditions related to the potential for radiological impact prior to the occurrence of actual releases; and

6) The Response Manager or his designee will close out the event or escalate to a General Emergency.

9.2.4 General Emergency Response

Upon the initial declaration of or escalation to a General Emergency, offsite emergency organizations are notified in accordance with Procedure ER 1.5 "General Emergency" or if the EOF is activated, Procedure ER 3.3 "Emergency Operations Facility Operations." The station emergency response organization will promptly notify offsite authorities of the General Emergency status, informing them of accident conditions and coordinating a continuous flow of accident diagnosis and prognosis information.

The Public Alert and Notification System (PANS) will be activated. Offsite authorities will fully activate emergency response resources and implement appropriate protective measures. These measures may be based on meteorological information, radiological dose projections or station indications of the potential for significant releases of radioactive material. The Response Manager and the entire NHY ERO will evaluate station accident parameters and indications, and will continually advise offsite authorities of the type of protective actions most appropriate to the observed situation. This would include advice on the question of shelter vs. evacuation.

Additional responses taken in a General Emergency condition include:

1) The full resources of the Federal Radiological Emergency Response Plan will be activated;

2) The Response Manager or his designee will close out the event in accordance with Procedure ER 7.3, "Reentry and Recovery."

9.3 EMERGENCY DE-ESCALATION AND TERMINATION CRITERIA

The emergency classification system defined in Section 5.0 of this plan provides the flexibility needed to both escalate or de-escalate the emergency level dependent upon the severity of the event.

De-escalation criteria associated with making a transition between emergency classes will require (1) a review of plant parameters and/or offsite radiological conditions in conjunction with the pre-established EALs; and (2) if the EOF is activated, review and concurrence of New Hampshire Yankee and offsite authorities on any de-escalation.

9.4 TERMINATION AND RECOVERY

Actions for recovery from emergency conditions, including reentry into affected areas of the station and eventual restoration of station stability, are described in Procedure ER 7.3, "Reentry and Recovery." Termination of the emergency phase and initiation of the recovery phase will require satisfying the following criteria appropriate to the emergency condition:

1) The reactor is shut down and criticality controls are in effect;

2) The core is being adequately cooled;

3) The fission product release has been controlled;

4) Control has been established over containment pressure and temperature;

5) An adequate heat transfer path to an ultimate heat sink has been established;

6) Primary system pressure is under control; and

7) State (*) officials agree with the Response Manager that station conditions require no further offsite protective action.

When station conditions allow a transition from an emergency to a recovery phase, the Response Manager shall perform the following actions:

1) Confer with the Site Emergency Director and EOF Coordinator to ensure that no conditions exist which would preclude recovery;

2) Establish a recovery organization (Section 8.7.1) and task this organization with the development of a recovery action plan;

3) Review the recovery action plan with the NRC, Director of Site Operations and State (*) emergency response officials and obtain concurrence;

4) Coordinate this transition with the Media Center; and

5) Direct the administrative, legal, and financial support necessary for the recovery organization.

Once the recovery phase has been initiated, the Response Manager shall:

1) Ensure the notification of all emergency response and station personnel: and

2) Establish a manpower plan to implement recovery and reentry operations.

10.0 EMERGENCY MEASURES

10.1 RADIOLOGICAL ACCIDENT ASSESSMENT SYSTEMS AND TECHNIQUES

The two effluent pathways for accidental releases of radioactive material at Seabrook Station are the plant vent stack and the main steam lines (through the lifting of the safety relief valves or the throttling of the atmospheric steam dump valves). Each of these effluent pathways contains a monitor. The monitor responses can be correlated to the effluent radioactivity concentration. In addition to these monitored pathways, high-range containment area monitors are capable of measuring the exposure rate within the containment, which can be correlated to the radioactivity concentration within the structure. Each of the above systems may be considered as separate release pathways which can be assessed with its associated monitor. Containment leakage is also considered as a possible effluent pathway for dose assessment.

The containment monitoring system consists of redundant ionization chambers and instrumentation channels with a range of 10^0 to 10^7 R/hr (gamma only). The system is Class 1E qualified. A time-dependent conversion factor has been calculated which will enable conversion of the monitor's response (R/hr) to the total noble gas concentration (μCi/cc) in the containment building at a given time after shutdown assuming that the concentration within the containment is uniform. This conversion factor is calculated based on the assumption that a core equilibrium mixture of fission products exists at t=0. It should be noted, however, that the intent of this system is not to correlate this monitor response to core conditions or damage but to estimate the concentration in the containment building. The only relationship that can be readily made from this monitor to core conditions is a minimum core damage level since the amount of diluted or undiluted primary coolant leakage into the containment building may be a major unknown variable. If available, the minimum core damage level indicated by this monitor will be used as an indication of the type of fission product mixture being released through the effluent pathways.

The Wide Range Gas Monitor (WRGM) is used to continuously monitor the gaseous activity released to the environment through the plant vent stack. Its monitoring range is large enough to encompass low level releases using a beta scintillation detector with a range of 1.0E-7 to 1.0E-1 μCi/cc and two mid to high range solid-state beta/gamma detectors of 1.0E-4 to 1.0E+2 μCi/cc and 1.0E-1 to 1.0E+5 μCi/cc, respectively. The WRGM was designed and installed to minimize personnel exposure while obtaining particulate and iodine grab samples. The WRGM also calculates a release activity in μCi/sec.

A backup monitor is available in the event of a WRGM failure. This monitor consists of an ionization chamber type detector, viewing a prescribed geometrical container in which the stack exit gas flows. The detector and associated remote universal digital rate meter are capable of monitoring dose rates from 0.1 mR/hr to 10,000 R/hr.

The main steam line monitors consist of a G-M detector placed adjacent to each of the four (4) main steam lines (several inches) with remote readout modules. This monitor response (mR/hr) is used to estimate offsite doses.

10.1 RADIOLOGICAL ACCIDENT ASSESSMENT SYSTEMS AND TECHNIQUES

10.1.1 Estimation of Offsite Whole Body Gamma Dose Rates

Initial Offsite Dose Rate/Dose Projection Capability

NHY maintains two methods for quickly determining the activity release rates and projected offsite whole body plume centerline dose rates at various distances downwind of the station. The primary method used during initial dose assessment by the Shift Superintendent, or a trained alternate, is a straight line Gaussian plume dispersion model programmed on a HP-41 CX calculator and EPROM system. This technique includes an option to select one of three release pathways (i.e., primary vent stack, containment or main steam line safety relief valve/atmospheric steam dump valves) and estimates projected whole body dose at distances of 0.6, 2, 5 and 10 miles for various meteorological conditions. A second HP-41 CX is stored in the Technical Support Center as a backup.

With an emergency condition producing a radiological release or an in-station (i.e., containment) source term that could be subsequently released, one of the priority duties of the Post Accident Sampling System Coordinator located in the OSC is to implement the sampling and analysis of releases and/or source terms to identify whether there is a radioiodine component or not. This sampling capability includes containment atmosphere, gas spaces in other plant areas, and the plant vent stack. Radioiodine levels identified at any of these points would be quantified and evaluated in terms of actual or potential impact.

Variable Trajectory Atmospheric Dispersion/Dose Projection Capability

NHY also maintains a second computerized dose projection system, utilized once the EOF is activated, which is capable of providing near real time offsite dose estimates for actual meteorological and radiological accident conditions. The system assumes a variable trajectory Gaussian plume segmented transport model designed to handle the site-specific atmospheric dispersion characteristics associated with the Seabrook Station site. The model simulates effluent transport and diffusion using a concept of discrete emissions (i.e., plume points). Both continuous and intermittent releases for either ground or elevated release points can be evaluated, including the effects of release height, building wake entrainment, momentum plume rise and terrain height Plume trajectories are calculated using onsite meteorological tower information, taking into consideration the station's location.

10.1 RADIOLOGICAL ACCIDENT ASSESSMENT SYSTEMS AND TECHNIQUES

10.1.1 Estimation of Offsite Whole Body Gamma Dose Rates

Variable Trajectory Atmospheric Dispersion/Dose Projection Capability (Continued)

The diffusion of each plume element is determined from the Gaussian diffusion model. The lateral and vertical dimensions of the plume are determined as a function of travel distance and atmospheric stability class. Plume dimensions are adjusted to account for building wake and plume meander effects. Plume growth during changing atmospheric stability conditions is determined using a virtual source concept. Plume depletion effects due to dry and wet deposition effects are recognized.

The variable trajectory transport model produces the following plume information as a function of time:

1) Plume centerline coordinates;

2) Plume width;

3) Nondepleted relative diffusion factors for estimating ground-level concentrations of noble gases in the cloud;

4) Depleted relative diffusion factors for estimating ground-level concentrations of materials in the cloud (except the noble gases);

5) Deposition factors for computing dry and wet deposition of radioactive materials in the cloud;

6) Gamma diffusion factors for calculating gamma dose using a finite-cloud plume model assumption; and

7) Total integrated dose calculation over the Plume Path.

This model is a subprogram of the Seabrook METPAC offsite dose projection program which merges the dose assessment algorithms, based on radiation monitor responses, with the plume transport algorithms to produce offsite dose projections as a function of time and distance from the site.

10.1 RADIOLOGICAL ACCIDENT ASSESSMENT SYSTEMS AND TECHNIQUES

10.1.1 Estimation of Offsite Whole Body Gamma Dose Rates

Variable Trajectory Atmospheric Dispersion/Dose Projection Capability (continued)

METPAC is programmed on a PC computer. The system includes: (1) A monochrome monitor and driver; (2) a color monitor and driver; (3) printer; (4) a floating point processor; and (5) a light pen. The program has been designed to graphically display the calculated plume characteristics on a plume EPZ map using the color monitor while pertinent input text is displayed on the monochrome monitor and hard copy of the dispersion and dose calculation programs is provided by the line printer. The system also maintains additional graphics options which allow the user to display the area road (evacuation route) networks, sector designations, and selected points of interest relative to the plume dimensions.

10.1.2 Evaluation of Field Air Samples

When Seabrook Station monitoring teams have determined the approximate plume centerline (i.e., maximum radiation level) in the field, they will take air samples at various intervals downwind from the station. These samples will be analyzed on a gross (beta, gamma) basis in the field and, if elevated levels are observed, returned to the EOF where they will be analyzed to determine radionuclide concentrations.

Particular attention will be directed to observed iodine concentrations. The air samples will be analyzed in a two-step process. The first step involves a field analysis of the sample which measures the gross radioactivity collected on the silver zeolite cartridge and filter paper samples using a Pancake G-M detector. If the sample analysis shows a relatively high amount of radioactivity, a second analysis at the EOF will be performed. The sample will be delivered to the EOF for gamma spectroscopic analysis with greater sensitivity and accuracy up to 10^{-7} µCi/cc for I-131. Procedure ER 5.2, "Site Perimeter and Offsite Monitoring and Air Sampling" also describes air sampling methods.

The projected thyroid dose is determined from the measured I-131 concentration by multiplying by an estimate of the duration of the exposure and the dose conversion factor for a member of the public (assumed conservatively to be a newborn infant). A nomogram, Figure 10.1, Field Sample Thyroid Dose Nomogram, has been developed specifically for this thyroid dose projection on the basis of airborne radioiodine measurements.

10.1 RADIOLOGICAL ACCIDENT ASSESSMENT SYSTEMS AND TECHNIQUES

10.1.2 Evaluation of Field Air Samples (continued)

In addition to the measurement and evaluation of offsite direct dose rates and air samples for radioiodine, the offsite radiological impact assessment will include the identification of all principal radionuclides potentially released from the accident in all potentially significant exposure pathways. This will be accomplished through an offsite monitoring and sampling program in which environmental samples of media (water, air, soil, etc., as appropriate) will be collected and subjected to detailed radionuclide analysis. This analysis can be performed by the mobile laboratory from YNSD when it arrives at the EOF, and at the Yankee Environmental Lab in Westboro, Massachusetts by dispatching the samples there.

The radionuclide results of any such analysis would be interpreted in terms of radiation exposure to the public by the use of the comprehensive dose calculation programs available at the YNSD Engineering Support Center.

10.2 PROTECTIVE ACTION RECOMMENDATION CRITERIA

For accidents that result in airborne radioactivity releases, projected whole body dose rate estimates at the site boundary and distances out to 10 miles will be issued to those offsite authorities responsible for protective action decision making. On the combined basis of this projected whole body dose rate estimate, the class and type of emergency condition, and the anticipated duration of offsite releases, the Short Term Emergency Director has the authority and responsibility to recommend to offsite authorities whether the public should be advised to shelter, evacuate, or take no action.

Should the emergency be classified as a General Emergency, the Short Term Emergency Director is prepared to issue protective action recommendations based on the estimated amount of fuel failure and the status of containment consistent with the USNRC IE Information Notice No. 83-28. At a minimum, the Short Term Emergency Director will recommend sheltering within 2 miles of the station and 5 miles in a downwind direction and, during the period of May 15 to September 15, evacuation of Hampton and Seabrook Beaches and closure of Massachusetts beaches.

Once actual source term and onsite and/or offsite field monitoring determinations have been made, the EOF Coordinator will provide projected offsite whole body and thyroid doses at various distances from the plant to the State of New Hampshire and the Commonwealth of Massachusetts (*). Based upon these results, NHY will recommend protective actions in accordance with the criteria set forth in the EPA Protective Action Guides, Table 10.1. NHY will also perform ingestion pathway sampling and analysis in support of the offsite authority determinations to be made in accordance with FDA/HHS Protective Action Guides recommended for the ingestion exposure pathway Emergency Planning Zone. Precautionary protective action advisories will be provided based upon station conditions that may have an impact on protective measures in effect.

10.3 RADIOLOGICAL EXPOSURE CONTROL

During a station emergency, abnormally high levels of radiation and/or radioactivity may be encountered. These levels may range from slightly above those experienced during normal station operation to life-endangering levels of several hundred rem in a short period of time. Under all situations, whether it is immediate action to regain control of the emergency or for life-saving purposes, measures will be taken to minimize personnel exposures from external and/or internal sources of radiation.

Specific exposure guidelines for entry or re-entry into areas in order to (1) remove injured persons, and (2) undertake corrective actions, are defined in Table 10.2 of the plan. The Site Emergency Director will authorize, with Health Physics Coordinator or Radiological Controls Coordinator concurrence, emergency dose guidelines consistent with these or more restrictive guidelines dependent upon emergency conditions. The Radiological Controls Coordinator will discuss the hazards involved in rescue procedures with the members of the response team prior to undertaking any health-threatening mission.

Considerations to be made prior to allowing personnel to accept risks associated with rescue operations are defined in Table 10.2, "Emergency Dose Limits."

Exposure to individuals providing other emergency functions will be consistent with the limits specified in Table 10.2 with every attempt being made to keep personnel exposure as low as reasonably achievable (ALARA).

The Health Physics Coordinator, or a designated alternate, is responsible for maintaining the emergency radiological protection programs developed for station staff and support personnel. The TSC, OSC and EOF maintain a supply of self-reading dosimeters, both high range and low range, in the emergency kits. Each emergency response organization member reporting to the site will be provided a TLD badge. Dose records based upon the results of these dosimeters will be maintained at each center. This information will be cross-referenced with and replaced by TLD badge data, as soon as they are processed. Should the station exhaust its supply of TLD badges, YNSD Environmental Lab will supply TLD badges. Offsite authorities responding onsite will be provided dosimetry.

10.4 PROTECTIVE MEASURES

10.4.1 Personnel Accountability

The determination of station personnel accountability is facilitated by the use of a computer-assisted accountability system. The goal of this system is to insure that personnel accountability shall be accomplished within 30 minutes of the site evacuation order given by the Short Term Emergency Director or Site Emergency Director.

10.4 PROTECTIVE MEASURES

10.4.1 Personnel Accountability (Continued)

Upon declaration of an emergency and activation of the station emergency alarm, station personnel assigned specific emergency responsibilities will proceed to their designated emergency center location. Unassigned personnel (i.e., station visitors, contractor and other station personnel) will evacuate through the NHY Guard Island. There, evacuating personnel will turn in their dosimetry and Protected Area ID badges, and receive instructions concerning station egress measures. Security will check out all evacuating personnel at the card readers. All emergency response personnel reporting to emergency centers will log in on card readers and accountability rosters associated with each center.

Station security personnel will be responsible for reviewing computer results and reporting these results to the Security Supervisor who, in turn, will make the final determination of station personnel accountability and report the results to the Short Term Emergency Director/Site Emergency Director. Search and rescue procedures will be implemented if any missing persons have been identified.

10.4.2 Station Access/Egress Control Methods

Under all Station emergency conditions, individuals in the owner-controlled area will be warned by either the station air horn or direct security notification. Public address announcements, made by control room personnel, will provide emergency instruction to those personnel within the Protected Area. Visitors or those in transit within the owner-controlled area will be advised by the most appropriate means. The complete warning and advisement process will be accomplished in a rapid manner to ensure personnel safety.

When a Site Area Emergency or a General Emergency has been declared, all unassigned station personnel will be directed to evacuate to either the remote assembly area (Seabrook Greyhound Park, Route 107) for monitoring and decontamination or directly home. At an Alert, these personnel will be sent home.

In the event that station conditions may produce or have produced a release, traffic control measures will be established to direct unassigned personnel out via the most appropriate exit (the North Access Road or the South Access Road). The Security Shift Commander will be informed by the Site Emergency Director which access road to use for site evacuation traffic in order to minimize the potential for radiation exposure or contamination by radioactive material.

10.4.2 Station Access/Egress Control Methods (Continued)

If a radioactive release has occurred, personnel trained in contamination monitoring techniques will proceed to the remote assembly area (Seabrook Greyhound Park) to perform contamination monitoring of evacuated vehicles and personnel. All evacuating personnel will be instructed to report to the remote assembly area to be surveyed for contamination levels. Detection of personnel or vehicle contamination in excess of a level established for personnel and equipment release (i.e., Personnel - <100 cpm (Beta, Gamma) per probe area above background using a pancake G-M detector and; Equipment - 1000 dpm (Beta, Gamma) per 100 cm^2 above background) triggers the need to implement decontamination actions that appropriately correspond to the type and degree of contamination and are also consistent with the priorities of the emergency actions and conditions underway. The radiological monitoring personnel will contact (via radio or telephone) the Radiological Controls Coordinator and report contamination survey results. This will establish an appropriate decontamination plan which, in general terms, would consist of washcloth decontamination of personnel and vehicle washing, if necessary.

All station evacuees will be advised of area evacuation routes by security upon being released. Site evacuation routes are noted in Figure 10.2, Seabrook Station Evacuation Routes. Appendix C provides evacuation time estimates of the public within the plume exposure pathway EPZ and also summarizes the major evacuation routes which will be utilized in the event that such action is necessary.

The Security Coordinator would arrange station badging necessary to support incoming emergency response personnel. All incoming responders will be directed to report to the EOF where they will be briefed and provided with the necessary equipment.

10.4.3 Decontamination Capability

Station decontamination facilities are located in the Operational Support Center, specifically at the Radiological Controlled Area HP Control Point. The RCA showers are available for personnel decontamination purposes. Soap, brushes, etc., are available to aid in decontamination efforts. Survey instrumentation for personnel monitoring is available here. If necessary, internal contamination can be assessed with the use of onsite body burden monitoring equipment. All waste generated through the use of the decontamination facilities is collected and processed by the station liquid radwaste system.

10.4 PROTECTIVE MEASURES

10.4.3 Decontamination Capability (Continued)

Decontamination capability exists at the Route 107 Warehouse and the Emergency Operations Facility. At the Route 107 Warehouse initial decontamination methods will involve the use of wash cloths to remove gross contamination which will be disposed of by normal radwaste procedures. All personnel exceeding a beta, gamma skin contamination level of 100 counts per minute (CPM) per probe area, above background will be detained for decontamination purposes; otherwise, they will be released after having been informed of appropriate decontamination procedures. At the EOF, personnel decontamination can be accomplished with the use of a shower station, with wash water collected into 55-gallon drums which shall be transferred to the site for processing. The need for vehicle decontamination is not anticipated but, if necessary, dry decontamination methods will be used.

10.4.4 Use of Onsite Protective Equipment and Supplies

The station supplies of personnel radiation protection equipment will be used as necessary to support the emergency response effort. Respiratory protection equipment, protective clothing, and potassium iodide will be assigned to the onsite emergency response organization members in accordance with Procedure ER 4.3, "Radiation Protection During Emergency Conditions." Radiological monitoring equipment will be stocked and available for use at established emergency centers. Appendix F provides a list of emergency equipment by center location.

10.4.5 Radiation Guideline Action Levels

Radiation guideline action levels for emergency center habitability are shown on Table 10.3, Emergency Center Protective Action Criteria. This table describes the actions of station staff in response to a range of station radiological conditions.

10.5 AID TO AFFECTED PERSONNEL

10.5.1 Medical Treatment

Station medical facilities are provided in the First Aid Station located in proximity to the Radiological Controlled Area Control Point. NHY also maintains a site Medical Office located in the Operations Support Building. The first aid station and Medical Office are equipped and supplied to implement the requirements of the NHY Medical Program. (Protected: Ref. NRC IR 85-32(10))

10.5 AID TO AFFECTED PERSONNEL

10.5.1 Medical Treatment (Continued)

Specific station personnel have been trained as Emergency Medical Technicians (EMTs). A minimum of two Emergency Medical Technicians will be onsite at any one time to provide 24-hour emergency response coverage.

Arrangements have been made with Exeter Hospital to provide care for contaminated injured patients. In addition, Wentworth-Douglass Hospital located in Dover, NH, will provide care for these individuals on a backup basis. Both hospitals participate in medical emergency drills as a portion of emergency plan training.

10.5.2 Medical Transportation

The Seabrook Fire Department ambulance will be used for medical transportaion of injured and contaminated personnel. The ambulance is capable of radio communications with the hospital while en route with a patient. (Protected: Ref. NRC IR 85-32(12))

NHY also maintains an ambulance onsite, with attending staff assigned during normal working hours (0700 to 1530 hours weekdays).

Ambulance personnel are provided with specific training by NHY staff on the health physics considerations associated with radiologically contaminated personnel.

TABLE 10.1

EPA PROTECTIVE ACTION GUIDELINES

PROJECTED DOSE (REM) TO THE POPULATION	RECOMMENDED ACTIONS[a]	COMMENTS
Whole Body < 1 Thyroid < 5	No planned protective actions.[b] State may issue an advisory to seek shelter and await further instructions. Monitor environmental radiation levels.	Previously recommended protective actions may be reconsidered or terminated.
Whole Body 1 to < 5 Thyroid 5 to < 25	Seek shelter as a minimum. Consider evacuation. Evacuate unless constraints make it impractical. Monitor environmental radiation levels. Control access.	If constraints exist, special consideration should be given for evacuation of children and pregnant women.
Whole Body 5 and above Thyroid 25 and above	Conduct mandatory evacuation. Monitor environmental radiation levels and adjust area for mandatory evacuation based on these levels. Control access.	Seeking shelter would be alternative if evacuation were not immediately possible.

(a) These actions are recommended for planning purposes. Protective action decisions at the time of the incident must take existing conditions into consideration.

(b) At the time of the incident, officials may implement low-impact protective actions in keeping with the principle of maintaining radiation exposures ALARA (as low as reasonably achievable).

TABLE 10.2

EMERGENCY DOSE LIMITS

Dose Level[a]	Criteria
1. 25 rem to the whole body, or 100 rem total to the extremities.	Maximum allowable dose to an emergency worker for the duration of the accident.
2. 75 rem to the whole body, or 300 rem total to the extremities.	Immediate evaluation and action required for saving of life. When efforts are completed, revert to limits in Item #1 above, as appropriate.

(a) The following shall be considered prior to allowing personnel to accept risks associated with emergency dose limits:

1. Female employees of childbearing age will not be allowed to participate;
2. Volunteers above the age of 45 years will be given priority;
3. The individual(s) awareness of the consequences that such an exposure can have; and
4. All possible protective measures to limit such exposure.

