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NORTH CAROLINA EMERGENCY RESPONSE PLAN

In support of the Catawba Nuclear Station
May 1983
Applicants' EP Exhibit
1

Division of Emergency Management

Department of Crime Control & Public Safety



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Rev.1 Jan. '84

**MUTUAL SUPPORT AGREEMENTS
RESPONSE ORGANIZATIONS**

The undersigned agree to the responsibilities assigned to their organization in the North Carolina Emergency Response Plan in Support of the Catawba Nuclear Station.

Date: _____

Heman R. Clark
Secretary, North Carolina Department of
Crime Control and Public Safety

Date: _____

G. E. Vaughan
Duke Power Company
General Manager, Nuclear Stations

Date: _____

Harley B. Gaston, Chairman
Gaston County Board of Commissioners

Date: _____

T. Jeffers, Mayor
Gastonia

Date: _____

T. LaFontine Odom, Chairman
Mecklenburg County Board of Commissioners

Date: _____

William F. Blankenship, Jr., Mayor
Pineville

FOREWORD

This plan was developed using the guidelines and information in NUREG-0654, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants, dated November 10, 1980. All appropriate criteria contained in NUREG-0654 are addressed in the plan.

The plan is a mutually supportive emergency response document. It identifies the resources and responsibilities of off-site response organizations and establishes a design for emergency response actions to protect the population that could be adversely affected by an accident at the Catawba Nuclear Station.

PART 1 establishes State procedures and stipulates how the State integrates its emergency response activity with other major response jurisdictions and organizations. Similarly, PARTS 2 and 3 contain county procedures and stipulate how the counties integrate their emergency response activity with other major response organizations. For thoroughness, each PART is designed around the major functions identified in NUREG-0654. Annexes to the Plan contain additional detail. For these reasons, and the existence of emergency procedures at the State and local levels, separate implementing procedures are not deemed necessary.

N.C. EMERGENCY RESPONSE PLAN
IN SUPPORT OF THE CATAWBA NUCLEAR STATION

RECORD OF CHANGES

CHANGE NUMBER	DATE OF CHANGE	DATE ENTERED	CHANGE MADE BY (SIGNATURE)

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**NORTH CAROLINA PROCEDURES TO SUPPORT THE
CATAWBA NUCLEAR STATION**

I. **PURPOSE.** The purpose of PART 1 is to provide for the use of State resources in response to an accident at the Catawba Nuclear Station. This plan of action and the procedures established for off-site emergency operations provide for integrating North Carolina's response with other response organizations and governmental jurisdictions, including the State of South Carolina.

II. **CONCEPT.**

A. **Planning.**

1. The Emergency Planning Zone (EPZ) is considered the area that could be affected by an accident at the Catawba Station. The radius of the EPZ extends to approximately 50 miles around the nuclear facility. The choice of the size of the EPZ represents a judgment on the extent of detailed planning needed to assure an adequate response base. In a particular emergency, protective actions might well be restricted to a small part of the planning zone. On the other hand, for the worst possible accident, protective actions would need to be taken outside the planning zone.
2. The EPZ is sub-divided into two parts: the **plume exposure pathway** (10-mile radius) and the **ingestion exposure pathway** (50-mile radius). The EPZ concept is illustrated in Figure 1.
3. The 10-mile radius of the plume exposure pathway is based primarily on the following considerations:
 - a. Projected doses from the traditional design basis accidents would not exceed Protective Action Guide (PAG) levels outside the zone.
 - b. Projected doses from most core melt sequences would not exceed PAG levels outside the zone.
 - c. For the worst core melt sequences, immediate life threatening doses would generally not occur outside the zone.
 - d. Detailed planning within 10 miles would provide a substantial base for expansion of response efforts if necessary.

EMERGENCY PLANNING ZONE CONCEPT

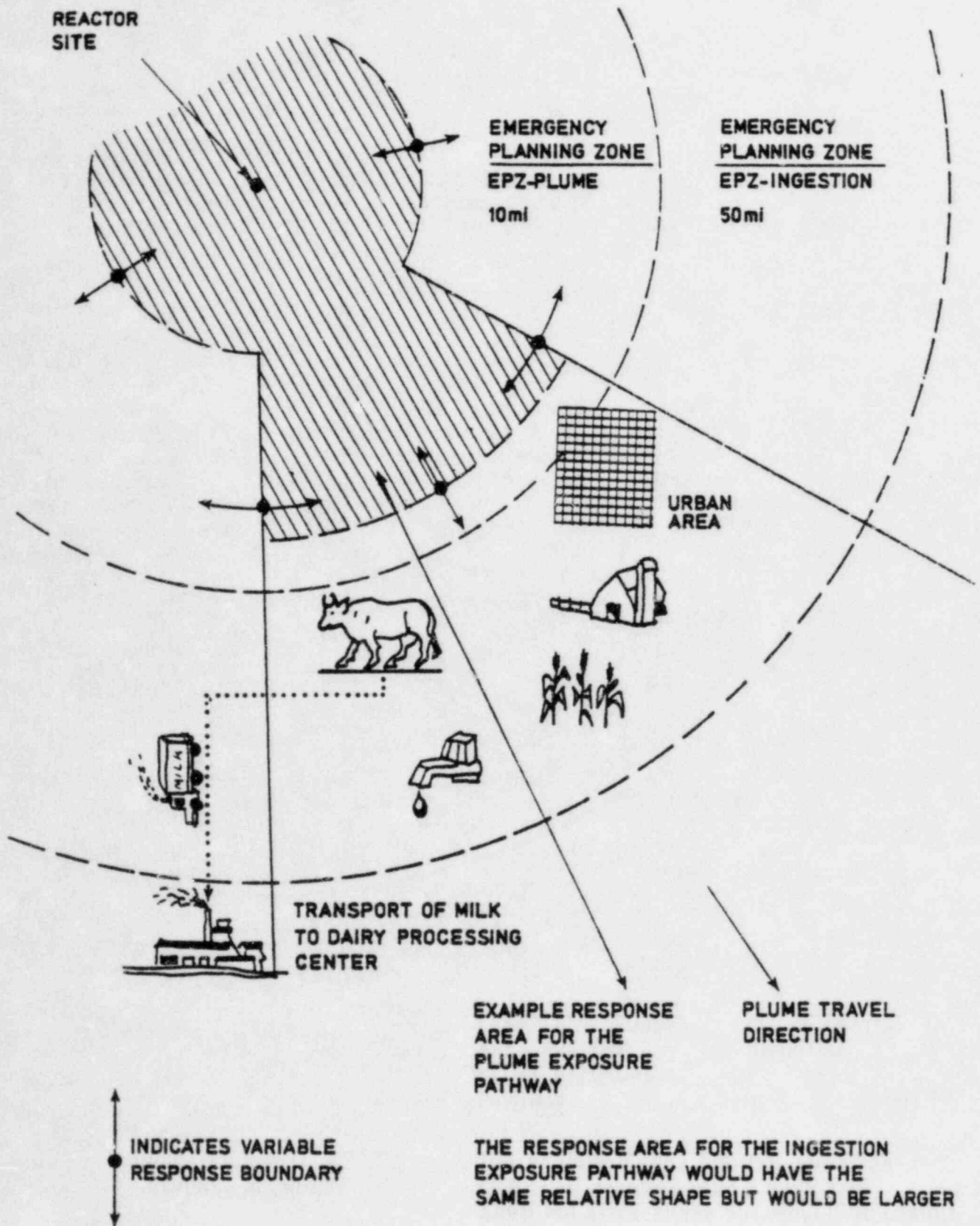


Figure 1

4. The 50-mile radius of the ingestion exposure EPZ is based on the following considerations:
 - a. The downwind range potentially threatened by significant contamination would generally be limited to about 50 miles from the power plant because of wind shifts during the release and travel periods.
 - b. There may be a conversion of atmospheric iodine (iodine suspended in the atmosphere for long time periods) to chemical forms that do not readily enter the ingestion pathway.
 - c. Much of any particulate material in a radioactive plume would have been deposited on the ground within 50 miles of the facility.
 - d. Projected contamination generally would not exceed PAG levels beyond the 50-mile EPZ.
5. The public can best be protected when the response by all parties is fully integrated, especially at the State and local levels. Through the integrated development and evaluation of plans, each party involved will have a clear understanding of the overall level of preparedness needed and the role it will play in the event of a nuclear accident. There must be clear recognition and acceptance by all parties involved of the shared responsibility for safeguarding the public health and safety. For these reasons, this plan provides for the integration of the response activity of all parties.

B. Operations.

1. The responsibility for directing and conducting emergency operations in the plume exposure pathway EPZ rests jointly with local and State governments. During the initial period after notification of an accident (approximately seven hours), emergency actions required to protect the people in the affected area are the responsibility of the local governments concerned. Therefore, local and State governments must prepare plans and response mechanisms for the plume exposure pathway EPZ.
2. Since the 10-mile EPZ includes areas in both North and South Carolina, the two states will coordinate response operations. To ensure this coordination, the Director or the North Carolina Division of Emergency Management (DEM) who will direct and control this State's operations from SERT head-

quarters, will designate a liaison to represent the State at South Carolina's forward emergency operations center (FEOC) in Clover, S.C.

3. The Department of Crime Control and Public Safety (DCCPS) is responsible for emergency operations conducted by the State (See Attachment 1).
4. The Director, DEM is responsible for planning, organizing, directing, and supervising emergency operations conducted by the State. The Director is also responsible for coordinating North Carolina's response operations with South Carolina.
5. The Director has designated a staff of specialists to assist in carrying out his duties. This staff is organized into the State Emergency Response Team (SERT) for which the Director serves as the leader.
6. The time required after notification to assemble SERT, move it to the affected area, and establish a field command post is approximately seven to nine hours.
7. During the time SERT is in transit, other necessary actions required of State Government (e.g., declaration of a State of Disaster or Emergency by the Governor or establishing contact with local governments and other parties concerned) will be completed by the appropriate agencies and coordinated by the State EOC.
8. When SERT is established (to the satisfaction of the SERT Operations Officer) at the field headquarters, the State will assume responsibility for directing State agency participation in emergency operations and coordinating actions involving both State and local agencies. (See Figure 2) The exact time at which the State will assume direction and control is when SERT dispatches a message to each county concerned, the South Carolina FEOC, the State EOC, the licensee, and the State warning point. This message states that:

Option A: At the request of the county or counties concerned, SERT has been established and assumes direction and control authority effective at the specified date and time: or,

Option B: A State of Disaster or Emergency has been declared, the SERT has been established and assumes direction and control authority effective at the specified date and time. (See Figure 3.)

**DIRECTION AND CONTROL RESPONSIBILITY
PHASED RELATIONSHIPS AND PRIMARY INFORMATION FLOW**

CONDITION	RELATIONSHIP	PRIMARY INFORMATION FLOW
Prior to an emergency	State and local government have an equal and mutual responsibility to plan.	As necessary between the State and local government and the plant.
Nuclear plant accident occurs. Emergency class is determined.	Local government directs and controls.	Initial notification goes from the plant to State and county warning points.
	State government assists.	State and county warning points notify key individuals.
Accident condition at the nuclear plant continues.	Local government directs and controls.	Plant to Government Messages: Option 1 - Messages from the plant continue to go to State and county warning points until directed otherwise; warning points pass messages to key individuals. <u>(This option should be used only when the other options are not feasible. Options 2 and 3, or a combination of them, are preferred).</u> Option 2 - As directed by the level of government concerned, messages from the plant go to one key individual at the State and county. Option 3 - As directed by the level of government concerned, messages from the plant go from the plant to the State EOC (or SERT), and county EOCs. Option 4 - As directed by the various governments concerned, a combination of Options 1, 2, and 3.
	State government assists.	

PART 1

Page 5

Figure 2

**DIRECTION AND CONTROL RESPONSIBILITY
PHASED RELATIONSHIPS AND PRIMARY INFORMATION FLOW**

PART 1

CONDITION	RELATIONSHIP	PRIMARY INFORMATION FLOW
Accident condition at the plant continues; local government requests that the State assume direction and control authority and control message dispatched.	State government directs and controls. Local government assists.	Messages from the plant go to SERT and the County EOCs.
Accident condition at the plant continues; State of Disaster or emergency declared; State assumption of direction and control message dispatched.	State government directs and controls. Local government assists.	Messages from the plant go to SERT and the County EOCs.

Figure 2 (continued)

MESSAGE FORMAT
FOR
STATE ASSUMPTION OF DIRECTION AND CONTROL AUTHORITY

The following message format must be used to transfer direction and control authority from the counties concerned to the State. The message must be initiated by SERT, authorized by the SERT leader, and may be transmitted via voice means or by a method that produces a hard copy. In either case, it must be complete.

1. DATE _____ TIME _____

2. FROM _____
(SERT LEADER)

3. TO _____
(List the responsible individual in each county)

4. SUBJECT: STATE ASSUMPTION OF DIRECTION & CONTROL AUTHORITY.

OPTION A - At the request of _____ county or counties, SERT has been established at _____ . SERT assumes direction and control authority at _____ .
(Location) (Time) (Date)

OPTION B - A State of Disaster (or emergency) has been declared by _____ (Whom) for _____ .
(Area Affected)

SERT has been established at _____ .
(Location)
SERT assumes direction and control authority at _____ .
(Time) (Date)

5. Please acknowledge receipt of the hard copy of this message and immediately verify its contents with SERT.

Figure 3

NOTE: When a State of Disaster or Emergency is declared by the Governor, the State has the authority to assume responsibility for directing and conducting emergency operations. This is not meant to negate local governments' continuing responsibility to protect the people prior to the arrival and establishment of SERT as described above.

9. The State is principally responsible for directing and conducting emergency operations in the 50-mile ingestion exposure pathway EPZ.
10. The ingestion exposure pathway EPZ includes 10 counties in South Carolina and 13 counties in North Carolina. The responsibility for conducting emergency operations with governments in the State of South Carolina is fixed by Letter of Agreement with the State of North Carolina. (See Attachment 1.)
11. Duke Power Company has the primary responsibility for planning and implementing emergency measures within the boundaries of the Catawba Nuclear Station. These emergency measures include corrective actions at the site and protective measures and aid for persons on-site. Since Catawba operators cannot do this alone, it is a necessary part of the Station's emergency planning to make advance arrangements with State and local organizations for special emergency assistance such as ambulance, medical, hospital, fire, and police services.
12. An additional emergency activity for which Duke Power Company has primary responsibility is accident assessment. This includes prompt evaluation of any potential risk to the public health and safety, both on-site and off-site, and timely recommendations to State and local governments. After declaration of an Alert or higher emergency class, Duke Power Company will provide updates on the situation and any recommendations for protective measures at 30-to 60-minute intervals or, if necessary, more frequently. This document reflects the identification and classification of accidents and the notification of off-site agencies by the facility operator as set forth in Nuclear Regulatory Commission regulation, NUREG-0654, Appendix 1.
13. Members of SERT are on call 24 hours a day.
14. Emergency communication links among State, local, and Federal agencies, and between State government

and Duke Power Company are staffed 24 hours a day. See Section VI, Emergency Communications.

15. Warning and notification activities and access control of North Carolina areas of Lake Wylie and the Catawba River within the 10-mile EPZ are the responsibility of the Charlotte-Mecklenburg Emergency Management Agency. (See Annex G.)
16. In summary, this plan contains emergency procedures to be implemented throughout the EPZ. In developing the emergency response concept of operations, two time frames were considered. During the first period, when an emergency condition exists at the power plant but is not serious enough to warrant a declaration of a State of Emergency by the Governor, the State will provide assistance to local governments in the affected area and direct the actions of State forces employed in an emergency response role. In the second period, when the emergency condition has escalated and a Declaration of Emergency has been made by the Governor, the State assumes responsibility for direction and control of all off-site emergency operations in North Carolina.

III. **ORGANIZATION AND RESPONSIBILITIES.** This section describes the organization of and the primary responsibilities for emergency response by State and local organizations and the Catawba Nuclear Station. It also specifically establishes the responsibilities of various supporting organizations and provides procedures to assure that each principal response organization is staffed to respond on a continuous basis.

A. **Principal EPZ Response Organizations.**

1. **State of North Carolina.**

- a. Department of Crime Control and Public Safety.
- b. Department of Human Resources.
- c. Department of Transportation.
- d. Department of Natural Resources and Community Development.
- e. Department of Agriculture.

2. **Local.**

- a. Gaston, Mecklenburg and York (S.C.) County governments and the municipal governments within the 10-mile EPZ.
- b. The county governments (and municipal governments in the counties) within the 50-mile EPZ are:

North Carolina

Anson	Cleveland	Mecklenburg	Union
Burke	Gaston	Rowan	
Cabarrus	Iredell	Rutherford	
Catawba	Lincoln	Stanly	

South Carolina

Cherokee	Lancaster
Chester	Newberry
Chesterfield	Spartanburg
Fairfield	Union
Kershaw	York

3. **Federal.**

- a. Nuclear Regulatory Commission (NRC).
- b. Department of Energy.

- c. Environmental Protection Agency.
 - d. Department of Health and Human Services.
 - e. Food and Drug Administration.
 - f. Federal Emergency Management Agency.
 - g. Department of Transportation.
 - h. Department of Agriculture.
 - i. National Weather Service.
 - j. Others as required.
4. Private Sector. (See Section III in Parts 2 and 3 and Annex E for specific references.)
- a. Duke Power Company.
 - b. Southern Bell Telephone Company.
 - c. Independent telephone companies.
 - d. Radio and television stations.
 - e. Private hospitals.
 - f. The Salvation Army.
 - g. The American Red Cross.
 - h. Volunteer organizations.

B. Responsibilities.

1. The Departments of Crime Control and Public Safety (DCCPS) and Human Resources (DHR) have the primary responsibility for responding to emergencies resulting from an incident or an accident at the Catawba Station. However, any State agency may be tasked with an emergency mission.
2. All departments with specific task assignments are listed in the following paragraphs. These departments will accomplish the following general tasks and any other tasks assigned by the SERT leader.
 - a. Provide personnel, equipment, and facilities.

- b. Develop and maintain supporting plans, procedures, and alerting lists for this plan, subject to review and approval by DCCPS.
 - c. Plan and provide for the safety of employees and protection of State property in the event of an emergency.
 - d. Coordinate actions with SERT and with departments having related tasks.
 - e. Train personnel assigned for emergency tasks.
 - f. Participate in exercises to test emergency plans and procedures.
 - g. Provide liaison to SERT.
 - h. Provide liaison to the State Emergency Operations Center (EOC) in Raleigh.
- C. **North Carolina Department of Crime Control and Public Safety.** Assemble and dispatch SERT to the scene of the emergency, serve as the central public information agency in disaster operations, and provide situation reports and other information to the Governor, including recommendations on: (1) activation of the National Guard; (2) activation of the Southern Mutual Radiological Assistance Plan; (3) declaring a State of Disaster or Emergency; and (4) evacuation and subsequent reentry and recovery.
- 1. **Division of Emergency Management (DEM).**
 - a. Prepare and maintain a State Radiological Emergency Response Plan for the Catawba Station in coordination with DHR and other interested agencies.
 - b. Coordinate training of local emergency workers.
 - c. Activate SERT and coordinate the State's response with local government and with the State of South Carolina.
 - d. Activate the State EOC in Raleigh and maintain it on a 24-hour basis or as directed.
 - e. Provide support to SERT in the field.
 - f. Provide communications with contiguous states and the Federal government and coordinate all communications.

- g. Provide communications with meteorological information stations in the vicinity of the Catawba Station.
- h. As resources allow, augment the Radiation Protection Section (RPS) of DHR with personnel from the radiological branch.
- i. Arrange for a SERT scientific advisor.

2. State Highway Patrol.

- a. Coordinate all law enforcement and traffic control.
- b. Operate the State warning point on a 24-hour basis.
- c. Provide immediate assistance to utility management and local authorities during initial onset of the emergency.
- d. Transport members of SERT and the Radiation Protection Emergency Team to the scene of the emergency, when directed.
- e. When necessary, establish and maintain communication links between utility management, local authorities, SERT, and the Secretary of DCCPS, or his designee.
- f. Provide communications support to SERT, including telecommunicators to operate the Police Information Network (PIN) terminal at SERT headquarters.
- g. Provide traffic control to support evacuation and in the vicinity of shelters, reroute traffic around contaminated areas, and report traffic problems to SERT.
- h. Establish roadblocks to reroute traffic and prevent entry into contaminated zones designated by SERT.
- i. Maintain a log of all persons and vehicles entering and leaving a designated zone subsequent to evacuation.
- j. Monitor evacuees and vehicles for contamination and record results.

- k. Direct and escort contaminated persons and vehicles to designated decontamination stations.
 - l. Provide assistance to county and municipal law enforcement agencies in warning and evacuating persons in the designated zone.
 - m. During a State of Disaster or Emergency provide or coordinate all law enforcement activity necessary for the protection of life and property.
 - n. Provide security for State property, facilities, and personnel.
 - o. Supervise the movement of all pedestrian and motor vehicle traffic in and adjacent to the designated zone.
 - p. Provide any service or logistical support directed by the Governor, the Secretary of DCCPS, SERT, or by the Patrol Commander or his designee, the appropriate Zone Director, or Troop Commander.
 - q. Provide a patrol car to escort the Radiation Protection mobile laboratory to the area of an accident and sufficient security personnel for the mobile laboratory during the emergency.
 - r. Provide a patrol car for back-up communications to each county EOC and the Catawba Station.
3. **North Carolina National Guard (Office of the Adjutant General).**
- a. Be prepared to provide the following aviation support:
 - (1) Short notice helicopter transportation for SERT, the Radiation Protection Team (up to eight personnel in each team), and other personnel as directed.
 - (2) Aerial evacuation of personnel from contaminated or threatened areas.
 - (3) Transportation of needed supplies and equipment.

NOTE: Due to lack of life support equipment in National Guard helicopters, other means of transporting patients who need such support should be considered.

- b. Be prepared to furnish ground transportation as follows:
 - (1) Trucks and buses with drivers to transport individuals and groups being evacuated from contaminated or threatened areas.
 - (2) Trucks and drivers for transporting supplies, equipment, and potable water.
 - (3) Operators to drive school buses and other equipment as may be required during an evacuation.
- c. Provide radio equipment for use by SERT.
- d. Provide equipment and personnel to conduct search and rescue missions.
- e. Provide equipment and personnel to establish and operate field kitchens for mass feeding.
- f. Provide personnel and equipment to operate portable showers and to assist in decontamination of equipment, roads, and structures. Assist in operating decontamination points as required.
- g. Protect public and private property against looting and other threats.
- h. Provide assistance for traffic control and law enforcement during evacuation and reentry phases of an emergency operation.
- i. With trained medical personnel and equipment, be prepared to provide emergency medical assistance.
- j. Make armories and other National Guard facilities available for use as shelters or other support functions when not required for National Guard use.
- k. With generators and flood light sets, provide area lighting as required.

- l. Provide five-ton wreckers to support evacuation.
 - m. Be prepared to provide other support commensurate with capabilities not listed.
 - n. Provide for record keeping and documentation of the off-site effects of the emergency and actions taken.
 - o. Manage radiation exposure of departmental personnel and maintain exposure records.
 - p. Prepare damage and loss survey reports.
4. **Civil Air Patrol** will provide volunteers for:
- a. Aerial courier and messenger service.
 - b. Light transport flights for movement of personnel and supplies.
 - c. Fixed, mobile, and airborne communications.
 - d. Ground, mobile, and air radiological monitoring support.
 - e. Search and rescue.
5. **Alcohol Law Enforcement.**
- a. Detect violations of alcohol control laws.
 - b. Provide law enforcement as directed.
 - c. Assist in search and rescue.
 - d. Any other services as directed.
- D. **North Carolina Department of Human Resources.**
1. **Radiation Protection Section (RPS), Division of Facility Services.**
- a. Determine the severity level of radiation release and report level to SERT.
 - b. Dispatch a Radiation Protection Emergency Response Team to the incident site.
 - c. Establish and supervise a system for radiological monitoring, excluding the

- monitoring of vehicles and people at traffic control points during evacuation.
- d. Designate a representative to SERT to coordinate technical activities.
 - e. Assume control of all off-site radiation related technical activities in the recovery operation.
 - f. Recommend measures to lessen the adverse effects on the health of the public and emergency workers.
 - g. Recommend measures to control the spread of radioactivity.
 - h. Determine the types of radiological technical expertise required from other Federal, State, and local government agencies and private industries, and request their assistance through SERT.
 - i. Arrange with public and private agencies to provide back-up support for monitoring and laboratory analysis. Maintain a list of radiological laboratories.
 - j. Provide necessary radiological technical direction and protective equipment to other agencies.
 - k. Establish radiological safety criteria for recovery.
 - l. Make recommendations for protective actions, evacuation, reentry, and recovery.
 - m. Review recommendations for protective actions from the Catawba Nuclear Station.
 - n. Obtain, store, distribute, and collect thermoluminescent dosimeters (TLDs).
 - o. Read, analyze, report, record, and maintain all dosimetry.
 - p. Identify fixed and supporting medical care facilities willing to accept and able to treat suspected or actual radiation contaminated victims.

- q. Serve as lead agency for radiological damage assessment for land, crops, livestock, and other personal property.
 - r. Identify meteorological information stations in the vicinity of nuclear facilities.
 - s. Develop a medical response plan for dealing with nuclear facility emergencies with off-site consequences.
 - t. Develop a system for State public health medical records and follow-up of individuals exposed to radiation. Information such as location at time of emergency, radiation dose, contamination, treatment, and release status will be recorded.
 - u. Develop and maintain a list of qualified medical consultants who can, if required, assist State and local medical authorities.
2. **Emergency Medical Services Section, Division of Facility Services.**
- a. Provide training programs for medical support personnel to care for off-site victims.
 - b. Coordinate emergency medical services at radiation accident sites and shelters.
 - c. Provide technical information on available emergency medical personnel.
 - d. Provide radiation safety training assistance to emergency medical personnel through existing Emergency Medical Training programs.
 - e. Devise plans to marshal quickly ambulance and rescue resources.
3. **Division of Health Services.** Coordinate all public health functions including the potassium iodide program. (See Paragraph IV.E.6.)
- a. **Laboratory Section, Environmental Sciences Branch.** Provide laboratory evaluation of suspected radioactive samples of all types, utilizing, if necessary, back-up facilities at North Carolina State University and the University of North Carolina at Chapel Hill.

- b. **Environmental Health Section, Sanitation Branch.**
- (1) Collect fish samples for analysis.
 - (2) Embargo and dispose of unprocessed fish.
 - (3) Request that the Wildlife Resources Commission police such an embargo.
 - (4) Embargo processed fish under authority delegated by the Department of Agriculture.
 - (5) Collect milk samples for analysis.
 - (6) Request that the Department of Agriculture embargo contaminated milk.
 - (7) Provide liaison with local health departments and provide technical assistance and consultation as needed.
- c. **Environmental Health Section, Solid and Hazardous Waste Management Branch.**
- (1) Coordinate with RPS on the removal of radiologically contaminated materials resulting from decontamination procedures.
 - (2) Coordinate with and provide for RPS specifications and design criteria for temporary disposal sites.
 - (3) Provide liaison to local health departments with solid wastes responsibilities for construction of temporary storage sites.
 - (4) Prior to an emergency, identify temporary storage sites for contaminated material.
 - (5) Locate and arrange for the provision of solid wastes disposal equipment.
 - (6) When directed, dispatch State or regional personnel to SERT headquarters immediately.

d. Environmental Health Section, Water Supply Branch.

- (1) Notify and update local water supply operations on the status of hazardous situations.
- (2) Order local water supply plants to cease operations and close intake systems where deemed necessary.
- (3) Provide for the mobile water treatment plant (Water Boy) where necessary.
- (4) Coordinate requests for emergency drinking water and provide technical assistance when requested for the treatment and distribution of emergency drinking water.
- (5) Provide technical assistance and supervision to local public water supply operations.
- (6) At the request of the owners, provide technical assistance for water supplies serving less than 15 connections or 25 people.

e. Health Assurance Section, Pharmacy Services.
Establish a monitoring and replacement program for the procurement, storage, and distribution of KI.

4. Division of Social Services.

- a. Coordinate overall shelter operations to support county shelter management.
- b. Coordinate shelter operations at designated shelters and support the American National Red Cross in shelter management.

5. Division of Mental Health, Mental Retardation and Substance Abuse Services.

- a. Provide mental health and crisis counseling.
- b. Provide medical support and inpatient services as a secondary role.

E. North Carolina Department of Agriculture.

1. Food and Drug Protection.

- a. Restrict the sale, production, distribution and warehousing of livestock, produce, and processed food products, as necessary.
 - b. Provide sampling and monitoring assistance.
 2. **Food Distribution.** Provide food commodities for evacuees when directed.
 3. **Livestock Feed.** Locate and report sources of uncontaminated feed for livestock.
- F. **North Carolina Department of Justice.**
1. **State Bureau of Investigation.** Investigate violations of the North Carolina Criminal Code and assist other law enforcement agencies.
 2. **Police Information Network (PIN).** Provide terminal equipment and operators to the State EOC and terminal equipment to SERT headquarters.
- G. **North Carolina Department of Natural Resources and Community Development.**
1. **Division of Forest Resources.**
 - a. Provide equipment and personnel for decontamination operations, including earth moving and washdown.
 - b. Provide air and land transportation.
 - c. Provide local area communications.
 - d. Provide emergency feeding.
 - e. Act as guides in forest areas.
 - f. Provide local weather measurement teams.
 2. **Division of Parks and Recreation.**
 - a. Monitor departmental facilities.
 - b. Provide equipment and personnel to assist in control activities in or near State parks.
 - c. Regulate or prohibit entry into and use of contaminated State parks.
 - d. Provide living facilities for evacuees and emergency workers.

- e. Act as guides in State park areas.
- f. Provide assembly areas for equipment and personnel.
- g. Provide transportation and communications in State park areas.

3. Division of Environmental Management.

- a. Collect samples of potentially contaminated bodies of water and of aerial dispersals of radioactive materials for analysis by DHR.
- b. Assist in technical decision to prohibit use of water sources.
- c. Halt or restrict the use of non-drinking water as deemed necessary.
- d. Consult with the Water Supply Branch, Environmental Health Section, DHR, on restrictions placed on the use of public drinking water.

H. North Carolina Wildlife Resources Commission.

- 1. Monitor fish and wildlife in affected areas.
- 2. Collect specimens of fish and wildlife for transfer to indicated laboratories to determine contamination levels.
- 3. Close contaminated areas to the taking of fish and wildlife and confiscate or prevent the sale of fish from contaminated or suspected areas.
- 4. Act as guides in woodland areas.
- 5. Perform law enforcement assistance as directed.
- 6. Provide air, water, and land transportation and assist in rescue.
- 7. Provide local area radio communications.
- 8. Provide consultation in wildlife management and biology.
- 9. Collect, or otherwise control the migration of, migratory forms of game fish and wildlife, if necessary.

10. Assist the Mecklenburg County Police Department in notifying boaters to leave Lake Wylie and the Catawba River.
- I. **North Carolina Department of Correction.**
 1. **Prisons Division.**
 - a. Provide transportation, uniformed personnel, and services to include law enforcement as directed.
 - b. Provide food service support as directed.
 - c. Provide a plan for evacuation or protection of inmates and employees in the evacuation zone.
 2. **Correctional Enterprises.** Provide containers (drums) for packaging contaminated material.
 - J. **North Carolina Department of Transportation.**
 1. **Division of Highways.**
 - a. Erect and maintain signs, lights, barricades or other traffic control devices needed to control traffic along affected routes or detour routes.
 - b. Monitor and report road conditions and clear the roads of debris, snow, equipment or stalled vehicles as needed.
 - c. Upon request, provide trained radiological monitors.
 - d. Upon request, provide vehicles for the movement of personnel.
 - e. Provide radio communications support.
 - f. Upon request, assist in the identification, containment, or removal of hazardous materials.
 2. **Division of Motor Vehicles, License and Theft Section.**
 - a. Upon request, provide personnel trained as radiological monitors.
 - b. In coordination with the State Highway Patrol, regulate traffic on affected highways.
 - c. Monitor and report road conditions to SERT.

- K. North Carolina Department of Administration.**
1. Provide purchase and contract support for procurement of emergency supplies and equipment.
 2. Operate State telephone exchange on a 24-hour basis upon activation of the State EOC.
- L. Local Government, County Boards of Commissioners, and City Councils.**
1. Protect the local population prior to the establishment of SERT.
 2. Assist in the execution of this plan on order of the Governor or his representatives.
 3. Develop supporting plans, procedures and checklists.
 4. Provide county level management of shelter operations. (For the specific organization of individual county shelter management schemes, see PARTS 2 and 3.)
- M. The American National Red Cross.**
1. Provide emergency mass care and shelter assistance.
 2. Provide assistance to individual families.
 3. Augment local medical personnel and equipment.
- N. The Salvation Army.**
1. Assist in mass and individual feeding.
 2. Provide clothing, food, furniture, and household supplies.
- O. Hospitals.** Provide emergency treatment of radiation injuries.
- P. Private Businesses, Industries and Electric Utility Companies.** Develop emergency plans as required to support their particular type of business or industrial operation.
- Q. Federal Government and Other States.**
1. **Southern Interstate Nuclear Compact.** Provide by agreement through the Southern Mutual Radiation Assistance Plan, personnel, equipment, laboratory

analysis, and other resources in the event of radiation emergencies outside the State's capabilities or from accidents occurring near mutual borders.

2. **Savannah River Operations Office, U.S. Department of Energy.** Develop, maintain, and implement the Inter-Agency Radiological Assistance Plan for Region 3 which provides capabilities for communications, monitoring, consultation, and access to Federal resources including aerial radiological measurement and monitoring by EG&G (Edgerhausen, Grimmerhausen and Grier, Las Vegas, Nevada, a contractor to the Savannah River Operations Office).
3. **U.S. Nuclear Regulatory Commission, Region 2.**
 - a. Provide direct consultation.
 - b. Arrange for medical assistance in cases of radiation over exposure incidents.
4. **National Weather Service, U.S. Department of Commerce.** Provide current and long-range meteorological data.

R. Coordinating Instructions.

1. Management of the tasks to be undertaken during the conduct of emergency operations will require the resources and efforts of more than one agency of government.
2. Some tasks may require the efforts of various combinations of Federal, State, and local agencies.
3. Some State agencies have the resources and the capability to accomplish the same task.
4. To attempt to fix responsibility for a single task with one agency of government in a pre-determined manner is impractical in that it would deny the SERT leader the flexibility required to respond to a situation which could (and probably would) be changing continually.
5. State agency heads, division directors, section chiefs, and other supervisors are responsible for preparing their organizations to accept the role of "lead agency." This responsibility includes planning, organizing, coordinating, and directing the accomplishment of an assigned task or function, when so directed by the SERT leader.

S. Primary and Support Responsibility Summary.

1. The basic organizational units and responsible individuals for North Carolina State Government are as follows:

<u>Government Entity</u>	<u>Title of Key Individual</u>
Department	Secretary
Division	Director
Section	Chief
Branch	Head

2. Figure 4 lists the major functions associated with emergency operations, the major response organizations, and the level of responsibility for the function. The ranking member of the unit of government participating in or performing the special function is responsible for organizing, training, equipping, committing, and controlling personnel for emergency response.
3. The fact that a unit of government (or key individual) is assigned primary responsibility for a specific function does not necessarily mean that the unit possesses the required capability to perform all tasks included in the function. The term "primary responsibility" is intended to mean "responsible for carrying out the function or seeing that it is carried out." Personnel with primary and support responsibilities are to be employed in a cohesive manner under the direction of the individual in charge of the unit with primary responsibility.
4. The policy development and major decision-making elements of the command and control function are carried out as prescribed by the Governor.
5. The overall operational elements of the command and control function are the responsibility of the Secretary of DCCPS. The Secretary has delegated to the Director of DEM the authority to act in his behalf in all matters related to and dealing with the operational aspects of command and control in the conduct of emergency response actions.
6. The Director of DEM uses SERT to carry out overall command and control and other functions for which DCCPS is primarily or secondarily responsible.
7. SERT is available and on call 24 hours a day.

8. Figure 4 lists major function and responsibility assignments. These are not intended to be all inclusive but rather to summarize the operational concept employed. All government agencies will examine their capabilities to support this plan's concept of operations and be prepared to perform other unspecified tasks.
9. The relationship between North and South Carolina response organizations is shown in Figure 5. Figures 6 through 9 illustrate the direction control, and coordination relationships among response organizations.

PRIMARY AND SUPPORT RESPONSIBILITY SUMMARY

<u>FUNCTION</u>	<u>ORGANIZATION</u>	<u>RESPONSIBILITY</u>	
		<u>PRIMARY</u>	<u>SUPPORT</u>
Command and Control	Dept. of Crime Control and Public Safety	X	
Warning	Dept. of Crime Control and Public Safety	X	
	National Weather Service		X
	Police Information Network		X
	Radio and television stations serving the EPZ		X
	County and municipal govern- ments in the EPZ.		X
Notification Communi- cations	Dept. of Crime Control and Public Safety	X	
	Police Information Network		X
	Southern Bell Telephone Co.		X
	Duke Power Company		X
Emergency Public Information	Dept. of Crime Control and Public Safety	X	
	Dept. of Human Resources		X
	Duke Power Company		X
	Dept. of Natural Resources and Community Development		X
	County and municipal governments in the EPZ		X
	Radio and television stations serving in EPZ		X
	Local newspapers		X
Accident Assessment	Duke Power Company	X	
	Dept. of Human Resources		X
	Dept. of Crime Control and Public Safety		X
	U.S. Dept. of Energy (RAP) (IRAP)		X
	Southern Emergency Response Council (SMRAP)		X
	U.S. Environmental Protection Agency		X
	U.S. Nuclear Regulatory Commission		X

Figure 4

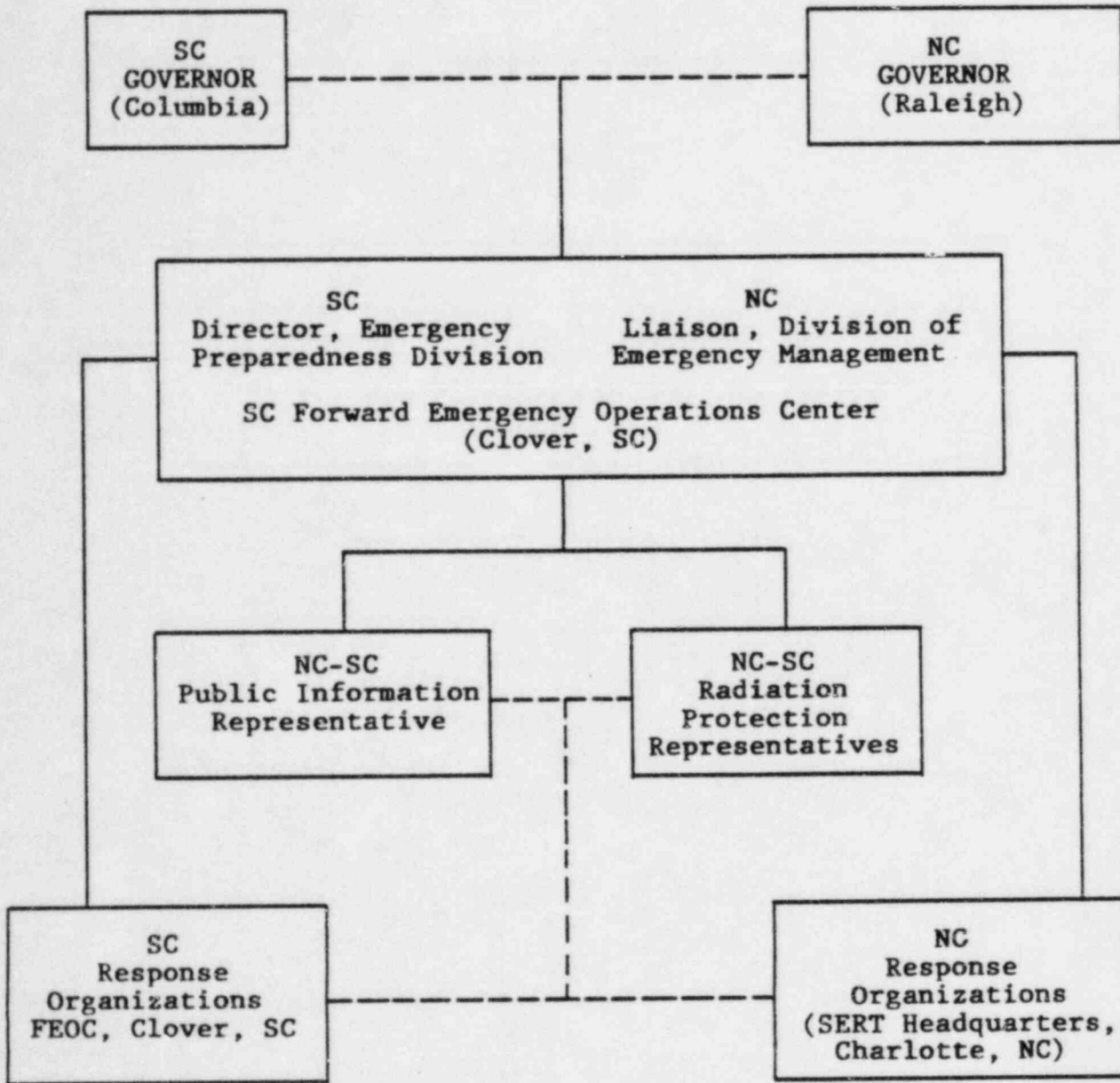
<u>FUNCTION</u>	<u>ORGANIZATION</u>	<u>RESPONSIBILITY</u>	
		<u>PRIMARY</u>	<u>SUPPORT</u>
Public Health and Sanitation	Dept. of Human Resources	X	
	County health departments in the EPZ		X
Social Services	U.S. Dept. Health and Human Services		X
	Dept. of Human Resources	X	
	County social services organizations in the EPZ		X
Fire and Rescue	Red Cross		X
	Dept. of Crime Control and Public Safety	X	
	Dept. of Transportation		X
	Dept. of Natural Resources and Community Development		X
	Local government fire and rescue units serving the EPZ		X
Traffic Control	Volunteer fire and rescue organizations serving the EPZ		X
	Dept. of Crime Control and Public Safety	X	
	County sheriff's depts. in the EPZ		X
Emergency Medical Service	Municipal police depts. in the EPZ		X
	Dept. of Human Resources	X	
	Rescue organizations in the EPZ		X
	Ambulance providers serving in the EPZ		X
Law Enforcement	Hospitals in the EPZ		X
	Dept. of Crime Control and Public Safety	X	
	County sheriff's depts. in the EPZ		X
Transportation	Municipal police depts. in the EPZ		X
	Dept. of Crime Control and Public Safety	X	
	Dept. of Correction	X	
	Dept. of Transportation		X
	Public school transportation systems in the EPZ		X

Figure 4 (Cont'd.)

<u>FUNCTION</u>	<u>ORGANIZATION</u>	<u>RESPONSIBILITY</u>		
		<u>PRIMARY</u>	<u>SUPPORT</u>	
Protective Response	Dept. of Crime Control and Public Safety	X		
	Dept. of Human Resources		X	
	Dept. of Agriculture		X	
	Dept. of Natural Resources and Community Development		X	
	Dept. of Transportation		X	
	U.S. Nuclear Regulatory Commission		X	
	U.S. Dept. of Agriculture		X	
	U.S. Dept. of Energy		X	
	U.S. Environmental Protection Agency		X	
	County and municipal emergency service providers in the EPZ		X	
	Radio and television stations serving the EPZ		X	
	Radiological Exposure Control	Dept. of Human Resources	X	
		Dept. of Crime Control and Public Safety		X
		Dept. of Agriculture		X

Figure 4 (Cont'd.)

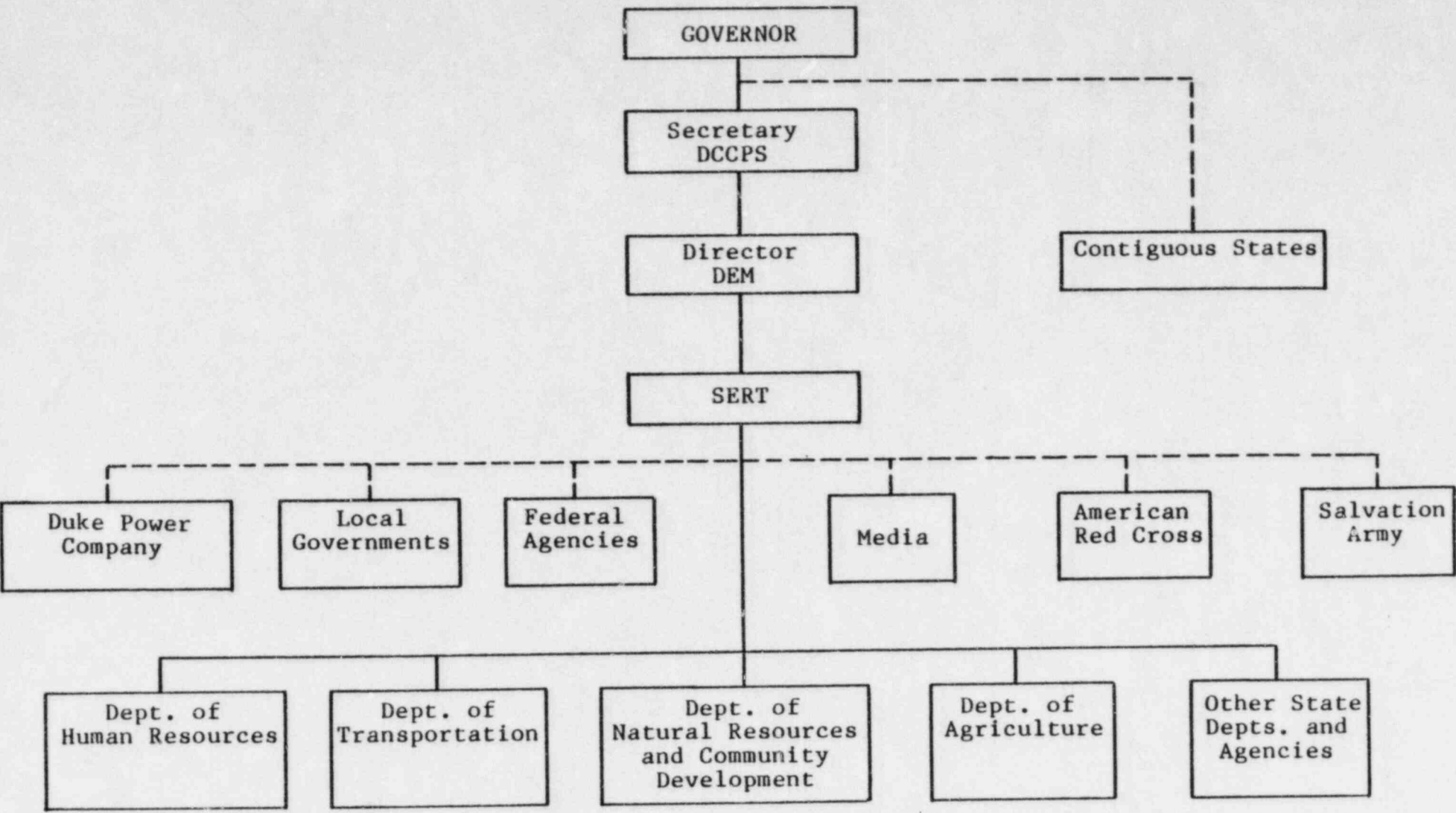
NORTH CAROLINA - SOUTH CAROLINA
JOINT RESPONSE ORGANIZATION



———— Direction and Control
----- Coordination

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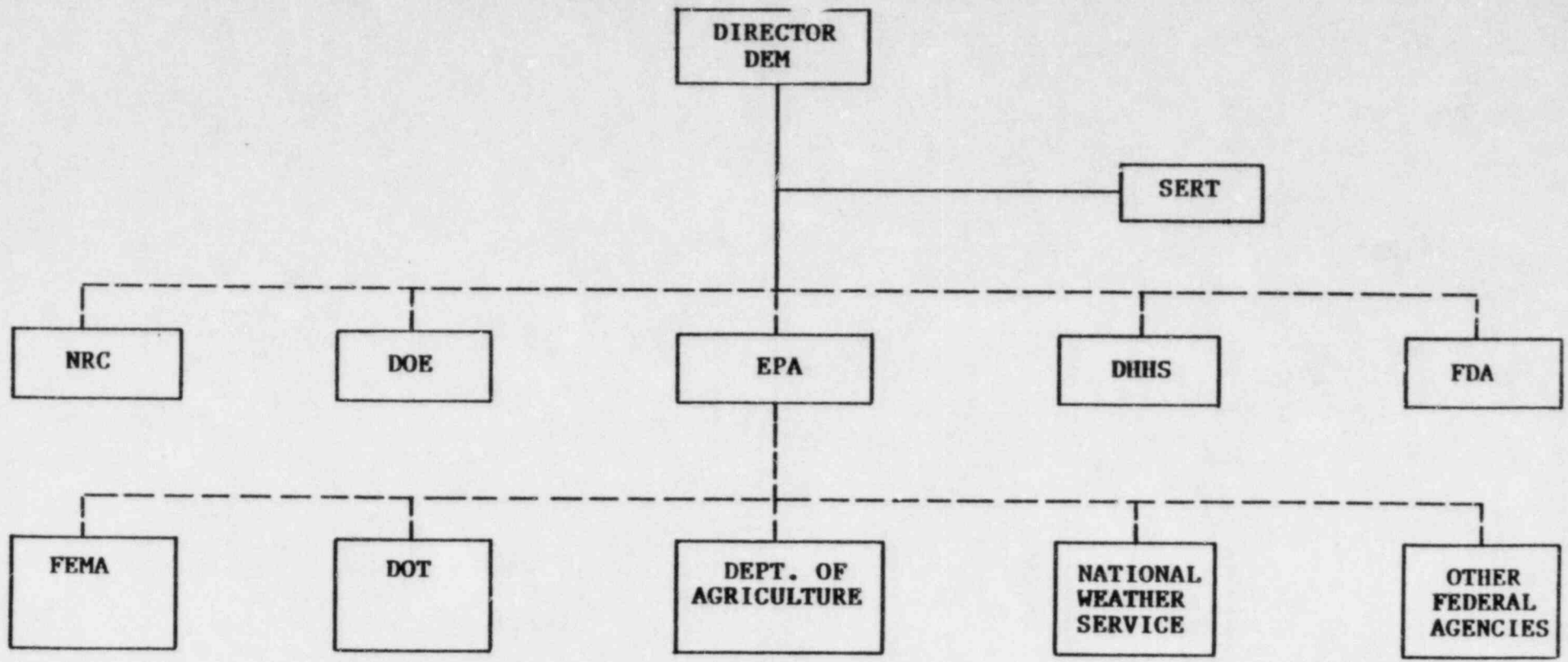
Figure 5



———— Direction and Control
----- Coordination

STATE DIRECTION, CONTROL, AND COORDINATION

Figur 6



—— Direction and Control
----- Coordination

STATE - FEDERAL COORDINATION

Figure 7

BASIC STATE EMERGENCY RESPONSE TEAM (SERT)

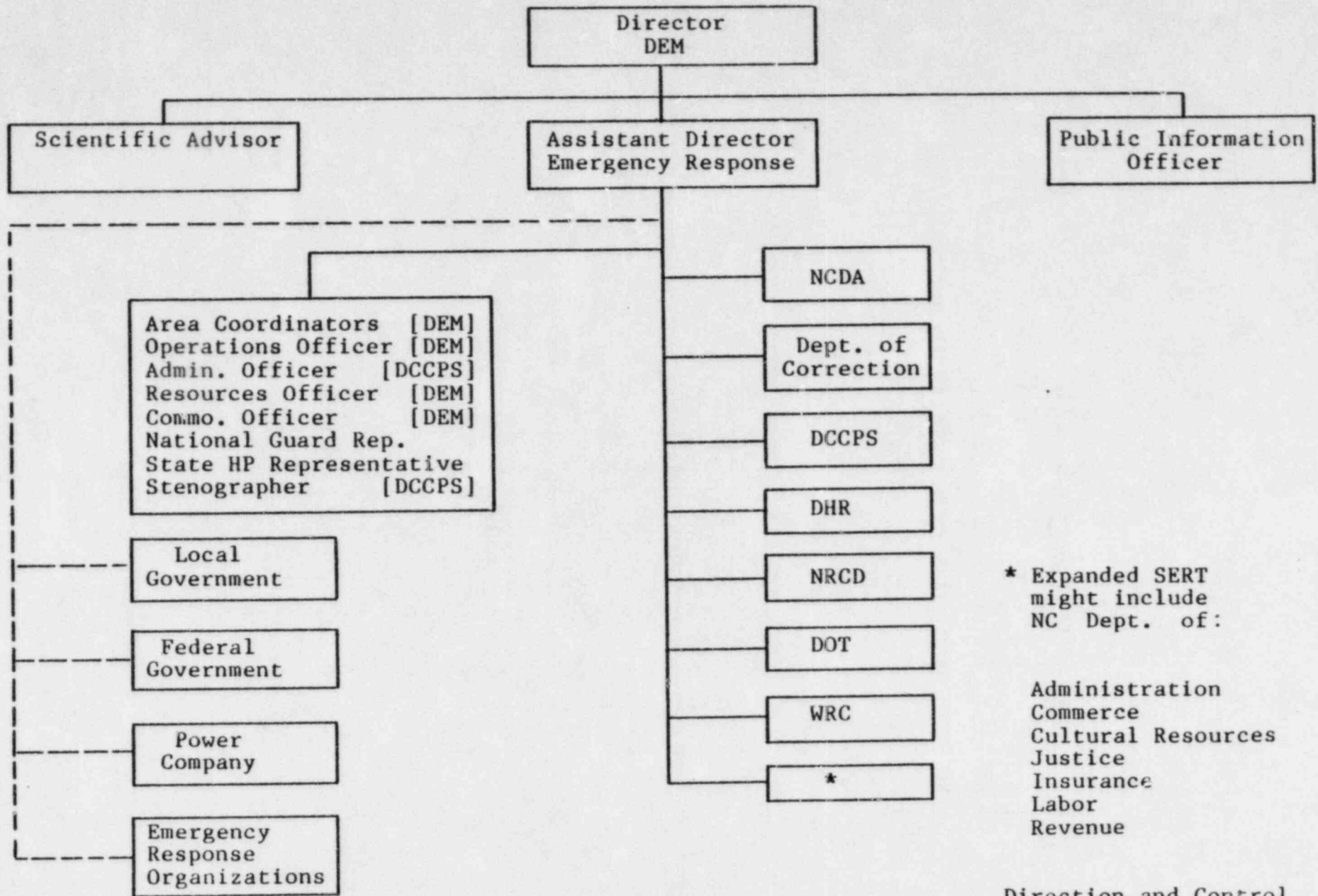
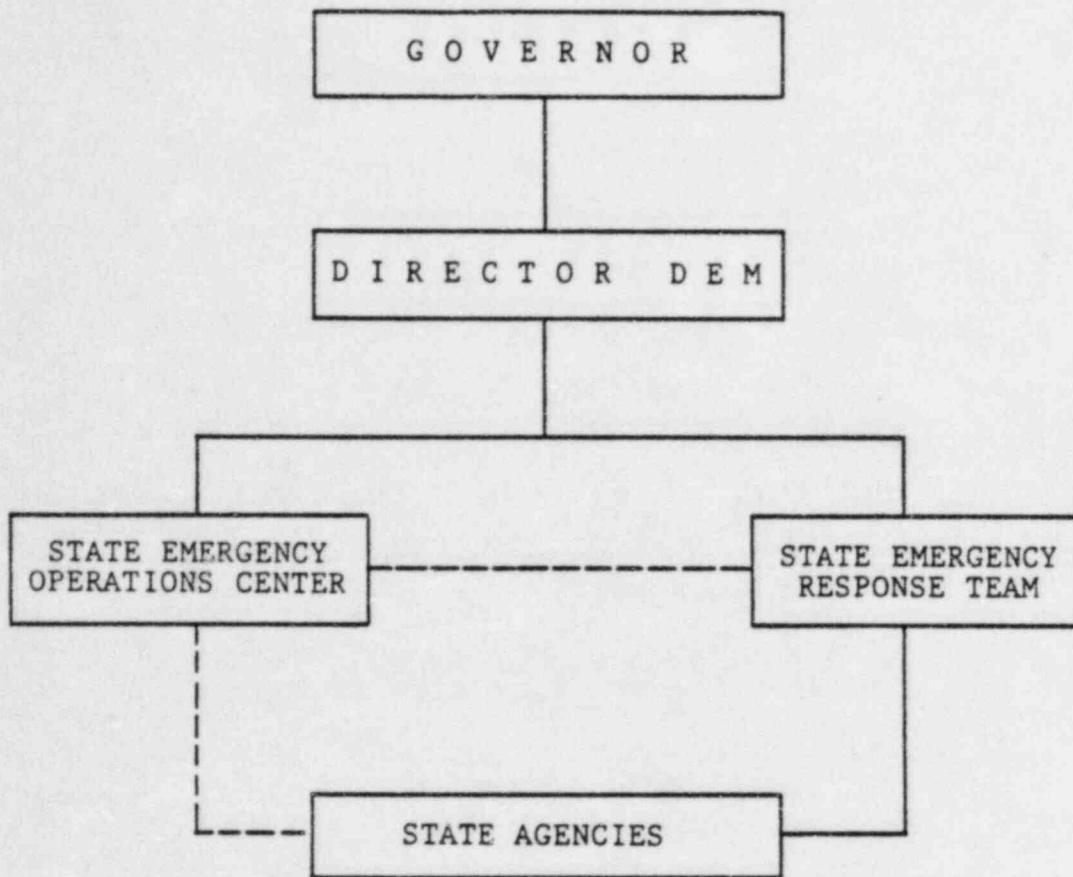


Figure 8

==== Direction and Control
 ----- Coordination

STATE DIRECTION, CONTROL, AND COORDINATION RELATIONSHIPS



—— Direction and Control
----- Coordination

Figure 9

IV. EXECUTION. Procedures and Methodology.

A. Emergency Classification System.

1. The emergency classification and action level scheme used in this plan is consistent with that established by NUREG-0654.
2. This system is used by State and local governments and by the Catawba Nuclear Station. State and local governments will rely on information and recommendations provided by the station for determination of minimum initial off-site response measures.