Manual of Protective Action Guides and Protective Actions for Nuclear Incidents (Table 2.1)

TABLE 10.3

EMERGENCY CENTER PROTECTIVE ACTION CRITERIA

1. A dose rate of 50 mR/hr will increase the frequency of radiation monitoring in the center and require an immediat evaluation of the accumulated center whole body dose readings on the center high-range dosimeter.

2. A dose rate of 1 R/hr expected to persist for longer than one hour or an accumulated center whole body dose reading of 1 R over a 24-hour period on the center high-range dosimeter shall initiate evacuation planning.

3. An accumulated center whole body dose reading greater than or equal to 5 R over a 24-hour period on the center high-range dosimeter shall require immediate evacuation to an alternate location.

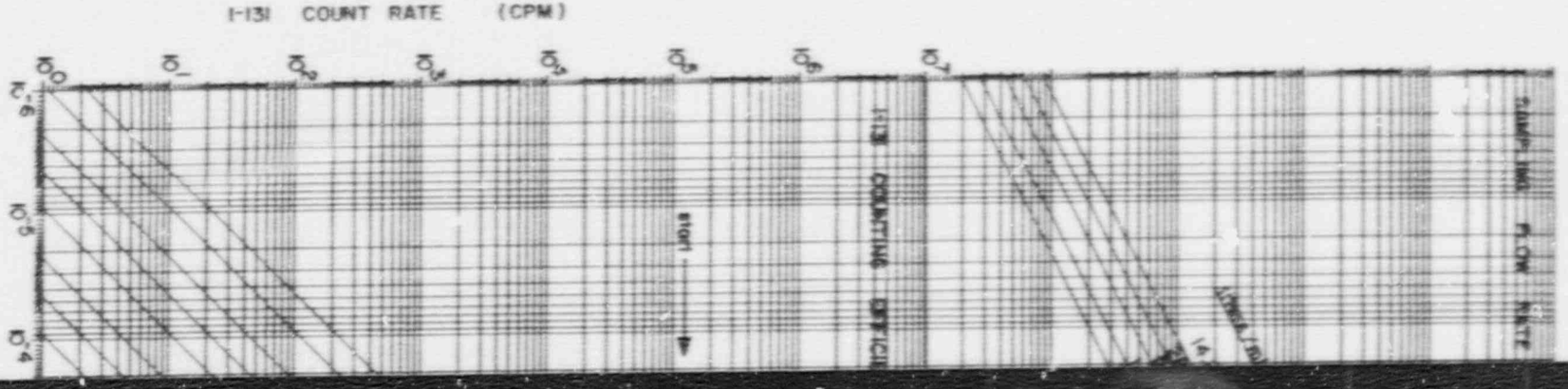
4. If sample results verify radioiodine activity concentrations and projected intakes greater than 500 MPC-hours, then potassium iodide shall be administered to all center personnel.

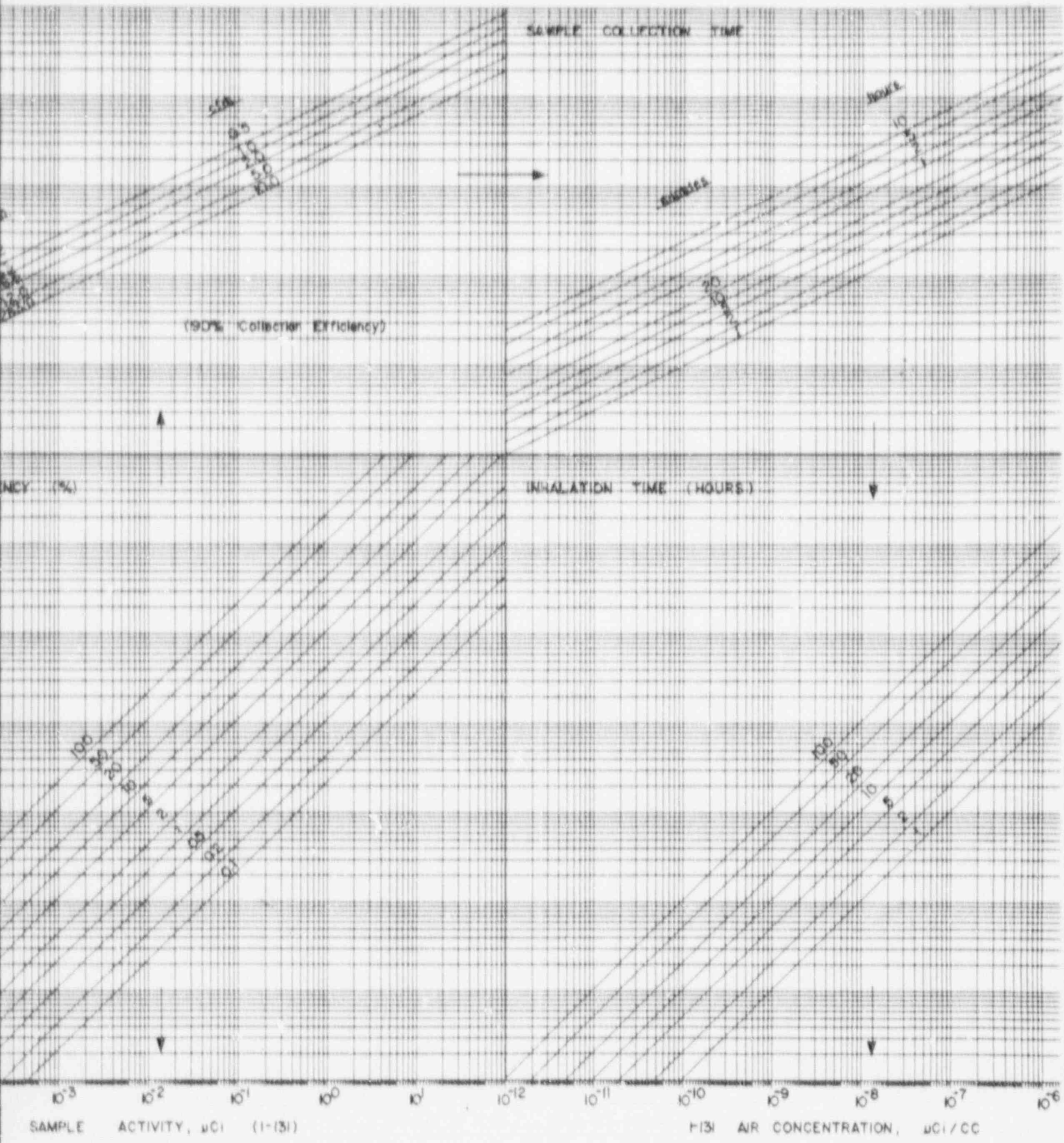
5. If particulate airborne activity concentrations exceed 3×10^{-8} µCi/cc for unidentified particulate activity or 10 x MPC, use of respirators shall be determined dependent upon the expected duration of the airborne contamination. Center ventilation may be secured.

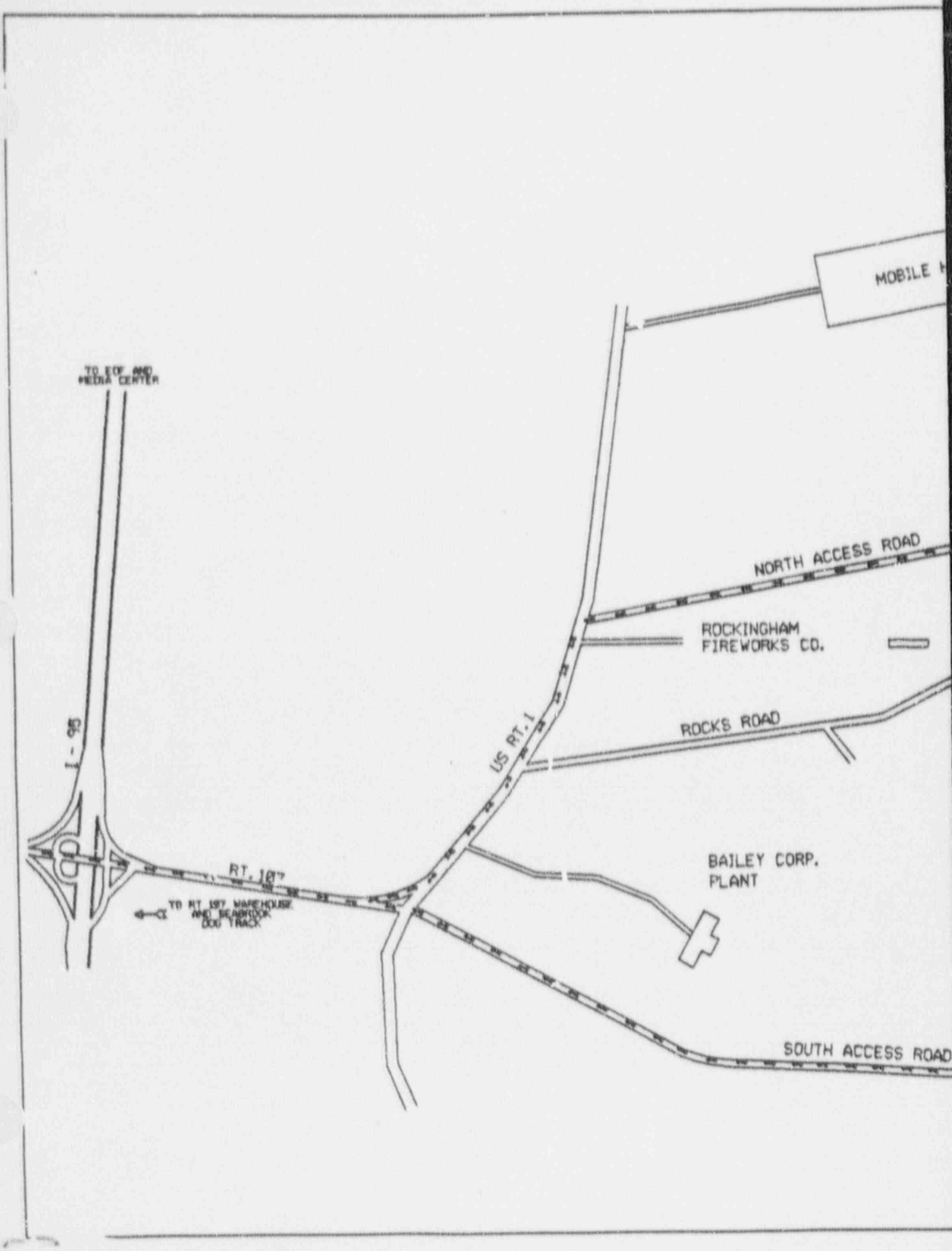
6. If particulate or radioiodine activity concentrations exceed 100 x MPC, use of respirators shall be required for continued operation.

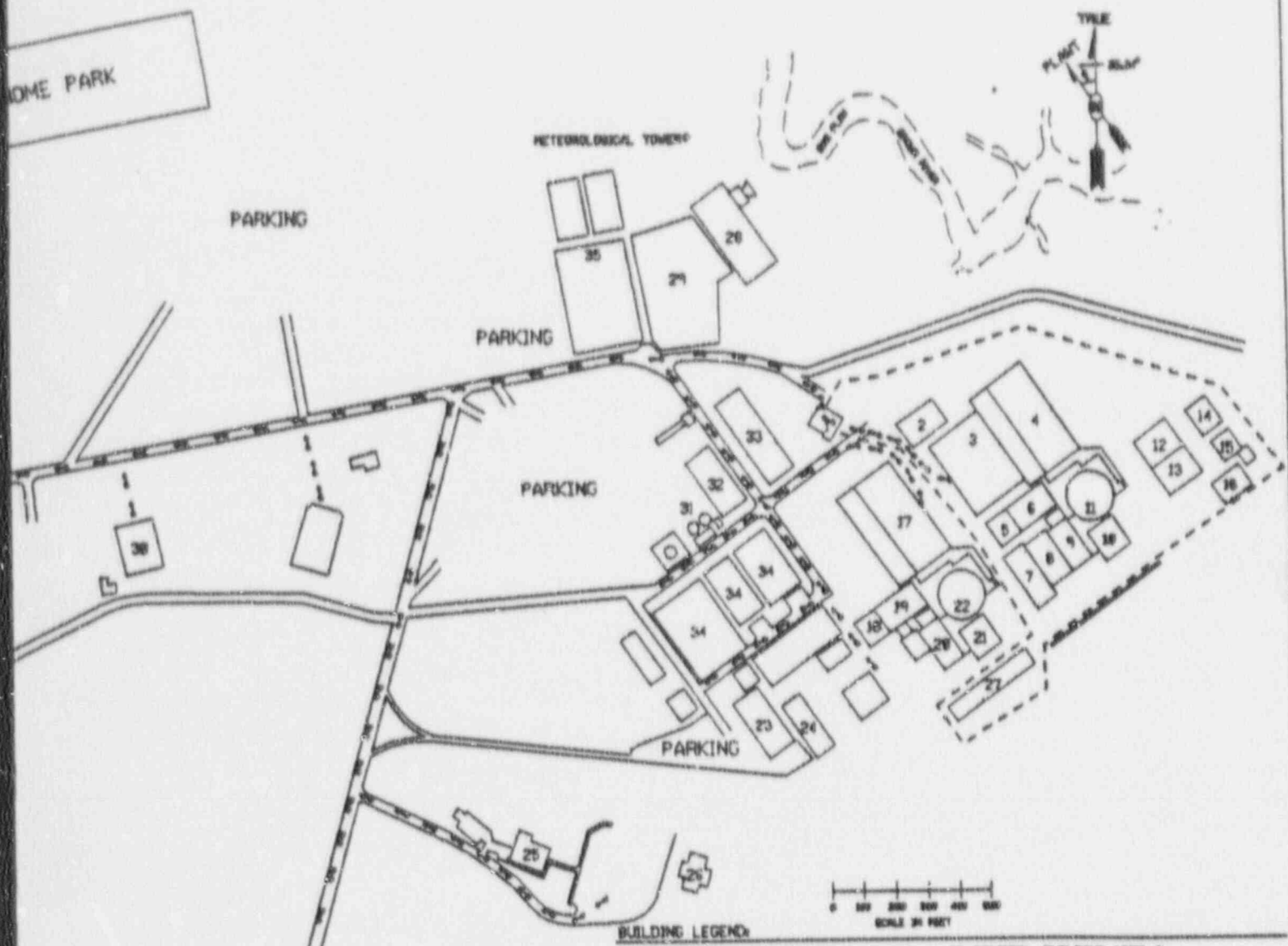
7. If particulate or radioiodine activity concentrations exceed 1000 x MPC, evacuation of the center shall be required.

8. Protective clothing (lab coats, shoe covers, cotton gloves) shall be required if area contamination surveys indicate contamination levels greater than 1000 dpm/100 cm^2 (β, γ) or 20 dpm/100 cm^2 (alpha).


I-131 COUNT RATE (CPM)
10^0
10^1
10^2
10^3
10^4
10^5
10^6
10^7
10^6
10^5
10^4
I-131 COUNTING EFFICI
START
SAMPLING FLOW RATE




MOBILE H
NORTH ACCESS ROAD
ROCKINGHAM
FIREWORKS CO.
ROCKS ROAD
US RT. 1
I - 95
RT. 107
BAILEY CORP.
PLANT
SOUTH ACCESS ROAD



BUILDING LEGEND:

1. GATEHOUSE
2. 345 KV SUBSTATION
3. PRODUCTION ADMINISTRATION BUILDING
4. TURBINE BUILDING UNIT 1
5. DIESEL GENERATOR BUILDING UNIT 1
6. CONTROL BUILDING UNIT 1
7. WASTE PROCESSING BUILDING
8. TANK FARM
9. PRIMARY AUXILIARY BUILDING UNIT 1
10. FUEL STORAGE BUILDING UNIT 1
11. CONTAINMENT BUILDING UNIT 1
12. CIRCULATING WATER PUMP HOUSE
13. SERVICE WATER PUMP HOUSE
14. INTAKE STRUCTURE
15. DISCHARGE STRUCTURE
16. CHLORINATION BUILDING
17. TURBINE BUILDING UNIT 2
18. DIESEL GENERATOR BUILDING UNIT 2
19. CONTROL BUILDING UNIT 2
20. PRIMARY AUXILIARY BUILDING UNIT 2
21. FUEL STORAGE BUILDING UNIT 2
22. CONTAINMENT BUILDING UNIT 2
23. HIGH RISE
24. TECHNICAL TRAINING
25. TRAINING CENTER
26. SCIENCE & NATURE CENTER
27. COOLING TOWERS
28. SETTLING BASIN
29. 345 KV TERMINATION AREA
30. PRODUCTION WAREHOUSE
31. FIRE PROTECTION TANKS & PUMPS
32. CHANGE HOUSE
33. CONSTRUCTION OFFICES
34. WAREHOUSES
35. SEWAGE TREATMENT FACILITY
36. GENERAL OFFICE BUILDING

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NEW HAMPSHIRE YANKEE SEABROOK STATION RADIOLOGICAL EMERGENCY PLAN	SEABROOK STATION EVACUATION ROUTES	
	SNEP REV. 9	FIGURE 10.2

11.0 EMERGENCY NOTIFICATION AND PUBLIC INFORMATION

11.1 EMERGENCY NOTIFICATION

Upon classification of accident conditions at the station, the Short Term Emergency Director ensures that the State Police of New Hampshire and Massachusetts (*) are notified. This notification is made within 15 minutes of emergency classification and is the initial link to the offsite governmental emergency network for the activation of offsite emergency response plans, including emergency public notification if the emergency condition warrants it. The format and contents of the initial message between the station and the State Police dispatchers (*) are specified in notification procedures which are reviewed and agreed upon by state authorities (*).

Having been notified through State channels, the Department of Public Health of Massachusetts (*) and New Hampshire Public Health Services will call Seabrook Station and request the following information:

1) Name of caller;

2) Date, time and classification of emergency (or termination);

3) Brief description of the event (or reason for termination);

4) Prevailing weather conditions (e.g., wind velocity, direction, atmospheric stability; form of precipitation, if any);

5) Whether a release has occurred and, if so, the type and quantity of release and estimated duration/impact times;

6) Actual or projected dose rates at the station boundary; projected dose rates at various distances from the station (2, 5, and 10 miles);

7) Emergency response actions underway; and

8) Recommended protective actions in accordance with State protective action criteria (i.e., EPA Protective Action Guides).

Follow-up reports will be provided on an as-needed basis until such time that the emergency condition has been deemed terminated as agreed upon by the States of New Hampshire and Massachusetts (*) and NHY emergency management. Following this closeout, a written summary of the accident will be provided to the respective States and the NRC.

11.2 PUBLIC NOTIFICATION

Public alerting and notification within the Seabrook Station plume exposure pathway EPZ will be accomplished through the use of the equipment and systems described in Appendix E.

11.3 PUBLIC INFORMATION

Any emergency will generate a continuous and intensive demand for up-to-date public information. This is best accomplished if each organization involved is aware of what the others are saying. Consequently, NHY has planned for the establishment of a Media Center and Joint Telephone Information Center (JTIC) for the purpose of providing coordinated press releases and establishing rumor control.

At an Unusual Event declaration, the Seabrook Station News Service staff will coordinate public information inquiries in accordance with Procedure ER 3.4, 'Seabrook Station News Services Operations.' However, under an Alert, Site Area Emergency or General Emergency, the Media Center, located at Newington Town Hall, Newington, New Hampshire and the JTIC, located at Newington Station next to the EOF, will be activated. They will be staffed and operated by designated public information personnel from NHY in accordance with Procedure ER 3.5, 'Media Center/Joint Telephone Information Center.' Personnel with nuclear expertise will be responsible for media contact and interfacing with public information representatives for the States of New Hampshire and Massachusetts (*), the NRC and other Federal agencies.

Selected members of the public information staff will report to the EOF to evaluate and draft news releases on information concerning the accident. When the content of the news releases has been approved by the Response Manager, this information will be forwarded to the Media Center where news releases will be made public.

An Emergency News Manager from NHY will manage the activities of the Media Center. Information transfer to the Media Center will be managed by the Emergency Communications Coordinator utilizing dedicated communication links. Announcements during an emergency and important policy statements will be approved and/or made by the Response Manager or in his absence by the Site Emergency Director. Joint press conferences will be coordinated with key government officials and the Emergency News Manager. A Company Spokesperson will be available for all press conferences.

Work space and communications equipment have been provided at the Media Center for State and Federal agency use. The Media Center staff will make every effort to issue timely and accurate news bulletins on the conditions at the Station.

Located at the JTIC, public information personnel will monitor media networks, both television and radio, for erroneous information concerning accident conditions, and as misinformation is recognized, corrective action will be taken. Public inquiries will be dealt with by rumor control personnel. Special toll free telephone numbers have been assigned and will be publicized for this purpose to ensure appropriate rumor control measures.

11.3 PUBLIC INFORMATION (continued)

Public information materials are available at the Media Center. In the form of "press kits," the materials include information on radiation, Seabrook Station operations, the Seabrook Station emergency planning zone, the emergency classification system, and a collection of resumes of NHY spokespersons.

As part of normal station operations, the Seabrook Station Science and Nature Center staff maintains supplies of public information materials and provides educational programs for the general public upon request.

Public information materials specific to emergency plans of New Hampshire and Massachusetts (*) have been developed. The materials have been distributed to residents and made available to transients in New Hampshire and Massachusetts who are located within the plume exposure pathway Emergency Planning Zone (EPZ). Materials distributed include:

- Resident population: calendars, self-addressed special needs survey cards, self-adhesive labels

- Beach/Transient population: signs posted at beaches, parks and state forest recreation areas; posters, fliers, self-adhesive labels and bus route maps (each of these materials is printed both in English and French)

- Commercial establishments (restaurants, businesses, health care facilities, etc.) and schools: posters, fliers, self-adhesive labels, bus route maps

- Farmers, farm workers, food processors and food distributors: a brochure containing information on protection of the food chain. This brochure will be made available at advertised locations within the 50-mile ingestion exposure pathway EPZ at the time of an emergency.

These materials contain facts about the emergency plans, information on potential protective actions (such as sheltering and evacuation), listings of EBS radio stations, emergency bus routes and evacuation routes, considerations for school children and handicapped persons, names and locations of reception centers and host facilities, contacts for additional information and educational material on radiation. These emergency plan public information materials will be made available at the Media and Science and Nature Centers after they have been distributed to the public.

11.3 PUBLIC INFORMATION (continued)

In addition to the printed emergency plan public information materials, sample broadcast messages consistent with Seabrook Station's emergency classification and protective action recommendation schemes have been developed. The messages are intended to be used as part of the Emergency Broadcast System Network to provide information to the public when needed.

The NHY Corporate Communications Department is in daily contact with local and regional media, and annually conducts a program to acquaint the news media with information concerning radiation, emergency public information procedures, general station characteristics, the emergency classification system and other pertinent facts. Area media representatives are invited and encouraged to attend the annual briefings.

12.0 MAINTAINING EMERGENCY PREPAREDNESS

12.1 Drills and Exercises

Emergency exercises and drills will be conducted to test and evaluate the adequacy of emergency facilities, equipment, procedures, communication channels, actions of emergency response personnel, and coordination between NMY and offsite agencies. A summary of exercises and drills, and associated elements are presented below.

12.1.1 Radiological Emergency Plan Exercises

An exercise tests the execution of the overall station emergency response and its integration with responding offsite organizations. In order to test and evaluate the station emergency response, an exercise will be conducted annually. Consistent with the regulatory requirements for offsite exercise participation, Federal, State (*) and local agencies will be notified of intended exercises and their conduct will be coordinated with offsite authorities as appropriate.

12.1.2 Emergency Plan Drills

A drill is a supervised instruction period aimed at testing, developing and maintaining skills in a particular emergency response function. The frequency of drills is dependent upon the function which is to be tested.