3. The four classes of emergencies are:

Notification of Unusual Event
Alert
Site Area Emergency
General Emergency

4. Rationale for Emergency Classification.

- a. The rationale for the notification of unusual event and alert classes is to provide early and prompt notification of minor events that could lead to more serious conditions or consequences. A gradation is provided to assure fuller response preparations for more serious indicators.
- b. The site area emergency class reflects conditions where some significant releases are likely or are occurring but current information does not indicate core melting. In this situation full mobilization of emergency personnel in the near-site environs is indicated and monitoring teams and associated communications are dispatched.
- c. The general emergency class involves actual or imminent substantial core degradation or melting with the potential for loss of containment. The immediate action for this class is sheltering (staying inside) rather than evacuation until an assessment can be made that: (1) an evacuation is indicated, and (2) an evacuation, if indicated, can be completed prior to significant release and arrival of radioactive material in the affected areas.

5. Examples of initiating conditions for the four emergency action levels are illustrated in Figures 10 through 13 which follow. (These are the same examples used in the Catawba Nuclear Station Emergency Plan.)

**EXAMPLES OF INITIATING CONDITIONS
NOTIFICATION OF UNUSUAL EVENT**

The Catawba Nuclear Station will declare an **UNUSUAL EVENT** in any circumstance that warrants it, including circumstances not specifically listed in this table. Examples of **UNUSUAL EVENT** initiating conditions are:

1. Emergency core cooling initiated (ECCS) and discharge to vessel.
2. Radiological effluent Technical Specification limits exceeded.
3. Fuel damage indication:
 - a. High coolant activity sample exceeding Technical Specifications.
 - b. Failed fuel monitor indicates mechanicala clad failure greater than 1% to 5% or 0.1% equivalent fuel failures within 30 minutes.
4. Abnormal coolant temperature and/or pressure or abnormal reactor fuel temperature.
5. Exceeding either primary/secondary leak rate Technical Specifications or primary leak rate Technical Specifications.
6. Failure of a safety or relief valve in a safety related system to close following reduction of applicable pressure. (Primary System [NC] or Main Steam [SM]).
7. Loss of off-site power or loss of on-site AC power capability.
8. Loss of containment integrity requiring shutdown by Technical Specifications (3/4.6.1).
9. Loss of engineered safety feature or fire protection system function requiring shutdown by Technical Specifications (e.g., malfunction, personnel error, or procedural inadequacy).
10. Fire on-site lasting more than 10 minutes.
11. Indications or alarms on process or effluent parameters not functional in control room to an extent requiring plant shutdown or other significant loss of assessment or communication capability (e.g., plant computer, meteorological instrumentation).
12. Security threat or attempted entry or attempted sabotage.

13. Natural phenomenon being experienced or projected beyond usual levels.
 - a. Any earthquake felt in plant or detected on station seismic instrumentation.
 - b. 50-year flood or low water, hurricane surge, seiche (lake tidal wave)
 - c. Any tornado on-site
 - d. Any hurricane.
14. Other hazards being experienced or projected.
 - a. Aircraft crash on-site or unusual aircraft activity over facility.
 - b. Train derailment on-site.
 - c. Near-site or on-site explosion.
 - d. Near-site or on-site toxic or flammable gas release.
 - e. Turbine failure causing rapid plant shutdown.
15. Other plant conditions exist that in the judgement of the Shift Supervisor, the Operations Duty Engineer, the Superintendent of Operations, or the Station Manager warrant increased awareness of local authorities or require plant shutdown under Technical Specification requirements or involve other than normal controlled shutdown (e.g., cooldown rate exceeding Technical Specification limits, pipe cracking found during operation).
16. Transportation of contaminated injured individual from site to off-site.
17. Rapid depressurization of secondary side.

**EXAMPLES OF INITIATING CONDITIONS
ALERT**

The Catawba Nuclear Station will declare an **ALERT** in any plant circumstance that warrants it, including circumstances not specifically listed in this paragraph. Examples of **ALERT** initiating conditions are:

1. Severe loss of fuel cladding.
2. Rapid gross failure of one steam generator tube with loss of off-site power.
3. Rapid failure of more than 10 steam generator tubes.
4. Steam line break with significant primary to secondary leak rate.
5. Primary coolant leak rate greater than 50 gpm.
6. High radiation levels or high airborne contamination which indicates a severe degradation in the control of radioactive materials.
7. Loss of off-site power and loss of all on-site AC power for up to 15 minutes. (See Site Area Emergency EP/O/A/5000/04, for extended loss).
8. Loss of all on-site DC power.
9. Coolant pump seizure leading to fuel failure.
10. Complete loss of functions needed for plant cold shutdown.
11. Failure of the reactor protection system to initiate and complete a scram which brings the reactor subcritical.
12. Fuel damage accident with release of radioactivity to containment or fuel handling building.
13. Fire potentially affecting safety systems.
14. Most or all alarms (annunciators) lost.
15. Radiological effluents greater than 10 times Technical Specification instantaneous limits (an instantaneous rate which, if continued over 2 hours, would result in about 1 mr at the site boundary under average meteorological conditions or whenever effluent monitors or radiological monitoring detect these levels).

16. Ongoing security compromise.
17. Severe natural phenomena being experienced or projected:
 - a. Earthquake greater than Operational Basis Earthquake Levels
 - b. Flood, low water, hurricane surge, seiche near design levels.
 - c. Any tornado striking facility.
 - d. Hurricane winds near design basis level.
18. Other hazards being experienced or projected.
 - a. Aircraft crash on facility.
 - b. Missile impacts from whatever source on facility.
 - c. Known explosion damage to facility affecting plant operation.
 - d. Entry into facility environs of toxic or flammable gases.
 - e. Turbine failure causing casing penetration.
19. Other plant conditions exist that in the judgement of the Shift Supervisor, the Operations Duty Engineer, the Superintendent of Operations, or the Plant Manager warrant precautionary activation of the Technical Support Center and near-site Crisis Management Center.
20. Evacuation of control room anticipated or required with control of shutdown systems established from local station.

**EXAMPLES OF INITIATING CONDITIONS
SITE AREA EMERGENCY**

The Catawba Nuclear Station will declare a **SITE AREA EMERGENCY** in any plant circumstance that warrants it, including circumstances not specifically listed in this paragraph. Examples of **SITE AREA EMERGENCY** initiating conditions are:

1. Known loss of coolant accident greater than makeup pump capacity.
2. Degraded core with possible loss of coolable geometry (indicators should include instrumentation to detect inadequate core cooling, coolant activity and/or containment radioactivity levels).
3. Rapid failure of more than 10 steam generator tubes with loss of off-site power (e.g., several hundred gpm primary to secondary leak rate).
4. Steam line break with greater than 50 gpm primary to secondary leakage and indication of fuel damage.
5. Loss of off-site power and loss of on-site AC power for more than 15 minutes.
6. Loss of vital on-site DC power for more than 15 minutes.
7. Complete loss of any function needed for plant hot shutdown.
8. Transient requiring operation of shutdown systems with failure to scram (continued power generation but no core damage immediately evident).
9. Major damage to spent fuel in containment or fuel handling building (e.g., large object damages fuel or water loss below fuel level).
10. Fire compromising the functions of safety systems.
11. Most or all alarms (annunciators) lost for more than 15 minutes and plant is not in cold shutdown or plant transient initiated while all alarms lost.
12. Effluent monitors detect levels corresponding to greater than 50 mr/hr for 1/2 hour or greater than 500 mr/hr Whole Body for two minutes (or five times these levels to the thyroid) at the site boundary for adverse meteorology.
 - a. These dose rates are projected based on other plant parameters (e.g., radiation level in containment with

- leak rate appropriate for existing containment pressure) or are measured in the environs.
- b. EPA Protective Action Guidelines are projected to be exceeded outside the site boundary.
13. Imminent loss of physical control of the plant.
 14. Severe natural phenomena being experienced or projected with plant not in cold shutdown.
 - a. Earthquake greater than SSE (Safe Shutdown Earthquake) levels.
 - b. Flood, low water, hurricane surge, seiche greater than design levels or failure of protection of vital equipment at lower levels.
 - c. Winds in excess of design levels.
 15. Other hazards being experienced or projected with plant not in cold shutdown.
 - a. Aircraft crash affecting vital structures by impact or fire.
 - b. Severe damage to safe shutdown equipment from missiles or explosion.
 - c. Entry of uncontrolled toxic or flammable gases into vital areas.
 16. Other plant conditions exist that in the judgement of the Shift Supervisor, the Operations Duty Engineer, the Superintendent of Operations, or the Plant Manager warrant activation of emergency centers and monitoring teams and a precautionary public notification.
 17. Evacuation of Control Room and control of shutdown systems not established from local stations in 15 minutes.

**EXAMPLES OF INITIATING CONDITIONS
GENERAL EMERGENCY**

The Catawba Nuclear Station will declare a **GENERAL EMERGENCY** in any circumstance that warrants it, including circumstances not specifically listed in this paragraph. Examples of **GENERAL EMERGENCY** initiating conditions are:

1. Effluent monitors detect levels corresponding to 1 rem/hr Whole Body or 5 rem/hr Thyroid at the site boundary under actual meteorological conditions.
 - a. NOTE: These dose rates are projected based on plant parameters (e.g., radiation levels in containment with leak rate appropriate for existing containment pressure with some confirmation from effluent monitors) or are measured in the environs.
 - b. NOTE: Consider evacuation only within about 2 miles of the site boundary unless these levels are exceeded by a factor of 10 or projected to continue for 10 hours or EPA Protective Action Guideline exposure levels are predicted to be exceeded at longer distances.
2. Loss of 2 of 3 fission product barriers with a potential loss of 3rd barrier, (e.g., loss of core geometry and primary coolant boundary and high potential for loss of containment). NOTE: Consider 2 mile precautionary evacuation.
3. Loss of physical control of the facility. NOTE: Consider 2 mile precautionary evacuation.
4. Other plant conditions exist, from whatever source, that in the judgement of the Shift Supervisor, the Operations Duty Engineer, the Superintendent of Operations, or the Plant Manager make release of large amounts of radioactivity in a short time period possible (e.g., any core melt situation).
 - a. For melt sequences or for failure of containment isolation systems, the most likely failure mode is melt through with release of gases.
 - b. For core melt sequences where significant releases are not yet taking place and large amounts of fission products are not yet in the containment atmosphere, consider 2 mile precautionary evacuation. Consider 5 mile downwind evacuation (45° to 90° sector) if large amounts of fission products (greater than Gap activity) are in the containment atmosphere. Recommend sheltering in other parts of plume exposure emergency planning zone under this circumstance.

- c. For core melt sequences where significant releases from containment are not yet taking place and containment failure leading to a direct atmospheric release is likely in the sequence but not imminent and large amounts of fission products in addition to noble gases are in the containment atmosphere, consider precautionary evacuation to 5 miles and 10-mile down-wind evacuation.
 - d. For core melt sequences where large amounts of fission products other than noble gases are in the containment atmosphere and containment failure is judged imminent, recommend shelter for those areas where evacuation cannot be completed before transport of activity to that location.
 - e. As release information becomes available, adjust these actions in accordance with dose projections, time available to evacuate, and estimated evacuation times given current conditions.
 - f. Example sequences.
 - (1) Small and large LOCA's with failure of ECCS to perform leading to severe core degradation or melt. Ultimate failure of containment likely for melt sequences. (Several hours likely to be available for response.)
 - (2) Transient initiated by loss of feedwater and condensate systems (principle heat removal system) followed by failure of emergency feedwater system for extended period. Core melting is possible in several hours with ultimate failure of containment likely if the core melts.
 - (3) Transient requiring operation of shutdown systems with failure to scram. Core damage is likely. Additional failure of the core cooling and makeup system would lead to core melt.
 - (4) Failure of off-site and on-site power along with total loss of emergency feedwater makeup capability for several hours could lead to eventual core melt and likely failure of containment.
 - (5) Small LOCA and initially successful ECCS. Subsequent failure of containment heat removal system over several hours could lead to core melt and likely to failure of containment.
5. Any major internal or external events (e.g., fires, earthquakes substantially beyond design levels) which could cause massive common damage to plant systems.

B. Warning and Notification Methods and Procedures.

1. The following procedures will be used for the notification of State response organizations by Catawba and for the notification of emergency personnel by the response organizations. The system to provide early warning and clear instruction to the populace within the plume exposure pathway EPZ is described in Annex C and in PARTS 2 and 3.
2. The initial notification and follow-up messages of any one of the four classes of an emergency action level (unusual event, alert, site area emergency, general emergency) are transmitted from the station's control room to the State warning point and to the warning points in Gaston and Mecklenburg Counties. (See Figure 2.)
3. The commercial telephone system is to be used to transmit the initial notification to the State warning point. The back-up means of communication will be voice radio.
4. Messages received must be authenticated by either one of the following methods:
 - a. The telecommunicator at the State warning point verifies that the code word transmitted is on the list of authenticator code words.
 - b. Upon completion of the call, the telecommunicator calls back to the Catawba Station to verify that the report is authentic.
5. The telecommunicator determines the method of authentication. If transmitted by radio, the message must be authenticated by code word.
6. The message format for reporting an emergency situation to the State and county warning points is in Annex F. The same format will be used for initial and follow-up messages.
7. Coordinating Instructions.
 - a. The telecommunicator at the State warning point is to complete the warning message form at the time the report is being transmitted.
 - b. DEM is responsible for supplying the warning points and the Catawba Station with the code word authenticator list with the effective dates clearly noted.

- c. The individual in charge of the operation of the State warning point is responsible for making immediately available to all telecommunicators/dispatchers the list of authenticator codes.
8. Notifying, Alerting, and Mobilizing County Emergency Response Personnel.
 - a. The detailed procedures for notifying and mobilizing emergency response personnel in Gaston, and Mecklenburg counties are described in PARTS 2 and 3.
 - b. The situation and class of emergency action will determine the response of the affected counties. In any case, actions necessary to protect the people in the affected areas in these counties will be the responsibility of the county governments during the initial hours of an emergency period or until the State has assumed direction and control responsibilities.
 9. Notifying, Alerting, and Mobilizing State Emergency Response Personnel.
 - a. When notification of any one of the four classes of an emergency action level is received at the State warning point, the telecommunicator on duty notifies a member of RPS and the Director, DEM (or the individual who is on call).
 - b. Upon notification, RPS takes the following actions:
 - (1) Contact the Catawba Station to verify the message and to obtain a first hand report of the actual situation and the actions being taken by Duke Power Company to bring the problem under control. The report will also include any predictions, estimates and forecasts of the effects the problem may have on the public and the environment, the areas that are or could be affected, and recommended protective actions that should be taken.
 - (2) Analyze the information received from the Catawba Station and report the results to the Director, DEM, along with recommendations for consideration.

- c. The Director, DEM, will take such actions to assure the appropriate emergency response. Some of the actions that could be taken are:
 - (1) Direct RPS to dispatch a radiological monitoring team to the affected area.
 - (2) Notify key members of SERT to assemble.
 - (3) Activate the State EOC.
 - (4) Inform officials of higher levels of government of the situation.
 - (5) Release appropriate statements to the media.
 - (6) Take any other actions necessary to include establishing a SERT headquarters near the affected area.
10. Procedures have been developed to disseminate information concerning emergency conditions, instructions to be followed and protective actions to be taken by people throughout the area within about a 10-mile radius of the Catawba Station. The system and procedures are described in Paragraph IV.D, Annexes C and D, and in PARTS 2 and 3.
11. Messages for the public concerning specific protective actions, such as sheltering, thyroid blocking, and evacuation are contained in Annex D to this plan.
12. If SERT has assumed direction and control authority and the decision has been made to activate EBS, SERT will notify the Federal Aviation Administration Airport Traffic Control Tower at Charlotte/Douglas International Airport and dispatchers of both the Southern and Seaboard/Coast Line Railroads.

C. Accident Assessment.

1. This paragraph establishes the methods, systems, and equipment to be used to assess and monitor actual or potential off-site consequences of a radiological emergency at the Catawba Station.
2. Field Measurement of Airborne Radioiodine.
 - a. RPS is equipped with 115 volts AC generator powered and 12 volts DC battery powered air

samplers with particulate and activated charcoal filters.

- b. A mobile laboratory is available for field analysis of collected radioactivity by multichannel gamma ray spectroscopy.
- c. Based on RPS minimum sample collection and counting times, the minimum detectable levels for radiation are 104×10^{-12} for the 12 volts DC systems and 2.0×10^{-12} for the 115 volts AC systems. See Figure 14 for minimum detectable levels as a function of collection and counting times.

3. General Field Monitoring Capability.

- a. RPS is responsible for the coordination of all field monitoring, including airborne plume location and tracking, and for assessment of radiological data.
- b. For sophisticated field monitoring, four survey teams from RPS are equipped with:
 - (1) 115 volts AC air samplers.
 - (2) 12 volts DC air samplers.
 - (3) Air sampling station.
 - (4) Communications to RPS forward command post and SERT.
 - (5) Plotting and recording equipment for geographical indication of data sampling.
 - (6) Portable survey equipment designed to measure contamination and radiation levels.
 - (7) Equipment for laboratory identification of isotopes.

4. The following State organizations will provide field monitoring support:

- a. Highway Patrol.
- b. Division of Emergency Management.

MINIMUM DETECTABLE LEVELS OF RADIOIODINE IN CHARCOAL FILTER (1)
WITH VARIOUS SAMPLING EQUIPMENT, (2)
SAMPLING TIME, AND COUNTING TIME

I. Intrinsic Germanium Detector with ND-66 Analyzer in the Mobile Lab

<u>Equipment</u>	<u>Sampling Time</u>	<u>MDL</u>	
		<u>10 Min Counting</u>	<u>30 Min Counting</u>
1. 12 Volts DC Sampler	30 min	17.2 pCi/m ³	10 pCi/m ³
	15 min	34.4 "	20 "
	10 min	51.6 "	30 "
	5 min	104.0 "	60 "
2. 115 Volts AC Sampler	30 min	.34 "	0.2 "
	15 min	.68 "	0.4 "
	10 min	1.00 "	0.6 "
	5 min	2.00 "	1.2 "

II. Ge(Li) Detector with ND-6620 System in State Laboratory (Raleigh)

<u>Equipment</u>	<u>Sampling Time</u>	<u>MDL</u>	
		<u>10 Min Counting</u>	<u>30 Min Counting</u>
1. 12 Volts DC Sampler	30 min	8.5 pCi/m ³	4.9 pCi/m ³
	15 min	17.0 "	9.8 "
	10 min	25.5 "	14.7 "
	5 min	51.0 "	29.4 "
2. 115 Volts AC Sampler	30 min	0.17 "	0.1 "
	15 min	0.34 "	0.2 "
	10 min	0.51 "	0.3 "
	5 min	1.02 "	0.6 "

Notes: (1) MDL of I-131 in glass fiber filter for particulate is approximately the same as that in the charcoal cartridge. The efficiency of particulate collection for glass fiber filter is assumed to be 100% while the efficiency of gaseous iodine collection for charcoal cartridge varies from 70% to 90% on humidity and other factors.

(2) The flow rate of the 12V battery operated air sampler is approximately 1 cu.ft. per minute. The flow rate for the 115V generator operated high-volume air sampler is assumed to be 50 cfm.

Figure 14

- c. Division of Enforcement, Wildlife Resources Commission.
 - d. Forest Resources Division, Department of Natural Resources and Community Development.
 - e. Department of Transportation.
5. RPS Survey Teams and Assessment Capability.
- a. When notified of an accident at Catawba, the State warning point will contact RPS which has two staff members with pocket pagers on duty 24 hours a day. (See also Paragraph IV.B., Notification Methods and Procedures.)
 - b. Two RPS survey teams will be activated within one hour of notification and dispatched to the vicinity of the Catawba Station. Using a "fan-out" telephone system, two additional RPS survey teams will be activated within 24 hours of notification.
 - c. RPS survey teams are composed of two radiation specialists each.
 - d. RPS will use any or all of the following transportation means:
 - (1) Privately-owned vehicles.
 - (2) Highway Patrol vehicles.
 - (3) State motor pool vehicles.
 - (4) Helicopters.
 - (5) The mobile radiation laboratory.
 - e. The mobile radiation laboratory is the focal point for RPS survey team communications and serves as a forward command post for RPS. The communication system has radio frequencies in common with:
 - (1) SERT headquarters.
 - (2) Local emergency management coordinators who have radio communications on emergency management frequencies.
 - (3) State Highway Patrol.
 - (4) Commercial radio - telephone service.

- (5) Three vehicular mounted and five hand-held units for survey teams.
- f. RPS Projections for Off-site Consequences.
 - (1) Upon initial notification by the State warning point that an accident has occurred, RPS will use computers, based on data supplied by the facility operator, to project off-site consequences.
 - (2) Computer programs and other calculating methods will be employed throughout the response period to project or assess population and emergency worker exposures based on data from the facility operator, RPS monitoring data, and any other sampling data available.
- 6. Relationship of Environmental Radiation Measurement to Protective Action Guide (PAG).
 - a. All facility operator release data and environmental radiation and radioactivity data will be accumulated and analyzed by RPS.
 - b. RPS will use these data to project expected future radiation levels both in areas being physically surveyed or sampled and in areas not surveyed.
 - c. RPS will use all available data to project the integrated radiation dose to the public. This projection will be based on current EPA recommendations and models for the expected duration of release and inhalation or ingestion of radioactive material, to the extent that these parameters are not reliably known.
 - d. This function will be aided by nomograms for principal radioisotopes in conjunction with airborne releases.
 - e. For other radioisotopes and types of releases, conventional calculating techniques will be employed.
 - f. The current projected integrated public radiation dose will be continually compared to the PAGs shown in Figure 18; RPS will recommend appropriate action to the SERT leader or the appropriate county emergency management coordinators.

- g. These recommendations will take into consideration both existing conditions such as time of day and weather, magnitude and duration of release, and the projected radiation dose which may be avoided by the protective action.

D. Public Education and Information.

1. This paragraph establishes the procedures for disseminating accurate and timely information to the public concerning an incident at the Catawba Nuclear Station and the initial actions to be taken. It also establishes the principal points of contact with the news media for the dissemination of information.
2. Two types of public information concerning nuclear power plants are required within the EPZ. The first type, which is "educational" in nature, acquaints the public with the effects on the human body and the environment of an accidental release of nuclear radiation in the atmosphere and contains precautions to minimize these effects. In addition, the methods used to alert and notify the public of an emergency are included. The means by which this type of information is made available to the public on a continuous basis may include, but are not necessarily limited to:
 - a. Catawba Nuclear Station Emergency Brochure (Figure 15).
 - b. Information printed in local telephone directories.
 - c. Magazines, periodicals, newsletters and bulletins published by departments and agencies of State and local governments.
 - d. Industrial and business publications.
 - e. Local newspapers.
 - f. Direct mail.
 - g. Displays and/or literature in those facilities listed in the Catawba Nuclear Station Emergency Plan.

- h. Local radio and television service spots.
- i. Programs presented to civic organizations.

State and local governments and Duke Power Company share a joint responsibility for disseminating this type of information. Duke Power Company will serve as the managing agency for the production and distribution of the brochure.

- 3. The second type of information disseminates instructions and directions on safety measures to be taken by the public should an emergency result in a release or the threat of a release of nuclear radiation.
 - a. Information in this category is prepared immediately prior to or during an announced emergency period. As the emergency situation or condition changes, updated information and instructions will be transmitted to the public.
 - b. The public information staff of SERT prepares these public announcements from data provided by the Duke Power radiological safety staff and RPS staff on SERT.
 - c. The Director, DEM, or the authorized representative will represent the State in the preparation and release of emergency public information and instructions on nuclear radiation accidents.
 - d. Coordinating Instructions:
 - (1) Information on the time frames of an accident is extremely important. The time between the initial recognition at the nuclear plant that an accident is in progress and the beginning of the radioactive release to the surrounding environment is critical in determining feasible protective actions. Knowledge of the potential duration of a release and the time available before expected off-site exposures is important in determining specific public instructions. Therefore, RPS members of SERT will make available to the public information staff all data necessary to prepare bulletins and statements for the public.
 - (2) The SERT public information officer is responsible for overall coordination of

public information activities among State agencies, local governments, and Duke Power Company.

4. The two principal points-of-contact available to media personnel for obtaining current information during an emergency are:
 - a. The Duke Power Company Media Center which will be located at the O.J. Miller Auditorium in Charlotte.
 - b. Field headquarters for SERT.
 5. Prior to the establishment of SERT, the media can contact the affected county EOC's or Duke's media center.
 6. Public information staffs should refer to Section VI for details and procedures for communicating with the public. Additional information is located in Annexes C, D and E.
 7. Any rumors detected will immediately be reported to the SERT public information officer who will devise methods to overcome rumors, coordinate response, and recommend a course of action to the SERT leader.
 8. State and local governments will inform the news media (annually at a minimum) on the status of plans for off-site response to accidents at the Catawba Nuclear Station. The public information staffs of SERT, local government, and Duke Power Company will jointly prepare programs and present them to the media. The presentations will include:
 - a. A briefing on the status of State, local, and Catawba emergency response plans.
 - b. An orientation on radiation and its effects on people and the environment.
 - c. Procedures and points-of-contact to be used by the media in obtaining pertinent information.
 - d. Other information as requested by the media.
- E. Protective Response for Plume Exposure Pathway.
1. A range of guidelines and protective actions have been developed for emergency workers and the public in the plume exposure pathway.

- a. Evacuation routes, shelters, monitoring points, hospitals, and the population distribution around the Catawba Station are shown on the 20-mile operations map in Annex I.
 - b. See Paragraph IV.B., Warning and Notification Methods and Procedures, Annexes C, G, and PARTS 2 and 3.
2. Dosage Projections and Protective Actions.
- a. Calculated and nomogram projections, supplemented by field and laboratory measurements of radioactive contamination, radiation level, and airborne radioactivity will be used by RPS to assess projected exposure due to inhalation, direct radiation, or consumption of contaminated food, milk, and water.
 - b. Basic protective actions for the public and emergency workers will be based on recommendations of the Environmental Protection Agency (EPA) in EPA 520/1-75-001, the U.S. Department of Health and Human Services (HHS), and the Federal Drug Administration (FDA) regarding human food and animal feed as published in the Federal Register of October 22, 1982 (47 FR 47073).
 - c. Protective actions may include:
 - (1) Area evacuation of all, or segments of the population.
 - (2) Advising people to stay indoors.
 - (3) Administration of potassium iodide (KI) as a blocking agent.
 - (4) Control of water supply intake.
 - (5) Diversion, embargo, or destruction of agricultural products.
 - (6) Other appropriate actions (e.g., advising the public to wash home grown produce prior to consumption).
 - d. The senior RPS representative on SERT is responsible for recommending the appropriate protective actions to the SERT leader for decision and implementation.

3. Radiological Monitoring and Analysis Responsibility.
 - a. Under this plan RPS, supported by other State agencies and departments, is responsible for all radiological monitoring and laboratory analysis for individual dose assessment. All monitoring and sampling equipment to be employed during an emergency response is portable and self-powered which will allow the flexibility to establish monitoring points at any accessible and necessary location.
 - b. The affected counties, with assistance and advice from the State, are responsible for monitoring activities at shelters.
 - c. Sampling of water, soil, food, and vegetation is supported by the U.S. Department of Agriculture, the N.C. Departments of Agriculture, Human Resources, and Natural Resources and Community Development as reflected in Section III of this Part.
4. Transportation for Evacuation.
 - a. The primary means of evacuation will be private vehicles and commercial buses.
 - b. Non-ambulatory patients will be transported by county rescue squads or ambulance services. Mutual aid agreements with surrounding counties will be used when necessary.
 - c. The N.C. Department of Correction will provide transportation for prisoners in both State and local correctional institutions.
 - d. Students in public school systems will be transported on school buses and other available transportation to shelters. EBS announcements will advise the public of the shelter to which each school's students have been transported.
 - e. Pickup points for those without transportation will be established as required.
 - f. Supporting transportation will be supplied by the following State organizations:
 - (1) N.C. National Guard.
 - (2) Wildlife Resources Commission.

(3) Division of Forest Resources, Department of Natural Resources and Community Development.

(4) Division of Highways, Department of Transportation.

5. Procedures to Expedite Evacuation.

- a. Since the objective of evacuation is to protect the health of the threatened population, the main goal of evacuation will be to move the population out of a threatened area.
- b. Contaminated vehicles will be decontaminated during an evacuation only when the area affected is small and judged to contain few contaminated vehicles.
- c. Contaminated vehicles will not be decontaminated during an evacuation when a large area is affected and when such an action would hinder the movement of the population out of a threatened area.
- d. Contaminated vehicles will be impounded if the decision is made to decontaminate them after the evacuation is completed. Adequate security will be provided to protect the impounded vehicles and measures will be taken to contain any contaminated wastes.
- e. Evacuees will be provided transportation from the point of impoundment to shelters. Arrangements will be made to provide commercial transportation from the shelter locations to other points, if needed.
- f. Evacuation routes outside the 10 mile EPZ will be surveyed to insure the availability of suitable storage sites for impounded vehicles. The selection of such sites will depend upon existing conditions at the time of the accident.
- g. The following highways in North Carolina are located within the 10-mile radius of the Catawba Station and will be used in an evacuation.
 - (1) I-77 running north-south with a capacity of 3000 cars per hour.

- (2) US 321 with a capacity of 2400 cars per hour and US 521 with a capacity of 1200 cars per hour.
 - (3) NC 274, NC 279, NC 160, and NC 49 running north-south each with an hourly vehicle capacity of 1200 cars.
- h. Access to evacuated areas will be controlled by local law enforcement officials assisted by the State Highway Patrol.
 - i. Gaston and Mecklenburg counties are responsible for the operation of shelters.
6. Procurement, Storage, and Distribution of Radiological Protective Drugs.
- a. The Division of Health Services, DHR, will establish a monitoring and replacement program to insure that a sufficient number of potassium iodide units are conveniently and strategically located in the vicinity of the Catawba Station. The majority of the potassium iodide units will be stored in the Charlotte-Mecklenburg Health Department under the control of county officials. The Division of Health Services will coordinate directly with SERT, the counties involved, and Duke Power Company in order to carry out this program. SERT will be immediately informed of any significant change in the status of available potassium iodide units.
 - b. The Division of Health Services will determine the number of potassium iodide units required for emergency workers and institutionalized persons within the plume exposure pathway and will coordinate the procurement of all potassium iodide.
7. Decision to Distribute and Administer Radiological Protective Drugs.
- a. The State Health Director or his agent, in consultation with the Chief of RPS is empowered to authorize the distribution of potassium iodide to emergency workers and institutionalized persons if the total thyroid exposure of an individual is reasonably suspected, projected, or confirmed to reach or exceed 15 rems from inhalation or ingestion of radiiodine.

- b. If the total thyroid exposure is suspected, projected, or confirmed to reach or exceed 25 rems, the State Health director or his agent will recommend the administration of potassium iodide to emergency workers and insitutionalized persons in affected areas.
 - c. Line of Succession.
 - (1) If it is considered necessary to administer potassium iodide, the RPS Chief will attempt to contact the State Health Director for 15 minutes.
 - (2) If unable to contact the State Health Director, the RPS Chief will attempt to contact the Deputy State Health Director for 10 minutes.
 - (3) If unable to contact the Deputy Health Director, the RPS Chief will attempt to contact the State Public Health Pharmacist for 5 minutes.
 - (4) If unable to contact the State Public Health Pharmacist, the Chief of RPS shall act for the State Health Director in this matter.
 - d. Prior to the establishment of SERT, officials in the affected counties, after consultation or reasonable efforts to effect consultation, are empowered to authorize the distribution and administration of appropriate dosages of potassium iodide.
8. The State Department of Transportation and county and municipal public works departments will clear evacuation routes of any impediments such as snow, ice, debris, or equipment.
9. The time estimates for Gaston and Mecklenburg zones are shown in Figure 16.

SUMMARY OF EVACUATION TIME ESTIMATES FOR NC 10-MILE EPZ
(Hours and Minutes)

<u>Mecklenburg County</u>	<u>General Population</u>		<u>Special Population</u>	
	<u>Normal Conditions</u>	<u>Adverse Conditions</u>	<u>Normal Conditions</u>	<u>Adverse Conditions</u>
A-0 (2 miles)	3:25	3:25	5:00	5:00
A-1 (5 miles)	3:25	3:25	5:00	5:00
A-2 (10 miles)	3:25	3:25	2:45	4:15
 <u>Gaston County</u>				
F-3 (10 miles)	3:25	3:25	1:40	2:30

Source. Catawba Nuclear Station Evacuation Analysis: Evacuation Time Estimates. (McLean, Virginia: PRC Voorhees, April 1983).

Figure 16

10. Considerations for Protective Actions.

- a. RPS is responsible for evaluation of all monitoring and facility release data and projection of anticipated individual dose (whole body and thyroid) in the absence of protective actions. In general, RPS will recommend public protective actions to the SERT leader when projected individual doses exceed those shown in PAGs in Figure 18. These actions are based on recommendations in EPA-520/1-75-001.
- b. The primary recommended protective actions are sheltering in small or large structures and evacuation. Recommendations will be based upon an evaluation of comparative dose reduction factors expected through either sheltering or evacuation or a combination of the two. Based on the recommended EPA evaluation and decision making procedures in EPA 520/1-78-001B, the approach providing the largest dose reduction factor will be recommended to the SERT leader.
- c. It is specifically noted that, while evacuation (when feasible before cloud passage) allows total elimination of dose, it also entails certain risks of injury, cost, and inconvenience. Accordingly, by using conservative whole body and thyroid dose reduction factors recommended by EPA for small and large structures, serious consideration would be given to sheltering, if the expected result were the reduction of population dose below the evacuation PAGs in this plan.
- d. The parameters for RPS evaluation and recommendations are based on those recommended in EPA 520/1-78-001B and include:
 - (1) T_R - time from incident to start of release from containment.
 - (2) T_a - time required for cloud to travel to the point of consideration.
 - (3) T_e - cloud passage time.
 - (4) T_D - delay time from initiating event to beginning of protective action.
 - (5) T_T - time spent in evacuating from the contaminated area.

- (6) T_S - time from beginning to end of source release.
- (7) L - conservatively assumed ventilation rates.
- (8) K_1, K_2, K_3, K_4 , - whole body and thyroid - dose conversion factors for the various components (avenues) of exposure.

e. The actual decision making logic is outlined in Figures 14a and 14b in EPA 520/1-78-001B.

F. Protective Actions for Ingestion Exposure Pathway.

1. Ingestion exposure pathways contain water, fish, meat, milk and crops. In the event of airborne and liquid releases of radioactive materials, RPS will project potentially affected areas based on release data from the facility operator and any other available environmental measurement data. The techniques for projecting airborne releases are similar to those referred to in Section IV.C., Accident Assessment, and will be shown on ingestion pathway land use maps during an emergency (See Annex I).
2. In cases where projections based on facility operator release data significantly exceed ingestion PAGs recommended by FDA for food and animal feed, RPS may recommend to the SERT leader precautionary embargos, instructions to the public, and other protective actions pending final evaluation of sample collection and radiological analysis.
3. RPS will define and implement a sampling and analysis program involving the following steps for each appropriate ingestion pathway:
 - a. Projection of the potentially affected area(s).
 - b. Efficient midline sampling and radiological analysis to establish the distance to which levels may exceed ingestion PAGs.
 - c. Efficient sampling and radiological analysis to establish the breadth at which levels may exceed ingestion PAGs.
 - d. Recommendations for appropriate protective actions to the SERT Leader.

4. Upon the known or suspected release of radioactive material from the Catawba Station, the RPS representative at the State EOC in Raleigh will request a planning meeting with representatives of DCCPS and other appropriate agencies to:
 - a. Identify various existing ingestion pathways and set priorities (e.g., crops nearest harvest first or pasture and dairy cattle in case of radioiodine releases).
 - b. Identify numbers, types, locations, and volume of samples to be collected.
 - c. Assign specific agencies sampling tasks and give instructions on delivery of samples for analysis. Subsequent planning meetings will be held for more detailed monitoring and for follow-up sampling and analysis.
5. Upon the determination that any ingestion pathway PAG is exceeded, RPS will recommend appropriate protective actions to the SERT leader. These actions may include:
 - a. Embargo and diversion or disposal of commercial agricultural products, milk, and other dairy products.
 - b. Place cattle on stored feed.
 - c. Embargo and destruction of fish.
 - d. Restrict or halt the use of non-drinking water.
 - e. Control of water supply intakes.
 - f. Close or control areas to the taking of game animals and commercial or sports fish.
 - g. Public advisories to wash vegetables or to dispose of specified garden or farm products intended for personal consumption.
 - h. Other actions as required.
6. Similar monitoring activities will continue until radioactivity levels are below the ingestion PAGs recommended by FDA.
7. Responsibilities for Planning and Implementing Protective Actions:
 - a. North Carolina Department of Agriculture.

- (1) Provide data for ingestion pathway land use maps to DCCPS.
 - (2) Restrict the sale, production, distribution and warehousing of livestock, produce, dairy and processed food products.
 - (3) Provide expert consultation regarding livestock, dairy, agricultural, and processing practices in the 50-mile radius of the plant.
 - (4) Assist in sample collection for radiological analysis.
- b. **North Carolina Department of Crime Control and Public Safety.**
- (1) Maintain ingestion pathway land use plotting maps (See Annex I).
 - (2) Through the SERT leader, act on protective actions recommended by RPS.
 - (3) Participate in meetings in the State EOC on ingestion pathway monitoring.
- c. **Environmental Sciences Branch, Laboratory Section, Division of Health Services, DHR.**
Provide laboratory evaluation of potentially radioactive samples of all types.
- d. **Radiation Protection Section, Division of Facility Services, DHR.**
- (1) Accumulate and evaluate all radiological data and provide DCCPS data for ingestion pathway land use maps.
 - (2) Project and determine areas exceeding ingestion PAGs.
 - (3) Determine needs for ingestion pathway sampling and analysis and coordinate necessary meetings for implementation.
 - (4) Recommend protective actions to the SERT leader.
 - (5) Arrange for back-up analytical laboratory assistance from other States, federal, and private laboratories.

- (6) Collect environmental samples and make other radiological measurements.
- e. **Sanitation Branch, Environmental Health Section, Division of Health Services, DHR.**
- (1) Collect fish samples for analysis.
 - (2) Embargo and dispose of unprocessed fish and request the Wildlife Resources Commission to police such an embargo.
 - (3) Embargo processed fish under authority delegated by the Department of Agriculture.
 - (4) Collect milk samples for analysis.
 - (5) Provide liaison with local health departments.
- f. **Water Supply Branch, Environmental Health Section, Division of Health Services, DHR.**
- (1) Notify and update local water supply operators on status of radioactive contamination.
 - (2) Provide local water supply operators technical assistance and supervision for special or unusual treatments.
 - (3) Order local water supply plants to cease operations and close intake systems.
- g. **Division of Environmental Management, Department of Natural Resources and Community Development (NRCD).**
- (1) Sample potentially contaminated bodies of water and aerial dispersals of radioactive materials.
 - (2) Provide data for ingestion pathway land use maps to DCCPS.
 - (3) Provide expert consultation regarding use of and restrictions on water sources.
 - (4) Halt or restrict the use of non-drinking water.

- (5) Consult with the Water Supply Branch on restrictions on public drinking water.

h. Wildlife Resources Commission.

- (1) Close affected areas to the taking of fish and wildlife.
- (2) Collect samples of fish and wildlife for analysis.
- (3) Provide expert consultation in wildlife management and biology.
- (4) Control the movement of possibly contaminated wildlife.

i. State Emergency Board, (USDA).

- (1) Provide expert consultation in agricultural practices and crop status.
- (2) Coordinate collection of agricultural samples for analysis with the County Emergency Boards.

j. County Emergency Boards, USDA Agricultural Stabilization and Conservation Service Offices.

- (1) Maintain card files for farms indicating current agricultural activities and crops.
 - (2) Identify representative farms to be sampled within potentially affected areas as defined by RPS (within 50 miles of the plant).
 - (3) Provide and maintain agriculture photo maps.
 - (4) Collect agricultural samples for radiological analysis.
 - (5) Maintain lists of the name and location of facilities located in North Carolina that regularly process milk and agricultural products originating in the ingestion pathway EPZ.
8. Although lists of facilities located outside North Carolina that process food originating in the ingestion pathway EPZ are not maintained, this plan

calls for the embargo or diversion of contaminated food close to its origin and prior to its reaching processors. RPS will recommend that SERT notify the South Carolina Emergency Preparedness Division and appropriate health service agencies in the State of South Carolina in the event of radiological contamination of the ingestion pathway.

G. Radiological Exposure Control.

1. Radiation Dose Limits.

- a. RPS is responsible for insuring that radiation doses received by the public and emergency workers are below the normal acceptable maximum levels.
- b. RPS will use the EPA recommended PAGs as the maximum acceptable levels of radiation exposure for the public and emergency workers during an emergency. (See Figure 17.)
- c. The SERT leader has decision-making authority for all operations. The senior RPS representative on SERT is responsible for making recommendations to the SERT leader.

2. Dosimetry.

- a. All N.C. Highway Patrol troopers stationed in the vicinity of the Catawba Station have been issued and given training in the use of the following instruments:
 - CDV-700 Survey Meter (0-50 mR/hr).
 - CDV-715 Survey Meter (0-500 R/hr).
 - CDV-730 Dosimeter (0-20 R).
 - CDV-742 Dosimeter (0-200 R).
 - CDV-138 Dosimeter (0-200 mR).
 - CDV-750 Dosimeter Charger.
- b. DEM will support RPS by issuing additional CDV-730 (0-20 R) and CDV-742 (0-200 R) dosimeters to persons who could be exposed to significant radiation.

RECOMMENDED PROTECTIVE ACTIONS TO AVOID WHOLE BODY AND THYROID DOSE FROM EXPOSURE TO A GASEOUS PLUME

PART 1

Projected Dose (Rem) to the Population	Recommended Actions*	Comments
Whole body <1	<ul style="list-style-type: none"> .No protective action required. .State may issue an advisory to seek shelter and await further instructions or to evacuate voluntarily. 	Previously recommended protective actions may be reconsidered or terminated.
Thyroid <5	<ul style="list-style-type: none"> .Monitor environmental radiation levels. 	
Whole body 1 to <5	<ul style="list-style-type: none"> .Seek shelter and await further instructions. .Consider evacuation particularly for children and pregnant women. 	
Thyroid 5 to <25	<ul style="list-style-type: none"> .Monitor environmental radiation levels. .Control access. 	
Whole body 5 and above	<ul style="list-style-type: none"> .Conduct mandatory evacuation of populations in the affected area. .Monitor environmental radiation levels and adjust area for mandatory evacuation accordingly. 	Seeking shelter would be an alternative if evacuation were not immediately possible.
Thyroid 25 and above	<ul style="list-style-type: none"> .Control Access. 	
<u>Projected Dose (Rem) to Emergency Team Workers</u>		
Whole body 25	<ul style="list-style-type: none"> .Control exposure of emergency team members to these levels except for lifesaving missions. (Appropriate controls for emergency workers include time limitations, respirators, and stable iodine.) 	Although respirators and stable iodine should be used where effective to control dose to emergency team workers, thyroid dose may not be a limiting factor for lifesaving missions.
Thyroid 125		
Whole body 75	<ul style="list-style-type: none"> .Control exposure of emergency team members performing lifesaving missions to this level. (Control of time of exposure will be most effective.) 	

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* These actions are recommended for planning purposes. Protective action decisions at the time of the incident must take into consideration such constraints as magnitude and duration of release, wind speed and direction, transportation, and weather conditions.

Figur 17

- c. RPS will provide all State personnel who may be exposed to significant radiation with thermoluminescent dosimeters (TLDs). TLDs for local emergency personnel have been supplied by RPS to the warning point in Gaston and Mecklenburg Counties. RPS is responsible for reading and analyzing the dosage levels shown on the TLDs and making appropriate recommendations concerning the health and safety of the individuals concerned.
 - d. The dosimetry described above will be supplemented with other personal dose assessment techniques including urinalysis and whole body counting.
3. Dosimetry Procedures and Records.
- a. RPS will maintain a program to control the use of self-reading dosimeters. Deployment, recall, analysis, and replacement will be coordinated by RPS representatives on SERT.
 - b. Each emergency worker who enters or may enter areas where the external radiation exposure could exceed 10 percent of the PAGs for emergency personnel will be provided low and high range self-reading dosimeters (from DEM), a record sheet and instructions, and TLDs from RPS.
 - c. Each person assigned self-reading dosimeters will be instructed to:
 - (1) Charge the dosimeter at the beginning of the shift and record the results on the form provided.
 - (2) If the low-range (0-200 mR) dosimeter exceeds 50 percent of full scale, record the results and the accumulated exposure, recharge the dosimeter, and record these results on the forms provided.
 - (3) At the end of the shift, record the final reading, accumulated exposure, and the total exposure for the shift.
 - (4) Upon instruction from RPS, turn in self-reading dosimeter record form for analysis by RPS.

- (5) Immediately leave the radiation area should self-reading dosimeter results indicate that PAGs for emergency personnel may be exceeded and turn in the record form and TLDs for RPS analysis.
- d. RPS procedures for TLDs.
- (1) Maintain a record of all TLD assignments.
 - (2) Based on survey data, plant release data, and/or personnel dosimetry data, project potential emergency personnel radiation exposure.
 - (3) If projected actual exposures exceed 10 percent of the PAGs for emergency personnel, coordinate removal and replacement of TLDs and self-reading dosimeter record forms.
 - (4) Read TLDs, analyze results, and compare with self-reading dosimetry results.
 - (5) Maintain a record of reading period and accumulated exposure for each person and advise each person of the measured radiation exposure.
 - (6) In the event that the PAGs have been exceeded or might be exceeded if work were to resume, recommend that individuals be removed from radiation areas.
- e. In addition to the preceding dosimetry for emergency personnel, RPS will periodically issue to the SERT leader other recommendations designed to assure protection of emergency personnel. These recommendations will take into consideration actual or potential external radiation exposure and airborne radioactivity levels. The recommendations will include instructions to avoid or limit the duration of stay in specified areas or use specific protective equipment, apparel, or procedures in these areas.
- f. RPS will also maintain permanent records of any other dosimetry such as urinalysis or whole body counting for individuals exposed.
4. Procurement, Storage, and Distribution of TLDs.
- a. RPS will establish and operate a TLD program to

meet the emergency needs generated by nuclear power plants.

- b. RPS will coordinate the procurement and maintenance of the necessary equipment. The number of TLDs and the supporting equipment needed will be determined by RPS in coordination with other potential users at the State and local levels.
- c. TLDs for emergency workers in Gaston and Mecklenburg Counties will be stored at each county warning point. Distribution of TLDs in each county will be under the control of the individual authorized to activate the sirens to alert the general population. TLDs for State emergency workers will be stored by RPS and distributed on the direction of SERT.

5. Dosage Control.

- a. During the course of the emergency, RPS will review exposure records and make recommendations to the SERT leader to assure that workers' exposures remain below EPA recommended PAGs. RPS will operate on a 24-hour per day basis to determine the dose received by emergency personnel.
- b. RPS representatives on SERT will maintain communication with the appropriate authority on-site at the Catawba Station to assure that exposure levels of emergency workers moving on and off-site are below EPA recommended PAGs.
- c. The policy under this plan is to prevent emergency workers from receiving a radiation dose in excess of the stated PAGs. The senior RPS representative may recommend to the SERT leader that emergency workers be allowed to exceed the PAGs if workers cannot be rotated and the activities involved were critical to public protection. The SERT leader has final approval authority. Permission to exceed a whole body exposure of 75 rems will not be granted.

6. Decontamination and Waste Disposal.

- a. RPS is responsible for the coordination of monitoring, decontamination, and waste disposal actions described in Section III.
- b. When any monitoring station obtains radiation

readings of two times the normal background reading, that station will take the following actions:

- (1) Notify the RPS representative on SERT.
 - (2) Be prepared to take steps to decontaminate.
 - (3) Be prepared to assist in the containment and disposal of wastes such as clothes, water, or materials resulting from decontamination.
- c. A radiation specialist from SERT will be dispatched to the scene to supervise the decontamination and waste disposal activities, if possible.

7. Shelter Monitoring Activities.

- a. Local governments are responsible for shelter monitoring and registration activities throughout the emergency.
- b. State government agencies will provide support for shelter monitoring upon request to SERT. Details are contained in PARTS 2 and 3.

H. Recovery, Reentry, and Post-Accident Operations.

1. Recovery, reentry, and post accident operations require a continuous estimate of the existing radiological emergency through the analysis of radiological monitoring reports, air samples, and samples of foodstuffs, foliage, and water collected within the EPZ.
2. Sample collection and analysis are performed by radiological monitoring teams and health physics teams supplied by Duke Power Company, RPS, and Federal agencies.
3. The Chief of RPS will review reports and findings of the radiological monitoring teams and health physics teams. When radiation levels are no longer a threat to the public, RPS will recommend to the SERT leader that reentry and recovery operations begin. To assure that the PAGs will not be exceeded as a result of reentry, RPS will evaluate the projected total population dose commitment due to the continued presence of radioactive contamination and radiation levels. The evaluation will be based upon NRC recommendations contained in Regu-

latory Guide 1.109, "Calculation of Annual Doses to Man from Routine Releases of Reactor Effluents for the Purpose of Evaluation Compliance with 10 CFR Part 50, Appendix 1." Direct radiation exposure, air-borne contamination, deposited contamination, terrestrial and aquatic food pathways, and water contamination will be considered in the evaluation.

4. The Director of DEM will confer with local government officials, representatives from Federal agencies, and others as necessary regarding the recommendation for reentry. When the necessary agreements have been reached, the Director will recommend to the Governor the date and time reentry and recovery operations should begin.
5. Upon receipt of directions from the Governor to start reentry operations, SERT will proceed with reentry and recovery operations in coordination with local governments.
6. Operational Steps for Reentry.
 - a. The public information staff will prepare information and instructions for release by the media.
 - b. State and local law enforcement officials will staff traffic control points.
 - c. Shelter managers will assist evacuees with preparation for returning to evacuated areas.
 - d. SERT will monitor and observe reentry and recovery operations and report as necessary to the Director, DEM.
 - e. During the reentry, the Director, DEM will maintain liaison with local government officials and other interested parties to assure that reentry operations proceed as planned.

V. SUPPORT RESOURCES, PROCEDURES, FACILITIES, AND EQUIPMENT.**A. Emergency Response Support and Resources.**

1. Federal assistance is available to the State through the U.S. Department of Energy (DOE). Procedures for requesting and utilizing assistance and resources are contained in the Interagency Radiological Assistance Plan-3 (IRAP-3). The Savannah River Operations Office in Aiken, South Carolina, is responsible for implementing this plan. A 24-hour duty station is maintained to receive and process requests for emergency assistance. The telephone number is 803/725-3333.
 - a. The types of assistance available range from advice and information to supplying radiological assistance teams. The principal resources most likely to be requested from this agency by the State of North Carolina are:
 - (1) Technical radiological data from data banks.
 - (2) Computer service to calculate and predict emergency conditions using current conditions and circumstances about the Catawba Station as a data base.
 - (3) Technical personnel to serve as special advisors and consultants to SERT.
 - b. The Director of DEM, or the designated representative, is authorized to request these services and assistance for the State of North Carolina. The names of individuals and associated authentication procedures are contained in a special alerting and notification list maintained in the office of the Director and filed with the DOE regional coordinating office.
2. Other Sources of Assistance.
 - a. The Southern Mutual Radiation Assistance Plan (SMRAP), maintained by the Southern Emergency Response Council, contains procedures by which assistance on a mutually supporting basis can be made available by the southern states. A copy of this plan is maintained in North Carolina by RPS.

- b. Technical staff personnel and other resources will be made available by universities, utilities and private industry in accordance with letters of agreement on file in the office of RPS.

3. Radiological Laboratory Support.

- a. The radiological laboratory support in North Carolina is described in Figure 18.
- b. Pursuant to IRAP, additional laboratory services will be available from Federal agencies and their contractors. These services will be from laboratories of Federal agencies signatory to IRAP, including but not limited to:

Savannah River Operations Office
U.S. Department of Energy
Aiken, South Carolina

Eastern Environmental Radiation Laboratory
U.S. Environmental Protection Agency
Montgomery, Alabama

ORP Las Vegas Facility
U.S. Environmental Protection Agency
Las Vegas, Nevada

Oak Ridge National Laboratory
U.S. Department of Energy
Oak Ridge, Tennessee

NRC Region II Mobile Lab, if available
Atlanta, Georgia

- c. Further laboratory analysis assistance is available from SMRAP Signatory States.

4. Resources Support Coordination.

- a. Resources and support assistance from sources external to State and local governments may be required to conduct emergency operations within the EPZ. To assure that these resources are committed in an efficient and effective manner, the SERT leader will designate a SERT member to serve as the State's representative at the Catawba crisis management center (near-site emergency operations facility).

RADIOLOGICAL LABORATORY CAPABILITIES AND RESPONSE TIME

PART 1

Laboratory	Type of Samples	Analyses	Estimated Maximum Response Time
Shearon Harris Energy and Environmental Center, New Hill, N.C.	Air filter, water, soil, milk, vegetation, food	Low background gross alpha gross beta, liquid scintillation, spectrometry, gamma ray spectrometry, (NaI and Ge (Li) detectors) radio-chemistry procedures	4 hours
Duke University Durham, N.C.			
North Carolina State University, Raleigh, N.C.			
University of North Carolina, Chapel Hill, N.C.	water wipe	liquid scintillation	4 hours
Wilmington Manufacturing Division, General Electric Company, Wilmington, N.C.	air filter, water, soil, silt	uranium, gross alpha, beta, gamma	4 hours

Figure 18

- b. Duke Power Company will designate a company representative to serve with SERT. (See Duke Power Company Crisis Management Plan, Section B.)
- c. Gaston and Mecklenburg county governments will each designate a liaison to serve with SERT as a representative of the Board of County Commissioners.

B. Medical and Public Health Support.

- 1. Hospital and Medical Services for Contaminated Individuals.
 - a. RPS systematically visits and evaluates the capabilities, procedures, and willingness of North Carolina hospitals to accept and treat radiation accident victims. The evaluation form used for this is shown in Figure 19.
 - b. Few hospitals in the State have the internal capability to evaluate radiation exposure and internal contamination. These limitations are adequately compensated for by the following:
 - (1) RPS has executed formal agreements with three in-state corporations (General Electric Corporation, Carolina Power and Light Company, and Duke Power Company) which have whole body counting equipment to be used in support of the emergency response plan. In addition, the Federal government and its contractors can provide whole body counting assistance.
 - (2) DHR and several medical institutions in the State are capable of providing urinalysis to determine body burdens of radioactivity in victims. This is supplemented through available support from Federal and private commercial laboratories.
 - (3) RPS is prepared to arrange for complex blood studies to assess the amount of whole body radiation exposure. This includes the use of limited capabilities at major State medical institutions and services provided by Federal (NRC) agencies and their medical consultants.