12.1.2.1 Communication Drills

To ensure that emergency communications between the facility and offsite emergency response organizations are operable, communication drills will be conducted as outlined below. Included in the scope of these drills is the aspect of understanding message content (e.g., station technical terms). Paragraphs 3, 4, 5, and 8 below may be performed as part of the required annual exercise.

1) Communication channels with State governments within the plume exposure pathway will be tested monthly;

2) The pager system for the notification of the Primary Responders of the Emergency Response Organization (ERO) will be tested weekly;

3) The pager system for the notification of the Yankee Nuclear Services Division (YNSD) ERO will be tested annually;

4) Data transmission capability between station emergency centers will be tested annually;

5) EOF communications to State Emergency Operation Centers and to station field assessment teams will be conducted annually;

6) Communications between the Control Room and the NRC Headquarters Operations Center will be tested weekly on Emergency Notification System (ENS) dedicated telephone;

7) Communications between the EOF, TSC and the NRC Headquarters Operations Center will be tested monthly over the ENS; and

8) Notification of the Secondary Responders of the ERO via the automatic dialing system will be tested at least annually.

12.1.2.2 Fire Drills

To evaluate the response and training of the station fire brigade and coordination of same with offsite fire support, a number of fire drills are conducted annually with at least one drill being conducted with offsite fire support. The drills will be conducted in accordance with station Technica Specifications.

12.1.2.3 Medical Drills

To evaluate the response and training of the station medical response and offsite hospital personnel, a medical drill will be conducted annually involving a simulated contaminated individual. Although the station medical response may be tested more frequently, the offsite response portion of medical drills may be performed as part of the annual exercise.

12.1.2.4 Radiological Monitoring Drills

Plant environs and radiological monitoring drills (onsite and offsite) will be conducted annually. These drills will include collection and analysis of airborne sample media, communications, recordkeeping and, if feasible, interface with other offsite monitoring efforts. This drill may be performed as part of the annual exercise.

12.1.2.5 Health Physics Drills

Health Physics drills will be conducted semiannually which involve response to, and analysis of, simulated elevated airborne and liquid samples and direct radiation measurements. One of the drills may be performed as part of the annual exercise. Chemistry personnel will be periodically drilled on the analysis of station liquid samples.

12.1.3 Scenarios

The E-P Drill Group Supervisor is responsible for coordinating implementation of each drill and exercise package. Scenarios are prepared under the direction of the E-P Scenario Supervisor for each exercise and selected drills. As appropriate, scenarios are approved by Emergency Preparedness and Station management. For exercises that include offsite participation, the scenario will be submitted to FEMA for agency review in accordance with regulatory requirements. All exercise scenarios will be submitted to the NRC for review.

Within a six-year period, the scenario content will be varied to test all the major elements of the emergency preparedness program. In general, the scenario will simulate a sequence of emergency conditions that would call for the mobilization of the offsite authorities, require recommendations of offsite protective measures, and allow for evaluation of offsite plans and their integration with the Station response. The scenario will include, as a minimum, the following:

1) Date, time period, locations and participating organizations;

2) Basic objectives and specific elements that are to be tested;

3) Guidelines and extent of play;

4) Controller instructions, and a list of controllers and evaluators;

5) A narrative summary describing the exercise scenerio and expected responses; and

6) Time schedule of real and simulated events.

New Hampshire Yankee cannot commit other organizations to conduct an exercise during off-hour times. Outside organizations will be encouraged to participate in exercises, but starting times and pre-notification for exercises have to be agreed upon by participating offsite organizations.

The exercise will be structured with sufficient flexibility to allow free play for decision-making processes. The exercise scenario package will describe a specific accident sequence, contain a set of input messages, and list anticipated response actions which parallel the accident sequence. The exercise - controller organization will receive instructions to recognize areas where ERO responses may deviate from anticipated responses. The exercise controller organization may: (1) restrict player action if the response threatens the approved time sequence; (2) restrict player action if the response circumvents a required exercise objective; and (3) introduce 'free play' items to the scenario sequence if player actions become stagnant.

Specific exercise elements which allow free p. the decision-making process include:

1) Exposure control actions;

2) Manpower augmentation actions;

3) Emergency classification actions, particularly the de-escalation process;

4) Recommendation of protective actions; and

5) Coordination and communication with offsite authorities.

12.1.4 Evaluation of Exercises

To evaluate the performance of participating facility personnel and the adequacy of emergency facilities, equipment and procedures used during an exercise, the Exercise Coordinator will arrange for qualified controllers and evaluators to evaluate and critique the exercise.

A critique will be conducted as soon as feasible following the conclusion of the exercise with player personnel as designated by the Exercise Coordinator. After the critique, the controllers and evaluators will complete and submit evaluation forms to the Exercise Coordinator in which the exercise performance will be measured against the objectives. All comments and/or recommendations will be appropriately documented. Evaluators from state (*) agencies will be welcome to join the critique process.

The exercise documentation will be submitted to the Manager of Response and Implementation who will assign responsibility and deadlines for corrective actions. Individuals assigned this responsibility will be required to document actions taken to improve the station's emergency preparedness.

12.2 Emergency Plan Training

The following sections describe the various types of Emergency Plan Training.

12.2.1 Emergency Response Organization (ERO)

New Hampshire Yankee personnel with specific positions in the ERO will receive training to initially qualify them for a response position. To limit the amount of training required for initial qualification, ERO assignments will, as much as possible, parallel normal job knowledge, skills and abilities. The initial qualification will consist of an overview module and other modules that are appropriate to the individual's response position. The required modules are shown on Figure 12.1. Any module designated with an 'I' is required for initial qualification and any module designated with an asterisk is required for both initial qualification and requalification. All qualified members of the ERO will receive annual requalification training to maintain their level of emergency response knowledge.

The required training modules typically cover either the operation of a facility or the performance of a group of related tasks. The topics for a module on the operation of a facility typically include the following: organization, interaction with other facilities, interaction with outside organizations, activation, and return to ready status. The topics for a module on the performance of related tasks typically include the following: procedure(s) for performing the task(s), responsibility for performing the task(s), interactions with other organization members, and the use of related forms.

Training other than that shown on Figure 12.1 may be given to address specific needs.

12.2.2 Support Groups

Personnel outside the New Hampshire Yankee organization and who report to Seabrook Station will be offered training designed to aid them in performing their emergency response function. These include YNSD and the Town of Seabrook Fire Department. This training will include such topics as site access and facility operation.

Personnel outside the New Hampshire Yankee organization who do not report to Seabrook Station will also be offered training designed to aid them in performing their emergency response function. These personnel include NH Office of Emergency Management, NH Division of Public Health Services, Massachusetts Civil Defense Agency, Massachusetts Department of Public Health, Maine Emergency Management Agency, and Exeter Hospital. (Protected: Ref. NRC IR 86-18(03)) This training will include topics that would assist these personnel in performing their emergency response role.

The recommended modules for these groups are designated with an "O" on Figure 12.1. This training will be offered annually.

12.2.3 Station Personnel with No ERO Assignment

Station personnel with no ERO assignment will be trained in their proper response to an emergency during General Employee Training. This training will be given on an annual basis.

12.2.4 Emergency Public Information Personnel

Designated Emergency Public Information Personnel will annually receive training in the following areas:

1) Emergency response concepts including emergency management, recovery management and emergency response personnel.

2) Offsite support agencies, organizations and facilities.

3) Onsite support facilities and capabilities.

4) Media interface and conduct of operations.

5) Media Center facility, functions and resources.

6) Federal, State and other public information emergency plans to ensure recognition of contacts and coordination.

7) Communication channels and notification scheme.

12.2.5 Records

Documentation of training conducted in support of emergency planning is maintained in accordance with appropriate nuclear training procedures.

12.3 Review and Updating of Plan and Procedures

Annual independent reviews of the New Hampshire Yankee emergency preparedness program will be conducted. The reviews shall include the emergency plan, its implementing procedures, training, equipment, and State and local government planning interfaces (*). Management controls will be implemented for evaluation and correction of review findings. The result of the review, along with recommendations for improvements, will be documented and retained for a period of five years.

All changes to the emergency response procedures will be submitted to the Station Operations Review Committee (SORC) for review and approval before implementation. On an annual basis, written agreements with outside support organizations and government agencies will be evaluated to determine if such agreements are still valid. If not, then these agreements will be renewed and updated; otherwise, the agreements will be considered current. All telephone number listings associated with the station emergency response facilities will be reviewed quarterly and updated if necessary. Revisions will be made in accordance with current regulations and guidelines on a continuing basis, as applicable. Changes to the plan and procedures will be forwarded to all document control list recipients. (Protected: Ref. NRC IR 86-18(31))

12.4 Maintenance and Inventory of Emergency Equipment and Supplies

The emergency equipment and supplies are maintained as indicated in Appendix F. The calibration cycle for emergency station instruments is semiannual for portable instruments and pocket dosimeters unless use requires a more frequent calibration schedule. Along with requirements for calibration, the instruments will be source-checked during monthly inventories and before each use. There are sufficient reserve instruments and equipment to replace those that are removed from emergency kits for calibration purposes. An inventory of the emergency storage locations will be made, and discrepancies will be noted and corrected.

12.5 Emergency Preparedness Manager

The Emergency Preparedness Manager is assigned the following responsibilities:

1) Maintain the Seabrook Station Radiological Emergency Plan.

2) Maintain the Production Emergency Response (NPER) Manual.

3) Prepare emergency preparedness drill and exercise scenarios.

12.6 Response and Implementation Manager

The Response and Implementation Manager is assigned the following responsibilities:

1) Ensure the conduct of drills and exercises.

2) Track identified drill and exercise deficiencies, and associated corrective action.

3) Maintain Emergency Response Organization staffing.

4) Maintain Emergency Response Organization pager assignments and publish schedules.

5) Maintain the Emergency Response Organization Notification System data base.

12.7 Site Services Manager

The Site Services Manager is assigned the following responsibilities:

1) Maintain the emergency response facilities as described in the Seabrook Station Radiological Emergency Plan and Production Emergency Response Manual.

2) Obtain and track the availability of facilities and equipment required to maintain the Seabrook Station emergency response in a continuous state of readiness.

3) Ensure implementation of the communications and equipment test program.

12.8 Specialty Training Manager

Ensures the conduct and documentation of emergency preparedness training.

12.9 Director of Emergency Response and Implementation

Directs and manages radiological emergency response planning and preparedness.

12.10 Executive Director of Emergency Preparedness and Community Relations

Retains the overall authority and responsibility for radiological emergency response planning and preparedness.

EMERGENCY RESPONSE OR

LESSON PLAN NUMBER	TITLE	COMMUNICATOR (CR/EOF)	FIRE TECHNICIAN / EMT	SHORT TERM EMERGENCY DIRECTOR	SECURITY PERSONNEL	RESERVED	CHEMISTRY COORDINATOR	COMPUTER ENGINEER	EMERGENCY OPERATIONS MANAGER	ENGINEERING COORDINATOR	DESIGN ENGINEER	HEALTH PHYSICS COORDINATOR	I & C COORDINATOR	MAINTENANCE COORDINATOR	REACTOR ENGINEER	SITE EMERGENCY DIRECTOR	TECHNICAL SERVICES COORDINATOR	TSC ADMINISTRATIVE STAFF (TECHNICAL)	TSC ADMINISTRATIVE STAFF (CLERICAL)	OPERATIONS TECHNICIAN ①	SUPERVISORY CONTROL ROOM OPERATOR	CONTROL ROOM OPERATOR	CHEMISTRY TECHNICIAN	COMPUTER TECHNICIAN	HEALTH PHYSICS TECHNICIAN	I & C FOREMAN/PERSONNEL	MAINTENANCE FOREMAN-ELECTRICAL	MAINTENANCE FOREMAN-MECHANICAL	AUGMENTED MAINTENANCE-ELECTRICAL	AUGMENTED MAINTENANCE-MECHANICAL	①	OSC COORDINATOR	STORESKEEPER
ED1801C (856.81)	OVERVIEW OF EMERGENCY PLANNING																																
ED1802C (856.82)	CLASSIFICATION			*					*							*	*																
ED1803C (856.83)	NOTIFICATIONS			*					*							*																	
ED1806C (856.83A)	NOTIFICATION FOR CR COMMUNICATORS	*																															
ED1807C (856.84)	TSC OPERATIONS						*	*	*	*	*	*	*	*	*	*	*	*	*		*												
ED1825C (856.84A)	TSC OPERATIONS FOR ADMINISTRATIVE STAFF																			*													
ED1808C (856.85)	OSC OPERATIONS		*																			*	*	*	*	*	*	*	*		*	*	
ED1809C (856.86)	EOF OPERATIONS																																
ED1810C (856.86C)	EOF OPERATIONS FOR ADMINISTRATIVE STAFF																																
ED1811C (856.86D)	HP SUPPORT FUNCTIONS IN THE EOF																																
ED1812C (856.87A)	DOSE ASSESSMENT IN EOF (METPAC/HP41)																																
ED1813C (856.87B)	DOSE ASSESSMENT IN TSC/CR (HP41)			*			*					*																				
ED1814C (856.88)	PROTECTIVE ACTION DECISION MAKING			*								*					*															
ED1815C (856.89)	OFFSITE MONITORING																																
ED1816C (856.89A)	OFFSITE MONITORING FOR TEAM DRIVERS																																
ED1817C (856.89B)	OFFSITE MONITORING FOR COMMUNICATORS	*																															
ED1818C (856.10)	EMERGENCY RADIOLOGICAL CONTROLS											*														*							
ED1819C (856.11)	MEDICAL EMERGENCY		*	*														*								*							
ED1820C (856.12)	SECURITY				*																												
ED1821C (856.13)	MEDIA CENTER OPERATIONS																																
ED1822C (856.13C)	MEDIA CENTER ACTIVATION																																
ED1832C (856.17)	SITE ACCESS/EGRESS																																
ED1823C (856.19)	MANAGEMENT OF CONTAMINATED & INJURED PATIENT		*																														
ED1833C (856.19A)	MANAGEMENT OF CONTAMINATED & INJURED PATIENT-PRACTICE SESSION																																
ED1834C —	ORIENTATION FOR OFFSITE RESPONDERS																																
ED1824C —	SITE PERIMETER AND OFFSITE MONITORING FOR OSC PERSONNEL																									*							
		CR-SHIFT PERSONNEL					TECHNICAL SUPPORT CENTER															OPERATIONS SUPP CENTER												

EMERGENCY RESPO

LEGEND

1 = REQUIRED INITIAL TRAINING

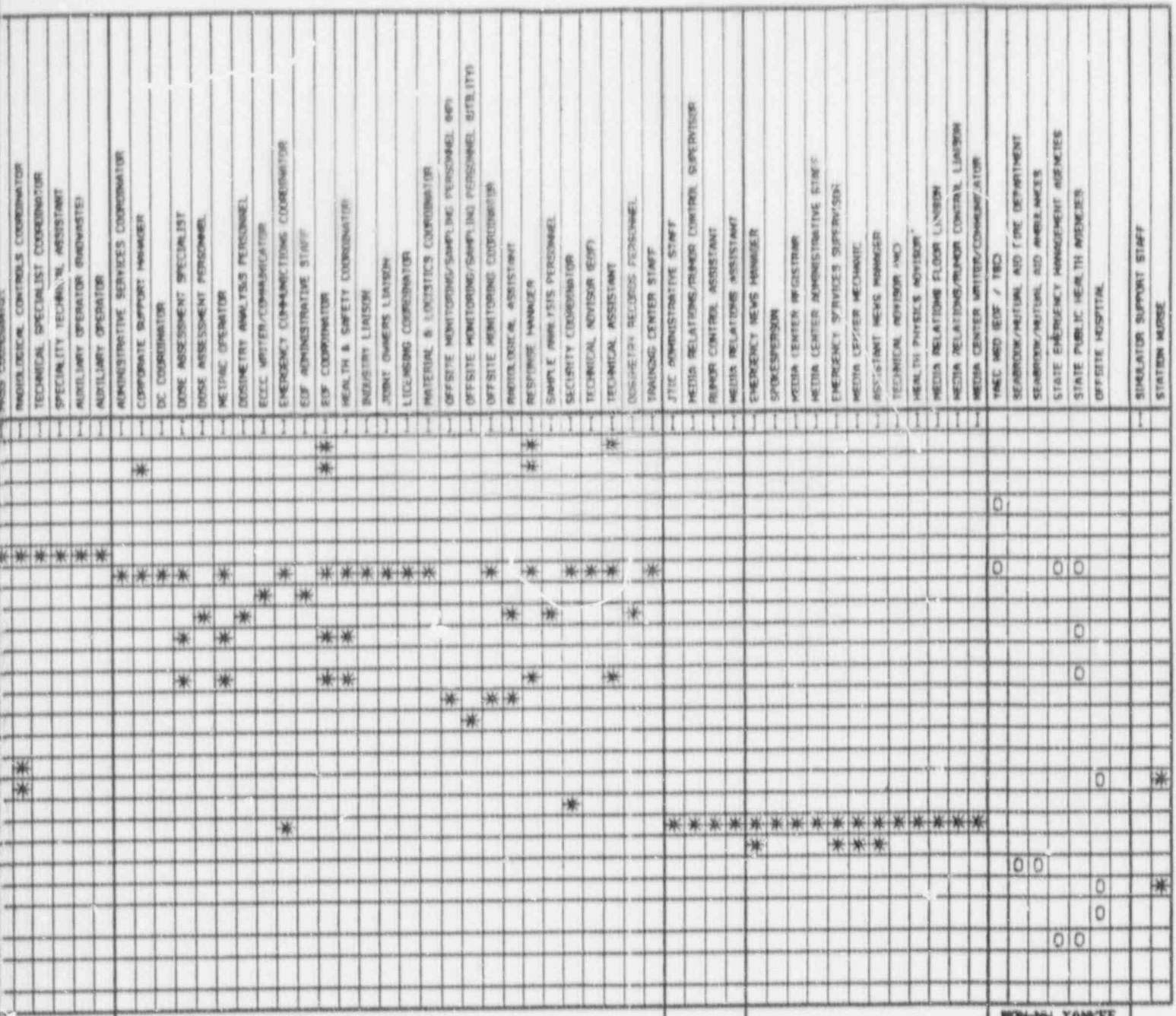
* = REQUIRED INITIAL AND PERIODIC REQUALIFICATION TRAINING

D = TRAINING OFFERED TO SUPPORT C

NOTE ① = CROSS TRAINING AS STED

REVISION 0	INITIAL ISSUE	06/05/89

GANIZATION TRAINING MATRIX



NSE FACILITY PERSONNEL LOCATION OR INTERFACE POINT

GANIZATIONS

NEW HAMPSHIRE YANKEE
SEABROOK STATION
RADIOLOGICAL EMERGENCY PLAN

SEABROOK STATION
EMERGENCY PREPAREDNESS
TRAINING PROGRAM

SSREP REV. 5 | FIGURE 12.1

APPENDIX A

EMERGENCY RESPONSE ORGANIZATION POSITION DEFINITIONS

(Protected: Ref. NRC IR 85-32(15b))

APPENDIX A

INDEX

APPENDIX A

INDEX
(Continued)

POSITION DEFINITION

EMERGENCY POSITION: Administrative Services Coordinator

ACTIVATION LEVEL: Alert through General Emergency

RESPONSE LOCATION: EOF

RESPONSIBLE TO: Corporate Support Manager

RESPONSIBILITIES:

a. Direct staff to provide administrative services to the emergency response organization.

b. Function as the site emergency organization purchasing agent with responsibility for contract negotiation/administration and material control.

c. Acquire additional resources such as documents, drawings, and office supplies required by station emergency management disciplines.

d. Maintain communication services for the station emergency response organization.

e. Responsible for establishing emergency personnel shift schedules.

PERSONNEL DESIGNATED TO FILL POSITION: Production Administrative Services Manager, Office Services Department Supervisor, Budget and Controls Manager, Inventory Department Supervisor.

QUALIFICATIONS: ANSI 3.1 qualified Supervisor and designated Emergency Plan training.

NOTE - The backup Administrative Services Coordinator performs the duties of the Assembly Area Coordinator.

POSITION DEFINITION

EMERGENCY POSITION: Assistant News Manager

ACTIVATION LEVEL: Alert through General Emergency

RESPONSE LOCATION: Media Center

RESPONSIBLE TO: Emergency News Manager

RESPONSIBILITIES:

a. Manages facility activation process.

b. Provides logistical and administrative direction for the operation and deactivation of the Media Center.

c. Ensure news release is copied, posted and distributed.

d. Coordinate graphics and status board display.

e. Obtain additional manpower and equipment as necessary.

PERSONNEL DESIGNATED TO FILL POSITION: Mediagraphics Department Supervisor, Nuclear Quality Manager, Information Resources Manager

QUALIFICATIONS: Two year public information or management/supervisory experience and designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION:	Auxiliary Operator
ACTIVATION LEVEL:	Alert through General Emergency
RESPONSE LOCATION:	OSC
RESPONSIBLE TO:	OSC Coordinator
RESPONSIBILITIES:	Implement repair and corrective actions.
PERSONNEL DESIGNATED TO FILL POSITION:	Auxiliary Operator
QUALIFICATIONS:	ANSI 3.1 qualified non-licensed operator. Radiation worker and designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION:	Auxiliary Operator (Radwaste)
ACTIVATION LEVEL:	Alert through General Emergency
RESPONSE LOCATION:	OSC
RESPONSIBLE TO:	OSC Coordinator
RESPONSIBILITIES:	a. Implement repair and corrective actions to radwaste facility. b. Operate radwaste equipment as necessary.
PERSONNEL DESIGNATED TO FILL POSITION:	Radioactive Waste Technician, Auxiliary Operator
QUALIFICATIONS:	ANSI 3.1 qualified non-licensed operator. Radiation worker and designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION:	Chemistry Coordinator
ACTIVATION LEVEL:	Alert through General Emergency
RESPONSE LOCATION:	TSC
RESPONSIBLE TO:	Site Emergency Director
RESPONSIBILITIES:	a. Direct radiochemistry operations. b. Coordinate planned gaseous and liquid releases. c. Assist in the HP41 dose assessment process.
PERSONNEL DESIGNATED TO FILL POSITION:	Chemistry and Health Physics Manager, Chemistry Department Supervisor, Chemistry Supervisor, Chemist
QUALIFICATIONS:	ANSI 3.1 qualified Chemistry Supervisor or Chemist. Radiation worker and designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION:	Chemistry Technician
ACTIVATION LEVEL:	Alert through General Emergency
RESPONSE LOCATION:	OSC
RESPONSIBLE TO:	PASS Coordinator
RESPONSIBILITIES:	a. Set up the Chemistry Hot Lab in accordance with appropriate Chemistry Department procedures. b. Perform post-accident gas and liquid sampling and analysis.
PERSONNEL DESIGNATED TO FILL POSITIONS:	Chemistry Technician
QUALIFICATIONS:	ANSI 3.1 qualified Chemistry Technician. Radiation Worker and designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION: Computer Engineer

ACTIVATION LEVEL: Alert through General Emergency

RESPONSE LOCATION: TSC/Computer Room

RESPONSIBLE TO: Technical Services Coordinator

RESPONSIBILITIES:

a. Provide continuous operation of the Main Plant Computer System.

b. Provide computer assistance as needed to personnel assigned to the Control Room.

c. Provide computer assistance as needed to personnel assigned to the Technical Support Center (TSC).

d. Provide computer assistance as needed to personnel assigned to the Emergency Operations Facility (EOF).

PERSONNEL DESIGNATED TO FILL POSITION: Computer [illegible]opment Department Supervisor, Computer Engineer

QUALIFICATIONS: Working knowledge of the operation of Main Plant Computer System. Radiation worker and designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION: Computer Technician

ACTIVATION LEVEL: Alert through General Emergency

RESPONSE LOCATION: OSC

RESPONSIBLE TO: OSC Coordinator

RESPONSIBILITIES:

a. Implement repair and corrective actions associated with the Main Plant Computer System (MPCS) and the RDMS and Security computers.

b. Respond to requests initiated by Computer Engineer.