RADIATION ACCIDENT
HOSPITAL EVALUATION CHECK SHEET

_____ Hospital Name
_____ Address including Zip Code

Persons to contact: 24-Hour phone numbers, extension, A/C

Will facility accept contaminated patients? ____, but only if ____

Survey equipment available:

Check if Alpha detection capability available

A. Meters _____ Range _____
 _____ Range _____
 _____ Range _____

B. Others (imaging equipment or calibrators)

Written emergency procedures: ____ Yes, attached ____ No

Inspector's comment concerning the facility and its ability to cope with an emergency:

Figure 19

- (4) Through its evaluation program, RPS knows in advance which hospitals have limited expertise and capabilities. Special assistance is available from seven North Carolina physicians have agreed to provide expert medical assistance in support of the State's response to radiation accidents.
2. RPS standard procedures and reference materials related to medical support include:
 - a. Map showing the location of all hospitals that can provide medical support for victims of radiological accidents.
 - b. Current lists of names, addresses, phone numbers and administrators of all hospitals.
 - c. Copies of evaluation reports showing each hospital's capabilities, needs, willingness to accept contaminated patients, and their notification procedures.
 - d. Copies of each hospital's emergency response plans for radiation accident victims.
 - e. Procedures for selecting appropriate facilities to receive contaminated victims and for determining the quantity and type of support to be provided to those facilities.
3. The following North Carolina hospitals in the vicinity of the Catawba Nuclear Station, with the capabilities as noted, will support the Catawba Station and the surrounding communities in the event of a radio-logical emergency. (RPS maintains lists and locations of other hospitals at greater distances from the station that will provide back-up support.)
 - a. Charlotte Memorial Hospital, Charlotte, N.C.
Telephone: 704/331-2121 Ext. 2145
Administrator: Harry A. Nurkin, President
Bed Capacity: 853
Location: 1000 Blythe Boulevard
Heliport: Grassed area suitable for use
Distance from the Catawba Station: 27 miles
Contact Person: John Baker, M.D.
704/331-2121 Ext. 3181
Hospital has a plan to treat 10 patients.

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2. RPS standard procedures and reference materials related to medical support include:
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- a. Charlotte Memorial Hospital, Charlotte, N.C.
Telephone: 704/331-2121 Ext. 2145
Administrator: Harry A. Nurkin, President
Bed Capacity: 853
Location: 1000 Blythe Boulevard
Heliport: Grassed area suitable for use
Distance from the Catawba Station: 27 miles
Contact Person: John Baker, M.D.
704/331-2121 Ext. 3181
Hospital has a plan to treat 10 patients.

- b. Gaston Memorial Hospital, Inc., Gastonia, N.C.
Telephone: 704/866-2000
Administrator: Thomas R. Matherlee, President
Bed Capacity: 479
Location: 2424 Court Drive
Heliport: Cement pad behind hospital
Distance from Catawba Station: 25 miles
Contact Person: Thomas R. Matherlee,
President 704/866-2129
Hospital has a limited plan to treat 5 patients.

4. Radiological survey instrumentation will be provided by consultants to the hospitals listed above. RPS will also make recommendations to the SERT leader for additional support from the Federal government.

5. Transportation of Radiation Victims

- a. The Emergency Medical Services (EMS) Section, Facility Services Division, DHR is responsible for developing procedures to marshal ambulance and rescue resources and for coordinating emergency services at radiation accident sites and shelters.
- b. RPS will advise EMS of the medical facilities to be evacuated, and those facilities capable of receiving radiated patients.
- c. EMS staff, in consultation with RPS, will determine the number of vehicles needed and dispatch them to a local staging area as required.
- e. If necessary, the Military Assistance to Safety and Traffic (MAST) programs will be used to assist in transporting non-ambulatory persons to and from medical facilities.
- f. At the staging area, EMS personnel will be issued dosimeters, briefed on the nature and extent of the accident, and assigned missions.

C. Emergency Facilities and Equipment.

1. North Carolina State Government conducts emergency command and control functions from the State EOC located in the sub-basement area of the Administration Building at 116 W. Jones Street, Raleigh, N.C. 27611.

2. The State EOC has approximately 20,000 square feet of floor space occupied daily by DEM staff.
3. Office space is maintained in a readiness condition for the Governor and his staff. Space is also reserved for other key officials who assist the Governor and his staff in carrying out command and control functions.
4. The State EOC is equipped with an emergency power plant, a communications center, eating and sleeping quarters and other necessities required for continuous operation.
5. SERT, when directed to establish a field command and control facility, will locate at one of three facilities in the vicinity of the Catawba Station.
 - a. Primary location: The North Carolina Air National Guard Headquarters at Charlotte/Douglas International Airport, Charlotte. This facility contains adequate space and other necessities to support a 50-member emergency response team on a 24-hour a day basis for an extended period.
 - b. First Alternate Location: The Iredell County Emergency Operations Center at 201 Water Street in Statesville. Arrangements have been made with the governing officials for use of a designated area in this facility by SERT. The facility is equipped with emergency power, a communications center, and other necessities required for continuous operation over an extended period.
 - c. Second Alternate Location: The University of North Carolina at Charlotte located on U.S. Highway 49 in northeast Charlotte. The campus contains several buildings that can be used as a field command post. Arrangements have been made with University officials for use of this facility should it become necessary. The selection of the specific building to be used will be made as soon as possible after the decision has been made to locate the field command post at this location. Factors such as time of the year and university activities in progress, must be considered when selecting the specific building. Any building selected will contain adequate space and other necessities required for periods of extended operation.

- d. Each facility that has been selected as a possible SERT headquarters is located more than 10 miles from the Catawba Station. Based on conditions and circumstances at the time, the Director of DEM will establish the SERT command post at the primary location or at one of the alternate locations. Normally, SERT will not relocate during an operation.
 - e. As a minimum, SERT will consist of the DEM Director and Assistant Director (for Response), a public information officer, and a State Highway Patrol representative. This team can be expanded to include the representatives shown in Figure 8. Expansion and strength requirements will be determined by the Director of DEM.
6. Procedures are established to alert, notify, and assemble SERT. The times required from notification of members of SERT to the establishment of the field command post under varying conditions are shown in Figure 20.
 7. To ensure a coordinated response by North and South Carolina, the Director of DEM will direct and control SERT's operations from the FEOC in Clover, South Carolina. The Director may choose to have members of the public information staff and RPS to locate there and assist him.
 8. Radiological monitoring equipment used by the following State government agencies is inventoried, inspected, and given an operational check quarterly:
 - Alcohol Law Enforcement Division
 - Wildlife Resources Commission
 - Division of Highways
 - Division of Motor Vehicles
 - Division of Forest Resources
 - State Highway Patrol
 - N.C. Wing, Civil Air Patrol
 - Radiation Protection Section
- a. 100 radiological equipment kits are maintained in the radiological branch of DEM to replace any that become inoperable or are lost.
 - b. Calibration of equipment will be performed at intervals recommended by the equipment supplier.

9. An inventory of emergency kits by general category (protective equipment, communications equipment, radiological monitoring equipment and emergency supplies) is contained in Attachment 3 to this PART.
10. The off-site meteorological capability available in the vicinity of the Catawba Station is provided by the National Weather Service Office in Charlotte (704/394-5158) and local weather measurement teams provided by the Division of Forest Resources. Wind speed and direction, temperature and vertical gradient, precipitation, and dew point data will be provided.
11. Field monitoring data collected within the EPZ during the period of an announced emergency condition will be transmitted or delivered to the mobile radiological laboratory operated by RPS. The laboratory will be positioned in a location which, in the judgement of the Chief of RPS, is best suited to accomplishing the assigned mission. This mobile laboratory is equipped with a commercial radio-telephone, three radios on the Emergency Management network and one radio on the State Highway Patrol network.

SERT ALERT AND NOTIFICATION TIME TABLE

TIME PERIOD	WEATHER CONDITIONS	NOTIFY AND ASSEMBLE SERT	TRAVEL TIME RALEIGH-CHARLOTTE	ESTABLISH FIELD COMMAND POST	ESTIMATED TIME TO COMPLETE ACTIVATION OF FIELD COMMAND POST
Mon.-Fri.	fair	1 hr.	4 hrs.	2 hrs.	7 hrs.
0800-1700	rain, sleet, snow	1 hr.	5 hrs.	2 hrs.	8 hrs.
Mon.-Fri.	fair	2 hrs.	4 hrs.	2 hrs.	8 hrs.
1700-0800	rain, sleet, snow	2 hrs.	5 hrs.	2 hrs.	9 hrs.
Saturday-	fair	2 hrs.	4 hrs.	2 hrs.	8 hrs.
Sunday and Holidays	rain, sleet, snow	2 hrs.	5 hrs.	2 hrs.	9 hrs.

NOTE: SERT has the option of assuming direction and control responsibilities before the field command post is completely operational.

Figure 20

VI. EMERGENCY COMMUNICATIONS.

- A. Provisions have been made for communication networks to support all emergency response organizations throughout the course of an emergency. These networks are formed using commercial telephone service, Duke Power Company radio systems, local government emergency service two-way radio systems, and State and Federal government communications.
- B. To assure that an immediate level of alert and notification readiness is available, the following emergency response facilities are staffed 24 hours a day.
1. The Catawba Station Control Room.
 2. The State warning point located at the N.C. Highway Patrol Communications Center in Raleigh, N.C.
 3. The warning points in Gaston and Mecklenburg Counties.
 4. The National Weather Service Forecast Office for North Carolina located at Raleigh-Durham Airport.
 5. The National Weather Service Offices located in Asheville, Charlotte, Greensboro, Wilmington, and Cape Hatteras.
- C. DCCPS, the State EOC, and RPS are not staffed 24 hours a day but are required to have key personnel on call at all times.
- D. Emergency Communication Between North and South Carolina.
1. The primary means of communication between SERT headquarters and South Carolina's FEOC is commercial telephone backed up by voice radio.
 2. Commercial telephone is the primary means of communication between State emergency response organizations in the two states.
 3. The Civil Defense National Voice System (CDNAVS) has terminals in the North Carolina EOC and the South Carolina EOC.
 4. The Civil Defense National Teletype System (CDNATS), with terminals installed in the State EOCs of both North and South Carolina, provides high speed (100 WPM) teletype service between the two state governments.

5. The Civil Defense National Radio System (CDNARS) has terminals installed in both State EOCs providing voice radio or radio teletype communication between the two state governments.
 6. The National Warning System (NAWAS), another special telephone system has terminals located at the State warning points and EOCs.
- E. Communications with Federal Response Organizations.
1. Commercial telephone service is the primary means of communication between State government and Federal response organizations.
 2. The CDNAVS telephone system described above provides direct dial interconnect with the Federal Telecommunications System (FTS) via government circuits.
 3. CDNAVS through "manual (operator) switching" at the Federal Regional Center in Thomasville, Georgia, can be used to access the "automatic voice network" (AUTOVON) for communication with military establishments, if needed.
 4. The Department of Energy Regional Coordinating Office in Aiken, S.C., (Savannah River Operations Office - 803/725-3333) uses equipment identical to that used in the CDNARS system. With proper authorization, voice radio or radio teletype communication could be established between the North Carolina EOC and the DOE Regional Coordinating Office in South Carolina.
- F. Communications between State and Local Governments.
1. Commercial telephone via dedicated lines is the primary means of communication between SERT headquarters and Gaston and Mecklenburg County EOCs.
 2. Two-way radio and PIN are the back-up means of communication.
- G. Communications between Duke Power Company, State, and Local Governments.
1. Commercial telephone is the primary means of communication between the Catawba Station and Duke's Crisis Management Center (near-site EOF) and the State EOC.

2. The alternate means of communication is voice radio from the Duke Power Crisis Management Center to the Lincoln County EOC and from that point to the State EOC. These radio systems are in place and operational.
 3. The primary means of communication between the SERT headquarters and Duke Power Company direction and control installations will be commercial telephone via ringdown circuits. Back-up communication between these points will be two-way radio systems. These systems will be expanded, as required, by the addition of temporary base stations, mobile units, and hand-carried portable units.
 4. Automatic ringdown (ARD) telephone lines are the primary means of communication between the Catawba Station and Gaston and Mecklenburg Counties. When Catawba operations or crisis management personnel activate this circuit, telephones in both warning points ring simultaneously. These lines may remain open for two-way communication throughout an emergency.
 5. The secondary means of communications are the commercial telephone lines.
- H. Additional Back-up Communications.
1. The State Highway Patrol, when committed, will position radio equipped cars at the EOCs in Gaston and Mecklenburg counties and at the Catawba Station to provide back-up communication between these sites and SERT.
 2. In an extreme emergency when other forms of communications are not possible, the State Highway Patrol can be used to transport hard-copy messages.
- I. Field Assessment Team Communications.
1. Two-way voice radio base station equipment will be installed at SERT headquarters to communicate with mobile units and hand-held portables used by accident assessment teams from RPS and Duke Power Company.
 2. Space will be provided at SERT headquarters for installation of temporary base station equipment for accident assessment teams furnished by Federal response organizations.
- J. Communications for Alerting Emergency Response Personnel.

1. Commercial telephone lines are the primary means of transmitting the initial notification of an unusual event from the Catawba Station to the State warning point. A dedicated ringdown circuit is used to alert the county warning points (See Figure 21). Voice radio is the back-up means of communications.
2. RPS members assigned to accident assessment teams are on call 24 hours a day and will be notified by telephone from the State warning point of an emergency condition.
3. Each member of RPS is equipped with a tone and voice pager that can be accessed from any telephone in the Raleigh area. The individual RPS member who receives the initial notification from the State warning point will alert and inform other staff members who are on call.
4. Key SERT members are on call 24 hours a day. A list of these individuals (with business and non-business telephone numbers) is posted at the State warning point. The SERT member who receives the initial notification from the State warning point by telephone will alert and inform other members of the response team by telephone. During weekends and holidays two key members will be equipped with tone and voice pagers.

K. Periodic Communications Tests.

1. The following communications links between DEM and Federal agencies are tested or used on a daily or weekly basis:
 - a. CDNAVS: Used daily (during business hours) for administrative communication.
 - b. CDNATS: Operated daily during business hours by DEM secretarial and clerical staff for administrative communications.
 - c. CDNARS: Tested once each week between DEM and FEMA Regional Center in Thomasville, Georgia. Operators are secretarial and clerical staff of the Division assigned on a rotating basis.
 - d. NAWAS: Tested at the national and the State level (at the State warning point) once every eight hours on an unscheduled basis.

COMMUNICATIONS LINKS FOR INITIAL NOTIFICATION

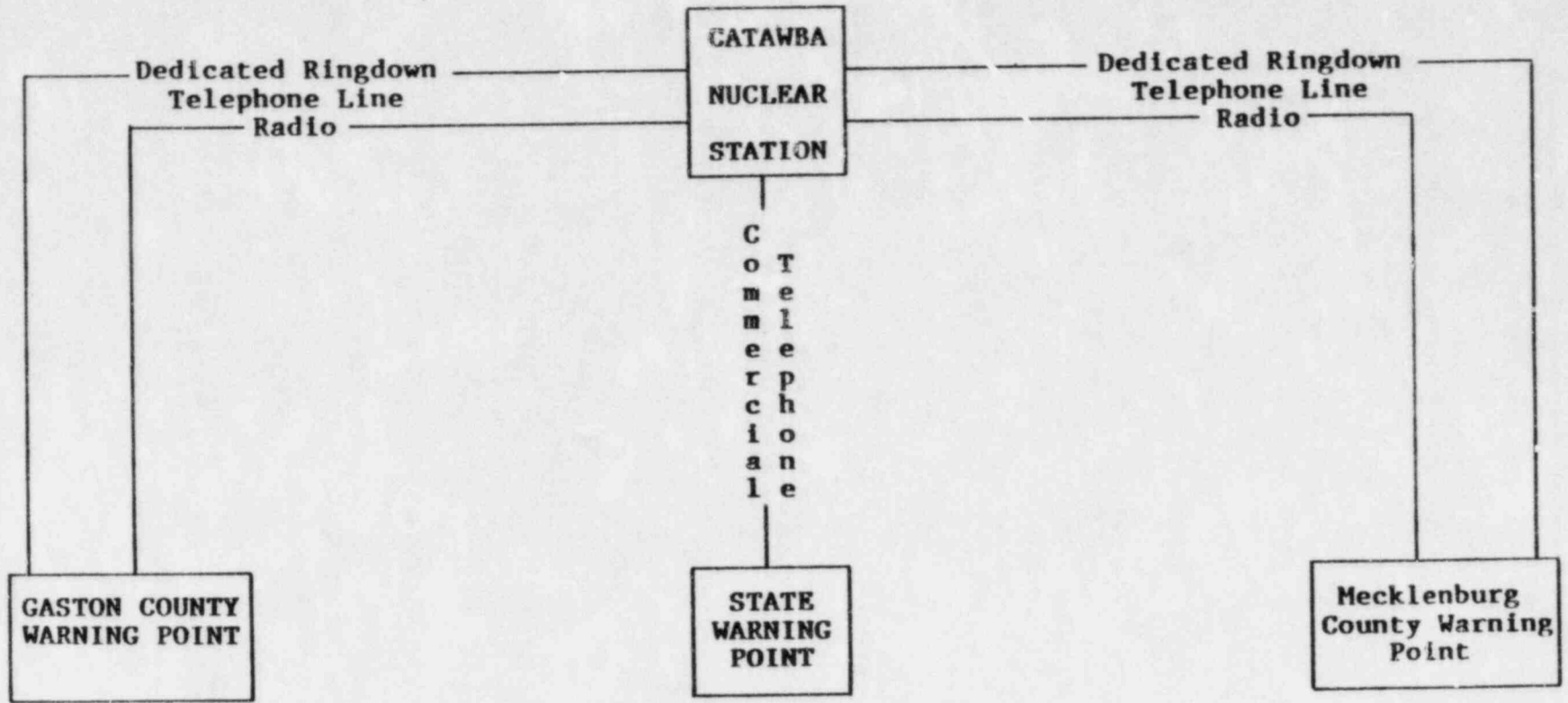


Figure 21

2. Tests for DEM Emergency Radio Networks.

- a. FM Voice Network: Operated daily during business hours by DEM Area Coordinators to contact the county coordinators in their jurisdictions. Occasionally used by the State office to contact mobile units in and around Raleigh.
 - b. SSB Voice Network: Operated daily by all members of the Division staff for high precedence administrative communications or emergency communications as required between State EOC and DEM Area Offices. It is staffed in a stand-by mode Monday through Friday during business hours. A formal test is conducted from the State EOC once each week.
 - c. Police Information Network (PIN): The PIN terminal, located in the State EOC, is activated once a month for test purposes and is put on line when EOC is activated for emergencies.
- L. The following individuals are responsible for preparing and implementing communications plans in support of emergencies in the Catawba Station Nuclear EPZ:

ORGANIZATIONCOMMUNICATIONS REPRESENTATIVE

Duke Power Company
 DEM
 SERT
 Gaston County
 Mecklenburg County

Emergency Coordinator
 Communications Officer
 Team Communication Officer
 County Communication Officer
 County Communication Supervisor

M. Communication to the Public.

1. The primary means of communication to the public are broadcast radio and television. There are 24 radio stations and five television stations serving the Catawba Area EBS. (See Annex E.)
2. The NOAA weather radio station operated by the National Weather Service Office in Charlotte serves the area included in a 10-mile radius of the Catawba Station.
3. The resources shown above are more than adequate to provide communication to 100 percent of the public within a 10-mile radius of the Catawba Station.

4. The type of information broadcast by radio and television stations and the method of transmission are dictated by the specific condition existing at the Catawba Station.
 - a. When a normal or "non-emergency" condition exists, informational and educational items are broadcast to the public by radio and television stations (and National Weather Service Radio) as scheduled by each broadcaster.
 - b. EBS will be activated when an emergency condition develops to the extent that the public should be "warned" and informed either to be prepared or to take some type of protective action.
5. Radio station WEZC in Charlotte will activate EBS and transmit the alert tone information and instructions to all radio and television stations serving the area within a 10-mile radius of the Catawba Station. When the transmission is received, these stations will immediately retransmit it to the public as often as necessary. As the emergency condition changes, revised information and instructions will be transmitted to keep the public aware of the circumstances.
6. The National Weather Service follows essentially the same procedures as the broadcast radio and television stations, except for EBS activation procedures. NOAA weather radio stations interrupt current programming to transmit information related to an emergency condition at Catawba.
7. Within limits of time, the newspapers serving the area will publish special editions containing information and instructions to the public.
8. Coordinating Instructions.
 - a. During normal non-emergency periods, radio and television spots, special programs, special announcements by National Weather Service radio, and newspaper articles concerning nuclear plants will be linked with and related to information shown in static displays and distributed by direct mail, in telephone directories and by other sources used in the EPZ.
 - b. Announcements and advisories transmitted to the public during periods when an emergency

condition exists may (and probably will) refer to information published and distributed during non-emergency periods, such as:

- (1) Geographical areas or political subdivisions within a 10-mile radius of the Catawba Station.
 - (2) Travel routes and shelter facilities should evacuation be required.
 - (3) The effects of radioactivity on people.
 - (4) Instructions concerning the use of drugs or medicines to offset the effects of radiation.
 - (5) Instructions on how the public will be alerted and informed of an emergency condition, or a potential threat, particularly between the hours of midnight and 6 a.m.
- c. Emergency information and instructions transmitted to the public will be prepared jointly by Duke Power Company and local and State government public information staffs.
- d. Planning for use of EBS is the responsibility of the Communications Branch of DEM.

VII. PLANS, EXERCISES, DRILLS, AND TRAINING.

- A. Periodic exercises and drills will be conducted in order to evaluate the emergency response plans and to develop and maintain key skills. Deficiencies identified as a result of exercises and drills will be corrected.
- B. Exercises.
1. DCCPS is responsible for the development of all fixed nuclear facility exercises conducted by the State.
 2. An annual exercise will be conducted involving one of the fixed nuclear facilities in North Carolina to test the plan for that facility and the integrated response capability of participating organizations. The scenario will differ from year to year to insure that all major elements of the plan will be tested within a five-year period.

3. Within each six-year period, at least one annual exercise will begin between 6 p.m. and midnight and one between midnight and 6 a.m.
4. Principal Exercise Participants.
 - a. The Office of the Governor.
 - b. North Carolina State Government departments of:
 - Administration
 - Agriculture
 - Correction
 - Crime Control and Public Safety
 - Human Resources
 - Justice (PIN)
 - Natural Resources and Community Development
 - Transportation
 - c. Wildlife Resources Commission.
 - d. Local governments: Elected officials, appointed officials, chiefs and operating units of emergency services in Gaston and Mecklenburg Counties.
 - e. Duke Power Company.
 - f. The American Red Cross.
 - g. Federal agencies with emergency response obligations.
 - h. Southern Bell telephone company.
 - i. Radio and television stations serving the EPZ.
 - j. Volunteer emergency service organizations.
5. DCCPS is responsible for establishment of a control group for each exercise. Composed of representatives of the organizations shown in Paragraph 4 above, the control group is responsible, under the direction of DCCPS, for the plan and conduct of the exercise.
6. Exercise plans will be developed under the direction of DCCPS in coordination with local governments and Duke Power Company. These plans will include but not be limited to the following:
 - a. Basic objective(s) of the exercise.
 - b. Date(s), time period, place(s), and partici-

- pating organizations.
- c. Simulated events (scenario).
 - d. A time schedule of real and simulated initiating events.
 - e. A narrative summary describing the conduct of the exercise.
 - f. A description of the arrangements and advance materials to be provided to controllers, evaluators, and official observers.

C. Drills.

1. Elements of emergency response organizations will conduct specialized drills according to the following schedule:

<u>ORGANIZATION</u>	<u>ELEMENT</u>	<u>TYPE OF DRILL</u>	<u>SCHEDULE</u>
DCCPS	DEM	Communications	Monthly
County	Emerg. Mgmt. Ag.	Communications	Monthly
Duke Power Co.	McGuire Plant	Communications	Annually
DHR	RPS	Communications	Annually
County & City	Fire Depts.	Fire	*
County	EMS	Emerg. Medical	Annually
Hospitals**	Emergency Depts.	Emerg. Medical	Annually
Duke Power Co.	McGuire Plant	Rad. Monitoring	Annually
DHR	RPS	Rad. Monitoring	Annually
DCCPS	DEM	Rad. Monitoring	Annually
DHR	RPS	Health Physics	Semi-annually

* In accordance with Catawba Nuclear Station requirements.

** Hospitals that serve the EPZ.

2. Each element of an emergency response organization that conducts periodic drills is responsible for preparing and conducting the drills within the required time frame.
3. Elements of emergency response organizations may wish to conduct drills jointly. For example, radiological monitoring drills may be conducted jointly with communications drills.
4. Emergency medical drills may be included as a part of an annual nuclear plant exercise.
5. The drill plans will include but not be limited to the items described in paragraph B.6 above.

D. Evaluation and Critique.

1. DCCPS is responsible for conducting the evaluation and critique of exercises and drills. The critique will be conducted as soon as possible after each exercise or drill, with all key players, controllers, and evaluators in attendance.
2. DCCPS will establish an evaluation group composed of representatives from the Duke Power Company, Federal, State, and local governments.
3. DCCPS will be responsible for recording information obtained in the critique, evaluating it, and implementing needed improvements in this plan and State government emergency response procedures.

E. Radiological Emergency Response Training.

1. Radiological emergency response training at Federal, State and local levels will be provided to those individuals who may be called upon to assist in an emergency, including participants under mutual aid agreements.
2. Training at all levels will emphasize practical application and experience. In-place exercises, drills, sub-systems exercises, table top exercises, emergency operations simulations, and field exercises will be stressed.
3. Shown below are the types of training available and the State department or agency responsible for arranging or conducting the training.
 - a. Team Leadership and Coordination. DCCPS, in coordination with DOT, will actively pursue quotas for the NRC Radiological Emergency Operations Course at Las Vegas, Nevada. Nominees to fill the quotas will be limited to such State and local personnel as team leaders, coordinators and key personnel of response organizations who are expected to participate in emergency operations at or near the Catawba Station. Other Federal level training such as meetings, seminars, and workshops will be attended by appropriate representatives of State and local government.
 - b. Accident Assessment. DHR is responsible for training personnel in accident assessment. From a professional and technical point of view, they are already trained by virtue of

their positions, (e.g., radiation safety officers for major hospitals, health physicists, or professors of nuclear engineering). Training will consist primarily of accident assessment organization, procedures, and reports and will be conducted in conjunction with exercises to test this plan.

- c. Radiological Monitoring. DEM is responsible for training instructors who will conduct the Basic Radiation Emergency Preparedness Course at State and local levels. The Division is also responsible for arranging radiological training in those counties in the vicinity of the Catawba Station and will, if necessary, conduct the training.
- d. Law Enforcement and Firefighting. The State Highway Patrol, Alcohol Law Enforcement Division, Motor Vehicles License and Theft Section, Wildlife Resources Commission, and Forest Services have instructors and are responsible for training their personnel.
- e. Emergency Medical Service and Rescue. The Emergency Medical Service (EMS) Section of DHR is responsible for the Emergency Medical Training (EMT) for State level EMS and rescue personnel.
- f. Local Emergency Service. Training of local emergency management and service personnel is the responsibility of the local Emergency Management Coordinator. This responsibility is met through the Basic Radiation Emergency Preparedness Course, State-sponsored EMT, Federally-sponsored emergency response operation training, and participation in various training exercises and drills.
- g. Medical Support. Training for medical support personnel is the responsibility of the local Emergency Management Coordinator in conjunction with hospital and ambulance providers concerned. This responsibility is met through the use of State-sponsored EMT and special training provided by hospitals.
- h. Communications. Training for communications personnel is the responsibility of the department or agency to which they are assigned. Training at the integrated response level necessary to implement this plan will be

accomplished during drills and annual exercises.

4. State and local governments will conduct radiation emergency response training for personnel scheduled to operate within the plume and ingestion exposure pathway EPZs. Refresher training will be conducted on an annual basis commencing with individual training and culminating with a field exercise.
- F. Responsibility for Plan Development, Periodic Review, and Distribution.
1. The Director, DEM, as the designated Emergency Planning Coordinator is responsible for the development, updating, and distribution of emergency plans and for the coordination of these plans with other response agencies at Federal, State, and local levels.
 2. The Emergency Planning Coordinator will:
 - a. Provide training for individuals responsible for the planning effort.
 - b. Have overall authority and responsibility for radiological emergency response planning.
 - c. Ensure that this plan and supporting plans are reviewed, updated, and certified current on an annual basis. Any update will take into account the need for changes identified by drills and exercises. Revised pages will be dated and marked to show where changes have been made.
 3. Each organization will update the telephone numbers in this plan and in supporting internal procedures at least quarterly.

This Attachment stipulates the authorities and references upon which PART 1 is based. It also contains copies of agreements with other governmental jurisdictions and organizations that support the plan.

**ATTACHMENT 1
AUTHORITIES, REFERENCES AND AGREEMENTS**

A. North Carolina Emergency Management Act of 1977 (G.S. 166A-1 et seq.).

1. Definitions.

a. Emergency Management.