PERSONNEL DESIGNATED TO FILL POSITION: Computer Technician

QUALIFICATIONS: Working knowledge of the operation of the Main Plant Computer System. Radiation worker and designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION: Control Room Communicator

ACTIVATION LEVEL: Unusual Event through General Emergency

RESPONSE LOCATION: Control Room - Technical Support Center

RESPONSIBLE TO: Short Term Emergency Director - Emergency Operations Manager

RESPONSIBILITIES:

a. Initiate and maintain communications with state and NRC officials.

b. Notification of primary responders.

PERSONNEL DESIGNATED TO FILL POSITION: I&C Technician

QUALIFICATIONS: One year's experience in Nuclear Power Plant. Radiation worker and designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION:	Control Room Operator
ACTIVATION LEVEL:	Alert through General Emergency
RESPONSE LOCATION:	OSC
RESPONSIBLE TO:	OSC Coordinator
RESPONSIBILITIES:	Implement repair and corrective actions.
PERSONNEL DESIGNATED TO FILL POSITION:	Control Room Operator
QUALIFICATIONS:	Licensed Reactor Operator. Radiation worker and designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION: Corporate Support Manager

ACTIVATION LEVEL: Alert through General Emergency

RESPONSE LOCATION: EOF

RESPONSIBLE TO: Response Manager

RESPONSIBILITIES:

a. Direct all licensing, security, and administrative support for the Seabrook Station Emergency Response Organization.

b. Coordinate all offsite and licensing support from the Engineering Support Center (ESC) of the Yankee Nuclear Services Division (YNSD) of Yankee Atomic Electric Company (YAEC).

c. Maintain facility command and control during any absences of both the Response Manager and EOF Coordinator.

d. Assist EOF Coordinator with Nuclear Alert System (NAS) notifications.

PERSONNEL DESIGNATED TO FILL POSITION: Regulatory Compliance Manager, Independent Safety Engineering Group Supervisor, Lead Engineer - Operating Experience.

QUALIFICATIONS: ANSI 3.1 qualified Supervisor or Professional/Technical personnel and designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION:	Design Engineer
ACTIVATION LEVEL:	Alert through General Emergency
RESPONSE LOCATION:	TSC
RESPONSIBLE TO:	Engineering Coordinator
RESPONSIBILITIES:	Research and provide system and component design information for use in technical evaluations and decision-making.
PERSONNEL DESIGNATED TO FILL POSITION:	Personnel assignments as requested by Engineering Subdivision Senior Management and maintained by Response and Implementation. Assignees are typically engineers from the Engineering Subdivision.
QUALIFICATIONS:	Engineering degree. Radiation worker and designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION: Document Control Center Coordinator

ACTIVATION LEVEL: Alert through General Emergency

RESPONSE LOCATION: EOF

RESPONSIBLE TO: Administrative Services Coordinator

RESPONSIBILITIES:

a. Perform computer searches/retrieval of vital documents on NHY NRMS.

b. Obtain drawings, manuals and other documents required for emergency.

c. Obtain reproduction of documents.

d. Obtain non NHY documents from UE&C/YAEC as required for emergency.

e. Coordinate entry and retrieval of data on INPO "Nuclear Network" as approved by Corporate Support Manager.

PERSONNEL DESIGNATED TO FILL POSITION: Records Management Department Supervisor, Records Management Department Section Leader, Records Technician

QUALIFICATIONS: ANSI 3.1 qualified Supervisor, or 2 years' experience in Records Management Department and designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION: Dose Assessment Personnel

ACTIVATION LEVEL: Alert through General Emergency

RESPONSE LOCATION: EOF

RESPONSIBLE TO: Dose Assessment Specialist

RESPONSIBILITIES:

a. Disseminate METPAC information to appropriate EOF personnel.

b. Update radiological status boards.

c. Assist Dose Assessment Specialist and METPAC Operator as requested.

PERSONNEL DESIGNATED TO FILL POSITION: Personnel assignments as requested by Nuclear Production senior management and maintained by Response and Implementation. Assignees are typically associated with technical departments at the Station.

QUALIFICATIONS: Designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION:	Dose Assessment Specialist
ACTIVATION LEVEL:	Alert through General Emergency
RESPONSE LOCATION:	EOF
RESPONSIBLE TO:	EOF Coordinator
RESPONSIBILITIES:	a. Assess the offsite consequences of station planned and unplanned radiological releases to determine offsite doses. b. Provides offsite dose information for the protective action recommendation process.
PERSONNEL DESIGNATED TO FILL POSITION:	Health Physicist, Health Physics Supervisor, Emergency Planner
QUALIFICATIONS:	Three years' experience in Health Physics or Emergency Planning and designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION: Dosimetry Analysis Personnel

ACTIVATION LEVEL: Alert through General Emergency

RESPONSE LOCATION: EOF

RESPONSIBLE TO: Dose Assessment Specialist

RESPONSIBILITIES:

a. Issue dosimetry and process the TLD's as needed.

b. Coordinate dosimetry efforts with the resources provided by the YNSD mobile laboratory.

PERSONNEL DESIGNATED TO FILL POSITION: Health Physics Supervisor, Health Physics Working Foreman, Health Physics Technician

QUALIFICATIONS: ANSI 3.1 qualified Health Physics Technician and designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION: Dosimetry Records Personnel

ACTIVATION LEVEL: Alert through General Emergency

RESPONSE LOCATION: EOF

RESPONSIBLE TO: Dosimetry Analysis Personnel

RESPONSIBILITIES:

a. Prepare Self Reading Pocket Dosimetry for use.

b. Issue dosimetry to personnel reporting to the station.

c. Maintain dosimetry/exposure records.

PERSONNEL DESIGNATED TO FILL POSITION: Personnel assignments as requested by Nuclear Production senior management and maintained by Response and Implementation. Assignees are typically associated with technical departments at the Station.

QUALIFICATIONS: Designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION:	ECCC Clerk*
ACTIVATION LEVEL:	Alert through General Emergency
RESPONSE LOCATION:	EOF Emergency Communications Command Center
RESPONSIBLE TO:	Emergency Communications Coordinator
RESPONSIBILITIES:	Provide administrative support to the ECCC
PERSONNEL DESIGNATED TO FILL POSITION:	Personnel assignments as requested by the Corporate Communications Department, approved by the assignee's home department management, and maintained by Response and Implementation. Assignees are typically administrative level personnel.
QUALIFICATIONS:	Designated Emergency Plan training

*This position may also perform the duties of the Seabrook Station News Services Clerk (SSNS Clerk) during an Unusual Event declaration.

POSITION DEFINITION

EMERGENCY POSITION: ECCC Writer/Communicator

ACTIVATION LEVEL: Alert through General Emergency

RESPONSE LOCATION: EOF ECCC

RESPONSIBLE TO: Emergency Communications Coordinator

RESPONSIBILITIES:

a. Draft news releases as directed by the Emergency Communications Coordinator.

b. Maintain communications with the Media Center Writer/Communicator.

PERSONNEL DESIGNATED TO FILL POSITION: Personnel assignments as requested by the Corporate Communications Department, approved by the assignee's home department management, and maintained by Response and Implementation. Assignees are typically administrative level personnel.

QUALIFICATIONS: Designated Emergency Plan training

POSITION DEFINITION

EMERGENCY POSITION: Emergency Communications Coordinator

ACTIVATION LEVEL: Alert through General Emergency

RESPONSE LOCATION: EOF ECCC

RESPONSIBLE TO: Response Manager

RESPONSIBILITIES:

a. Obtain emergency status information from the Response Manager.

b. Establish communication with the Emergency News Manager at the Media Center.

c. Coordinate and supervise preparation of draft news releases.

d. Obtain approval for content of news release from the Response Manager.

e. Ensure the Media Center is contacted regularly with updates on plant status.

PERSONNEL DESIGNATED TO FILL POSITION: Director of Corporate Communications, Purchasing, Contracts and Insurance Manager, Corporate Communications Special Projects Manager.

QUALIFICATIONS: Management personnel and designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION: Emergency News Manager

ACTIVATION LEVEL: Unusual Event through General Emergency

RESPONSE LOCATION: Seabrook Station News Services or Media Center

RESPONSIBLE TO: Short Term Emergency Director, Site Emergency Director or Response Manager

RESPONSIBILITIES:

a. Manage operation of Seabrook Station News Services and Media Center.

b. Direct orderly flow of timely and accurate information concerning plant conditions to media.

c. Coordinate news briefing logistics with the Assistant News Manager and Spokesman.

d. Ensure news releases are coordinated with State and Federal officials.

PERSONNEL DESIGNATED TO FILL POSITION: Corporate Communications Manager, Media Relations Coordinator/Spokesman.

QUALIFICATIONS: Two years' experience in public information or management/supervision and designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION: Emergency Operations Manager

ACTIVATION LEVEL: Unusual Event through General Emergency

RESPONSE LOCATION: Control Room/TSC

RESPONSIBLE TO: Site Emergency Director

RESPONSIBILITIES:

a. Coordinate inputs from technical and corrective action advisors.

b. Coordinate activities of Control Room personnel required to restore the station to a safe condition.

c. Provide technical accident assessment and operational guidance to Site Emergency Director and Control Room staff.

d. Request the design and planning of temporary modifications.

e. Determine emergency procedures related to system operation.

f. Establish shift operations support, if applicable.

g. Provide guidance for Control Room personnel concerning protection of the reactor core.

h. Oversee the accumulation, retention, and transmission of vital unit parameters required to analyze the accident status.

i. Review operational occurrences as necessary.

PERSONNEL DESIGNATED TO FILL POSITION: Operations Manager, Assistant Operations Manager, and other Operations Department Supervisors as assigned by the Operations Manager.

QUALIFICATIONS: Previously or currently licensed or certified Senior Reactor Operator at Seabrook Station; ANSI 3.1 qualified Supervisor. Radiation worker and designated Emergency Plan training. In addition to the designated Emergency Plan training, training in mitigating the consequences of core damage (S65 or equivalent) and an overview of emergency operating procedures (EOP) are required. (Protected: Ref NRC IR 86-18(4))

POSITION DEFINITION

EMERGENCY POSITION: Emergency Services Supervisor

ACTIVATION LEVEL: Alert through General Emergency

RESPONSE LOCATION: Media Center

RESPONSIBLE TO: Assistant News Manager

RESPONSIBILITIES:

a. Supervise Media Center activation process.

b. Maintain building services during operation of Media Center.

c. Supervise the deactivation of the facility to return it to Newington Town Hall.

PERSONNEL DESIGNATED TO FILL POSITION: Utility Supervisor, Maintenance Engineering Technician

QUALIFICATIONS: Designated Emergency Plan Training

POSITION DEFINITION

EMERGENCY POSITION:	Engineering Coordinator
ACTIVATION LEVEL:	Alert through General Emergency
RESPONSE LOCATION:	TSC
RESPONSIBLE TO:	Technical Services Coordinator
RESPONSIBILITIES:	a. Coordinate the damage evaluation, repair and corrective action efforts of the Technical Support Center. b. Provide guidance to engineers and administrative staff in the TSC.
PERSONNEL DESIGNATED TO FILL POSITION:	Engineering Supervisor, Lead Engineer, Project Engineer
QUALIFICATIONS:	ANSI 3.1 qualified Technical/Professional personnel. Radiation worker and designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION:	EOF Administrative Staff
ACTIVATION LEVEL:	Alert through General Emergency
RESPONSE LOCATION:	EOF
RESONSIBLE TO:	Administrative Services Coordinator
RESPONSIBILITIES:	Perform administrative tasks in the EOF.
PERSONNEL DESIGNATED TO FILL POSITION:	Personnel assignments as requested by Nuclear Production senior management and maintained by Response and Implementation. Assignees are typically administrative level personnel.
QUALIFICATIONS:	Designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION: EOF Coordinator

ACTIVATION LEVEL: Unusual Event through General Emergency

RESPONSE LOCATION: EOF (Control Room for Unusual Event)

RESPONSIBLE TO: Response Manager (Site Emergency Director for Unusual Event)

RESPONSIBILITIES:

a. Act as a liaison with offsite authorities.

b. Assess the onsite and offsite radiological consequences.

c. Provide Response Manager with protective action recommendations.

d. Arrange for the analysis of environmental media samples.

PERSONNEL DESIGNATED TO FILL POSITION: Personnel assignments approved by the assignee's home department management, and maintained by Response and Implementation. Assignees are typically professional/technical personnel with health physics experience.

QUALIFICATIONS: ANSI 3.1 qualified Manager, Professional/Technical personnel. In addition to the designated Emergency Plan training, training in mitigating the consequences of core damage (S65 or equivalent) is required. (Protected: Ref. NRC IR 85-18(4))

POSITION DEFINITION

EMERGENCY POSITION:	Fire Technician/EMT
ACTIVATION LEVEL:	Unusual Event through General Emergency
RESPONSE LOCATION:	Control Room
RESPONSIBLE TO:	Unit Shift Supervisor
RESPONSIBILITIES:	a. Perform station fire fighting duties. b. Respond to medical emergencies.
PERSONNEL DESIGNATED TO FILL POSITION:	Per station fire plan.
QUALIFICATIONS:	Per station fire plan. Radiation worker and designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION: Health and Safety Coordinator

ACTIVATION LEVEL: Alert through General Emergency

RESPONSE LOCATION: EOF

RESPONSIBLE TO: Corporate Support Manager

RESPONSIBILITIES:

a. Coordinates all accident/incident information with American Nuclear Insurers (ANI).

b. Communicates with the ESC and coordinates their emergency support regarding environmental monitoring and sampling.

c. Provide information as requested on Health Physics Network (HPN).

PERSONNEL DESIGNATED TO FILL POSITION: Senior Health Physicist, Engineer

QUALIFICATIONS: ANSI 3.1 qualified Professional/Technical personnel and designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION: Health Physics Advisor

ACTIVATION LEVEL: Alert through General Emergency

RESPONSE LOCATION: Media Center

RESPONSIBLE TO: Spokesman

RESPONSIBILITIES:

a. Assist Emergency News Manager with formulation of news briefing statements and materials.

b. Participants in news briefings to answer Health Physics related technical questions.

PERSONNEL DESIGNATED TO FILL POSITION: Personnel assignments as requested by the Corporate Communications Department, approved by the assignee's home department management, and maintained by Response and Implementation. Assignees are typically professional level personnel and may be non-NHY.

QUALIFICATIONS: Designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION:	Health Physics Coordinator
ACTIVATION LEVEL:	Alert through General Emergency
RESPONSE LOCATION:	Technical Support Center
RESPONSIBLE TO:	Site Emergency Director
RESPONSIBILITIES:	Provide direct input of radiological considerations during emergency corrective and response action planning.
PERSONNEL DESIGNATED TO FILL POSITION:	Health Physics Department Supervisor, Senior Health Physicist, Health Physicist Supervisor, Health Physics Working Foreman
QUALIFICATIONS:	ANSI 3.1 qualified Health Physics Supervisor. Radiation worker and designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION: Health Physics Technician

ACTIVATION LEVEL: Alert through General Emergency

RESPONSE LOCATION: OSC

RESPONSIBLE TO: Radiological Controls Coordinator

RESPONSIBILITIES:

a. Provide Health Physics coverage for in-plant activities.

b. Perform personnel monitoring and issue dosimetry.

c. Identify equipment decontamination requirements.

d. Assist in personnel decontamination.

e. Direct in-plant radiation and contamination surveys.

f. Perform habitability checks of the OSC, TSC, and Control Room as directed.

g. Assist in response to medical emergencies as directed by the Unit Shift Supervisor.

PERSONNEL DESIGNATED TO FILL POSITION: Health Physics Technician

QUALIFICATIONS: ANSI 3.1 qualified Health Physics Technician. Radiation worker and designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION:	I&C Coordinator
ACTIVATION LEVEL:	Alert through General Emergency
RESPONSE LOCATION:	TSC
RESPONSIBLE TO:	Technical Services Coordinator
RESPONSIBILITIES:	a. Coordinate I&C damage evaluation, repair and corrective actions. b. Coordinates Control Room, TSC, and OSC communications link.
PERSONNEL DESIGNATED TO FILL POSITION:	I&C Department Supervisor, I&C Supervisor
QUALIFICATIONS:	ANSI 3.1 qualified I&C Supervisor. Radiation worker and designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION:	I&C Foreman/Personnel
ACTIVATION LEVEL:	Alert through General Emergency
RESPONSE LOCATION:	OSC
RESPONSIBLE TO:	OSC Coordinator
RESPONSIBILITIES:	Implement repair and corrective actions.
PERSONNEL DESIGNATED TO FILL POSITIONS:	I&C Working Foreman
QUALIFICATIONS:	ANSI 3.1 qualified I&C Foreman. Radiation worker and designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION: Industry Liaison

ACTIVATION LEVEL: Alert through General Emergency

RESPONSE LOCATION: EOF

RESPONSIBLE TO: Corporate Support Manager

RESPONSIBILITIES:

a. Coordinates all requests for support to industry organizations that can provide emergency response assistance.

b. Coordinates all response assistance with the Westinghouse Emergency Response Center.

c. Coordinates operational and engineering support with onsite recovery needs.

PERSONNEL DESIGNATED TO FILL POSITION: Senior Engineer, Instructor

QUALIFICATIONS: ANSI 3.1 qualified Professional/Technical personnel and designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION:	Joint Owners Liaison
ACTIVATION LEVEL:	Alert through General Emergency
RESPONSE LOCATION:	EOF
RESPONSIBLE TO:	Response Manager
RESPONSIBILITIES:	a. Disseminate plant status information to Joint Owners via news releases. b. Respond to Joint Owner inquiries related to emergency conditions.
PERSONNEL DESIGNATED TO FILL POSITION:	Selected NHY Subdivision Heads, Licensing Supervisor, Licensing Manager, Data Request Coordinator, Executive Assistant
QUALIFICATIONS:	Management/Supervisory-level personnel and designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION: Licensing Coordinator

ACTIVATION LEVEL: Alert through General Emergency

RESPONSE LOCATION: EOF

RESPONSIBLE TO: Corporate Support Manager

RESPONSIBILITIES:

a. Coordinate resolution of all licensing issues that may result from the emergency conditions or the mitigating actions that follow.

b. Coordinate interface with NRC Incident Response Team.

PERSONNEL DESIGNATED TO FILL POSITION: Lead Engineer - Compliance, Manuals and Procedures Administrator, Engineering Analyst.

QUALIFICATIONS: ANSI 3.1 qualified Professional/Technical personnel and designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION: Maintenance Coordinator

ACTIVATION LEVEL: Alert through General Emergency

RESPONSE LOCATION: TSC

RESPONSIBLE TO: Technical Services Coordinator

RESPONSIBILITIES:

a. Initiate repair team actions.

b. Recommend appropriate corrective actions.

c. Evaluate repair task personnel and material requirements and request additional resources, if needed.

PERSONNEL DESIGNATED TO FILL POSITION: Mechanical Supervisor, Mechanical Electrical Supervisor, Maintenance Support Supervisor, Electrical Supervisor.

QUALIFICATIONS: ANSI 3.1 qualified Maintenance Supervisor. Radiation worker and designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION:	Maintenance Foreman-Electrical
ACTIVATION LEVEL:	Alert through General Emergency
RESPONSE LOCATION:	OSC
RESPONSIBLE TO:	OSC Coordinator
RESPONSIBILITIES:	Implement repair and corrective actions.
PERSONNEL DESIGNATED TO FILL POSITION:	Maintenance Working Foreman
QUALIFICATIONS:	ANSI 3.1 qualified Maintenance Personnel. Radiation worker and designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION:	Maintenance Foreman-Mechanical
ACTIVATION LEVEL:	Alert through General Emergency
RESPONSE LOCATION:	OSC
RESPONSIBLE TO:	OSC Coordinator
RESPONSIBILITIES:	Implement repair and corrective actions.
PERSONNEL DESIGNATED TO FILL POSITION:	Maintenance Working Foreman
QUALIFICATIONS:	ANSI 3.1 qualified Maintenance Personnel. Radiation worker and designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION: Material and Logistics Coordinator

ACTIVATION LEVEL: Alert through General Emergency

RESPONSE LOCATION: EOF

RESPONSIBLE TO: Administrative Services Coordinator

RESPONSIBILITIES:

a. Arrange procurement or rental of required material, equipment and supplies.

b. Arrange delivery of stock materials.

c. Provide the necessary contractual arrangements for the use of outside labor and equipment.

d. Maintain records of all procurement transactions.

PERSONNEL DESIGNATED TO FILL POSITION: Storekeeper, Inventory Department Working Foreman

QUALIFICATIONS: Designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION:	Media Center Administrative Staff
ACTIVATION LEVEL:	Alert through General Emergency
RESPONSE LOCATION:	Media Center
RESPONSIBLE TO:	Assistant News Manager
RESPONSIBILITIES:	Perform Media Center administrative tasks.
PERSONNEL DESIGNATED TO FILL POSITION:	Personnel assignments as requested by the Corporate Communications Department, approved by the assignee's home department management, and maintained by Response and Implementation. Assignees are typically administrative level personnel.
QUALIFICATIONS:	Designated Emergency Plan training

POSITION DEFINITION

EMERGENCY POSITION: Media Center Mechanic

ACTIVATION LEVEL: Alert through General Emergency

RESPONSE LOCATION: Media Center

RESPONSIBLE TO: Emergency Services Supervisor

RESPONSIBILITIES:

a. Assist in physical setup of the Media Center.

b. Maintain Media Center building services during facility operations.

PERSONNEL DESIGNATED TO FILL POSITION: Utility Worker

QUALIFICATIONS: Designated Emergency Plan training

POSITION DEFINITION

EMERGENCY POSITION: Media Center Registrar

ACTIVATION LEVEL: Alert through General Emergency

RESPONSE LOCATION: Media Center

RESPONSIBLE TO: Assistant News Manager

RESPONSIBILITIES:

a. Register and badge incoming personnel.

b. Issue press kits to the media representatives as they arrive.

c. Advise incoming media representatives on Media Center procedures, facility layout, and schedules.

PERSONNEL DESIGNATED TO FILL POSITION: Personnel assignments as requested by the Corporate Communications Department, approved by the assignee's home department management, and maintained by Response and Implementation. Assignees are typically administrative level personnel.

QUALIFICATIONS: Designated Emergency Plan training

POSITION DEFINITION

EMERGENCY POSITION:	Media Center Writer/Communicator
ACTIVATION LEVEL:	Alert through General Emergency
RESPONSE LOCATION:	Media Center
RESPONSIBLE TO:	Assistant News Manager
RESPONSIBILITIES:	Maintain contact with the EOF Writer/Communicator.
PERSONNEL DESIGNATED TO FILL POSITION:	Personnel assignments as requested by the Corporate Communications Department, approved by the assignee's home department management, and maintained by Response and Implementation. Assignees are typically administrative level personnel.
QUALIFICATIONS:	Designated Emergency Plan training

POSITION DEFINITION

EMERGENCY POSITION: Media Relations Assistant

ACTIVATION LEVEL: Alert through General Emergency

RESPONSE LOCATION: Joint Telephone Information Center

RESPONSIBLE TO: Media Relations/Rumor Control Supervisor

RESPONSIBILITIES:

a. Respond to and document media inquiries received on the media relations telephones.

b. Monitor news coverage for accuracy.

PERSONNEL DESIGNATED TO FILL POSITION: Personnel assignments as requested by the Corporate Communications Department, approved by the assignee's home department management, and maintained by Response and Implementation. Assignees are typically professional level personnel.

QUALIFICATIONS: Designated Emergency Plan training

POSITION DEFINITION

EMERGENCY POSITION: Media Relations Floor Liaison*

ACTIVATION LEVEL: Alert through General Emergency

RESPONSE LOCATION: Media Center

RESPONSIBLE TO: Emergency News Manager

RESPONSIBILITIES:

a. Answer media inquiries and provide background information.

b. Brief Emergency News Manager on media inquiries.

c. Attend news briefings.

d. Ensure that auditorium status boards are updated.

e. Coordinate media requests for visits to the EOF.