- (1) That state of readiness to minimize the adverse effect of any type of disaster which includes the never-ending preparedness cycle of prevention, mitigation, warning, movement, shelter, emergency assistance, and recovery.
- (2) That Division of the Department of Crime Control and Public Safety whose mission is to organize, plan, train, and coordinate operations of State and local government personnel, quasi-governmental entities, and volunteer organizations in preparation and response to emergencies or disasters.

- b. Disaster. An occurrence of, or an imminent threat of, widespread or severe damage, injury, or loss of life or property resulting from a natural or man-made cause.

2. Functions of State Emergency Management.

- a. Coordination of the activities of all agencies for emergency management within the State, including planning, organizing, staffing, equipping, training, testing, and activation of emergency management programs.
- b. Preparation and maintenance of State plans for man-made or natural disasters.
- c. Coordination of the use of existing means of communications and supplementary communications resources and integrating them into a comprehensive State or State-Federal telecommunications or other communications system or network.

3. Authority of the Governor for Emergency Management. The Governor shall have general direction and control of the State Emergency Management Program and shall be responsible for carrying out the provisions of the North Carolina Emergency Management Act. The Governor is authorized and empowered:

- a. To utilize the services, equipment, supplies, and facilities of existing departments, offices, and

agencies of the State and of the political subdivisions thereof. The officers and personnel of these departments, offices, and agencies are required to cooperate with and extend such services and facilities to the Governor upon request. Such authority shall exist for a disaster, or emergency management planning and training purposes.

- b. To delegate any authority vested in him by this law and to provide for the subdelegation of any such authority.
 - c. To make, amend, or rescind mutual aid agreements.
 - d. To assume operational control over all or part of the emergency management functions within this State in the event of a disaster or threat of disaster, or when requested by the governing body of any political subdivision in the State.
4. Authority of the Secretary of Crime Control and Public Safety. The Secretary of Crime Control and Public Safety shall be responsible to the Governor for State Emergency Management activities and shall have:
- a. The power as delegated by the Governor to activate the State and local plans applicable to areas in question and shall be empowered to authorize and direct employment and use of any personnel and forces to which the plan or plans apply and the use and distribution of any supplies, equipment, materials, and facilities available pursuant to this statute or any other provisions of law.
 - b. Additional authority, duties, and responsibilities that may be prescribed by the Governor and which may be subdelegated to the appropriate member of his Department.
5. State of Disaster. The existence of a state of disaster may be proclaimed by the Governor, or by resolution of the General Assembly if either of these finds that a disaster threatens or exists. Any state of disaster shall be terminated by a proclamation of the Governor or resolution of the General Assembly.
- a. Powers of the Governor during a state of disaster:
 - (1) To utilize all available State resources as reasonably necessary to cope with emergencies, including the transfer and direction of personnel or functions of State agencies or units thereof for the purpose of performing or facilitating emergency services.

- (2) To take such action and give such directions to State and local law enforcement officers and agencies that may be reasonably necessary for the purpose of securing compliance with the provisions of this law and with the orders, rules, and regulations made pursuant thereto.
- b. Powers of the Governor, with the concurrence of the Council of State:
- (1) To direct and compel the evacuation of all or part of the population from any stricken or threatened area within the State; to prescribe routes, modes of transportation, and destinations in connection with the evacuation; and to control ingress and egress of a disaster area, the movement of people within the area, and the occupancy of premises therein.
 - (2) To establish a system of economic control over all resources, materials, and services.
 - (3) To regulate and control the flow of vehicular and pedestrian traffic, the congregation of persons in public places or buildings, lights and noises of all kinds, and the maintenance and extension and operation of public utility and transportation services and facilities; to waive a provision of any regulation or ordinance of a State agency or local government unit which restricts the immediate relief of human suffering.
 - (4) To perform and exercise such other functions and powers and duties as are necessary to promote and secure the safety and protection of the civilian population.
 - (5) To procure (by purchase, condemnation, seizure, or by other means), to construct, lease, transport, store, or maintain, renovate, or distribute materials and facilities for emergency management without regard to limitation of any existing law.
- B. North Carolina Radiation Protection Act (G.S. 104E-1 et seq.).
1. Authority of Radiation Protection Commission. The Radiation Protection Commission is authorized:
 - a. To advise the Department of Human Resources in the development of comprehensive policies and programs for evaluation, determination, and reduction of hazards associated with the use of radiation.

- b. To adopt, promulgate, amend, and repeal such rules and regulations and standards relating to the manufacture, production, transportation, use, handling, servicing, installation, storage, sale, lease, or other disposition of radioactive material and radiation machines as may be necessary to carry out the policies, purposes, and provisions of the North Carolina Radiation Protection Act.
2. Authority of the Department of Human Resources. The Department of Human Resources is the designated State agency to administer a statewide radiation protection program consistent with the provisions of the North Carolina Radiation Protection Act. The Department of Human Resources is authorized:
 - a. To advise, consult, and cooperate with other public agencies and with affected groups and industries concerning radiation and its hazards.
 - b. To respond to any emergency which involves possible or actual release of radioactive material, and to perform or supervise decontamination or otherwise protect the public health and safety in any manner deemed necessary. This section does not in any way alter or change the provisions of Chapter 166A of the North Carolina General Statutes concerning response during an emergency by the Department of Crime Control and Public Safety.
 - c. To develop and maintain a Statewide environmental radiation protection program for monitoring the radioactivity levels in air, water, soil, vegetation, animal life, milk, and food as necessary to insure protection of the public and the environment from radiation hazards.
 - d. To enter upon any public or private property, other than a private dwelling, at all reasonable times for the purpose of determining compliance with the provisions of the North Carolina Radiation Protection Act and rules, regulations, and standards adopted pursuant thereto.
 - e. In the event of emergency, to impound or order the impounding of sources of radiation in the possession of any person who is not equipped to observe or fails to observe the provisions of this law or any rules or regulations promulgated by the Commission.
3. Authority of the Governor. After approval by the Radiation Protection Commission, the governor is authorized to enter into agreements with the Federal government, other states, or interstate agencies, whereby this State will perform on a cooperative basis with the Federal government, other states, or interstate agencies,

inspections, emergency response to radiation accidents, and other functions related to the control of radiation.

G. Department of Crime Control and Public Safety (G.S. 143B-473 et seq.).

1. The Department of Crime Control and Public Safety includes, among others:
 - a. State Highway Patrol Division.
 - b. National Guard Division.
 - c. Civil Air Patrol.
 - d. Alcohol Law Enforcement Division.
 - e. Emergency Management Division.
2. The head of the Department of Crime Control and Public Safety is the Secretary who has authority in the following areas, among other things:
 - a. To insure the preparation, coordination, and currency of military and emergency management plans and the effective conduct of emergency operations by all participating agencies to sustain life, and prevent, minimize, or remedy injury to persons and damage to property resulting from disasters caused by enemy attack or other hostile actions or from disasters due to natural or man-made causes. (G.S. 143B-473 et seq.)
 - b. In the event that the Governor, in the exercise of his constitutional and statutory responsibilities, shall deem it necessary to utilize the services of more than one subunit of State government to provide protection to the people from natural or man-made disasters or emergencies, including but not limited to wars, insurrections, riots, civil disturbances, or accidents, the Secretary, under the direction of the Governor, shall serve as the chief coordinating officer for the State between the respective subunits so utilized. (G.S. 143B-476)
 - c. Whenever the Secretary exercises the authority provided in sub-section (b) of this section, he shall be authorized to utilize and allocate all available State resources as are reasonably necessary to cope with the emergency or disaster, including directing of personnel and functions of State agencies or units thereof for the purpose of performing or facilitating the initial response to the disaster or emergency. Following the initial response, the Secretary, in consultation with the heads of the State agencies which have or appear to have the responsibility for

dealing with the emergency or disaster, shall designate one or more lead agencies to be responsible for subsequent phases of the response to the emergency or disaster. Pending an opportunity to consult with the heads of such agencies, the Secretary may make interim lead agencies designations. (G.S. 143B-476(d))

- d. Every department of State government is required to report to the Secretary, by the fastest means practical, all natural or man-made disasters or emergencies, including but not limited to wars, insurrections, riots, civil disturbances, or accidents which appear likely to require the utilization of the services of more than one subunit of State government. (G.S. 143B-476(e))
- e. Nothing contained in sections (b), (c), or (d) shall be construed to supersede or modify those powers granted to the Governor or the Council of State to declare and react to a state of disaster as provided in Chapter 166A of the General Statutes, the Constitution or elsewhere. (G.S. 143-476(g))
- f. State Highway Patrol: The State Highway Patrol shall have full power and authority to perform such duties as peace officers as may from time to time be directed by the Governor. Members of the State Highway Patrol, in addition to the duties, power, and authority granted elsewhere, shall have the authority throughout the State of North Carolina of any peace officer in respect to making arrests for any crimes committed in their presence and shall have authority to make arrests for any crimes committed on any highway. (G.S. 20-184 et seq.)
- g. North Carolina National Guard.
 - (1) The Governor shall be the Commander-in-Chief of the militia and shall have the power to call out the militia to execute the laws, secure the safety of persons and property, suppress riots or insurrections, repel invasions and provide disaster relief. (G.S. 127-1 et seq.)
 - (2) The military head of the militia shall be the Adjutant General, who shall hold the rank of Major General. The Adjutant General shall be appointed by the Governor, in his capacity as Commander-in-Chief of the militia, in consultation with the Secretary of Crime Control and Public Safety, and shall serve at the pleasure of the Governor. (G.S.127A-19)

- (3) In all administrative and operational matters affecting the militia while under State control, the Adjutant General shall be responsible to and subject to the direction and supervision of the Secretary of Crime Control and Public Safety. (G.S. 127A-20)
- (4) In the event members of the North Carolina National Guard or State Defense Militia are called out by the Governor pursuant to the authority vested in him by the Constitution, they shall have such power of arrest as may be reasonably necessary to accomplish the purpose for which they have been called out. (G.S. 127A-149)

h. Civil Air Patrol.

- (1) The Civil Air Patrol Division is authorized to receive, from State and local governments, their agencies, and private citizens, requests for assistance by the North Carolina Wing, Civil Air Patrol in natural or man-made disasters or other emergency situations. (G.S. 143B-490 et seq.)
- (2) The Secretary or his designee, under such rules, terms, and conditions as are adopted by the Department, shall approve or disapprove missions by the North Carolina Wing, Civil Air Patrol. (G.S. 143-490)
- (3) Wing Commander. The Wing Commander of the North Carolina Wing, Civil Air Patrol shall certify to the Secretary of Crime Control and Public Safety those senior members, 18 years of age or older, who are in good standing. Those certified members shall be deemed and considered employees of the Department of Crime Control and Public Safety for Workmen's Compensation purposes, and for no other purposes, while performing duties incident to a State requested and approved mission.

- i. Alcohol Law Enforcement Division. Enforce the liquor and drug laws; perform such other duties as may be assigned by the Secretary for the Governor. Alcohol Law Enforcement agents have statewide jurisdiction and the same powers and authorities as law enforcement officers generally. (G.S. 18A-19)
- j. Emergency Management Division. See North Carolina Emergency Management Act of 1977. (G.S. 166A-1 et seq.)

D. Department of Human Resources.

1. This department includes, among others:
 - a. Division of Facility Services.
 - (1) Health Planning Section.
 - (2) Emergency Medical Services Section.
 - (3) Radiation Protection Section.
 - b. Division of Health Services.
 - (1) Laboratory Section, Environmental Science Branch.
 - (2) Sanitary Engineering Section.
 - (a) Sanitation Branch.
 - (b) Solid Waste Branch.
 - (c) Water Supply Branch.
 - c. Division of Social Services.
2. The head of the Department of Human Resources is the Secretary. The Secretary has the authority to, among other things:
 - a. Emergency Medical Services (G.S. 143-407 et seq. and G.S. 130-230 et seq.).
 - (1) After consulting with the Emergency Medical Services Advisory Council and with such local governments as may be involved, seek the establishment of statewide, regional, and local emergency medical services operations.
 - (2) Develop a system for classifying and categorizing hospitals as to kinds and levels of emergency treatment they normally and regularly provide and make this information available and known to ambulance service providers, health care facilities, and to the general public.
 - (3) Encourage and assist in the development of appropriately located comprehensive emergency treatment centers.
 - (4) Encourage and assist in the development of a statewide emergency medical services communication system which would enable transport vehicles to communicate with treatment facilities.

- (5) Establish a State emergency medical services record system.
- (6) Promote the development of an air ambulance support system to supplement ground vehicle operations.

b. Health Services.

- (1) Sanitation. Enforce regulations of the Commission for Health Services concerning the sanitary aspects of harvesting, processing, and handling shellfish and crustacea. Permits may be issued and revoked and the Department may regulate, prohibit, or restrict such activities relating to the sanitation of shellfish and crustacea as may be necessary. The Department and the Department of Natural Resources and Community development are authorized to enter into an agreement respecting the duties and responsibilities of each agency as to harvesting, processing, and handling of shellfish and crustacea. (G.S. 130-169.01 et seq.)
- (2) Sanitation. Enforce regulations, adopted by the Commission for Health Services, concerning the sanitary aspects of harvesting, processing, and handling of scallops. The Department may issue and revoke permits, regulate, prohibit, or restrict such activities relating to the sanitation of scallops as may be necessary. The Department may enter into an agreement with the Department of Natural Resources and Community Development respecting the duties and responsibilities of each agency as to the harvesting, processing, and handling of scallops. (G.S. 130-169.04 et seq.)
- (3) Water Supply. The Department shall cause to be made examination of all waters and their sources and their surroundings which are used, or proposed to be used, as sources of public water supply, and the Department shall ascertain whether the same are suitable for use as public water supply sources. (G.S. 130-166.44)
- (4) Solid Waste. Develop a comprehensive program for implementation of safe and sanitary practices for management of solid waste (solid waste does not include oils and other liquid hydrocarbon or radioactive materials); develop and enforce a permit system governing the facilities; and make investigation, surveys, and inspections concerning solid waste management. (G.S. 130-166.16 et seq.)

- c. Social Services. Enforce the rules and regulations of the Social Services Commission and supervise the county departments of Social Services. The county departments of Social Services shall administer the programs of public assistance established by the General Assembly. (G.S. 108-7 et seq.)
- d. Health Planning Section. Conduct statewide inventories of health care facilities. (G.S. 131A-1 et seq.)
- e. Radiation Protection Section. See North Carolina Radiation Protection Act. (G.S. 104E-1 et seq.)

E. North Carolina Department of Agriculture.

1. This department includes, but is not limited to the Food and Drug Protection Division.
2. The head of the Department of Agriculture is the Commissioner of Agriculture who is authorized to, among other things:
 - a. Detail or embargo any food, drug, device, cosmetic, or consumer commodity that is adulterated. Food shall be deemed adulterated if it contains any poisonous or deliterious substance which may render it injurious to health or it has been intentionally subjected to radiation, unless the use of radiation was in conformity with the regulations or otherwise authorized. (G.S. 106-120 et seq.)
 - b. Enter at reasonable times any factory, warehouse, or establishment in which food, drugs, devices, or cosmetics are manufactured, processed, or packed or held for introduction to commerce or after such introduction or to enter any vehicle being used to transport or hold such food, drugs, devices, or cosmetics in commerce. (G.S. 106-140)
 - c. Inspect any livestock, poultry, grain, or feed to determine if it is adulterated and to prohibit the use of such adulterated products. (G.S. 106-549.17; 106-549.53; 106-621 et seq.; 106-284.30 et seq.)

F. North Carolina Department of Justice.

1. The North Carolina Department of Justice includes, among others:
 - a. State Bureau of Investigation.
 - b. Division of Criminal Statistics, Police Information Network.

2. The head of the Department of Justice is the Attorney General who has the authority to, among other things:
 - a. Investigate at the request of the Governor when called upon by law enforcement officers of the State any crime committed anywhere in the State. SBI agents have the same power of arrest as is now vested in the sheriffs of the several counties and their jurisdiction is statewide. (G.S. 114-12 et seq.)
 - b. To establish, devise, maintain, and operate a system for receiving and disseminating, to participating agencies, information collected, maintained, and correlated concerning criminal and law administration.
- G. North Carolina Department of Natural Resources and Community Development.
1. The Department of Natural Resources and Community Development includes, but is not limited to:
 - a. Division of Marine Fisheries.
 - b. Division of Forestry Resources.
 - c. Division of Parks and Recreation.
 - d. Division of Environmental Management.
 2. The head of the Department is the Secretary who is authorized to, among other things:
 - a. Administer and enforce the provisions of the law pertaining to the conservation of marine and estuarine resources.
 - b. Enforce the regulations of the Marine Fisheries Commission which is empowered to authorize, license, regulate, prohibit, prescribe, or restrict all forms of marine estuarine resources in coastal fishing waters with respect to time, place, character, or dimensions of any method or equipment that may be employed in taking fish, seasons for taking fish, and size limits on maximum quantities of fish that may be taken, possessed, bailed to another, transported, bought, sold, or given away. The Commission can regulate and prohibit, and the Department is authorized to license, the opening and closing of coastal fishing waters, except as to inland game fish, whether entirely or only as to the taking of particular classes of fish, use of particular equipment or as to other activities within the jurisdiction of the Department; and the possession, cultivation, transportation, importation, exportation, sale, purchase, acquisition, and

disposition of all marine and estuarine resources and all related equipment, implements, vessels, and conveyances. (G.S. 113-181 et seq.)

- c. Appoint inspectors and protectors of the Marine Fisheries Commission who are granted the powers of peace officers anywhere in the State in enforcing all matters within the jurisdiction of the department. Inspectors and protectors are additionally authorized to arrest without warrant under the terms of G.S. 15A-401(b) for felonies, for breaches of the peace, for assault on them or in their presence, and for other offenses evincing a flouting of their authority as enforcement officers or constituting a threat to the public peace and order which would tend to subvert the authority of this State if ignored. Peace officers may also arrest violators who commit an assault upon a law enforcement officer, give a false report to a police radio, unlawfully carry a concealed weapon, or impersonate an officer. (G.S. 113-136)
- d. Appoint as many forest law enforcement officers as the Secretary deems necessary to carry out the forest law enforcement responsibility of the department. In addition to the powers of forest rangers to prevent and extinguish fires, these officers shall have all powers and duties to enforce all statutes of this State enacted for the protection of forests and woodlands from fires, insects, or disease, and for preventing the obstruction of streams and drainage ditches in forests and woodlands. These officers may arrest, without warrant, any person or persons committing any crimes in their presence or whom the officer has probable cause to believe has committed a crime in his presence. (G.S. 113-55.1)
- e. Make reasonable rules for the regulation of the use by the public of all State forests, State parks, and State lakes under its charge, which regulations after having been posted in conspicuous places on or adjacent to such properties of the State and at the courthouse of the county or counties in which properties are situated, shall have the force and effect of law and any violation of such regulation shall constitute a misdemeanor and shall be punishable by a fine of not more than \$50 or by imprisonment not exceeding 30 days. (G.S. 113-35)
- f. In conjunction with the Environmental Management Commission, conduct hearings for the classification of waters, assignment of classifications, air quality standards, air contaminate sources, classifications, emission control standards and to adopt rules and regulations concerning each. (G.S. 143-215.3(a))

g. If he finds an emission into the air or discharge into the water is causing imminent danger to the health or safety of the public may, with concurrence of the Governor, order persons responsible to immediately reduce or discontinue the discharge or emission. (G.S. 143.215.3(a)(12))

H. Wildlife Resources Commission. The Wildlife Resources Commission is authorized to, among other things:

1. Manage, restore, develop, cultivate, conserve, protect, and regulate wildlife resources of the State and to administer laws relating to game, game and freshwater fish, and other wildlife resources enacted by the General Assembly. (G.S. 143-237 et seq.)
2. Appoint wildlife protectors who are granted the authority of peace officers anywhere in the State in enforcing all matters within the jurisdiction of the Wildlife Resources Commission. Protectors are additionally authorized to arrest without warrant under the terms of G.S. 15A-401(b) for felonies, breaches of the peace, assaults on them or in their presence, and other offenses evincing a flouting of their authority as enforcement officers or constituting a threat to the public peace and order which would tend to subvert the authority of this State if ignored. They may also arrest violators who commit an assault upon a law enforcement officer, cause a false report to be broadcast on a police radio, unlawfully carry a concealed weapon, or impersonate an officer. (G.S. 143-246 and 113-136)

I. Environmental Management Commission.

1. The Environmental Management Commission of the Department of Natural Resources and Community development has promulgated rules and regulations to be followed in protection, preservation, and enhancement of the water and air resources of the State. (G.S. 143B-282)
2. It is unlawful to discharge any radiological, chemical or biological warfare agent or high level radioactive waste into the waters of the State. (G.S. 143-214.2(a)) The discharge of any waste to the subsurface or ground waters of the State by means of wells is prohibited. (G.S. 143-214.2(b)) A permit to discharge waste into the water must be obtained from the Commission.
3. Civil penalties and criminal penalties are provided for violation of the laws relating to air pollution. (G.S. 143-215.6)
4. The Commission can declare an emergency when it finds a generalized condition of water or air pollution which is causing imminent danger to the health or safety of the public. (G.S. 143-215.3(a)(12))

5. It is unlawful, except as provided by permit from the Commission, for any person to discharge or cause to be discharged, oil or other hazardous substances into or upon any waters, tidal flats, beaches, or lands within the State, or into any sewer, surface water drain or waters that drain into the waters of this State, regardless of fault of the person having control over the oil or other hazardous substances, or regardless of whether the discharge was the result of intentional or negligent conduct, accident, or other cause. (G.S. 143-215.83(a) and 143-215.91)
6. Hazardous substance means any substance, other than oil, when discharged in any quantity may present an imminent and substantial danger to the public health or welfare and is designated by the U.S. Environmental Protection Agency, unless the Commission objects. (G.S. 143-215.77(5a) and 143-215.77A)

J. North Carolina Department of Correction.

1. The North Carolina Department of Correction includes, among others:
 - a. Prisons Division.
 - b. Correctional Enterprises.
2. The head of the Department of Correction is the Secretary who is authorized to, among other things:
 - a. Provide necessary custody, supervision, and treatment to control and rehabilitate criminal offenders and juvenile delinquents and thereby reduce the rate and cost of crime and delinquency.
 - b. Adopt rules and regulations related to the conduct, supervision, rights, and privileges of persons in his custody or under his supervision. (G.S. 143B-260 et seq. and G.S. 148-2 et seq.)

K. North Carolina Department of Transportation.

1. The North Carolina Department of Transportation includes, among others, the Division of Highways.
2. The general purpose of the Department of Transportation is to provide for the necessary planning, construction, maintenance, and operation of an interconnected Statewide transportation system of economical and safe transportation of people and goods as provided by law. (G.S. 143-345 et seq.)

I. Department of Administration (G.S. 143-334 et seq. and 143B-366 et seq.).

1. The Department of Administration includes, among others, the Division of State General Services.
2. The head of the Department of Administration is the Secretary who is authorized to, among other things:
 - a. Establish a coordinated system for transmission of information by communication between various agencies and departments and institutions of the State, local, and Federal government. (G.S. 143-334 et seq.)
 - b. Appoint special police officers who shall have the same power of arrest and territorial jurisdiction as the police officers of the City of Raleigh. In addition, these special police shall have the authority of a deputy sheriff on property owned, leased, or maintained by the State and located in the County of Wake.
 - c. Establish and operate a central telephone system. (G.S. 143-334 et seq.)
 - d. Perform such additional duties as may be assigned by the Governor. (G.S. 143-334 et seq.)
 - e. Exercise all functions, powers, duties, and obligations concerning the Southern Interstate Nuclear Compact. (G.S. 143B-366 et seq.)

M. Southern Interstate Nuclear Compact (G.S. 104D-1 et seq.).
The Congress of the United States in P.L. 563 provided for the southern states to create an Interstate agency. The North Carolina General Assembly provided in G.S. 104D-1 for North Carolina's participation in the Southern Interstate Nuclear Compact and the Southern Interstate Nuclear Board. This Board has the power to ascertain and analyze on a continual basis the position of the South with respect to nuclear related industries; encourage the development and use of nuclear energy, facilities, installations, and products as part of the balance of economy; collect, correlate and disseminate information relating to civilian uses of nuclear energy, materials, and products; and conduct or cooperate in conducting programs of training for State and local personnel engaged in any aspect of nuclear industry, medicine, or education with the promotional regulation thereof; and training programs in the formulation of administration of measures designed to promote safety and all matters related to the development, use, or disposal of nuclear energy, materials, products, installation, or waste. North Carolina and the other southern states participated in the Southern Agreement for Mutual State Radiological Assistance and its resulting Southern Mutual Radiation Assistance Plan also as a result of the Southern Interstate Nuclear Compact.

N. Dumping of Toxic Substance.

1. Crime. It shall be unlawful to deposit, place, dump, discharge, spill, release, burn, incinerate, or otherwise dispose of any toxic substances as defined in G.S. 14-184.2 or radioactive material as defined in G.S. 104E-5 into the atmosphere, in the waters, or on land except where such disposal is conducted pursuant to Federal or State law, regulation, or permit. (G.S. 14-284.2)
2. Definition of Toxic Substances.
 - a. Heavy metals: mercury, plutonium, selenium, thallium, and uranium.
 - b. Halogenated hydrocarbons: polychlorinated biphenyls, kepone. (G.S. 14-284.2(b))
3. Punishment. Any person who willfully violates the provisions of G.S. 14-284.2 shall be guilty of a felony, punishable upon conviction by a fine of not more than one hundred thousand dollars (\$100,000) per day of violation or by imprisonment or by both at the discretion of the court. (G.S. 14-284.2(a))

O. Authority of Local Government (G.S. 14-288.1 et seq. and G.S. 166A-1 et seq.)

1. Power of Local Government to Enact Ordinances to Deal with States of Emergency. The governing body of any municipality or county may enact ordinances designed to permit the imposition of prohibitions and restrictions during a state of emergency. The ordinances authorized may prohibit and restrict:
 - a. Movement of people in public places.
 - b. Operation of offices, business establishments, and other places to or from which people may travel or at which they may congregate.
 - c. Other activities or conditions the control of which may be reasonably necessary to maintain order, protect lives, or protect property during the state of emergency.
2. The Authority of the Chairman of the Board of County Commissioners or Mayor of a Municipality. Ordinances passed by either the county or the municipality, respectively, may delegate the authority to determine and proclaim the existence of a state of emergency and to impose those authorized prohibitions and restrictions to the chairman of the board of county commissioners or the mayor of the municipality, respectively.

3. Extent of County Ordinances. No ordinance enacted by a county shall apply within the corporate limits of any municipality, or within any area of the county over which the municipality has jurisdiction to enact general police-power ordinances, unless the municipality by resolution consents to its application.
4. Violation of Ordinances. Any person who violates any provision of such ordinances is guilty of a misdemeanor and shall be fined not more than \$50 or imprisoned for not more than 30 days.
5. Emergency Management Responsibility. The governing body of each county is responsible for emergency management within the geographical limits of such county. All emergency management efforts within the county shall be coordinated by the county, including activities of the municipality within the county.
6. Emergency Management Agency. The governing body of each county is authorized to establish and maintain an emergency management agency. All incorporated municipalities are authorized to establish and maintain emergency management agencies subject to coordination by the county. Joint agencies composed of a county and one or more municipalities within its border may be formed. In the event any county fails to establish an emergency management agency, the Governor is empowered to establish an emergency management agency within the county.
7. Emergency Management Coordinator. When the governing body of each county establishes an emergency management agency, it shall appoint a coordinator who shall have direct responsibility for the organization, administration, and operation of the county program and will be subject to the direction and guidance of the governing body. The municipality or county may delegate powers in a local state of emergency to the emergency management coordinator.
8. Mutual Aid Agreements. The chief executive of each political subdivision, with the concurrence of the subdivision's governing body, may develop mutual aid agreements for reciprocal or emergency management aid and assistance. The chief executive officer of each political subdivision, with concurrence of the governing body and subject to approval of the Governor, may enter into mutual aid agreements with local chief executive officers and other states or reciprocal or emergency management aid and assistance.



Office of the Governor
Atlanta, Georgia 30334

George Busbee
GOVERNOR

February 5, 1980

The Honorable James B. Hunt
Governor of North Carolina
Office of the Governor
State Capitol
Raleigh, North Carolina 27611

Dear ~~Governor Hunt:~~

This responds to your letter to me dated December 14, 1979 concerning the radiological assistance supplemental agreement. I appreciate your interest in this area and your efforts at keeping me informed of the status of North Carolina's radiological planning activities.

I agree that we must work together in both radiological planning and during any actual response activity involving radioactive material. Please find attached the signed supplemental agreement concerning notification and exchange of information during radiological emergencies.

I look forward to continued cooperative efforts between the State of Georgia and State of North Carolina in this important area.

Sincerely,

George Busbee

GB:bcj
Enclosure

cc: Commissioner Joe Tanner-DNR
Major Gen. Bill Jones-DOD

AGREEMENT

THIS AGREEMENT is made by and between the GOVERNOR of the State of North Carolina and the GOVERNOR of the State of Georgia.

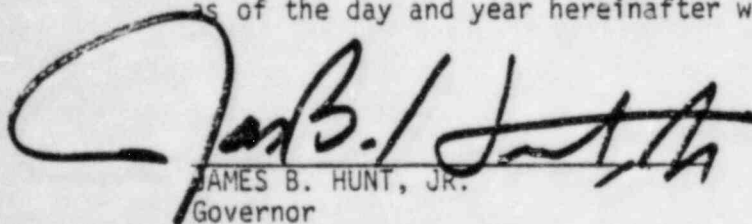
Section 1. Each Governor shall notify the Governor of the adjoining sister state, through the STATE EMERGENCY OPERATING CENTERS or other duly responsible state department, of any release of radioactive materials into the environment (air, ground, river, stream, etc.) that may affect the environment of the adjoining sister state.

Section 2. This NOTIFICATION is to take place immediately upon the identification of a release of radioactive materials that might constitute such a threat. Subsequent notices shall be given as necessary.

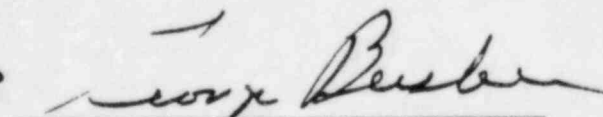
Section 3. MESSAGES will include, at the minimum, that information indicated in the attached standard message.

Section 4. THIS AGREEMENT is to become effective upon signing by both Governors. It shall be automatically renewed from year to year, subject to the right of either Governor to terminate THIS AGREEMENT at any time during the term by furnishing thirty (30) days prior written notice to the other Governor that termination is desired.

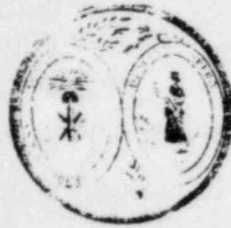
IN WITNESS WHEREOF the parties hereto have executed THIS AGREEMENT as of the day and year hereinafter written.



JAMES B. HUNT, JR.
Governor
State of North Carolina
Dated: December 14, 1979



GEORGE D. BUSBEE
Governor
State of Georgia
Dated:



State of South Carolina

Office of the Governor

RICHARD W. RILEY
GOVERNOR

POST OFFICE BOX 11450
COLUMBIA 29211

February 8, 1980

The Honorable James B. Hunt, Jr.
Office of the Governor
State of North Carolina
Raleigh, North Carolina 27611

Dear Governor Hunt:

I am pleased to enter into an agreement with the State of North Carolina which allows for mutual exchange of information in the event of a radiation emergency which may have potential ramifications for our states.

In South Carolina, the agency charged with response and assessment of nuclear incidents is the Bureau of Radiological Health, South Carolina Department of Health and Environmental Control. This bureau is best qualified to furnish your state the type of information required in our agreement. Please assign someone from your state to work with our Bureau of Radiological Health to develop procedures for carrying out provisions of the notification agreement.

Kindest regards,

Richard W. Riley

RWR/alb

cc: Dr. Robert S. Jackson, Commissioner, South Carolina Department of Health and Environmental Control

Brigadier General George R. Wise, Director, Emergency Preparedness Division

AGREEMENT

THIS AGREEMENT is made by and between the GOVERNOR of the State of North Carolina and the GOVERNOR of the State of South Carolina.

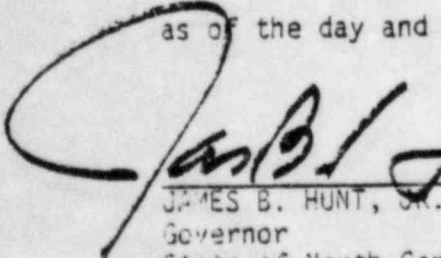
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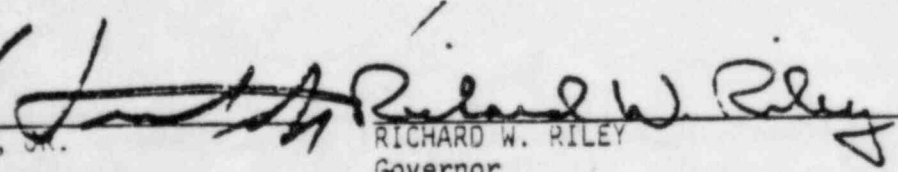
Section 2. This NOTIFICATION is to take place immediately upon the identification of a release of radioactive materials that might constitute such a threat. Subsequent notices shall be given as necessary.

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IN WITNESS WHEREOF the parties hereto have executed THIS AGREEMENT as of the day and year hereinafter written.


JAMES B. HUNT, JR.
Governor
State of North Carolina
Dated: December 14, 1979


RICHARD W. RILEY
Governor
State of South Carolina
Dated:

State of Tennessee

LAMAR ALEXANDER GOVERNOR

March 20, 1980

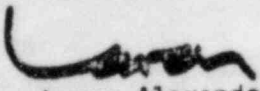
The Honorable James B. Hunt, Jr.
Governor of North Carolina
State Capitol
Raleigh, North Carolina 27611

Dear Jim,

We have reviewed the proposed supplemental agreement which you sent to me, and I am happy to add my signature to it. The document is enclosed.

I hope this is helpful to the U. S. Nuclear Regulatory Commission's approval of the North Carolina Radiation Emergency Response Contingency Plan. If I can be of any further assistance on this important matter, please let me know.

Sincerely,


Lamar Alexander

LA/khb

cc: Dr. Eugene Fowinkle
Major General Carl Wallace

RECEIVED
APR 2 1980
SECRETARY'S OFFICE
N. C. Dept. of Crime Control
Public Safety

AGREEMENT

THIS AGREEMENT is made by and between the GOVERNOR of the State of North Carolina and the GOVERNOR of the State of Tennessee.

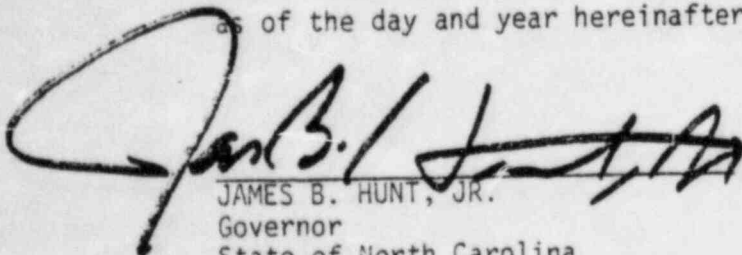
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Section 2. This NOTIFICATION is to take place immediately upon the identification of a release of radioactive materials that might constitute such a threat. Subsequent notices shall be given as necessary.

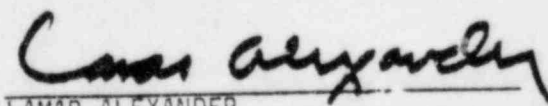
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IN WITNESS WHEREOF the parties hereto have executed THIS AGREEMENT as of the day and year hereinafter written.



JAMES B. HUNT, JR.
Governor
State of North Carolina
Dated: December 14, 1979



LAMAR ALEXANDER
Governor
State of Tennessee
Dated:



COMMONWEALTH of VIRGINIA

Office of the Governor

Richmond 23219

February 6, 1980

John N. Dalton
Governor

The Honorable James G. Hunt, Jr.
Governor, State of North Carolina
State Capitol
Raleigh, North Carolina 27611

Dear Jim:

Thank you for your letter regarding the establishment of a mutual notification agreement for handling radiological emergencies. Although Virginia is not presently a member of the Southern Mutual Radiological Assistance Pact, we believe that a mutual agreement regarding notification and exchange of information is desirable.

Therefore, on behalf of the Commonwealth of Virginia, I am pleased to sign the enclosed notification agreement. Notification of our State Emergency Operating Center can be made by calling (804) 272-1441. Alternatively, response from our Bureau of Radiological Health can be obtained during duty hours by calling 804/786-5932, or during off-duty hours at 804/786-2201.

It is my sincere hope and expectation that this notification system will never be needed due to a radiation accident. In the meantime, however, our citizens will enjoy an added measure of protection because of it.

With all good wishes, I am

Very truly yours,



JOHN N. DALTON

JND/ccs

cc: Secretary Jean L. Harris
Secretary George M. Walters
Dr. James B. Kenley
Mr. George Jones

GENERAL  ELECTRIC

CASTLE HAYNE ROAD • P. O. BOX 780 • WILMINGTON, N. C. 28401 • (919) 343-5000

NUCLEAR ENERGY
PRODUCTS DIVISIONWILMINGTON MANUFACTURING
DEPARTMENT

December 10, 1979

Mr. Dayne H. Brown, Chief
Radiation Protection Section
Division of Facilities Services
Department of Human Resources
State of North Carolina
P. O. Box 12200
Raleigh, N. C. 27605

Dear Mr. Brown:

Subject: State of North Carolina
Radiation Emergency Response Contingency Plan

In your letter of February 23, 1979, to A. L. Kaplan, you requested a commitment from General Electric Company to make available to your organization certain resources of the Wilmington Manufacturing Department located at the GE fuel fabrication plant in Wilmington, N. C., in the event of a radiation emergency.

We understand from your letter of November 21, 1979, that you are an authorized representative of the State of North Carolina, as referred to in GS #104E-22, with respect to requesting assistance in the event of an emergency requiring the kinds of radiological safety personnel, laboratories and equipment which we have at the GE fuel fabrication plant in Wilmington, N. C.

Also, GE's agreement to provide personnel and services or equipment, is effective only in the event of an "emergency" as presently defined in the State of North Carolina's Radiation Protection Act.

In the case of a radiation emergency, the radiation safety equipment tabulated in the attachment to this letter might be of use to you and will be available contingent upon its use in-house and upon the conditions previously stated, at the time of the emergency. To a reasonable extent, we also will be willing to provide personnel support to operate this equipment upon your request in the event of a radiation emergency.

This agreement for GE to provide available resources as you may request, in the event of an emergency, will terminate immediately if GS #104E-22 is amended in any fashion which will adversely

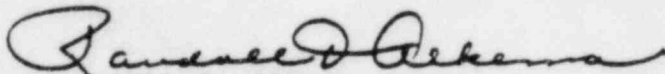
PART 1

Mr. Dayne H. Brown
December 10, 1979
Page 2

affect the protection presently provided to GE against the claims arising while GE personnel are rendering assistance during an emergency.

Very truly yours,

GENERAL ELECTRIC COMPANY



Randall J. Alkema
General Manager,
Wilmington Manufacturing Department

RJA/ALK:bmw

Attachment

cc: J. H. Bradberry
W. J. Hendry
A. L. Kaplan
E. A. Lees
J. A. Mohrbacher
R. L. Torres

DUKE POWER COMPANY

1-28

PART 1

POWER BUILDING
422 SOUTH CHURCH STREET, CHARLOTTE, N. C. 28242

WILLIAM O. PARKER, JR.
VICE PRESIDENT
PLANT PRODUCTION

March 6, 1979

TELEPHONE AREA 704
373-4083

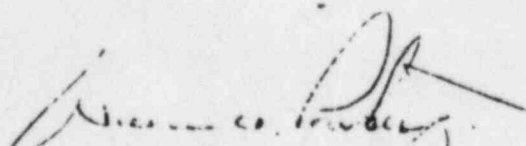


Mr. Dayne H. Brown, Chief
Radiation Protection Section
N. C. Department of Human Resources
Division of Facility Services
P. O. Box 12200
Raleigh, North Carolina 27605

Dear Mr. Brown:

This letter is to advise you that Duke Power Company will cooperate with your office in the event of any radiological emergency within the State of North Carolina, by making the body burden analyzer at the McGuire Nuclear Station and/or the Environmental Radiological Laboratory available, as a back-up to other similar resources that you may have, for whole body counting purposes.

Very truly yours,



William O. Parker, Jr.

LL/jpb



PART 1

CP&L
Carolina Power & Light Company
P. O. Box 1551 • Raleigh, N. C. 27602



J. A. JONES
Executive Vice President
Chief Operating Officer

March 23, 1979

Mr. Dayne H. Brown, Chief
Radiation Protection Section
Department of Human Resources
Post Office Box 12200
Raleigh, North Carolina 27605

Dear Mr. Brown:

Carolina Power & Light Company is pleased to assist the Radiation Protection Section in development of the North Carolina Radiation Emergency Response Contingency Plan. We will make available various Company health physics facilities and services located within the State of North Carolina to the Radiation Protection Section as backup to your own radiological laboratory equipment. We share your hope that you will never need to call upon these Carolina Power & Light Company resources in an emergency condition.

The following health physics facilities and services will be made available to you if the need should arise:

1. Whole body counting services (mobile facility normally located at the Harris Energy & Environmental Center except during refueling outages at the Robinson and Brunswick Nuclear Plants).
2. Radiological environmental monitoring laboratory facilities at the Harris Energy & Environmental Center.
3. Personnel dosimetry services located at the Harris Energy & Environmental Center.
4. Portable radiation monitoring equipment.
5. Health physics personnel.

PART 1

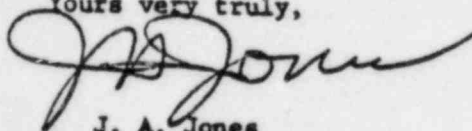
Mr. Dayne H. Brown

-2-

March 23, 1979

We acknowledge the high degree of cooperation which exists between your Section and Carolina Power & Light Company noting that some of the facilities and services mentioned above have already been made available to you on an informal basis. These Company resources will be made available to you consistent with our primary requirement to operate our nuclear plants in compliance with applicable regulations and licenses.

Yours very truly,



J. A. Jones

JAJ/svT1

PART 1



THE UNIVERSITY OF NORTH CAROLINA
AT
CHAPEL HILL

Office of the
Assistant Vice Chancellor for Business

The University of North Carolina at Chapel Hill
214 South Building 005 A
Chapel Hill, N.C. 27514

May 14, 1979



Mr. Dayne H. Brown, Chief
Radiation Protection Section
N.C. Dept. of Human Resources
Division of Facility Services
P. O. Box 12200
Raleigh, NC

Dear Mr. Brown:

The University of North Carolina at Chapel Hill will make its radiation safety facilities in The University Health and Safety Office available to your office in the event of a radiation emergency.

The University may have to seek reimbursement for costs incurred, especially if such assistance is provided to an organization other than another state agency.

The degree of cooperation and assistance between the University and the Radiation Protection Section has enhanced our own program and provided valuable resources upon which we can call.

Please contact Dr. Donald G. Willhoit, Director of the Health and Safety Office, to make the necessary arrangements.

Sincerely,

Charles C. Antle, Jr.
Charles C. Antle, Jr.

CCA/fm

cc: John Temple
Don Willhoit

NORTH CAROLINA STATE UNIVERSITY | AT RALEIGH

P. O. Box 5067, RALEIGH, N. C. 27607

OFFICE OF THE PROVOST AND VICE-CHANCELLOR



Mr. Dayne H. Brown, Chief
 Radiation Protection Section
 Division of Facility Services
 N. C. Department of Human Resources
 1330 St. Mary's Street
 Raleigh, North Carolina 27605

Dear Mr. Brown:

Your letter dated April 6, 1979, concerning the North Carolina State University Radiation Protection Office personnel and facilities being made available as a back-up support to your laboratories in an emergency has been referred to this office for reply.

We shall be pleased to make our personnel and facilities available in an emergency, subject only to the constraint that we would need to continue a basic level of surveillance of our own facilities during the emergency period.

As stated in your letter, we also wish to acknowledge the cooperation which exists between your facility and the University's Radiation Protection Office and desire to continue this very favorable atmosphere.

Other data associated with your request is compiled in Appendices A, B, and C, attached. We would expect to be totally reimbursed for any supplies which would be used; and in the event our equipment and/or radiation detection instruments were lost, damaged, or became highly contaminated, we would expect replacement or decontamination.

Three persons from the Radiation Protection Office staff could be in the field at any one time. Finally, we would expect to respond to the needs of the Radiation Emergency Team as in the past.

If we can furnish additional information, please do not hesitate to call on us.

Sincerely yours,

A handwritten signature in cursive script that reads "Nash N. Winstead".

Nash N. Winstead
 Provost and Vice Chancellor

NNW/gj

Attachment

cc: Chancellor Joab L. Thomas
 Mr. George Worsley, Vice Chancellor for Finance and Business
 Dr. Elizabeth C. Theil, Chairman, Radiation Protection Council
 Mr. L. T. Caruthers, Radiation Protection Officer

North Carolina State University at Raleigh is a constituent institution of The University of North Carolina System.

PART 1

MEMORANDUM OF UNDERSTANDING
BETWEEN THE STATE OF NORTH CAROLINA
AND DUKE POWER COMPANY

1. Purpose

This Memorandum of Understanding establishes an agreement between the State of North Carolina and Duke Power Company relative to planning and exercising for and responding to an incident at the McGuire or Catawba Nuclear Stations that might affect the health and safety and property of the citizens of North Carolina and/or give cause for public concern.

2. Authority

- a. North Carolina General Statutes 143B-476 et seq
- b. North Carolina General Statutes 166A-1 et seq

3. Background

Duke Power Company has two nuclear power plants operating or under construction that are required by the Nuclear Regulatory Commission to have detailed off-site contingency plans for response to events or emergencies which may affect the citizens of North Carolina. In the case of an incident the successful implementation of these plans will require a coordinated effort of local and state governments, and Duke Power Company. Under North Carolina General Statutes the responsibility for this planning and the authority to direct the State response lies with the Secretary of the Department of Crime Control and Public Safety.

4. Agreement

- a. It is understood that the State of North Carolina, with the assistance of Duke Power Company, will:

- Prepare and maintain both state and county contingency plans as required by the Nuclear Regulatory Commission and the Federal Emergency Management Agency;

- Periodically exercise these plans in accordance with federal requirements;

- Maintain a 24-hour alert, notification, and response capability; and

- Respond with all available and necessary Resources in case of an actual emergency at the plants.

b. It is also understood that Duke Power Company, with the assistance of the State, agrees to:

- Promptly advise the State and local governments of any incidences that might affect or cause concern to the citizens of North Carolina;

- Cooperate with the State in the development, exercising, and implementation of emergency plans to protect the health and safety of the public in the event of a nuclear accident.

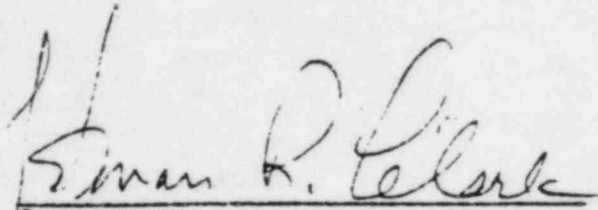
- Permit the State to periodically review environmental radioactive monitoring programs; and

- Make equipment and personnel available to assist the Radiation Protection Section of the Department of Human Resources in its radiation assessment and monitoring responsibilities.

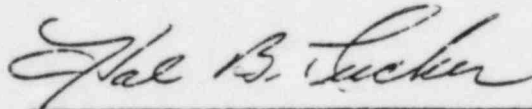
This agreement shall commence with the signing of this Memorandum of Understanding and shall continue until expressly revoked.

5/25/83

Date



Secretary
Dept. of Crime Control and
Public Safety



Utility Representative

Vice President, The Prod.

5/13/83

P. Other References.

1. Nuclear Regulatory Commission Regulation 0654 - Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants.
2. Ten Code of Federal Regulations, Part 20, Standards for Protection Against Radiation.
3. Ten Code of Federal Regulations, Part 50, Appendix E, Emergency Plans for Production and Utilization Facilities.
4. Rules and regulations of the North Carolina Radiation Protection Commission, 10 NCAC 3G.0400 et seq.
5. G.S. 166A-14, Immunity and Exemption.
6. G.S. 115-183(6) as amended, Participation by Local Boards of Education.
7. G.S. 104E-22, Tort Claims Against Persons Rendering Emergency Assistance.
8. The Southern Mutual Radiological Assistance Plan (on file in the Division of Emergency Management, Department of Crime Control and Public Safety).
9. Interagency Radiological Assistance Plan for Region IV (on file in the Division of Emergency Management, Department of Crime Control and Public Safety.)
10. Executive Order Number 14 (6 October 1977).
11. Public Law 87-563, Southern Interstate Nuclear Compact.
12. Public Law 93-288, Disaster Relief Act of 1974.
13. Public Law 91-606, Disaster Relief Act of 1970.

**ATTACHMENT 2
SUPPORTING PLANS AND THEIR SOURCES**

PLANS

North Carolina Disaster
Relief and Assistance
Plan

North Carolina Emergency
Management Administrative
Plan

Interagency Radiological
Assistance Plan

Southern Mutual Radiation
Assistance Plan

Duke Power Company
Crisis Management Plan
for Nuclear Stations

Catawba Nuclear Station
Emergency Plan

SOURCE

North Carolina Division of
Emergency Management, DCCPS

N.C. Division of
Emergency Management, DCCPS

U.S. Energy Research
and Development Agency

Southern Emergency
Response Council

Duke Power Company

Duke Power Company

STANDING OPERATING PROCEDURES

Emergency Operations Center
Standing Operating Procedures
(SOP) for Natural and Man-Made
Disasters

State Emergency Response
Team Standing Operating
Procedures

SOURCE

N.C. Division of
Emergency Management, DCCPS

N.C. Division of
Emergency Management, DCCPS

This attachment lists the radiological monitoring equipment available for use in an emergency.

**ATTACHMENT 3
INVENTORY OF EMERGENCY KITS AND
RADIOLOGICAL MONITORING EQUIPMENT**

- A. The two principal sources of radiological monitoring equipment and personnel provided by the State are:
1. The Radiological Branch of the Division of Emergency Management, DCCPS.
 2. The Radiation Protection Section, Division of Facility Services, DHR.
- B. Items of equipment listed below are maintained in a readiness condition in the Radiological Branch, DEM.
1. Protective Equipment: none
 2. Communications Equipment: 1-4 channel two-way radio
 3. An average of 100 radiological monitoring kits are maintained in inventory stock ready for use. Each kit contains the following items:
 - a. 1 - CDV-700 low range survey meter.
 - b. 1 - CDV-715 high range survey meter.
 - c. 2 - CDV-742 high range, 0-200R self-reading dosimeters.
 - d. 1 - CDV - 750 dosimeter charger.
 - e. 1 - set ear phones.
 - f. Batteries to operate equipment.
 - g. User manuals for each piece of equipment.

These kits can be augmented with 1 - CDV-138 low range, 0-200mR self-reading dosimeters.
 4. Emergency Supplies.
 - a. Pre-packaged supplies to support initial responders on SERT.
 - b. 4 cases of fresh batteries.
 - c. Assorted electronics equipment and necessary tools for field repair of instruments.
 - d. 300 - CDV-730, 0-20R self reading dosimeters.

e. 300 - CDV-138, 0-200mR self-reading dosimeters.

f. 25 - CDV-750 dosimeter chargers.

C. Equipment maintained by the Radiation Protection Section, Division of Facility Services.

<u>Manufacturer</u> <u>Model</u>	<u>Detection</u> <u>Capability</u>	<u>Number</u>
Emberline E-130G	Geiger Counter - Gamma to 1000mR/gr	2
" PAC-3G	Gas Proportional Counter - Alpha to 10^5 cpm	1
" PAC-4G	Gas Proportional Counter - Alpha and Beta probes to 5×10^5 cpm	3
" PAC-4G-3	Gas Proportional Counter-Alpha, Beta and Tritium	3
" PNR-4	Neutron Rem Counter - Neutrons to 5 rem/hr	1
" PRS-1 (Rascal)	Portable Ratemeter-Scaler	2
" E-520	Geiger Counter - Up to 200mR/hr Beta-Gamma - Up to 2000mR/hr Gamma	2
Victoreen 470A	"Panoramic" Survey Meter (Alpha, Beta, Gamma, and X-Ray)	6
Nuclear Chicago 2612	Hard Beta and Gamma, or Alpha and soft Beta to 20 mR/hr, depending on probe used	6
" 2650	Alpha, Beta, low-energy Gamma to 100 mR/hr	2
Victoreen 440	Alpha, Beta, Gamma, X-Ray to 300 mR/hr	2
Victoreen 471RF	Beta above 200 KeV, X-Ray and Gamma above 40 KeV; RF shielded version of the model 471 having on its lowest range a 1 mR/hr full scale sensitivity.	1

<u>Manufacturer Model</u>	<u>Detection Capability</u>	<u>Number</u>
Victoreen 490, Thyac II	Beta-Gamma GM probe	1
Victoreen 490, Thyac III	Alpha, Gamma, Alpha-Beta-Gamma, or Beta-Gamma depending on probe used	5
Victoreen 666	X-Ray and Gamma, 3 mR/hr to 3×10^4 R/hr 20 keV to 1.2 MeV energy response	5
Pocket Dosimeters	Gamma, X-Ray. Various ranges up to 200 R	20
MDH, 10150	X-Ray Monitor	4
Eberline TLR-5	Thermoluminescent Dosimeter Reader for Harshaw LiF dosimeters (TL-100); The range is from 1 mR to 1000 R.	1
Teledyne-8310	Thermoluminescent Dosimeter Reader with teletype for Teledyne's CaSO ₄ (Dy) dosimeters with optical char- acter recognition capability. Linear dose response from 0.1 mR to 1000 R.	1
Teledyne - CaSO ₄ (Dy) dosimeters	Ambient radiation	150
Nuclear Data-60	Microprocessor based multichannel analyzer system consisting of 2048 channel memory; Techtran 815 single cassette system for spectrum storage.	1
Radon System	An in-house constructed Radon Flask Counting assembly and radon gas emanation system. Capable of de- termining radon and radium-226 concentration in a water as low as approximately 0.2 pCi/liter.	1

Other Equipment

Superior, Motor Home A Superior (26 feet) luxury motor home converted into a mobile laboratory with two 11,000 BTU on board air conditioners; one 30, BTU/LPG forced air furnace with heat ducts; 4,000 watt on-board 115 V.A.C. gasoline driven motor generator.

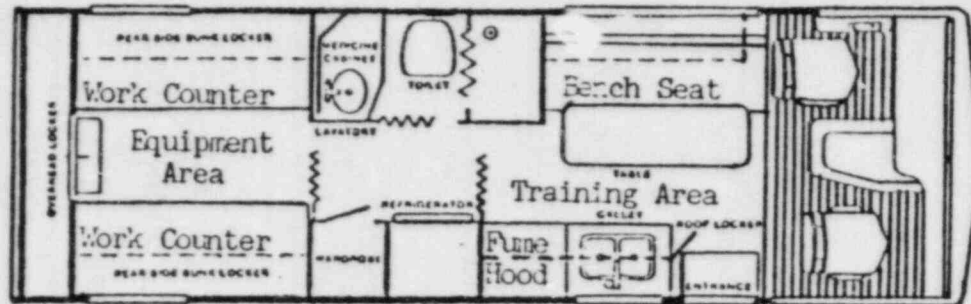
The mobile laboratory is equipped with the following items of equipment:

1. One Nuclear Data ND-66 multichannel Analyzer/Terminal system for data acquisition and as a remote video terminal for data analysis when connected to the ND-6620 system through telephone communication.
2. One Princeton Gamma Tech portable intrinsic germanium detector with a liquid nitrogen auto-fill system (13.5% efficiency, 1.85KeV resolution at 1.33MeV)
3. One Panasonic UD-702E manual TLD reader with 400 environmental dosimeters and 75 personnel dosimeters.
4. One microcomputer system (Vector Graphic Model 5032) which can be used in nuclear plant emergency response as a portable field computer for fast dose assessment (with three terminals, a dot matrix and a higher quality printer, X-Ray plotter, high resolution graphics monitor, and graphics digitizer).
5. One Digital DEC writer and Datec 212 modem for data reception through telephone communication from a remote microcomputer (Vector 5032).
6. One Reuter-Stokes RSS-111 high pressure ionization chamber for gross gamma measurement.
7. Two Ludlum Model 2218 Dual Stabilized Analyzer with 1/2" by 2" (dia) NaI crystal for field radioiodine measurement with silver zeolite radioiodine cartridge.
8. Three Ludlum Model 19 Micro R Meter for gross gamma radiation measurement.
9. Four battery powered portable air samplers.
10. Five high-volume portable air samplers.
11. One programmable calculator (TI-59) with printer (PC-100A) and with software for automatic multiple-isopleth computation.