PERSONNEL DESIGNATED TO FILL POSITION: Personnel assignments as requested by the Corporate Communications Department, approved by the assignee's home department management, and maintained by Response and Implementation. Assignees are typically professional level personnel.

QUALIFICATIONS: Designated Emergency Plan training.

*This position may also perform the duties of the News Services Representative during an Unusual Event declaration.

POSITION DEFINITION

EMERGENCY POSITION: Media Relations/Rumor Control Liaison

ACTIVATION LEVEL: Alert through General Emergency

RESPONSE LOCATION: Media Center

RESPONSIBLE: Emergency News Manager

RESPONSIBILITIES:

a. Ensure wire services (e.g., AP and UPI) are provided news release information.

b. Ensure that media representatives in the auditorium are provided copies of news releases.

c. Report trends in media inquiries to the Emergency News Manager.

d. Ensure that an adequate number of press kits are available to media representatives.

e. Ensure that status boards in the auditorium and Sawyer Room are maintained.

PERSONNEL DESIGNATED TO FILL POSITION: Personnel assignments are requested by the Corporate Communications Department, approved by the assignee's home department management, and maintained by Response and Implementation. Assignees are typically professional level personnel.

QUALIFICATIONS: Designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION: Media Relations/Rumor Control Supervisor

ACTIVATION LEVEL: Alert through General Emergency

RESPONSE LOCATION: Joint Telephone Information Center

RESPONSIBLE TO: Media Relations/Rumor Control Liaison

RESPONSIBILITIES:

a. Ensure that media relations and rumor control telephone lines are operational.

b. Ensure that television, radios, recording equipment, and tone alert radios are operational.

c. Assign Media Relations and Rumor Control Assistants and keep them briefed on NHY ERO response activities and news release timing.

d. Report rumor trends to the Media Relations/Rumor Control Liaison.

e. Ensure that public information line recording is maintained with current accident and response information.

f. Report spacial needs requests received over the rumor control lines.

PERSONNEL DESIGNATED TO FILL POSITION: Personnel assignments as requested by the Corporate Communications Department, approved by the assignee's home department management, and maintained by Response and Implementation. Assignees are typically professional level personnel.

QUALIFICATIONS: Designated Emergency Plan training

POSITION DEFINITION

EMERGENCY POSITION:	METPAC Operator (Protected: Ref. NRC IR 86-18(5))
ACTIVATION LEVEL:	Alert through General Emergency
RESPONSE LOCATION:	EOF
RESPONSIBLE TO:	Dose Assessment Specialist
RESPONSIBILITIES:	Operate METPAC dose assessment computer program.
PERSONNEL DESIGNATED TO FILL POSITION:	Personnel assignments approved by the assignee's home department management, and maintained by Response and Implementation. Assignees are typically technical personnel with health physics or chemistry experience.
QUALIFICATIONS:	Experience with METPAC operations and designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION:	Offsite Monitoring Communicator
ACTIVATION LEVEL:	Alert through General Emergency
RESPONSE LOCATION:	EOF
RESPONSIBLE TO:	Offsite Monitoring Coordinator
RESPONSIBILITIES:	Maintain communications with offsite monitoring/sampling teams for the transmittal of sampling instructions and radiological data.
PERSONNEL DESIGNATED TO FILL POSITION:	I&C Technician
QUALIFICATIONS:	One year's experience in nuclear power plant and designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION: Offsite Monitoring Coordinator

ACTIVATION LEVEL: Alert through General Emergency

RESPONSE LOCATION: EOF

RESPONSIBLE TO: Dose Assessment Specialist

RESPONSIBILITIES:

a. Coordinate the activities of offsite monitoring and sampling teams.

b. Coordinate offsite sample retrieval and analysis.

c. Provide field radiological data to the Dose Assessment Specialist.

d. Coordinate offsite monitoring activities with state monitoring personnel.

PERSONNEL DESIGNATED TO FILL POSITION: Health Physics Working Foreman, Senior Health Physics Technician, Utilities Supervisor

QUALIFICATIONS: Designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION:	Offsite Monitoring/Sampling Personnel (HP)
ACTIVATION LEVEL:	Alert through General Emergency
RESPONSE LOCATION:	EOF
RESPONSIBLE TO:	Offsite Monitoring Coordinator
RESPONSIBILITIES:	Obtain radiological information via direct measurements and sampling of environmental media (air, water, vegetation, milk) from offsite locations.
PERSONNEL DESIGNATED TO FILL POSITION:	Instrument & Controls Technician, Health Physics Technician
QUALIFICATIONS:	Health Physics Technician/Instrument & Controls Technician: Designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION:	Offsite Monitoring/Sampling Personnel (Utility)
ACTIVATION LEVEL:	Alert through General Emergency
RESPONSE LOCATION:	EOF
RESPONSIBLE TO:	Offsite Monitoring Coordinator
RESPONSIBILITIES:	Driver for offsite monitoring/sampling personnel (HP)
PERSONNEL DESIGNATED TO FILL POSITION:	Utility Worker
QUALIFICATIONS:	Utility Worker: Valid driver's license and designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION:	Operations Technician
ACTIVATION LEVEL:	Alert
RESPONSE LOCATION:	Technical Support Center
RESPONSIBLE TO:	Emergency Operations Manager
RESPONSIBILITIES:	Provide Operational expertise in matters requiring specific detailed analysis regarding system reconfigurations, component flexibility and limitations.
PERSONNEL DESIGNATED TO FILL POSITION:	Shift Superintendent
QUALIFICATIONS:	Shift Superintendent. Radiation Worker and designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION: OSC Coordinator

ACTIVATION LEVEL: Alert through General Emergency

RESPONSE LOCATION: OSC

RESPONSIBLE TO: Maintenance Coordinator

RESPONSIBILITIES:

a. Direct support personnel in the investigation and/or repair of plant systems.

b. Ensure all personnel assigned to perform an in-plant emergency function are fully aware of the scope of the assignment.

c. Direct search and rescue efforts.

PERSONNEL DESIGNATED TO FILL POSITION: Off-Duty Unit Shift Supervisor

QUALIFICATIONS: Licensed Senior Reactor Operator. Radiation worker and designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION:	PASS Coordinator
ACTIVATION LEVEL:	Alert through General Emergency
RESPONSE LOCATION:	OSC
RESPONSIBLE:	OSC Coordinator
RESPONSIBILITIES:	a. Direct post-accident sampling and analysis activities. b. Coordinate the dispatch of sampling personnel.
PERSONNEL DESIGNATED TO FILL POSITION:	Chemistry Working Foreman, Senior Chemistry Technician
QUALIFICATIONS:	ANSI 3.1 qualified Chemistry Technician. Radiation worker and designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION:	Radiological Assistant
ACTIVATION LEVEL:	Alert through General Emergency
RESPONSE LOCATION:	EOF
RESPONSIBLE TO:	Offsite Monitoring Coordinator
RESPONSIBILITIES:	a. Direct EOF radiological functions, including habitability, personnel/vehicle monitoring and decontamination. b. Assist in the preparation of environmental samples.
PERSONNEL DESIGNATED TO FILL POSITION:	Health Physics Technician
QUALIFICATIONS:	Minimum one year's experience in Health Physics technology and designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION: Radiological Controls Coordinator

ACTIVATION LEVEL: Alert through General Emergency

RESPONSE LOCATION: OSC

RESPONSIBLE TO: OSC Coordinator

RESPONSIBILITIES:

a. Direct health physics coverage for in-plant activities.

b. Direct radiological exposure control for in-plant personnel.

c. Direct personnel to perform habitability checks of the OSC, TSC and Control Room as necessary.

d. Direct on-site and in-plant radiological survey personnel.

e. Authorize entry into the plant without an RWP for critical work.

PERSONNEL DESIGNATED TO FILL POSITION: Health Physics Supervisor, Health Physics Working Foreman

QUALIFICATIONS: ANSI 3.1 qualified Health Physics Technician. Radiation worker and designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION:	Reactor Engineer
ACTIVATION LEVEL:	Alert through General Emergency
RESPONSE LOCATION:	TSC
RESPONSIBLE TO:	Technical Services Coordinator
RESPONSIBILITIES:	a. Analyze core parameters. b. Provide core protection recommendations.
PERSONNEL DESIGNATED TO FILL POSITION:	Reactor Engineering Department Supervisor, Senior Reactor Engineer, Reactor Engineer
QUALIFICATIONS:	ANSI 3.1 qualified Reactor Engineer. Radiation worker and designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION: Response Manager

ACTIVATION LEVEL: Alert through General Emergency

RESPONSE LOCATION: EOF

RESPONSIBLE TO: Chief Executive Officer

RESPONSIBILITIES:

*a. Authorize protective action recommendations.

*b. Approve news releases.

*c. Authorize notification of offsite authorities.

d. Provide management direction and guidance.

e. Coordinate with federal response organizations and authorize use of YNSD support for response operations.

f. Coordinate with the NRC the resolution of issues regarding operating license requirements.

g. Direct recovery actions implemented once the emergency has ended.

CAUTION
* DENOTES RESPONSIBILITIES THAT CANNOT BE DELEGATED (Protected: Ref. NRC IR 85-32(5)).

PERSONNEL DESIGNATED TO FILL POSITION: Executive Director, Training Manager, Nuclear Services Manager, Production Services Manager, Director of Quality Programs

QUALIFICATION: Senior New Hampshire Yankee Management, ANSI 3.1 qualified Manager, and designated Emergency Plan training.

In addition training in mitigating the consequences of core damage (S65 or equivalent) is required. (Protected: Ref. NRC IR 85-18(4))

POSITION DEFINITION

EMERGENCY POSITION:	Rumor Control Assistant
ACTIVATION LEVEL:	Alert through General Emergency
RESPONSE LOCATION:	Joint Telephone Information Center
RESPONSIBLE TO:	Media Relations/Rumor Control Supervisor
RESPONSIBILITIES:	Respond to and document public inquiries received on the rumor control telephones.
PERSONNEL DESIGNATED TO FILL POSITION:	Personnel assignments as requested by the Corporate Communications Department, approved by the assignee's home department management, and maintained by Response and Implementation. Assignees are typically professional level personnel.
QUALIFICATIONS:	Designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION: Sample Analysis Personnel (Protected: Ref. NRC IR 86-18(5))

ACTIVATION LEVEL: Alert through General Emergency

RESPONSE LOCATION: EOF

RESPONSIBLE TO: Offsite Monitoring Coordinator

RESPONSIBILITIES:

a. Receipt and analysis of air samples from offsite locations.

b. Direct the analysis of environmental samples through YNSD Environmental Lab.

PERSONNEL DESIGNATED TO FILL POSITION: Health Physics Technician, Health Physics Working Foreman, Chemistry Technician, Chemistry Foreman.

QUALIFICATIONS: Designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION:	Security Coordinator
ACTIVATION LEVEL:	Alert through General Emergency
RESPONSE LOCATION:	EOF
RESPONSIBLE TO:	Corporate Support Manager
RESPONSIBILITIES:	a. Secure the emergency operations facility and/or any other areas identified by the Response Manager. b. Request and coordinate local law enforcement agency support. c. Manage station evacuation.
PERSONNEL DESIGNATED TO FILL POSITION:	Security Supervisor, Security Shift Supervisor
QUALIFICATIONS:	ANSI 3.1 qualified Security Supervisor and designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION:	Security Personnel
ACTIVATION LEVEL:	Unusual Event through General Emergency
RESPONSE LOCATION:	Gatehouse
RESPONSIBLE TO:	Security Coordinator
RESPONSIBILITIES:	Notify, via automatic dial telephone, the secondary responders of the emergency response organization.
PERSONNEL DESIGNATED TO FILL POSITION:	Per Security Plan
QUALIFICATIONS:	Per Security Plan and designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION: Short Term Emergency Director

ACTIVATION LEVEL: Unusual Event through General Emergency

RESPONSE LOCATION: Control Room

RESPONSIBLE TO: Site Emergency Director

RESPONSIBILITIES:

*a. Initiate station emergency response.

*b. Direct notification of offsite authorities.

*c. Perform initial dose assessment and recommend protective actions to offsite authorities. (Protected: Ref. NRC IR 85-32(4))

d. Direct plant staff for the mitigation of station emergency conditions.

*e. Reclassify the emergency.

*f. Direct evacuation of site.

*g. Authorize workers to exceed 10CFR20 Radiation Exposure Limits.

h. Initiate search and rescue.

*i. Approve news releases.

CAUTION
* DENOTES RESPONSIBILITIES THAT CANNOT BE BE DELEGATED. (Protected: Ref. NRC IR 86-18(01))

PERSONNEL DESIGNATED TO FILL POSITION: Shift Superintendent, Unit Shift Supervisor.

QUALIFICATIONS: Licensed Senior Reactor Operator. Radiation worker and designated Emergency Plan training

POSITION DEFINITION

EMERGENCY POSITION: Site Emergency Director

ACTIVATION LEVEL: Unusual Event throug.: General Emergency

RESPONSE LOCATION: Control Room/TSC

RESPONSIBLE TO: Response Manager

RESPONSIBILITIES:

*a. Relieve Short Term Emergency Director.

*b. Direct notification of offsite authorities (until relieved by the Response Manager).

*c. Direct in-station emergency response.

d. Ensure staffing of emergency response organization at required level.

*e. Reclassify the emergency.

*f. Request industry emergency response assistance, if necessary.

*g. Authorize workers to exceed 10CFR20 Radiation Exposure Limits.

*h. Recommend protective actions to offsite authorities.

*i. Approve news releases.

CAUTION
* DENOTES RESPONSIBILITIES THAT CANNOT BE BE DELEGATED. (Protected: Ref. NRC IR 86-18(01))

PERSONNEL DESIGNATED TO FILL POSITION: Station Manager, Assistant Station Manager, Operational Support Manager, Technical Support Manager.

QUALIFICATIONS: ANSI 3.1 qualified Manager or Supervisor. Radiation worker and designated Emergency Plan training. In addition to the designated Emergency Plan training, training in mitigating the consequences of core damage (S65 or equivalent) and an overview of emergency operating procedures (EOP) are required. (Protected: Ref. NRC IR 86-18(4))

POSITION DEFINITION

EMERGENCY POSITION:	Specialty Technical Assistant
ACTIVATION LEVEL:	Alert through General Emergency
RESPONSE LOCATION:	OSC
RESPONSIBLE TO:	Technical Specialist Coordinator
RESPONSIBILITIES:	Provide special technical support on an as-needed basis.
PERSONNEL DESIGNATED TO FILL POSITION:	Personnel assignments as requested by Nuclear Production senior management and maintained by Response and Implementation. Assignees are typically technical level personnel.
QUALIFICATIONS:	Radiation worker and designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION: Spokesperson

ACTIVATION LEVEL: Alert through General Emergency

RESPONSE LOCATION: Media Center

RESPONSIBLE TO: Emergency News Manager

RESPONSIBILITIES:

a. Coordinate news briefing logistics with Emergency News Manager.

b. Preside at news briefings to describe the situation, answer questions and dispel rumors.

PERSONNEL DESIGNATED TO FILL POSITION: Personnel assignments as determined by Response and Implementation in conjunction with Executive level NHY management.

QUALIFICATIONS: Senior or Executive level NHY management and designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION:	Storekeeper
ACTIVATION LEVEL:	Alert through General Emergency
RESPONSE LOCATION:	OSC
RESPONSIBLE TO:	OSC Coordinator
RESPONSIBILITIES:	Ensures the availability of equipment normally maintained in the warehouse.
PERSONNEL DESIGNATED TO FILL POSITION:	Material Technician
QUALIFICATIONS:	Storekeeper experience. Radiation worker and designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION:	Supervisory Control Room Operator
ACTIVATION LEVEL:	Alert through General Emergency
RESPONSE LOCATION:	OSC
RESPONSIBLE TO:	OSC Coordinator
RESPONSIBILITIES:	Activities as directed by the OSC Coordinator.
PERSONNEL DESIGNATED TO FILL POSITION:	Supervisory Control Room Operator
QUALIFICATIONS:	Licensed Reactor Operator. Radiation worker and designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION: Technical Advisor (EOF)*

ACTIVATION LEVEL: Alert through General Emergency

RESPONSE LOCATION: EOF

RESPONSIBLE TO: Technical Assistant

RESPONSIBILITIES:

a. Collect plant status information.

b. Maintain contact with other Technical Advisors.

c. Provide technical interpretation, clarification and background information for Emergency Communications Coordinator.

PERSONNEL DESIGNATED TO FILL POSITION: Personnel assignments as determined by Response and Implementation. Assignees are typically technical supervisory or management personnel.

QUALIFICATIONS: Working knowledge of Seabrook Station specific construction and system features, and designated Emergency Plan training.

*This position may also perform the duties of the SSNS Technical Advisor during an Unusual Event declaration.

POSITION DEFINITION

EMERGENCY POSITION: Technical Advisor (MC)

ACTIVATION LEVEL: Alert through General Emergency

RESPONSE LOCATION: Media Center

RESPONSIBLE TO: Emergency News Manager

RESPONSIBILITIES:

a. Collect plant status information.

b. Maintain contact with other Technical Advisors.

c. Provide technical interpretation, clarification and background information for Emergency News Manager, and media as appropriate.

PERSONNEL DESIGNATED TO FILL POSITION: Director of Quality Programs, Simulator Instructor, Test Supervisor, Reliability and Safety Manager, Planning, Scheduling and Outage Manager, Senior Engineer or equivalent supervisory/managerial position.

QUALIFICATIONS: Working knowledge of Seabrook Station - specific construction and system features, and designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION: Technical Assistant

ACTIVATION LEVEL: Alert through General Emergency

RESPONSE LOCATION: EOF

RESPONSIBLE TO: Response Manager

RESPONSIBILITIES:

a. Assist the Response Manager in the planning and scheduling of resources (e.g., manpower, equipment, etc.).

b. Provide Response Manager with technical and operational accident assessment.

c. Coordinate the activities of the Training Center staff providing technical assistance.

d. Coordinate the activities of the Technical Advisors.

PERSONNEL DESIGNATED TO FILL POSITION: Operations Training Manager, Operations Training Supervisor, Simulator Instructor

QUALIFICATIONS: Licensed or certified Senior Reactor Operator and designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION: Technical Services Coordinator

ACTIVATION LEVEL: Unusual Event through General Emergency

RESPONSE LOCATION: TSC (Control Room for Unusual Event)

RESPONSIBLE TO: Site Emergency Director

RESPONSIBILITIES:

a. Assess plant conditions using data from Control Room, SPDS, and plant staff reports to determine appropriate corrective actions.

b. Recommend appropriate corrective actions.

c. Coordinate YNSD personnel located at TSC.

d. Evaluate onsite personnel and equipment needs and request additional resources

e. Coordinate TSC activities with Emergency Operations Manager and Maintenance Coordinator.

PERSONNEL DESIGNATED TO FILL POSITION: Personnel assignments as requested by Nuclear Production senior management and maintained by Response and Implementation. Assignees are typically associated with technical departments at the Station.

QUALIFICATIONS: ANSI 3.1 qualified Manager, Supervisor, or Engineer. Radiation worker and designated Emergency Plan training. In addition to the designated Emergency Plan training in mitigating the consequences of core damage (S65 or equivalent) and an overview of emergency operating procedures (EOP) are required.

POSITION DEFINITION

EMERGENCY POSITION:	Technical Specialist Coordinator
ACTIVATION LEVEL:	Alert through General Emergency
RESPONSE LOCATION:	OSC
RESPONSIBLE TO:	OSC Coordinator
RESPONSIBILITIES:	Identify and coordinate the provision of technical specialists to supplement the Primary and Secondary Responders on an as-needed basis.
PERSONNEL DESIGNATED TO FILL POSITION:	Personnel assignments as requested by Nuclear Production senior management and maintained by Response and Implementation. Assignees are typically technical or supervisory level personnel.
QUALIFICATIONS:	Radiation worker and designated Emergency Plan training

POSITION DEFINITION

EMERGENCY POSITION: Training Center Staff

ACTIVATION LEVEL: Alert through General Emergency

RESPONSE LOCATION: EOF

RESPONSIBLE TO: Technical Assistant

RESPONSIBILITIES:

a. Provide assistance to the Technical Assistant and Operations Centers as directed.

b. Operate the MPCS to provide technical input to EOF technical review.

PERSONNEL DESIGNATED TO FILL POSITION: Simulator Instructor, Program Instructor, Simulator Engineer, Simulator Design Control Coordinator

QUALIFICATIONS: Two years' nuclear power plant experience in operations or training and designated Emergency Plan training.

POSITION DEFINITION

EMERGENCY POSITION: TSC Administrative Staff

ACTIVATION LEVEL: Alert through General Emergency

RESPONSE LOCATION: TSC

RESPONSIBLE TO: Engineering Coordinator

RESPONSIBILITIES:

FOR ENGINEERING PERSONNEL

a. Maintain TSC status boards.

b. Obtain technical documents and prints as requested.

c. Provide engineering input as requested.

FOR ADMINISTRATIVE PERSONNEL

a. Perform TSC administrative tasks.

b. Staff the satellite Document Control Center located in the TSC.

PERSONNEL DESIGNATED TO FILL POSITION: Personnel assignments as requested by Nuclear Production senior management and maintained by Response and Implementation. Assignees are typically administrative level personnel and engineers from the Technical Support Group.

QUALIFICATIONS: Radiation worker and designated Emergency Plan training

APPENDIX B

YANKEE EMERGENCY MUTUAL ASSISTANCE AGREEMENT

YANKEE EMERGENCY MUTUAL ASSISTANCE AGREEMENT

A. Introduction

The Yankee organization has developed a cooperative arrangement between Yankee Nuclear Services Division (YNSD), each Yankee plant (Yankee Nuclear Power Station, Vermont Yankee, Maine Yankee, New Hampshire Yankee), and Boston Edison - Pilgrim Nuclear Power Station under which a radiological emergency at any participating plant would be met with additional support from the unaffected plants. This arrangement is known as the Yankee Emergency Mutual Assistance Agreement and is designed to offer direct support to the management of a plant experiencing a radiological emergency condition upon request. Plant emergency procedures provide the mechanism for initiating a request for mutual assistance.

B. YNSD Role in an Emergency Situation

The role of the YNSD in the Yankee Emergency Mutual Assistance Agreement is to assist the affected plant by providing emergency support directly available from YNSD and to coordinate equipment and technical manpower resources available from participating plants.

When notified of an emergency situation at a participating plant at the "Alert," "Site Area," or "General" emergency classification level, as defined by the NRC, YNSD will activate its Engineering Support Center (ESC).

To initiate emergency response for a participating plant, activation of the YNSD ESC and, thus, the Yankee Emergency Mutual Assistance Agreement will be in accordance with each plant's emergency procedures. Once notified, YNSD emergency response activities will be in accordance with "Technical Administrative Guideline No. 12 - Emergency Preparedness Responsibilities" and Procedure YA-RPG-300, "Engineering Support Center Activation."

C. YNSD Technical Support

The ESC has technical and administrative personnel available to provide assistance to the affected plant. This includes, but is not limited to, the following:

a. Consultation regarding engineering, licensing, and radiological concerns;

b. Provisions for providing supplemental manpower and equipment support;

c. Environmental dose calculations and projections;

d. Assistance in the evaluation of plant radiological conditions;

e. Meteorological evaluation support;

f. Health Physics liaison between the affected plant and other New England facilities;

g. Liaison with the Radiation Emergency Medical Treatment Center in Boston;

h. Interface with State and Federal emergency response organizations;

i. Evaluation of options regarding the radiological aspects of recovery operations; and

j. Evaluation of accident severity using sample results, monitor readings, and auxiliary parameters as prescribed in each facilities core damage methodology for Seabrook Station, Yankee Nuclear Power Station, Vermont Yankee, and Maine Yankee.

D. YNSD Environmental Laboratory Analytical and Dosimetric Services

a. General

The Yankee Environmental Laboratory in Westboro, Massachusetts, is equipped to provide radiochemical processing of all types of environmental media sampled as part of the ongoing off-site environmental radiation surveillance programs of the Yankee plants. In the event of a radiological emergency at any participating plant, Laboratory staff are available, on a 24-hour emergency call basis, to perform gamma isotopic analyses on samples taken by the plant's emergency monitoring teams and submitted to the Laboratory by courier services. In addition to the availability of gamma spectrometers at the Laboratory, a portable gamma spectroscopy system can be deployed to a plant site to evaluate the on-site and off-site surface contamination levels in various media in the event of an accidental release of radioactive material. In addition to the analytical capabilities in the area of environmental surveillance, the Laboratory maintains a large scale environmental and personnel dosimetry processing operation in support of participating plants. Within hours of notification, a complete dosimetry processing system can be fully operational at a remote site for immediate turnaround of personnel dosimetry from plant staff and emergency sampling teams.

b. Mobile Laboratory Emergency Analysis Equipment and Van Services

The portable analysis equipment employed during an emergency response includes a shielded HPGe detector based gamma spectroscopy system complete with computerized spectral analysis capability.

A van is normally located at the Environmental Laboratory in Westboro and is used to transport the required equipment. Following a request from a plant for assistance in assessing an emergency condition, E-Lab personnel will be dispatched to a designated location within a few hours to determine the presence and level of surface

contamination. In samples of various media (air cartridges, air filters, vegetation, water) collected by the Field Sampling Teams, the system generates a report of plant-related nuclide concentrations, standard deviation, and MDC which is forwarded to Data Assessment personnel. Although the equipment is considered portable, it requires setup in a permanent location with an adequate regulated power source.

c. Mobile TLD Van Service

During a site emergency, one of the fully-automated TLD processing systems normally operated at the Westboro Laboratory, can be transported to the Emergency Operations Facility (EOF), or other remote location to allow a faster turnaround of personnel dosimetry. A set of 500 dosimeters is continuously available for issuance during an emergency, and at the onset of the event, additional TLDs can be prepared. Although the system can be set up inside an EOF or other remote facility, the Laboratory will send a specially equipped dosimetry processing trailer, if available. Remote site emergency TLD processing can be fully operational within twelve hours of a request.

d. Mobile Body Burden Van Services

The Environmental Laboratory is prepared to provide whole body counts for emergency workers. Although the system is considered portable, it requires a setup in a permanent remote location which is equipped to supply the required power for the system.

The portable system is comprised of a shielded HPGe detector, interfaced to a Canberra Series 40 MCA and HP 9816 computer. The analytical methodology provides a whole body scan or resolves activity content of the lung, GI, and thyroid.

A result report is generated for those plant-related nuclides found to be present at the 99% confidence level.

E. Mutual Assistance Agreement of Participating Plants*

a. General

The assistance provided to a plant under this paragraph would be supplementary in nature. The participating groups forming this assistance are Chemistry, Health Physics, Operations, or Support personnel of each participating plant capable of performing monitoring and decontamination functions. Monitoring instrumentation and procedures used by assistance teams are consistent with those employed in each plant's Emergency Plan. The following sections describe the training of assistance personnel and type of support.

b. Training

The assistance teams forming the mutual assistance agreement are trained in the assessment of on-site and off-site radiological conditions or radiological monitoring. This capability is achieved through Emergency Plan training. Additional training may be provided by using team members as observers during emergency drills and exercises.

c. Radiological Monitoring Support

Assistance teams are available on a 24-hour emergency call basis for emergency monitoring support. The ESC coordinates the dispatch of personnel and equipment, as requested by the affected plant. Responding personnel report to cognizant management upon arrival at the affected plant.

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* Yankee Nuclear Power Station, Vermont Yankee Nuclear Power Station, Maine Yankee Atomic Power Station, Seabrook Station, and Boston Edison - Pilgrim Nuclear Station.

d. Activation Protocol

Mutual assistance is requested and coordinated through the Engineering Support Center (ESC). The ESC Director or his designee has the authority and responsibility to support requests for mutual assistance from participating plants. Mutual assistance is coordinated in the following manner:

1. The ESC receives a request for mutual assistance from a participating plant experiencing a radiological emergency.

2. The ESC Director or his designee verifies the request and the resources requested by contacting the affected plant's Emergency Operations Facility (EOF).

3. Unaffected participating plants are contacted and requested to support the mutual assistance request.

4. The Office of the Vice President of Operations/Station Director at each participating facility has the authority to release mutual assistance resources.

5. The ESC develops a list of personnel and equipment that are responding and their estimated time of arrival at the affected plant.

6. The ESC Director or his designee contacts the affected plant's EOF and provides the names of responding personnel, the equipment being provided, and the estimated time of arrival.

F. YNSD Meteorological Analysis Support

The YNSD Meteorological Services section is available on a 24-hour emergency call basis to provide meteorological support for decision making and evaluation of environmental impact during emergency

conditions. YNSD maintains a subscription with Weather Services International (WSI) wh ~h allows the Meteorological Services Group access to the following information:

a. Hourly regional National Weather Service (NWS) observations;

b. Radar plots of regional shower activity;

c. NWS regional weather forecasts; and

d. NWS severe weather statements.

YNSD Meteorological Services personnel are available to assist EOF dose assessment personnel in evaluating the effects of a plant's environment on plume transport and diffusion.

G. Applicable Terms

a. Each of the organizations included in this Yankee Emergency Mutual Assistance Agreement has entered into and is a party to the "Nuclear Power Plant Emergency Response Voluntary Assistance Agreement" ("PPERVA Agreement) administered by the Institute of Nuclear Power Operations.

b. The provisions set forth in said NPPERVA Agreement which relate to compensation, liability, indemnification, and other related areas, specifically including all of Paragraphs 4 through 8 inclusive, are incorporated into this Agreement by reference; the term Requesting Company, as used therein, shall be the plant experiencing a radiological emergency and the term Responding Company shall be those organizations who provide assistance under this Agreement.

B. Responsibilities

This Emergency Mutual Assistance Agreement is maintained by Yankee Atomic Electric Company, Yankee Nuclear Services Division, Environmental Engineering Department. It shall be reviewed annually by all participants in the agreement and updated as required.

ATTACHMENT 1

Primary Categories of Technical Expertise*

Categories	YAEC**	VY	MY	NHY	BECO
Chemistry/Radiochemistry/Water Quality/Plant Chemistry.....	X	X	X	X	X
Containment/Containment Leak Testing/Containment Performance.....	X	X		X	X
Data Systems/Computers.....	X	X		X	X
Electrical Engineers/Electrical Distribution System.....	X	X	X	X	X
Environmental Engineers/Air Quality/Meteorology/ Biologists.....	X	X			
Environmental Radiation Monitoring.....	X	X		X	X
Fluid Flow/Hydraulic Systems/Heat Transfer/Transient Analysis.....	X			X	X
Fuel/Fuel Design/Fuel Metallurgical.....	X			X	X
General Nuclear Background.....	X	X	X	X	X
Health Physics/Radiation Protection/Dosimetry/..... Personnel Monitoring/Decontamination	X	X	X	X	X
Industrial Safety/Fire Protection.....	X	X	X	X	X
In-Service Inspection Engineer	X	X		X	X
Instrument and Controls Engineer.....	X	X	X	X	X
Mechanical Systems Design/Mechanical Equipment/ Piping/Valves.....	X	X	X	X	X
Metallurgical Materials/Materials Evaluation.....	X				X
Mobile Monitoring and Decontamination Trailers.....				X	
Nondestructive Examination/Nondestructive Testing.....	X	X		X	X
Nuclear Safety Analysis/Nuclear Engineers.....	X	X		X	X
Off-Gas Processing.....		X			X

* Additional equipment suppliers and expertise from other than Yankee plants is noted in INPO's Emergency Resources Manual.

** Resources are provided by the Yankee Nuclear Services Division (YNSD) and Yankee Nuclear Power Station.

ATTACHMENT 1
(Continued)

Categories	YAEC**	VY	MY	NHY	BECO
Pump Design/Pump Analysis	X	X			X
Quality Assurance Engineer	X	X	X	X	X
Radioactive Waste Management/Radioactive Waste Shipping	X	X		X	X
Reactor Engineering/Core Physics/Core Cooling/ Reactor Hydraulics	X	X		X	X
Scheduler	X		X	X	X
Security/Emergency Planning/Communications/Plant Management	X	X	X	X	X
Seismic Analysis/Earthquake Engineering	X				
Shielding	X		X	X	X
Stress Analysis/Structural Design/Vibration/Shock	X	X		X	X
Welding Engineer	X	X		X	X

** Resources are provided by the Yankee Nuclear Services Division (YNSD) and Yankee Nuclear Power Station.

ATTACHMENT 2

The following is the number of personnel, by function, located at each site that would be available for implementation of the Yankee Emergency Mutual Assistance Agreement. The number of personnel listed is the total number of personnel located on-site at the identified location. Not all personnel would be expected to respond in support of the Yankee Emergency Mutual Assistance Agreement because of responsibility to their own facility.

Function	Yankee Nuclea Power Station	Vermont Yankee	Maine Yankee	Seabrook Station	Pilgrim Station
Radiation Protection (128)	15	15	21	37	40
Chemistry (65)	7	5	7	26	20
Maintenance and I&C (415)	34	35	47	179	120
Operations (281)	40	40	51	90	60
Technical Services (169)	7	30	21	56	55
Monitoring/Decontamination/ Dosimetry (133)*	48	35*	35*	45*	15

NOTE: ( ) Indicates total number of personnel by function.

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* Indicates the minimum number of personnel that could be made available.

SIGNATURE PAGE

The undersigned companies hereby agree to become a party to and to be bound by all of the terms and conditions of this Yankee Emergency Mutual Assistance Agreement.

Yankee Atomic Electric Company

Corporate Officer Signature / Date 9/14/88

Vermont Yankee Nuclear Power Corporation

Corporate Officer Signature / Date 9/22/88

Maine Yankee Atomic Power Company

Corporate Officer Signature / Date 9/26/88

New Hampshire Yankee

Corporate Officer Signature / Date 9/20/88

Boston Edison Company

Corporate Officer Signature / Date 10/13/88

APPENDIX C

EVACUATION TIME ESTIMATES

EVACUATION TIME ESTIMATE SCENARIO DESCRIPTIONS

Scenario No.	Season	Day	Time	Weather	Scenario
1	Summer	Weekend	Mid-day	Good	Beach area population at capacity. Employees are at 70 percent of mid-week in towns with beach area, 40 percent in remaining towns. Tourists fill available seasonal and overnight facilities, with half of them at the beach areas.
2	Summer	Weekend	Mid-day	Rain	As above. Sudden rain occurs with beach population at capacity concurrent with accident at Seabrook Station.
3	Summer	Mid-Week	Mid-day	Good	Beach area and tourist population at 75 percent of capacity. Employees are at 100 percent of mid-week work force.
4	Summer	Mid-Week	Mid-day	Rain	As above. Sudden rain occurs.
5	Off-Season	Mid-Week	Mid-day	Good	Tourist population at 50 percent of yearly capacity (i.e, facilities which remain open the entire year). No beach area transients. Employees at 100 percent.
6	Off-Season	Mid-Week	Mid-day	Rain	As above, but for inclement (rain) weather.
7	Off-Season	Mid-Week	Mid-day	Snow	Conditions the same as for Description 5 except that there is inclement weather (snow). Evacuees must clear driveways.
8	Off-Season	Mid-Week Weekend	Evening All Day	Good	Tourist population at 50 percent of yearly capacity. No beach area transients. Employees at 25 percent of Mid-Week, Mid-day.
9	Off-Season	Mid-Week Weekend	Evening All Day	Rain	As above, but for inclement (rain) weather.
10	Off-Season	Mid-Week Weekend	Evening All Day	Snow	As above, but for inclement (snow) weather. Evacuees must clear driveways.

TABLE 1 (2 Mile Radius, 5 Miles Downwind) Wind Direction (from)

Scenario Number	303° - 34°	34° - 101°	101° - 123°	123° - 168°	168° - 191.5°	191.5° - 259°	259° - 281.5°	281.5° - 303°
1	6.17	6.17	5.75	7.00	7.00	7.00	7.00	5.75
2	8.00	8.00	7.58	8.83	8.83	8.83	8.83	7.58
3	5.25	5.25	5.00	5.50	5.50	5.50	5.50	5.00
4	6.75	7.00	6.17	7.00	7.00	7.00	7.00	6.17
5	4.50	4.50	3.92	4.00	4.00	4.00	4.00	3.75
6	5.50	5.58	4.42	4.42	4.42	4.42	4.42	4.42
7	6.00	6.00	5.17	5.17	5.17	5.17	5.17	5.00
8	3.58	3.58	3.58	3.67	3.58	3.58	3.58	3.58
9	4.42	4.42	3.67	4.25	4.25	4.25	4.25	3.58
10	5.08	5.08	4.58	5.25	5.25	5.25	5.25	4.50

TABLE 2 (5 Mile Radius, 10 Miles Downwind) Wind Direction (from)

Scenario Number	303° - 34°	34° - 191°	101° - 123°	123° - 168°	168° - 191.5°	191.5° - 259°	259° - 281.5°	281.5° - 303°
1	7.08	7.17	7.00	7.58	7.58	7.50	7.00	7.00
2	9.08	9.17	9.00	9.58	9.58	9.25	8.83	8.83
3	5.92	6.00	6.00	7.25	7.25	7.25	5.50	5.50
4	7.50	8.08	7.92	9.17	9.17	9.17	7.00	7.00
5	5.00	5.00	4.67	5.58	5.58	5.58	4.50	4.50
6	6.00	6.00	5.58	7.08	7.08	7.08	5.58	5.58
7	6.67	7.17	6.67	7.92	7.92	7.92	6.00	6.00
8	4.00	4.17	3.92	5.25	5.25	5.17	3.58	3.58
9	4.92	5.42	5.08	6.92	6.92	6.92	4.42	4.42
10	5.42	6.00	5.58	7.08	7.08	7.08	5.25	5.25

TABLE 3 (All Directions)

Scenario Number	2 Mile Radius	5 Mile Radius	10 Mile Radius
1	5.75	7.00	7.58
2	7.58	8.83	9.58
3	5.00	5.50	7.25
4	6.17	7.00	9.17
5	3.75	4.50	5.58
6	4.42	5.58	7.08
7	5.00	6.00	7.92
8	3.58	3.58	5.25
9	3.58	4.42	6.92
10	4.50	5.25	7.08

NOTE - Using Table 1, circle the appropriate scenario number (from) Evacuation Time Estimate Scenarios.

Using Table 1, find the appropriate wind direction (from). Follow the ETE values down until the circled scenario number is reached.

Perform the above steps with Table 2.

Table 3 is only to be used when there is no key hole PAR.

APPENDIX D

LETTERS OF AGREEMENT WITH EMERGENCY RESPONSE ORGANIZATIONS

APPENDIX D

LETTERS OF AGREEMENT

TABLE OF CONTENTS

(Protected: Ref. NRC IR 85-32(7))

(Protected: Ref. NRC IR 85-32(12))

LETTER OF AGREEMENT

between

New Hampshire Yankee

and

Exeter Hospital, Inc.

AGREEMENT

This emergency medical assistance and support agreement made this day of November 17, 1985, between Exeter Hospital, Inc., 3 Buzell Avenue, Exeter, New Hampshire 03833 (hereinafter referred to as "Hospital") and New Hampshire Yankee, P.O. Box 700, Seabrook, New Hampshire 03874 (hereinafter referred to as "NHY").

In consideration of the mutual covenants and agreements set out below, Exeter Hospital and NHY agree as follows:

1. Hospital will accept as patients any personnel from Seabrook Station who may be considered to have substantial radiation related injuries, or who may have been exposed to and contaminated by radioactive materials, provided that:

   a) arrangements for transportation of all such patients shall be made by NHY, and the patients will be accompanied by appropriately equipped and trained NHY personnel; and

   b) NHY shall take all appropriate precautionary measures designed to minimize the possibility of spread of radioactive materials and will advise the Hospital in advance of the patient's arrival, of the patient's physical status, and any associated radiological hazard.

2. NHY will:

   a) Compensate Hospital for its normal charges for use of facilities and medical services rendered

   b) Reimburse Hospital for (i) all materials and equipment consumed or which must be destroyed or replaced due to radioactive contamination in excess of normal background, and (ii) the costs of all training time for Hospital personnel required to maintain the treatment capabilities envisioned by this agreement; (iii) all costs of special equipment or renovations to existing hospital areas necessary to provide services hereunder.

   c) To the extent not directly and fully covered by NHY's nuclear liability insurance, reimburse Hospital and its employees and agents and contractors for all expenses incurred for the care of treatment of any hospital personnel (including Hospital's normal charges for any services rendered in the Hospital) who are injured or contaminated as a result of coming into contact with NHY personnel who are contaminated with radioactive material.

d) Be responsible for decontaminating Hospital's equipment and property and for proper disposal of any radioactive materials brought by NHY personnel or produced by Hospital as a result of the treatment of NHY personnel.

e) Provide Hospital with all radiation survey equipment that is necessary under applicable laws and regulations or sound medical practice for making determinations of radioactive contamination and maintaining said equipment.

f) Through mutual agreement and at NHY expense (i) provide and maintain for Hospital all appropriate equipment for treatment of radioactively contaminated patients and (ii) ensure that the appropriate training of Hospital staff is accomplished on an annual basis including training exercises in which both Hospital and NHY will participate.

g) To advise Hospital as to any reports to be filed under applicable state or federal law concerning any treatment or incident arising under this agreement.

3. This agreement shall be for an initial period of one (1) year from the date hereof and shall automatically be renewed for successive one (1) year periods unless either party, at least 90 days prior to the next scheduled expiration date, give notice of termination. No cause is required for termination.

4. NHY shall, indemnify and hold Hospital harmless from all costs, liabilities, claims and expenses (including reasonable counsel fees) made by any party and arising from the performance of services by Hospital or NHY under this agreement and whether or not the Hospital or its employees, agents and contractors, failed to exercise due care in the provision of such services.

5. This agreement may be amended at any time by written agreement between Exeter Hospital and NHY. If this agreement is terminated in accordance with its terms or by mutual aggreement, all equipment will remain the property of the Hospital except for all radiation survey instrumentation which will be returned to NHY.

IN WITNESS WHEREOF, the parties have caused the agreement to be executed by their duly authorized officer as of the day and year above written.

EXETER HOSPITAL, INC.

Dated:

August 31, 1982

By: _____
Barbara Grillo
Executive Director

NEW HAMPSHIRE YANKEE

By: _____
George S. Thomas
Vice President
Nuclear Production

LETTER OF AGREEMENT
BETWEEN
NEW HAMPSHIRE YANKEE
AND
SEABROOK GREYHOUND PARK

AGREEMENT

This Agreement between New Hampshire Yankee, Seabrook Station, Box 300, Seabrook, New Hampshire 03874 (hereinafter referred to as NHY), and Seabrook Greyhound Park, Seabrook, New Hampshire (hereinafter referred to as the Park), is to establish the use of the Park's facilities as an off-site assembly area for NHY personnel and contractors during an actual or simulated emergency at Seabrook Station.

In consideration of the mutual coventants and agreements set out below, the Park and NHY agree as follows:

The Park will provide to NHY the use of their facilities as an offsite assembly area in the case of an actual emergency or a simulated event at Seabrook Station. In the case of a radiological emergency requiring use of Park's facilities, NHY will notify the Park management as promptly as possible as to when personnel evacuation will commence. The use of the Park's facilities for drills and exercises will be such that they will not impact on the Park's racing program.

If an emergency situation exists at Seabrook Station and use of the Park's facilities is necessary (during the Park's racing program), the site evacuees will follow traffic control instructions as directed by traffic control personnel at the entry/egress point of the Park's parking area. This will promote uniform traffic evacuation patterns and ensure that site evacuee and Park evacuee traffic flows are not in conflict.

NHY agrees to reimburse, indemnify a. hold the Park harmless from all damage that may occur to Park facilities during their use as an assembly area for an actual or simulated event. NHY also agrees to reimburse the Park for payment of wages or other benefits to employees who are required to be on duty as a result of the use of Park facilities as an assembly area during an actual or simulated event. Further, NHY agrees to defend, indemnify and hold the Park harmless from any and all loss, cost, damange, judgment or expense to which it may be subjected by any person, be it in the nature of a claim, suit, judgment or other proceeding in which said person claims damages for personal injury or property damange arising from the use of Park facilities as an assembly area during an actual or simulated event.

This Agreement may be amended a. any time by written mutual agreement between the parties involved.

In witness whereof the parties have caused the agreement to be executed by their duly authorized offices as of the day and year first above written.

Seabrook Greyhound Park

by: _____ _____
Comptroller Date

New Hampshire Yankee

by: _____ Sept 6, 1988
Vice President Date

AGREEMENT

between

New Hampshire Yankee

and

Wentworth-Douglas Hospital
789 Central Avenue
Dover, NH 03820

This Emergency Medical Assistance and Support Agreement made this 12 day of JUNE, 1990, by and between Seabrook Joint Owners ("Joint Owners"), comprised of several utility companies (as more particularly described in Exhibit A which is incorporated into this Agreement) by and through their agent, New Hampshire Yankee Division of Public Service Company of New Hampshire, with its principal place of business at Seabrook, New Hampshire, 03874, ("Agent") and Wentworth-Douglas Hospital having its principal place of business at 789 Central Avenue, Dover, NH 03820 ("Hospital"). The rights, obligations and liabilities of each such Joint Owner with respect to this Agreement shall be several, in the same proportion as its ownership share, and shall be neither joint, nor joint-and-several.

In consideration of the mutual covenants and agreements set out below, Hospital and Agent agree as follows:

1. Hospital will admit as in-patients (or where appropriate treat on an out-patient basis) personnel from Seabrook Station who may be injured and/or considered to have substantial radiation related injuries, or who may have been exposed to and contaminated by radioactive materials, provided that:

   a) Arrangement for transportation of all such patients shall be made by Agent, and the patients will be accompanied by appropriately equipped and trained personnel; and

   b) Agent will take all appropriate precautionary measures designed to minimize the possibility of spread of radioactive materials and will advise the Hospital in advance of the patient's arrival, of the patient's physical status, and any associated radiological hazard.

   c) Hospital will maintain adequate technical information and treatment capabilities and will have a minimum of one physician and one nurse on call within two hours capable of supervising, evaluating and treating radiologically contaminated injured members of the general public.

2. Agent will:

a) Compensate Hospital for its normal charges for use of facilities and medical services rendered.

b) Reimburse Hospital for (i) all materials and equipment consumed, or which must be destroyed or replaced due to radioactive contamination in excess of normal background, and (ii) the costs of all training time for Hospital personnel required to maintain the treatment capabilities envisioned by this agreement; (iii) all costs of special equipment or renovations to existing hospital area necessary to provide services hereunder.

c) To the extent not directly and fully covered by Agent's nuclear liability insurance, reimburse Hospital and its employees and agents and contractors for all expenses incurred for the care or treatment of any hospital personnel (including Hospital's normal charges for any services rendered in the Hospital) who are injured or contaminated as a result of coming into contact with Agent's personnel who are contaminated with radioactive material.

d) Be responsible for decontaminating Hospital's equipment and property and for proper disposal of any radioactive materials brought by Agent's personnel or produced by Hospital as a result of the treatment of Agent's personnel.

e) Provide Hospital with all radiation survey equipment that is necessary under applicable laws and regulations, or sound medical practice for making determinations of radioactive contamination and maintaining said equipment.

f) Through mutual agreement and at Agent's expense (i) provide and maintain for Hospital all appropriate equipment for treatment of radioactively contaminated patients and (ii) ensure that the appropriate training of Hospital staff is accomplished on an annual basis including training exercises in which both Hospital and Agent will participate.

g) To advise Hospital as to any reports to be filed under applicable state or federal law concerning any treatment or incident arising under this agreement.

3. This agreement shall be for an initial period of one (1) year from the date hereof and shall automatically be renewed for successive one (1) year periods unless either party, at least 90 days prior to the next scheduled expiration date, give notice of termination. No cause is required for termination.

4. Joint Owners shall, indemnify and hold Hospital harmless from all costs, liabilities, claims and expenses (including reasonable counsel fees) made by any party and arising from the performance of services by Hospital or Agent under this agreement and whether or not the Hospital or its employees, agents and contractors, failed to exercise due care in the provision of such services.

5. This agreement may be amended at any time by written agreement between Wentworth-Douglas Hospital and Agent. If this agreement is terminated in accordance with its term or by mutual agreement, all equipment will remain the property of the Hospital except for all radiation survey instrumentation which will be returned to Agent.

IN WITNESS WHEREOF, the parties have caused the agreement to be executed by their duly authorized officers as of the day and year first above written.

WENTWORTH-DOUGLAS HOSPITAL

By: _____

NEW HAMPSHIRE YANKEE DIVISION OF PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE, as agent as aforesaid

By: _____
T.C. Feigenbaum
Sr. Vice President & COO

EXHIBIT A

OWNER AND OWNER'S REPRESENTATIVE

This Agreement is being entered into by the several utility companies (collectively the "Owner") which are participants under the Agreement for Joint Ownership, Construction and Operation of New Hampshire Nuclear Units, dated May 1, 1973, as amended (the "Joint Ownership Agreement"). The rights, obligations, and liabilities of each such utility company with respect to this Agreement shall be several, in the same proportion as its Ownership share (specified below), and shall be neither joint nor joint-and several.

Utility	Ownership share
Public Service Company of NH	35.56942%
The United Illuminating Co.	17.50000%
EUA Power Corp.	12.13240%
Mass. Municipal Wholesale Electric Co.	11.59340%
New England Power Co.	9.95766%
The Connecticut Light & Power Co.	4.05985%
Canal Electric Co.	3.52317%
Montaup Electric Co.	2.89989%
NH Electric Co-Operative, Inc.	2.17391%
Vermont Electric Generation & Transmission Co-Operative, Inc.	0.41259%
Taunton Municipal Lighting Plant	0.10034%
Hudson Light & Power Dept.	0.07737%
	100.00000%

Each such participant reserves the right, in connection with a comparable assignment of its interest under the Joint Ownership Agreement, to assign its interest hereunder, in whole or in part, to any other entity which is or becomes a participant under the Joint Ownership Agreement. Any changes in participants or proportions caused by said assignments shall automatically be deemed incorporated into this Agreement.

The Owner hereby represents that it has delegated complete responsibility for management of this Agreement and of the Seabrook Project to New Hampshire Yankee Division of Public Service of New Hampshire, as Owner's Representative and agent. Until it receives written notice to the contrary, the contracting party shall be entitled to deal only with the Owner's Representative, except as may otherwise be specified with respect to billing and payments hereunder. Any notice or other communication given or furnished, or any action taken, by the Owner's Representative, making referance to this Agreement and given, furnished or taken in accordance herewith, shall be deemed to be notice given or communication furnished or action taken by the Owner. Notwithstanding the foregoing, the parties acknowledge that New Hampshire Yankee Electric Corporation will become the Owner's Representative in the future and agree that no written notice to the contracting party is required when this occurs.

TOWN OF
Seabrook, New Hampshire
FIRE DEPARTMENT
Telephones: Emergency 474-3434, Business 474-2811 & 474-3880

March 23, 1990

LETTER OF AGREEMENT
BETWEEN
SEABROOK STATION
AND THE
SEABROOK FIRE DEPARTMENT

The purpose of this letter of agreement is to establish arrangements with Seabrook Fire Department to provide firefighting support and ambulance service for Seabrook Station.

The Seabrook Fire Department agrees to provide firefighting assistance at Seabrook Station when requested. Seabrook Station will provide escort for the Fire Department when entering Station property. The Seabrook Fire Department will have primary fire-fighting authority throughout the site with the exception of the area enclosed by the protected area security fence. Seabrook Station will retain primary firefighting responsibility for all buildings, structures and equipment on or within the protected area once established.

The Seabrook Fire Department will provide emergency medical transportation for Seabrook Station personnel when requested. The Seabrook Fire Department (ambulance personnel/EMT's) will receive training, on an annual basis in the handling of radio-actively contaminated and injured patients.

This letter of agreement shall be effective immediately upon execution of the parties representing the organizations and will be in effect until superseded by another letter of agreement or notification or withdrawal by both agreement parties.

Ted C. Feigenbaum 3/27/90
Ted C. Feigenbaum Date
Senior Vice President
and CEO
N.H. Yankee Division of
PSNH

Jerry W. Brown 3/27/90
Jerry W. Brown Date
Fire Chief
Seabrook Fire Department

AllComm
COMMUNICATIONS & TELECOMMUNICATIONS SYSTEMS
163 Martell Court, Keene, NH 03431 603/357-0009

EMERGENCY SERVICES AGREEMENT

NEW HAMPSHIRE YANKEE

AND

ALLCOMM INC.

This agreement, effective on the date signed by the parties hereto, is to establish an emergency services agreement between New Hampshire Yankee and AllComm, Inc. AllComm agrees to provide the following services under the terms and conditions specified below:

1. AllComm agrees to provide New Hampshire Yankee with emergency electronic communications support in the event of the declaration of an Alert, Site Area Emergency, or General Emergency at Seabrook Station. This support is also available to New Hampshire Yankee for emergency preparedness drills and exercises.

2. AllComm maintains a 24-hour "on call" telephone number for New Hampshire Yankee to use: (603) 357-0009.

3. When requested by New Hampshire Yankee, AllComm Inc. personnel will respond as expediently as possible to the EOF/IFO at Newington, NH or other location as directed, and will provide diagnostic support and other assistance for communications systems utilized to coordinate the emergency response activities of State (NH, MA, ME) agencies, local municipalities, New Hampshire Yankee (ERO and ORO) and other governmental agencies.

4. In the event of an inadvertent siren activation, AllComm Inc. agrees to provide technical assistance as requested by New Hampshire Yankee.

5. Payment for these service will be at the rates identified in the NHY purchase order.

As signified by our signatures below, we accept the terms of this agreement.

G. R. Gram Date 4/8/85

Executive Director of
Emergency Preparedness
and Community Relations
New Hampshire Yankee

Gary J. Catapano Date 4/13/83

President

AllComm Inc.

LETTER OF AGREEMENT
BETWEEN
THE STATE OF NEW HAMPSHIRE
AND
NEW HAMPSHIRE YANKEE REPRESENTING BOTH THE EMERGENCY AND OFFSITE RESPONSE ORGANIZATIONS

I. PURPOSE:

The purpose of the Letter of Agreement is to establish radiological emergency preparedness, notification and response should an event at Seabrook Station require Radiological Emergency Response Plan activation.

II. DEFINITIONS:

A. Emergency Operations Centers (EOCs) - Facilities established by the State of NH and the NHY ORO where emergency response command and control occurs. The State of NH EOC is located in Concord, NH, and the NHY ORO EOC is co-located with the NHY EOF.

B. Emergency Operations Facility (EOF) - A center established at Newington Station, Newington, NH to coordinate the deployment of NHY ERO personnel, to evaluate offsite accident conditions and to maintain communications with offsite authorities.

C. EOF Coordinator - An NHY ERO member who coordinates accident assessment and protective action recommendations with offsite authorities. He conducts these functions within the EOF.

D. Incident Field Office (IFO) - A center established in the vicinity of the New Hampshire portion of the Seabrook Station Emergency Planning Zone, where the State of New Hampshire response and assistance to local communities is coordinated. The IFO is co-located with the NHY EOF.

E. Media Center - A center dedicated to the news media for the purpose of conducting joint NHY ERO, NHY ORO, State of NH, and Federal briefings concerning emergency conditions. The Media Center is located at the Town Hall in Newington, NH.

F. New Hampshire Yankee Emergency Response Organization (NHY ERO) - The licensee's organized personnel response to a Seabrook Station Radiological Emergency.

G. New Hampshire Yankee Offsite Response Organization (NHY ORO) - New Hampshire Yankee's compensation organization for the Commonwealth of Massachusetts.

H. Nuclear Alert System (NAS) - A communication system for initial notification to the State of New Hampshire and the NHY ORO of an emergency at Seabrook Station; and the means of communication between the three organizations for exchange of information during the period of the emergency.

III. AGREEMENT

The State of New Hampshire and New Hampshire Yankee, representing both the NHY ERO and the NHY ORO, agree as follows:

A. The NHY ERO shall notify the NH State Police and the NHY ORO Contact Point within fifteen (15) minutes after an event has been classified as an Unusual Event, Alert, Site Area Emergency or General Emergency. This notification shall be made over the NAS. Commercial telephone is the backup to the NAS.

B. The initial message content used in the contact specified in A. above, is in agreement among the emergency response procedures of each of the three organizations. After the initial contact, additional information shall be provided to the NH Division of Public Health Services Emergency Response Initiator and the NHY ORO Director when each makes a call-back to the NHY ERO. This information is specified in the follow-up notification form contained in the emergency response procedures of the three organizations.

C. The three organizations shall exchange and coordinate emergency response plan changes that pertain to those elements of interface prior to implementing the change. The three organizations shall coordinate the effective date of such changes.

D. The NHY ERO shall provide space for representatives from the State of New Hampshire and the NHY ORO at the EOF and the Media Center. This includes space at the EOF for the operation of the State of New Hampshire IFO, and for the operation of the NHY ORO EOC.

E. The three organizations agree to exchange all information (i.e., radiological releases, meteorological data, offsite radiological projections and measurements, and onsite technical data) known and available to facilitate a rapid and accurate evaluation of the emergency.

F. The NHY ORO and the State of New Hampshire agree to coordinate the notification of the public by the public alert and notification system and through EBS.

G. The NHY ORO and State of New Hampshire agree to coordinate the evaluation and implementation of precautionary actions for special populations within the plume exposure EPZ.

H. The three organizations shall coordinate plume exposure EPZ field radiological monitoring efforts. This coordination is to include the deployment of each organization's offsite monitoring teams (i.e., the State of New Hampshire teams within the New Hampshire portion of the plume EPZ, the NHY ORO teams within the Massachusetts portion and the NHY ERO teams throughout the EPZ), the review and exchange of all monitoring results, and the radionuclide analysis of particulate and radioiodine air samples at the NHY EOF.

I. The NHY ERO agrees to assist the State of New Hampshire and the NHY ORO in ingestion pathway sampling and analysis efforts. This includes assistance to the State of New Hampshire coordination of ingestion pathway evaluations with the State of Maine. The scope of the assistance can include sampling personnel and equipment and radionuclide analysis capability.

J. Once the EOF is activated, the EOF Coordinator of the NHY ERO is the point for contact for the State of New Hampshire and the NHY ORO for radiological assessments and protective action recommendation discussions.

K. The three organizations agree to coordinate news releases and rumor control activities. Information shall be released to the public in a timely, coordinated manner through the Media Center. Also, the three organizations agree to participate in a periodic emergency preparedness education and orientation program for news media representatives.

L. The State of New Hampshire and the NHY ORO agree to the methodology established by the NHY ERO to project offsite radiological consequences. The NHY ERO agrees to provide any special projections that are beyond the routine scope of the radiological assessment effort, as long as the methodology used can cover the request.

M. The State of New Hampshire and the NHY ORO have reviewed and agree to the procedure established by the NHY ERO to classify emergency conditions, which includes the Emergency Action Levels.

N. The NHY ERO agrees to make the radiological analysis services of the Yankee Atomic Environmental Laboratory available to the State of New Hampshire and the NHY ORO. The priority for sample processing by the Yankee Atomic Environmental Laboratory would be established through joint agreement by the NHY ERO, NHY ORO and the NH Division of Public Health Services at the time of an incident.

O. The State of New Hampshire agrees to notify the State of Maine (ingestion pathway zone) for all emergency classifications and coordinate the evalation of offsite radiological consequences with authorities in that State during an event which is classified as either a Site Area Emergency or General Emergency at Seabrook Station.

P. The State of NH agrees to notify and coordinate the response actions of the United States Coast Guard for the waterway portions of the plume EPZ.

Q. The State of NH agrees to notify the Federal Aviation Administration for any necessary air space restrictions.

R. The State of NH agrees to notify the Boston and Maine Railroad for any necessary restrictions on rail travel.

S. The State of NH agrees to request assistance available through New England state agency compacts in response to a request by the NHY ORO.

T. The State of NH agrees to arrange for the clearance of NHY ERO and NHY ORO emergency response personnel through EPZ Access Control Points in NH.

U. This agreement may be amended at any time by written agreement between the parties.

V. This agreement shall be effective as of the last date signed below.

STATE OF NEW HAMPSHIRE

By _____
Director, Office of Emergency Management

3/23/88
Date

NHY EMERGENCY RESPONSE ORGANIZATION

By _____
Vice President - Nuclear Production

3/24/88
Date

By _____
Director, Public Health Services

March 23, 1988
Date

NHY OFFSITE RESPONSE ORGANIZATION

By _____
Executive Director, Emergency Preparedness and Community Relations

3/23/88
Date

INPO

Institute of
Nuclear Power
Operations

Suite 1500
1100 Circle 75 Parkway
Atlanta, Georgia 30339-3064
Telephone 404 953-3600

August 30, 1989

Mr. Edward A. Brown
President and CEO
Public Service Company of New Hampshire
New Hampshire Yankee Division
P. O. Box 300
Seabrook, New Hampshire 03874

Dear Mr. Brown:

In the event of an emergency at your utility, INPO will assist you in acquiring the help of other organizations in the industry, as described in INPO 86-022, Emergency Resources Manual. In addition, INPO will provide assistance by utilizing its own resources, as requested and as appropriate. An update of the Emergency Resources Manual, Revision 3, has been provided to your administrative point of contact.

INPO's agreement to support your company in the event of an emergency, details on the specific support available from INPO, and information on how to request support are described in the Introduction, Section 1, of the manual. A copy of the Introduction is enclosed.

This agreement will remain in effect until terminated in writing. Please forward a copy of this letter and the enclosure to your emergency preparedness manager for use in updating your emergency plan.

Should you have questions, please contact me at (404) 953-5356 or Ron Seiberling, manager, Emergency Preparedness Department, at (404) 953-7646.

Sincerely,

W. R. Kindley
Vice President and Director
Corporate Support Division

WRK:klm

Enclosure: (As stated above)

New Hampshire
Yankee

February 21, 1990

Michael R. Lewis
New Hampshire Yankee
PO Box 300
Seabrook, N.H. 03874

Dear Mr. Lewis

In connection with New Hampshire Yankee's Emergency Response Organization, this letter confirms the existence of purchase order #55769 which relates to the providing of emergency callout services.

It is also understood that the purchase order will automatically be renewed each year unless our services are no longer required.

Sincerely,

Barbara Tetrault

Barbara Tetrault
Portsmouth Answering Service

APPENDIX E

SEABROOK STATION

PUBLIC ALERT AND NOTIFICATION SYSTEM

1.0 INTRODUCTION

The design objective of the Seabrook Station Public Alert and Notification System (PANS) is to have the capability to essentially complete the initial notification of the public within the plume exposure pathway Emergency Planning Zone (EPZ) (Reference 1) within about 15 minutes.[1] This meets the requirements of 10 CFR 50.47 and Appendix E, "Emergency Planning and Preparedness for Production and Utilization Facilities" and the guidance of NUREG-0654/ FEMA-REP-1, Rev. 1, Appendix 3.

Notification of the public in the plume exposure pathway Emergency Planning Zone (EPZ) is conducted primarily through the use of sirens where:

- "The expected siren sound pressure level generally exceeds 70 dBC where the population exceeds 2,000 persons per square mile and 60 dBC in other inhabited areas;
- The expected siren sound pressure level generally exceeds the average measured summer daytime ambient sound pressure levels by 10 dB (geographical areas with less than 2,000 persons per square mile)." (Reference 2)

If these criteria cannot be achieved, tone alert radios (or other notification means) will be utilized for those specific geographical areas not covered by sirens. These provisions will assure that "...the prompt public notification system shall have the capability to essentially complete the initial notification of the public within the plume exposure pathway EPZ..." (Reference 1). Tone alert radios, if used as part of the primary public alert and notification system, will be offered prior to issuance of the license to operate above five per cent power level.

Footnote 1: A complete description of the design is given in the "Seabrook Station Public Alert and Notification System FEMA-REP-10 Design Report" dated April 30, 1988 and Addendum 1 dated October 14, 1988.

Primary public alerting within the Seabrook Station EPZ will be accomplished through the activation of both pole-mounted fixed sirens and the Vehicle Alert and Notification System (VANS)[2] positioned throughout the EPZ. A total of 110 electronic sirens will be used in the EPZ to perform the initial alerting function. Of these, 94 sirens are permanently mounted in the New Hampshire portion of the EPZ. For Massachusetts, VANS will be deployed to 16 acoustic locations from 6 staging areas and one summertime only satellite staging area. Fixed sirens in the State of New Hampshire will be activated by radio from the Rockingham County Dispatch Center in Brentwood, NH. VANS for Massachusetts are dispatched and activated by radio communication from the NHY Offsite Response EOC in Newington, NH.

Public information and instructional messages will be broadcast over the Emergency Broadcast System (EBS) by designated commercial radio stations. A public education program will be maintained to advise people in the EPZ that when the sirens are heard, they should tune to the designated commercial EBS radio stations for information about the emergency.

The electronic sirens have both tone and public-address capability. The siren tone is used to provide the alert function at all siren locations.

Along the public beaches in Seabrook and Hampton, New Hampshire, sirens will provide both alerting tones and public address messages.[3]

Footnote 2: VANS is a transportable fixed siren concept capable of remote actuation.

Footnote 3: Beach voice messages will be used in-season (i.e., May 15 - Sept. 15)

Reserve VANS vehicles will be maintained as backups for the Massachusetts portion of the EPZ.

2.0 SIRENS

Seabrook Station will use three types of sirens for public alert and notification:

1. Whelen Model WS-3000: oscillating very high power electronic sirens (rated at 122 dBC at 550 Hz at 100 feet).

2. Dual Whelen Model WS-4000: oscillating ultra-high power electronic sirens (system rated at 134 dBC at 550 Hz at 100 feet).

3. Whelen Model WS-4000: oscillating ultra-high power electronic sirens (system rated at 129 dBC at 550 Hz at 100 feet).

The functional design of the three models is almost identical with the main difference being siren output. Each model is modular which allows easy replacement and/or field maintenance of the power amplifiers, tone generators, radio receivers and decoders, battery-chargers and batteries. All are capable of tone or voice operation.

The New Hampshire portion of the EPZ will utilize Whelen Model WS-3000 and WS-4000 sirens while the Massachusetts portion of the EPZ utilizes VANS vehicles each equipped with the dual Whelen Siren System Model WS-4000.

2.1 Siren Sound Level Prediction

The sound level coverage for each siren location were predicted utilizing a computer model developed by Wyle Laboratories. The Wyle model accounts for sound attenuation due to spherical sound spreading, air and ground absorption, scattering of acoustic energy, reflection and diffraction of acoustic energy by barriers formed by hills, refraction by temperature gradient, and refraction by wind speed gradient.

The sound coverage provided by each siren is displayed in the form of sound contours, which are lines of equal sound level surrounding the siren location. The computerized propagation model calculates the sound level in increments of 200 feet along equally spaced radials from the siren location taking into account the rated siren sound output level (measured at 100 feet), meteorological conditions, and the ground cover and topography along each radial. Contours of equal sound level are then generated using an interpolative procedure along each radial. This somewhat irregular contour is then smoothed by fitting cubic curves passing through and matching smoothly at the calculated points on each radial.

2.2 Remote Control of Sirens

The fixed sirens in the State of New Hampshire will be activated by radio communication from the Rockingham County Dispatch Center in Brentwood, NH. The VANS sirens (for the Massachusetts portion of the EPZ) will be remotely activated by the NHY Offsite Response EOC Contact.

2.3 Public Alert and Notification Process

New Hampshire Portion of EPZ

Procedures have been established in the New Hampshire Radiological Emergency Response Plan to ensure that the public is provided with the alert signal within 15 minutes of the time that the decision to activate the siren system is made. The New Hampshire Office of Emergency Management (NHOEM) is informed of the incident at Seabrook Station, either through the State Police Communications Center (SPCC) or, upon activation of the State EOC, directly from Seabrook Station. If the incident is a SITE AREA EMERGENCY or GENERAL EMERGENCY, NHOEM directs the RCDC to activate the sirens and directs the activation of EBS. The NHOEM will coordinate the activation of the siren

systems with the EBS broadcasts. The NHOEM can also direct the local siren activation points to activate the sirens within their boundaries. In the event of a GENERAL EMERGENCY, where NHOEM is not contacted within 10 minutes, the SPCC (the State's 24-hour communication point) can also direct RCDC to activate the sirens and EBS.

The NHOEM will contact the EBS radio stations, explain that there is an immediate Site Area Emergency (or General Emergency) and instruct the radio station operators on the appropriate EBS message to commence broadcasting.

If an early precautionary action for the beach is recommended, the sirens covering the beach areas will be used to alert and notify the beach population of the beach closing. NHOEM will direct RCDC to activate its special beach closing procedures. RCDC will first activate the alert signal on the beach sirens. Then, a pre-recorded voice message, in English and French, will be broadcast over the sirens, using their public address mode of operation. The voice message will inform the beach population that the beaches have been closed and will instruct them to leave the beach area.

The NHOEM will notify the U.S. Coast Guard and the Federal Aviation Agency that there is an immediate Site Area Emergency (or General Emergency) at Seabrook Station.

Massachusetts Portion of EPZ

In the event that Seabrook Station declares an immediate Site Area or General Emergency, the Seabrook Station Short-Term Emergency Director (STED) will notify the NHY Offsite Response EOC Contact and establish contact with officials of the Commonwealth of Massachusetts through the Massachusetts State Police with the request for authorization to activate the Public Alert and Notification System.

The NHY Offsite Response EOC Contact will direct the dispatch of VANS and operators through communication with each VANS staging area where vehicles will be in a constant state of readiness.

Upon receiving authorization, the STED will direct the activation of the Massachusetts portion of the public alert and notification system through communication with the NHY Offsite Response EOC Contact.

The NHY Offsite Response EOC Contact will notify the lead EBS radio station; he will explain that there is an immediate Site Area Emergency (or General Emergency) and instruct the radio station operator on the appropriate EBS message to commence broadcast based on direction provided by the Seabrook Station Short-Term Emergency Director.

The NHY Offsite Response EOC Contact will remotely activate the VANS sirens concurrent with the EBS message broadcast.

In the case of an escalating emergency, after the NHY Offsite Response Organization (NHY ORO) is activated, the NHY Offsite Response Director will assume Public Alert and Notification System responsibility, including EBS activation, from the Seabrook Station Emergency Response Organization. The VANS vehicles will be dispatched at the Alert or higher emergency classification. Upon authorization of the officials of the Commonwealth of Massachusetts, he will direct public notifications to be made using the public alert and notification system. The NHY ORO Public Notification Coordinator will communicate with the State of New Hampshire and the Commonwealth of Massachusetts to coordinate EBS messages and timing of the Massachusetts siren system with that of New Hampshire. The EBS radio station will be provided with the appropriate EBS message(s) and instructed to commence broadcast. Concurrent

with broadcast of the EBS message, the NHY ORO Communication Coordinator will activate the sirens using the siren activation encoder in the NHY Offsite Response EOC. Additional backup methods will be available for public alerting, including activation of backup VANS. The NHY Offsite Response Director will verify the State of New Hampshire's initial notification to the U.S. Coast Guard and the Federal Aviation Agency. The U.S. Coast Guard is responsible for notification of transients in waters under their jurisdiction, and the FAA is responsible for notifying and restricting air traffic in the area. The Department of Interior will perform notification in the Parker River Wildlife Refuge. The NHY Offsite Response Organization (ORO) also maintains the capability, as part of the supplemental alerting system, for door-to-door notification of the hearing-impaired population as coordinated by the NHY ORO Special Population Coordinator, as described in Seabrook Plan for Massachusetts Communities (SPMC) Implementing Procedures.

2.4 VANS (Vehicular Alert and Notification System)

The VANS will consist of a fleet of trucks each with a notification cargo package. The notification package consists of a Dual Whelen Model WS-4000 Siren System. (See Figure E-1).

2.4.1 Vehicle

The VANS vehicle(s) is a heavy-duty truck similar to those used for other services under adverse weather conditions. No significant delays attributable to the VANS vehicles traversing their routes under adverse weather conditions are anticipated based on the choice of the vehicles and operator training.

The truck is equipped with a commercially available telescoping high lifting capacity crane which will be used to transport the sirens to their

preassigned acoustic locations. The sirens are rigidly mounted to the crane, which when fully extended, will be approximately 45 feet above the ground. Outriggers are provided to stabilize the vehicle. The vehicle is equipped with the siren console boxes and an on-board generator, both securely mounted to the truck bed.

2.4.2 Locations

Locations have been identified through the use of acoustical analysis techniques, where the VANS will provide siren tone coverage for essentially 100 percent of the population in the Massachusetts plume exposure pathway EPZ in the event of an emergency. Vehicles will be dispatched from continuously staffed, local staging areas and will be sent to the pre-selected acoustic locations to allow activation of the sirens.

Routes from the staging areas to each location are pre-planned and have been provided for each vehicle. Each route has been tested for timing and evaluated for VANS use. The route transit time for any single vehicle, combined with the setup and activation time, will meet the requirements of 10 CFR 50, Appendix E. Evaluations and tests will provide the bases to assure that the system is capable of performing its function of public alert and notification within 'about 15 minutes' (Reference 1).

2.4.3 Time Bases

The VANS is designed to complete the alert function within 'about 15 minutes.' To accomplish this, the VANS vehicles must be dispatched, travel the predetermined route, and set up in the operable position. At this point, the VANS are fully deployed and capable of remote actuation. The total siren activation time meets the guidelines set in FEMA-REP-1 and FEMA-REP-10. For

VANS design purposes the 15 minute time interval is composed of system response time and siren sounding time. Each of these is discussed below.

System Response Time

System response time is the combination of the time to alert the drivers located in staging areas (driver alert), dispatch the VANS vehicles (dispatch), travel the predetermined routes (route transit), and raise the siren at the acoustic location (setup VANS). The system response time is based on the guidelines in FEMA-REP-10, Seabrook Station Public Alert and Notification System Design Report, Addendum 1.

Siren Sounding Time

The design basis siren sounding time is (3) three minutes based on the guidelines in FEMA-REP-1 and FEMA-REP-10.

2.4.4 Operational Mode Description

At the Alert level or higher emergency plan classification, the NHY ORO will dispatch the vehicles from their staging areas to their predetermined acoustic locations and the sirens will be placed in an operable[4] position (which is ready for remote activation or actuation if previously selected by the arming sequencer).

Footnote 4: Operable position will require leveling and stabilizing the vehicle with the outriggers and raising the siren to the deployed position.

The sirens will be capable of receiving an actuation signal for remote tone operation while the vehicle is in transit. This signal will be stored in the siren control circuitry until the 'siren raised' interlock is cleared. Conversely, if a VANS vehicle is fully deployed at its acoustic location and the 'siren raised' interlock is cleared, the siren is capable of remote actuation from the NHY ORO EOC. This 'siren raised' interlock prevents the siren from sounding until the siren is in the raised position for personnel safety.

Once the VANS vehicles are operable at their preselected locations, siren operation and actuation are equivalent to a fixed pole siren system. Each of the final VANS locations has been analyzed to assure the recommended sound level coverage (Reference 3) is provided for the population density of the area and local topographical conditions. Communication with the vehicle drivers at the VANS staging areas normally will be accomplished via telephones. Backup communications will be via radio at the VANS staging areas. Each vehicle will be equipped with a radio to allow two-way communications with the NHY ORO EOC. The VANS drivers will be trained in vehicle operation, siren operation and vehicle routes.

2.4.5 VANS Normal Mode

All VANS vehicles are permanently assigned to Seabrook Station and are under the administrative control of the NHY Emergency Preparedness and Community Relations Subdivision (EP&CR). This Subdivision will assure that:

1. The locations of each VANS vehicle are maintained.
2. The periodic return of VANS vehicles for maintenance and surveillance of each VANS vehicle is controlled and consistent with local, state, and interstate vehicle requirements.
3. The training of all VANS operators is current.
4. The VANS is continuously available to perform its intended function.

Periodically VANS vehicles must be returned to Seabrook Station for surveillance and maintenance. The NHY EP&CR Subdivision has the responsibility for assuring that sufficient VANS vehicles are always available at the staging areas for public alert and notification purposes.

All VANS vehicles which are available for emergency plan support will be checked for readiness at the beginning of each shift by the assigned VANS operator. This will include (but not be limited to):

- vehicle fluid levels (oil, gas, wiper washer, etc.),
- vehicle operability,
- tires,
- fresh water in the vehicle canteen,
- medical kit,
- dosimetry equipment,
- radio,
- road flares,
- ear protection, and
- batteries on charge.

All acoustic locations will be checked weekly to verify that the sites are available for emergency use via the assigned route.

2.4.6 Surveillance and Maintenance

Surveillance and maintenance of the truck lift mechanisms and sirens will be conducted in accordance with the procedures identified in the Seabrook Station 'REP-10' report.

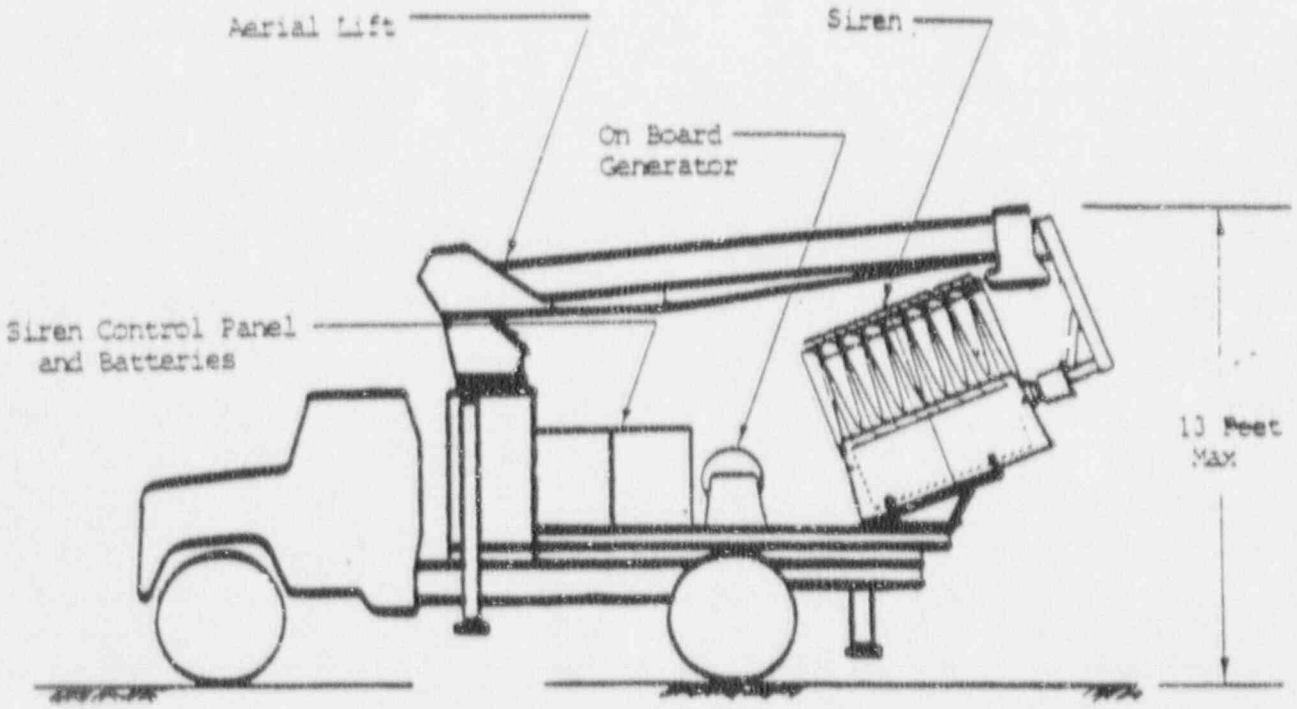
3.0 REFERENCES

1. 'Code of Federal Regulations,' 10 CFR 50, Appendix E, Section IV.D.3.

2. FEMA-REP-10, November 1985, Section E.6.2.2.

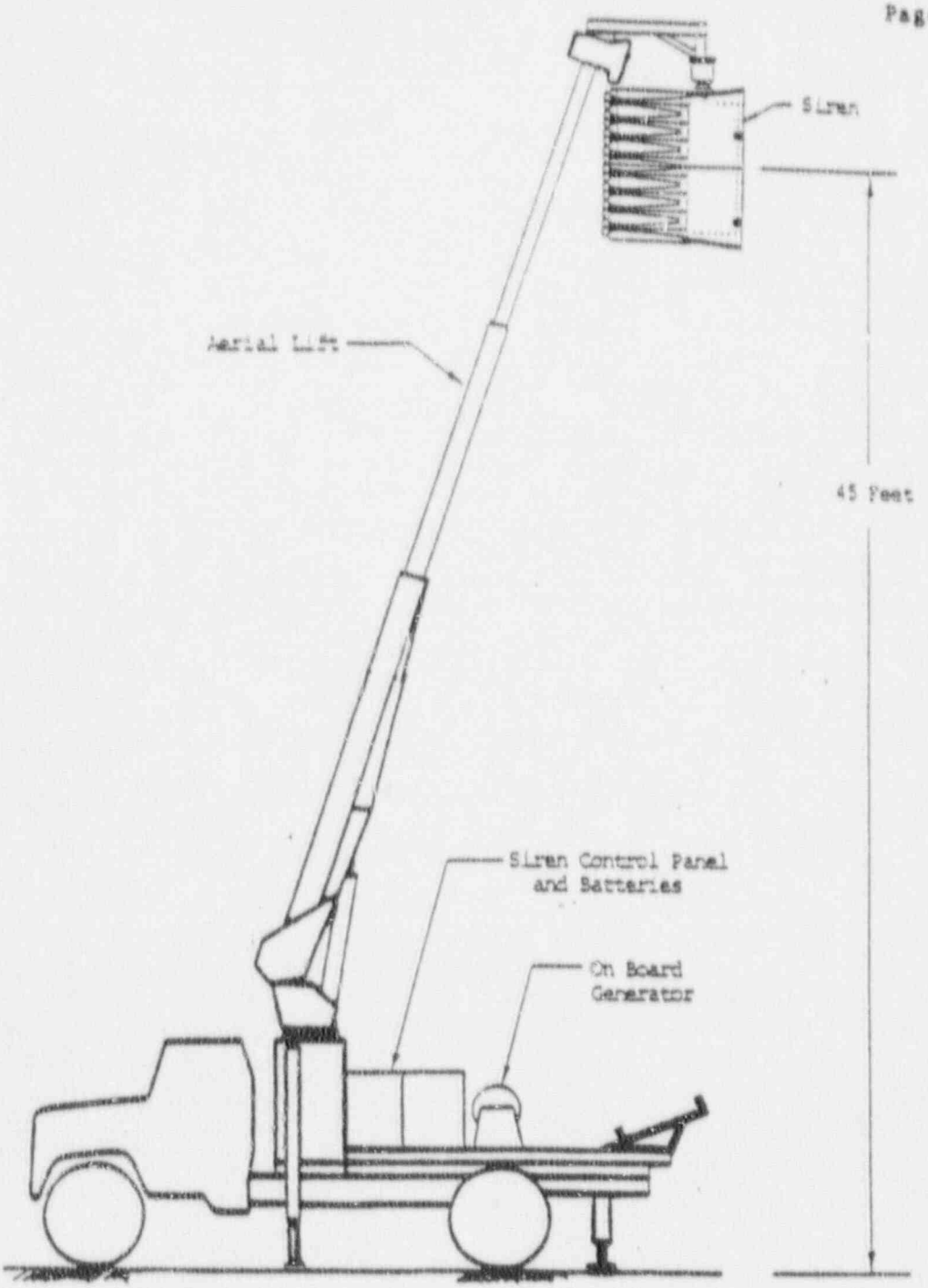
3. 'Guide for the Evaluation of Alert and Notification Systems for Nuclear Power Plants'; FEMA-REP-10/November 10, 1985; Federal Emergency Management Agency; Washington, D.C.; November, 1985.

LIST OF FIGURES



SKETCH SHOWING AERIAL LIFT TRUCK
IN TRAVEL MODE
(TYPICAL)

FIGURE E-1



SKETCH SHOWING AERIAL LIFT TRUCK
IN NOTIFICATION MODE
(TYPICAL)

FIGURE E-1

APPENDIX F

EMERGENCY EQUIPMENT

Equipment and supplies in support of the Seabrook Station Radiological Emergency Plan are maintained in accordance with Emergency Response Procedure ER 8.1, "Emergency Equipment and Facility Inventory and Preparedness Check." This procedure details the inventory and preparedness checks of Emergency Preparedness equipment and supplies in the Control Room, Technical Support Center, Operational Support Center, Route 107 Warehouse, Emergency Operations Facility, Media Center, Joint Telephone Information Center and Exeter Hospital. (Protected: Ref. NRC IR 85-32(16))

APPENDIX G

SEABROOK STATION

SUPPORTING EMERGENCY PLANS AND PROCEDURES

LISTING

APPENDIX G
SUPPORTING PLANS AND PROCEDURES

I. FEDERAL PLAN

Federal Radiological Emergency Response Plan

II. STATE PLANS

New Hampshire Radiological Emergency Response Plan

Commonwealth of Massachusetts Comprehensive Emergency Response Plan, Appendix 3 to Hazard Specific Supplement No. 6, Radiological Emergency Response Plan for Fixed-Site Nuclear Facilities

III. LOCAL PLANS

New Hampshire EPZ includes the following:

Seabrook
Portsmouth
Greenland
Rye
North Hampton
South Hampton
Hampton
Hampton Falls
Stratham
Exeter
Newfields
Brentwood
Kingston
East Kingston
Kensington
Newton
New Castle

Massachusetts EPZ includes the following:

Salisbury
Newburyport
Newbury
West Newbury
Amesbury
Merrimac

IV. SEABROOK PLAN FOR MASSACHUSETTS COMMUNITIES

V. STATION EMERGENCY RESPONSE PROCEDURES

		SEABROOK STATION REP SECTION
CHAPTER 1:	CLASSIFICATION AND RESPONSE	
ER 1.1:	Classification of Emergencies	5.0
ER 1.2:	Unusual Event	5.0
ER 1.3:	Alert	5.0
ER 1.4:	Site Area Emergency	5.0
ER 1.5:	General Emergency	5.0
CHAPTER 2:	NOTIFICATION	
ER 2.0:	Emergency Notification Documentation Forms Procedure	
ER 2.1:	Notification of Emergency Response Organization	7.0
ER 2.2:	Deleted	
ER 2.3:	Activation of the New Hampshire Public Alert and Notification System	11.2
CHAPTER 3:	EMERGENCY FACILITY ACTIVATION	
ER 3.1:	Technical Support Center (TSC) Operations	7.0 6.1.1
ER 3.2:	Operational Support Center (OSC) Operations	6.1.2
ER 3.3:	Emergency Operations Facility (EOF) Operations	7.0 6.1.3
ER 3.4:	Seabrook Station News Services Operation	6.1.6, 8.4, 11.1, 11.2, 11.3
ER 3.5:	Media Center/Joint Telephone Information Center	6.1.6, 8.4, 11.1, 11.2, 11.3
ER 3.6:	Assembly Area Operations	N/A

		SEABROOK STATION REP SECTION
CHAPTER 4:	PERSONNEL PROTECTION	
ER 4.1:	Personnel Accountability/Evacuation	10.4.2
ER 4.2:	Reserved	
ER 4.3:	Radiation Protection During Emergency Conditions	10.4.5
ER 4.4:	Onsite Medical Emergency	10.5.1 10.5.2
ER 4.5:	Reserved	
ER 4.6:	Offsite Monitoring and Decontamination	10.1.2 10.4.2 10.4.3
ER 4.7:	Emergency Dosimetry Analysis	10.3
ER 4.8:	Emergency Onsite Radiological Surveys	N/A
CHAPTER 5:	RADIOLOGICAL ASSESSMENT	
ER 5.1:	HP-41 Dose Projection Determination	10.1.1
ER 5.2:	Site Perimeter and Offsite Monitoring and Environmental Sampling	10.1.2
ER 5.3:	Operation of the METPAC System	10.1.1
ER 5.4:	Protective Action Recommendations	10.2
ER 5.5:	Use of EOF Series 85 Multichannel Analyzer	N/A
ER 5.6:	WSI System Operation	6.2.3.1
ER 5.7:	HP-41 Emergency Classification Determination	10.1.1
ER 5.8:	Ingestion Exposure Pathway Coordination	9.4

CHAPTER 6: POST ACCIDENT SAMPLING AND ANALYSIS

NOTE: This series of procedures is maintained and controlled as department procedures within the Station Chemistry Department.

CHAPTER 7: EMERGENCY OPERATIONS

ER 7.1:	Deleted	
ER 7.2:	Planned Radiological Releases During Emergencies	10.4.2
ER 7.3:	Reentry and Recovery	10.3
ER 7.4:	Documentation and Recordkeeping	10.3

CHAPTER 8: MAINTAINING EMERGENCY PREPAREDNESS

ER 8.1	Emergency Equipment and Facility Inventory and Preparedness Check	12.4
ER 8.2:	Deleted This procedure has been incorporated into the Training Department ERO Program Description and Nuclear Training procedures.	12.2
ER 8.3:	Deleted This procedure has been incorporated into the Radiological Emergency Preparedness Drill and Exercise Manual.	12.1
ER 8.4:	Emergency Plan and Procedure Review and Revision	12.3
ER 8.5:	Emergency Communications System Preparedness Tests	12.1.2.1
ER 8.6:	Emergency Response Procedure Development	12.3
ER 8.7:	Deleted Information from this procedure has been incorporated into an Emergency Preparedness and Community Relations (EP&CR) department level procedure.	9.2.2

CHAPTER 9: PUBLIC INFORMATION

ER 9.1: Deleted

This procedure has been incorporated into Procedures ER 3.4 and ER 3.5.

APPENDIX H

NUREG-0654/SEABROOK STATION

RADIOLOGICAL EMERGENCY

PLAN CROSS REFERENCE

NUREG-0654/SEABROOK STATION RADIOLOGICAL EMERGENCY PLAN CROSS REFERENCE

NUREG-0654, REVISION 1	SEABROOK STATION
REFERENCE SECTION	REP SECTION
A.1.a	8.8, 8.9, and Figures 8.13 and 8.14
A.1.b	8.0
A.1.c	Figures 8.1 through 8.10
A.1.d	Figures 8.1 through 8.11, and Appendix A
A.1.e	8.0 and 7.1
A.3	Appendix D
A.4	8.0 and 9.0
B.1	8.0 and Appendix A
B.2	8.3.1
B.3	8.0
B.4	8.3.1
B.5	8.0
B.6	8.0 and Figures 8.1 through 8.11
B.7.a	8.5 and 8.6
B.7.b	8.6 and 8.7
B.7.c	8.8 and 8.9
B.1.d	11.3
B.8	8.5 and 8.6 and Appendix B
B.9	8.8.1 and Appendix D

NUREG-0654, REVISION 1	SEABROOK STATION
REFERENCE SECTION	REP SECTION
C.1.a	Appendix A
C.1.b	3.4 and the Federal Radiological Emergency Response Plan
C.1.c	6.0, 7.0
C.2.b	8.9
C.3	8.6.7 and Appendix B
C.4	Appendix B and D
D.1	5.0
D.2	5.0
E.1	7.0
E.2	7.0
E.3	7.0
E.4 a-n	11.0
E.6	11.0 and Appendix E
E.7	11.3
F.1.a	7.0
F.1.b	7.0
F.1.c	7.0
F.1.d	7.0
F.1.e	7.0
F.1.f	7.0

NUREG-0654, REVISION 1	SEABROOK STATION
REFERENCE SECTION	REP SECTION
F.2	10.5
F.3	7.0
G.1	11.3
G.2	11.3
G.3.a	11.3
G.3.b	N/A
G.4.a	11.3
G.4.b	11.3
G.4.c	11.3
G.5	11.3
H.1	6.0
H.2	6.0
H.4	6.0
H.5	6.2.2
H.5.a	6.2.3
H.5.b	6.2.2
H.5.c	6.2.1
H.5.d	6.2.4
H.6.a	6.2.3
H.6.b	6.2.5
H.6.c	6.2.5
H.7	6.2.5

NUREG-0654, REVISION 1	SEABROOK STATION
REFERENCE SECTION	REP SECTION
H.8	6.2.3.1
H.9	6.1.2
H.10	Appendix F
H.11	Appendix F
H.12	6.1.3
I.1	5.0, 10.0
I.2	6.2, 10.0
I.3.a	6.2, 10.0
I.3.b	6.2, 10.0
I.4	6.2.2, 10.0
I.5	6.2.3.1, 10.0
I.6	6.2.2, 10.0
I.7	6.0, 10.0
I.8	6.0, 10.0
J.9	10.1.2
I.10	6.2.2, 10.1.1
J.1.a	10.4.2
J.1.b	10.4.2
J.1.c	10.4.2
J.1.d	10.4.2
J.2	10.4.2

NUREG-0654, REVISION 1	SEABROOK STATION
REFERENCE SECTION	REP SECTION
J.3	10.4.2
J.4	10.4.2
J.5	10.4.1
J.6.a	10.4.4
J.6.b	10.4.4
J.6.c	10.4.4
J.7	10.2, Table 10.1
J.8	Appendix C
J.10.a	4.2.3, Figure 4.4, 4.5 and 4.6 10.0, Figure 10.2
J.10.b	Figure 4.4, 4.5 and 4.6, 11.0
J.10.c	11.0, Appendix E
J.10.m	10.3, Appendix C
K.1.a	10.3, 10.4
K.1.b	10.3, 10.4
K.1.c	10.1
K.1.d	10.4
K.1.e	10.4
K.1.f	10.4
K.1.g	10.4
K.2	10.3, Appendix A
K.3.a	10.3

NUREG-0654, REVISION 1	SEABROOK STATION
REFERENCE SECTION	REP SECTION
K.3.b	10.3
K.5.a	10.4.3
K.5.b	10.5
K.6.a	10.4.2
K.6.b	6.0
K.6.c	8.7
K.7	10.4.3
L.1	10.5
L.2	10.5
L.4	10.5
M.1	8.7
M.2	8.7
M.3	8.7
M.4	10.0
N.1.a	12.1
N.1.b	12.1
N.2.a	12.1.2.1
N.2.b	12.1.2.2
N.2.c	12.1.2.3
N.2.d	12.1.2.4

NUREG-0654, REVISION 1	SEABROOK STATION
REFERENCE SECTION	REP SECTION
N.2.e	12.1.2.5
N.3.a	12.1.3
N.3.b	12.1.3
N.3.c	12.1.3
N.3.d	12.1.3
N.3.e	12.1.3
N.3.f	12.1.3
N.4	12.1.4
N.5	12.1.4
O.1	12.2
O.1.a	12.2.2
O.2	12.2
O.3	10.5
O.4.a-i	12.2
O.5	12.2, Figure 12.1
P.1	12.7
P.2	12.8
P.3	12.5
P.4	12.3
P.5	12.3

NUREG-0654, REVISION 1	SEABROOK STATION
REFERENCE SECTION	REP SECTION
P.6	Appendix G
P.7	Appendix G
P.8	Table of Contents
P.9	12.3
P.10	12.3