RADIATION PROTECTION EMERGENCY TEAMS METEOROLOGICAL CAPABILITY

MOBILE LABORATORY LAYOUT

PART 1



Mobile Weather
Station-Sierra-
Misco, Inc.,
Model 1045

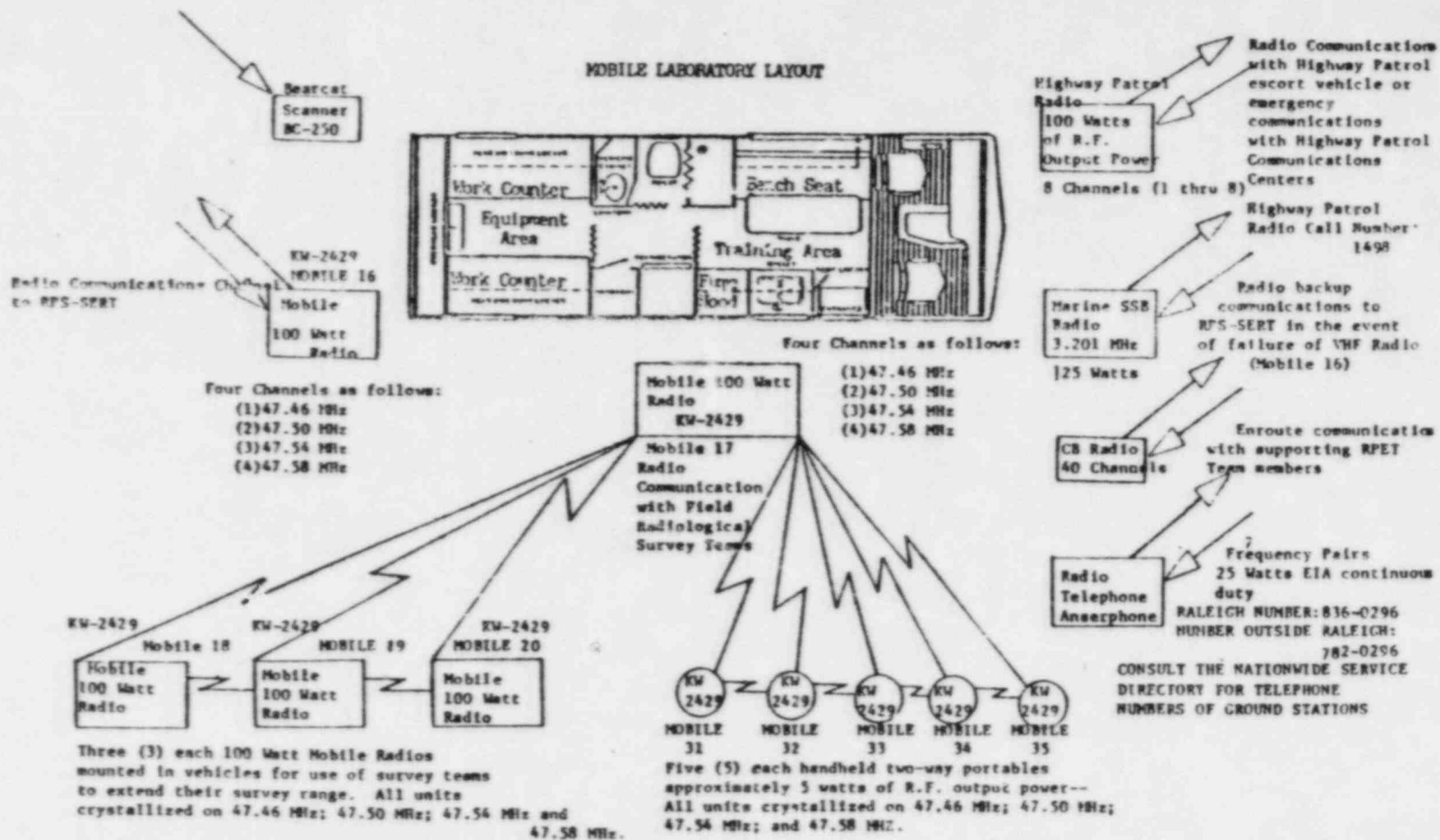
With Quality Sensors to
Measure:

- (1) Wind Speed
- (2) Wind Direction
- (3) Outdoor Temperature
- (4) Humidity
- (5) Barometric Pressure

3-6

**RADIATION PROTECTION EMERGENCY TEAM (RPET)
AVAILABLE MOBILE COMMUNICATIONS EQUIPMENT**

PART 1



**GASTON COUNTY PROCEDURES TO SUPPORT THE
CATAWBA NUCLEAR STATION**

I. PURPOSE.

- A. To meet the United States Nuclear Regulatory Commission Regulation #0654 Revision 1, dated November, 1980, requiring that local governments develop an emergency response plan for all areas that lie within 10 miles of a fixed nuclear facility. A portion of Gaston County lies within the 10-mile radius of Duke Power Company's Catawba Nuclear Station.
- B. To prescribe those actions to be taken by Gaston County and threatened municipalities to protect the health and safety of the general public who may be affected by radiation exposure and environmental contamination resulting from an accident at the Catawba Station.
- C. To define the roles of the county and local political subdivisions prior to, during, and after the need to evacuate any portion of this county.
- D. To provide for the coordination, direction, control, and continuity of governments in this and similar disaster situations.
- E. To provide the basis for preparation of detailed emergency operating procedures and training by the various public and private disaster support agencies within and outside this county.

II. CONCEPT OF OPERATIONS.

- A. In the event of an emergency at the Catawba Station, the plant will immediately notify, among others, the Gaston County warning point located in the Communications Center at the Gaston County Law Enforcement Building in Gastonia, N.C. This notification will include the class of the emergency, other amplifying information, and recommendations for protective actions.
- B. If the emergency poses a radiation threat to the surrounding community, local government will immediately take appropriate actions to inform the residents in the threatened areas of the actions they should take for their own safety. The population will be alerted by fixed and mobile siren systems, public address announcements, door to door alerting, Emergency Broadcast System (EBS) radio and television announcements, and any other communication systems such

as the National Weather Service (NWS) that are appropriate to the situation. (See Annex E, EBS Procedures.)

- C. Local government and emergency service organizations must plan for and be prepared to direct all off-site emergency operations for approximately the first 7 to 9 hours of the emergency or until assistance can be expected from the State Emergency Response Team (SERT).
- D. The State assumes direction and control authority when SERT dispatches a message to each county concerned, the State EOC, South Carolina FEOC, the licensee, and the State warning point. This message states either:
 - 1. **Option A:** At the request of the county or counties concerned, SERT has been established and assumes direction and control authority effective at the specified date and time, or;
 - 2. **Option B:** A State of Disaster or Emergency has been declared, SERT has been established and assumes direction and control authority effective at the specified date and time.
- E. The Gaston County Emergency Management Coordinator will be in charge of planning, organizing, and coordinating the general response conducted by Gaston County government.
- F. Gaston County is capable of continuous 24-hour operations for a protracted period.
- G. The head or supervisor of each county government department will be responsible for assuring continuity of resources.
- H. Emergency communications links among State, local, and Federal agencies, and between Duke Power Company and State and County governments are staffed 24 hours a day. (See Emergency Communications, Section VI.)
- I. In summary, this PART contains emergency procedures to be implemented throughout the EPZ. In developing the emergency response concept of operations, two time frames were considered. During the first period, when an emergency condition exists at the facility but is not serious enough to warrant a declaration of a state of emergency by the Governor of North Carolina, the county assists local residents in the affected area and directs the actions of county emergency response personnel. In the second period, when the emergency condition has escalated to such a level that the Governor declares a state of emergency, the State

assumes responsibility for direction and control of all emergency operations.

III. ORGANIZATION AND RESPONSIBILITIES. This section assigns responsibility for county emergency response organizations to inform, protect, and evacuate, if necessary, in the event an accident at the Catawba Station poses a threat to any portion of Gaston County. It also establishes the responsibilities of other organizations to provide personnel, equipment, and expertise in a supporting role. (See Organizational Chart, Figure 1.)

- A. The overall responsibility for decision-making within Gaston County rests with the Gaston County Commissioners, who have the ultimate responsibility for the protection of life and property within this county. Gaston County shall provide the basic planning, guidance, and evacuation support, as required, to the local township and municipal authorities.
- B. Any county or municipal agency or department may be tasked with an emergency mission. The supervisor of each department is responsible for the accomplishment of an assigned task or function. All department assignments are listed in the following paragraphs. In addition these departments are assigned the following general tasks:
1. Provide personnel, equipment, and facilities on a 24-hour basis.
 2. Plan and provide for the safety of employees and protection of public property in the event of an emergency.
 3. Coordinate actions with the Gaston County Emergency Management Coordinator and with departments having related tasks.
 4. Train personnel assigned with emergency tasks and participate in exercises to test emergency plans and procedures.
 5. Provide personnel to staff the Gaston County EOC and a liaison to SERT.
 6. Provide for record keeping and documentation of the emergency and actions taken.
 7. Manage radiation exposure of departmental personnel and maintain exposure records.
 8. Prepare damage and loss survey reports.

C. Gaston County Emergency Management Coordinator.

1. Recommend the activation of the County EOC located in Gastonia and maintain it on a 24-hour basis as needed.
2. Develop contingency plans that provide for a rapid and coordinated response of emergency services and coordinate protective response operations.
3. Assemble and dispatch emergency workers to the scene of the emergency.
4. Serve as advisor to the Board of County Commissioners and provide situation reports and other information including any recommendations to the State on the activation of SERT.
5. Coordinate training of local emergency workers.
6. Coordinate support to the emergency workers in the field.
7. Provide and coordinate communications with the State.
8. Provide communications with the National Weather Service in Charlotte to obtain meteorological information.
9. Develop priority and key alert lists.

D. Gaston County Police Chief.

1. Coordinate all law enforcement and traffic control.
2. Provide immediate assistance to the Catawba Station management and the Gaston County Commissioners during initial onset of the emergency.
3. When necessary, establish and maintain communication links between the Catawba Station and the County EOC and provide communications support to the County EOC.
4. Provide traffic control in support of evacuation, in the vicinity of shelters, and around contaminated areas. Report traffic problems to the County EOC.
5. Establish road blocks to reroute traffic and prevent entry into contaminated zones.

6. Maintain a log of all persons and vehicles entering and leaving a designated contaminated zone subsequent to evacuation.
7. Monitor evacuees and vehicles for contamination and record results.
8. Direct contaminated persons and vehicles to designated decontamination stations and provide escorts, if required.
9. Coordinate county rescue and volunteer fire departments support in warning and evacuating the public.
10. During a declared State of Disaster provide the State Highway Patrol with local law enforcement resources and assistance.

E. Gaston County Sheriff.

1. Coordinate law enforcement and traffic control.
2. Provide immediate assistance to the Catawba Station management and the Gaston County Commissioners during initial onset of the emergency.
3. Provide communications support to the Gaston county EOC.
4. Provide traffic control in support of evacuation, in the vicinity of shelters, and around contaminated areas. Report traffic problems to the County EOC.
5. Establish road blocks to reroute traffic and prevent entry into contaminated zones.
6. Maintain a log of all persons and vehicles for contamination and record results.
7. Monitor evacuees and vehicles for contamination and record results.
8. Direct contaminated persons and vehicles to designated decontamination stations and provide escorts, if required.
9. During a declared State of Disaster, provide the State Highway Patrol with local law enforcement resources and assistance.

F. Gaston County Emergency Services (Fire Service, Rescue Squads, and Emergency Medical Services).

1. Medical Transport Services.

- a. Continue training programs for medical support personnel who may be called upon to care for off-site victims.
- b. Provide emergency communications capability for medical facilities and ambulances and back-up communications for emergency workers.
- c. Coordinate emergency medical services at radiation accident sites and shelters.
- d. Provide technical information on available emergency medical personnel.
- e. Provide radiation safety training to emergency medical personnel through existing emergency medical training programs.
- f. Assist in obtaining ambulances and rescue resources.

2. Rescue Squad Captains.

- a. Provide support to the Gaston County Police Department in the warning and evacuation of people within the designated zones.
- b. Support emergency medical services at the radiation accident sites and shelters.
- c. Assist in obtaining rescue resources.
- d. Support volunteer fire departments in decontamination operations.
- e. Support traffic control operations in support of evacuation, in the vicinity of shelters, and around contaminated area.
- f. Support monitoring of evacuees and vehicles for contamination.
- g. Assist the lead law enforcement agency as needed to protect lives and property.

3. Gaston County Fire Marshal.

- a. Provide support assistance to the Gaston County

Police Department in the warning and evacuation of people within the designated zones.

- b. Provide equipment and personnel for decontamination operations, including earth moving and washdowns.
- c. Provide local area communications.
- d. Provide vehicles for movement of personnel when directed by the County Emergency Management Coordinator.
- e. Coordinate the removal of radiologically contaminated material.

G. Chairman, Board of County Commissioners.

1. Assume command of emergency response actions within the county and coordinate these with other units of government.
2. See Organizational Chart, Figure 1.

H. Gaston County Manager.

1. Provide administrative support, supplies, and equipment to maintain operations within the Gaston County EOC.
2. Provide other assistance as needed to support county operations.

I. Gaston County Social Services Director.

1. Assist the Red Cross in shelter operations at the designated shelters.
2. Provide personnel for the operations of designated shelters.
3. Provide clothing for evacuees.
4. Provide support personnel to monitor evacuees at designated shelters.

J. Gaston County Emergency Medical Services Director.

1. Maintain all communications within the EOC.
2. Maintain key warning and alert notification list and procedures.
3. Coordinate all communications from the field to the

County EOC.

4. Maintain the Gaston County weather teletype machine in order to obtain current meteorological information in the vicinity of the Catawba Station from the National Weather Service in Charlotte.
5. Provide support communications to the emergency workers in the field as needed.

K. Gaston County Landfill Supervisor.

1. Provide personnel and equipment to assist in decontamination of equipment, roads, and structures.
2. Support transportation of needed supplies and equipment.
3. Support the removal of radiologically contaminated material.
4. Support sanitation operations at the designated shelters.

L. Gaston County Agricultural Extension Agency.

1. Support the mass feeding for evacuees at the designated shelters and the EOC staff when directed.
2. Locate and report sources of uncontaminated feed for livestock.
3. Restrict the sale, production, distribution, and warehousing of livestock, produce, and processed food products as needed.
4. Support sampling and monitoring activities, including the areas accessible by fish.
5. Close contaminated or suspected areas to the taking of all fish.
6. Confiscate or prevent the sale of fish from contaminated or suspected areas.

M. Gaston County Superintendent of Education.

1. Support shelter operations at the designated shelters.
2. Assist Gaston County Red Cross and Social Services in shelter management.

3. Support efforts in locating clothing for evacuees.
4. Provide personnel for the operation of designated shelters.
5. Provide personnel and transportation of needed supplies and equipment to be used at designated shelters.
6. Designate school facilities outside the affected zones for use as shelters or other supporting functions.
7. Provide trucks and buses with drivers to transport individuals and groups being evacuated from contaminated or threatened areas.
8. Provide equipment and personnel to establish and operate kitchens for mass feedings.
9. Provide support personnel to monitor evacuees at designated shelters.

N. Gaston County Health Department Director.

1. Coordinate all public health functions.
2. Provide laboratory evaluation of suspected radioactive samples of all types.
3. Collect milk samples for analysis.
4. Provide liaison with County EOC and provide technical assistance and consultation as needed.
5. Prior to the emergency, identify temporary storage sites for contaminated material.
6. Provide technical assistance and supervision to county and city water supply operations for any special or unusual treatments.
7. Order water supply plants to cease operations and close intake systems where deemed necessary.
8. Provide technical assistance for water supplies having less than ten connections.
9. Coordinate requests for emergency drinking water.
10. Maintain close coordination with the Chief of the North Carolina Radiation Protection Section (RPS).

11. Maintain and administer potassium iodide (KI).
- O. Gaston County Mental Health Director.**
1. Support shelter operations with adequate crisis counselors.
 2. Support Gaston County Red Cross, Social Services and Board of Education in shelter management.
 3. Provide personnel and transportation of needed supplies and equipment for the designated shelters.
- P. Gaston County Volunteer Fire Department Chiefs.**
1. Monitor evacuees at designated shelters.
 2. Support shelter communications as needed.
 3. Provide support equipment and personnel for decontamination operations, including earth moving and washdown.
 4. Provide local area communications.
 5. Support law enforcement in warning and evacuating persons in designated zones.
- Q. Gaston County Maintenance Supervisor.**
1. Provide support in obtaining 30 and 55 gallon drums to be used for packaging contaminated material.
 2. Support the removal of radiologically contaminated material.
 3. Support the restoration of contaminated highways and other transportation facilities.
 4. Provide all necessary maintenance personnel, equipment, and operations.
 5. Monitor and report road conditions to the County EOC.
- R. Public Information Officer (PIO).**
1. Release timely and accurate information to the public.
 2. Maintain close coordination with the Catawba Station PIO, the DCCPS PIO, and the Chairman of the Board of County Commissioners. See also Paragraph IV.D., Public Education and Information.

S. Gaston County Red Cross Director.

1. Direct operations in the designated shelters and coordinate the support of school and social services personnel.
2. Provide support in the following:
 - a. Emergency mass care assistance.
 - b. Assistance to individual families.
 - c. Augmentation of Gaston County medical personnel, equipment, and blood products.

T. State and Federal Agencies in Support Role.

1. North Carolina Department of Crime Control and Public Safety (DCCPS) will coordinate the state effort to provide support.
2. North Carolina State Highway Patrol will provide law enforcement, traffic control, and radiological monitoring.
3. National Weather Service, Charlotte will prepare and release emergency public service messages via the National Oceanic and Atmospheric Administration (NOAA) weather radio.

U. Private Businesses, Industries, and Electric Utility Companies.

1. Duke Power Company.
 - a. Develop emergency response plan to support the Catawba Station.
 - b. Provide prompt and accurate reports of abnormal activity at the Catawba Station as required by the United States Nuclear Regulatory Commission (NRC).
 - c. Provide accident assessment and recommendations to local government concerning protective measures for the public.
2. Radio Station WEZC will be the common program control station for EBS to broadcast emergency instructions and information to the public on a 24-hour basis.

V. Gaston County Coordinating Instructions.

1. Many tasks to be undertaken during the conduct of emergency operations will require the resources and the efforts of more than one agency of government.
2. Some tasks may require the efforts of various combinations of Federal, State, and County agencies.
3. Some Gaston County agencies have the resources and capability to accomplish the same task.
4. To attempt to fix responsibility for a single task with one agency in a predetermined manner is impractical in that it would deny the Gaston County Emergency Management Coordinator the flexibility required to respond to a situation which could (and probably would) be changing continually.
5. Gaston County department and agency heads, directors, and supervisors are responsible for preparing their organizations to accept the role of "lead agency" when directed by the appropriate authority.

GASTON COUNTY ORGANIZATIONAL CHART

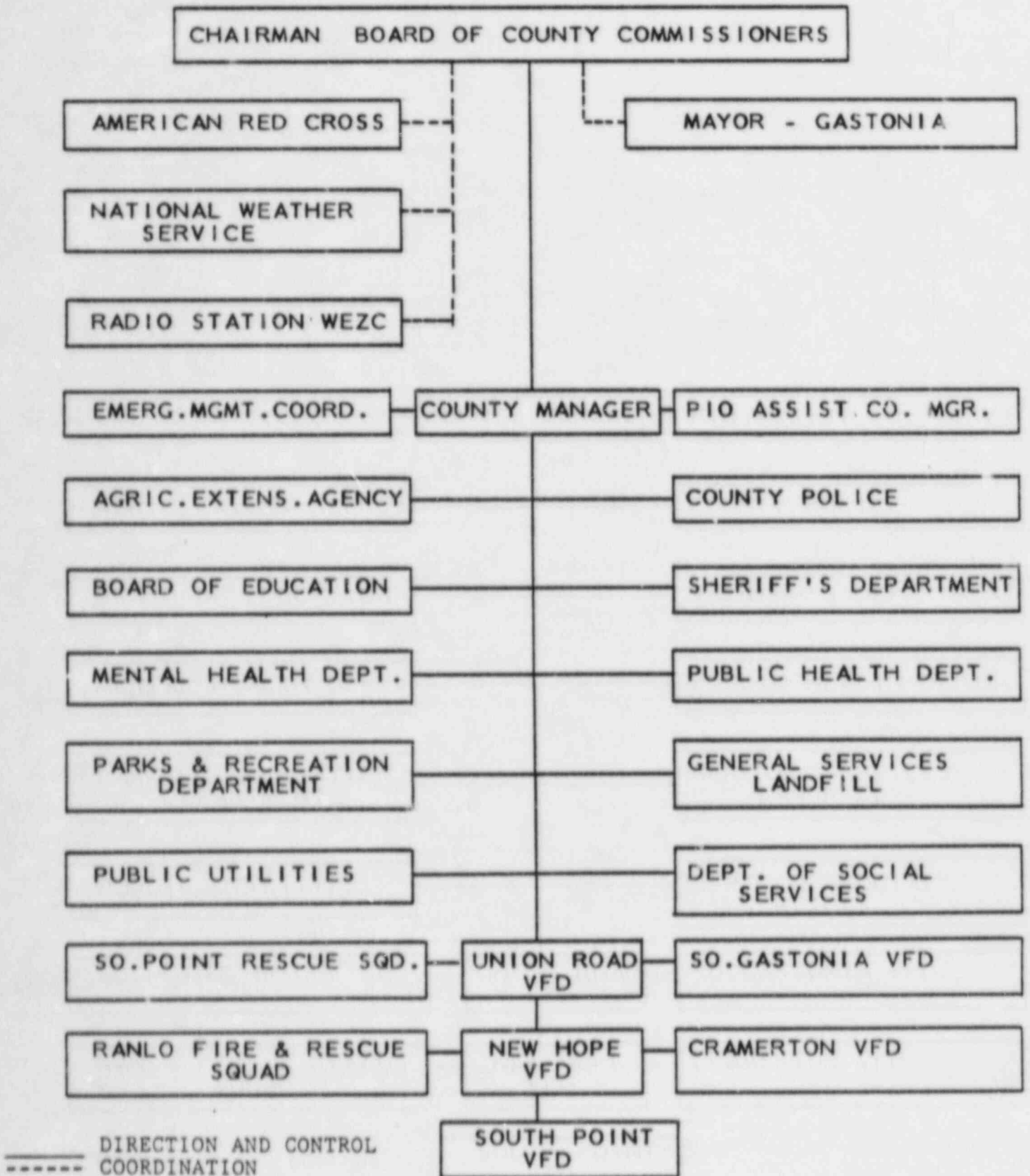


Figure 1

W. **Primary and Support Responsibility Summary.**

1. Basic organizational units and responsible individuals for Gaston County.

<u>GOVERNMENT ENTITY</u>	<u>TITLE OF KEY INDIVIDUAL</u>
Gaston County	Chairman of Board of Commissioners
Administration	County Manager
Emergency Management	Coordinator
Social Services	Director
Health department	Director
Fire Service	Fire Marshal
Fire Departments	Chiefs
Emergency Medical Service	Emergency Management Coordinator
Communications Department	Supervisor
Rescue Squads	Chiefs
City of Gastonia	Mayor
Maintenance Department	Supervisor
Agricultural Extension Agency	Director
Gaston County Board of Education	Superintendent
Mental Health	Director
Gaston County Landfill Dept.	Supervisor

2. Figure 2 lists the major functions, major response organizations, and level of responsibility for emergency operations. The ranking member of the unit of government participating in the special function is responsible for organizing, training, equipping, committing, and controlling personnel for emergency response.
3. The fact that a unit of government (or the individual in charge of the unit) is assigned primary responsibility for a specific function does not necessarily mean that the unit possesses the capability to perform all tasks included in the function. The term "primary responsibility" as used herein is intended to mean "responsible for carrying out the function or seeing that it is carried out." Personnel with primary and support responsibilities are to be employed in a cohesive manner under the direction of the individual in charge of the unit with primary responsibility.
4. The policy development and major decision-making elements of the command and control function are carried out as prescribed by the Chairman of the Gaston County Board of Commissioners or the designated representative.

5. The overall operational elements of the command and control function are the responsibility of the Chairman of the Gaston County Board of Commissioners. The Chairman has delegated to the Gaston County Emergency Management Coordinator the authority to act on his behalf in all matters related to and dealing with the operational aspects of command and control in the conduct of emergency response actions.
6. The Gaston County Emergency Management Coordinator utilizes the County EOC staff to carry out the function of overall command and control and other functions for which the Chairman of the Gaston County Board of Commissioners is primarily (and secondarily) responsible.
7. The Gaston County Department of Emergency Management is available and on call 24 hours a day.
8. Figure 2 lists major function and responsibility assignments. It is not intended to be all inclusive but rather to summarize the operational concept employed.

PRIMARY AND SUPPORT RESPONSIBILITY SUMMARY

<u>FUNCTION</u>	<u>ORGANIZATION</u>	<u>RESPONSIBILITY</u>	
		<u>PRIMARY</u>	<u>SUPPORT</u>
Command and Control	Gaston Co Dept. of Emergency Management	x	
Warning	Gaston Co. Communications Center	x	
	National Weather Service		x
	Police Information Network		x
	Radio and television stations		x
	Volunteer fire departments		x
	Rescue Squads Sheriff's Department		x
Notification Communications	Gaston Co. Communications Center	x	
	Police Information Network		x
	Southern Bell		x
	Duke Power Company		x
Public Inform- ation	Gaston Co. Dept. of Emer- gency Management	x	
	Duke Power Company		x
	Radio and television stations		x
	Local newspapers		x
Law Enforcement	Gaston Co. Police Dept. Sheriff's Department		x
	Rescue Squads		x
			x
Transportacion	Gaston Co. Bd. of Education	x	
	Gaston Co. Administration Department		x
Accident Assess- ment	Duke Power Company	x	
	Gaston Co. Dept. of Emergency Management		x
	Gaston Co. Agriculture Extension Service		x
Public Health and Sanitation	Gaston Co. Health Dept.	x	
	Gaston Co. Maintenance Department		x

Figure 2

<u>FUNCTION</u>	<u>ORGANIZATION</u>	<u>RESPONSIBILITY</u>		
		<u>PRIMARY</u>	<u>SUPPORT</u>	
Social Services, Shelter, Mass Feeding, and Clothing	Gaston Co. Red Cross	x		
	Gaston Co. Dept. of Social Services		x	
	Gaston Co. Bd. of Education		x	
	Gaston Co. Mental Health Dept.		x	
	Gaston Co. Agriculture Extension Services		x	
	Gaston Co. Emergency Management Department		x	
	Ambulance-Emergency Medical Services		x	
	Gaston Co. Rescue Squads		x	
	Gaston Co. Landfill		x	
	Fire	Gaston Co. VFDs	x	
		Cramerton VFD		x
New Hope VFD			x	
South Gastonia VFD			x	
South Point VFD			x	
Union Road VFD			x	
Ranlo Fire and Rescue			x	
Rescue	Ranlo Fire & Rescue	x		
	South Point Rescue Squad	x		
Traffic Control	Gaston Co. Police Dept.	x		
	Gaston Co. Sheriff's Dept.	x		
	Gastonia Police Dept.		x	
	Belmont Police Dept.		x	
Emergency Medical Services	Rescue Squads	x		
	Gaston County Medical Transport Service		x	
Protective Response	Gaston Co. Emergency Management Department	x		
	Gaston Co. Board of Education		x	
	Gaston Co. Department of Social Services		x	
	Gaston Co. Police Dept.		x	
	Gaston Co. VFDs		x	
	Gaston Co. Agriculture Extension Services		x	

Figure 2 (Cont'd.)

<u>FUNCTION</u>	<u>ORGANIZATION</u>	<u>RESPONSIBILITY</u>	
		<u>PRIMARY</u>	<u>SUPPORT</u>
Protective Response	Radio & television stations		X
	Gaston Co. Health dept.		X
	Gaston Co. Landfill		X
	Gaston Co. Maintenance		X
	South Point Rescue Squad		X
	Ranlo Fire & Rescue		X
Radiological Exposure Control	Gaston Co. Emergency Management Department	X	
	Gaston Co. Agriculture Extension Services		X
	Gaston Co. Police Dept.		X
	Gaston Co. VFDs		X
	So. Point Rescue Squad		X
	Ranlo Fire & Rescue Squad		X
	Gaston Co. Landfill		X
	Gaston Co. Health Dept.		X
	Gaston Co. Maintenance		X
	Gaston Co. Landfill Dept.		X
	Gaston Co. Health Dept.		X
	Gaston Co. Maintenance Dept.		X
	Sheriff's Department		X

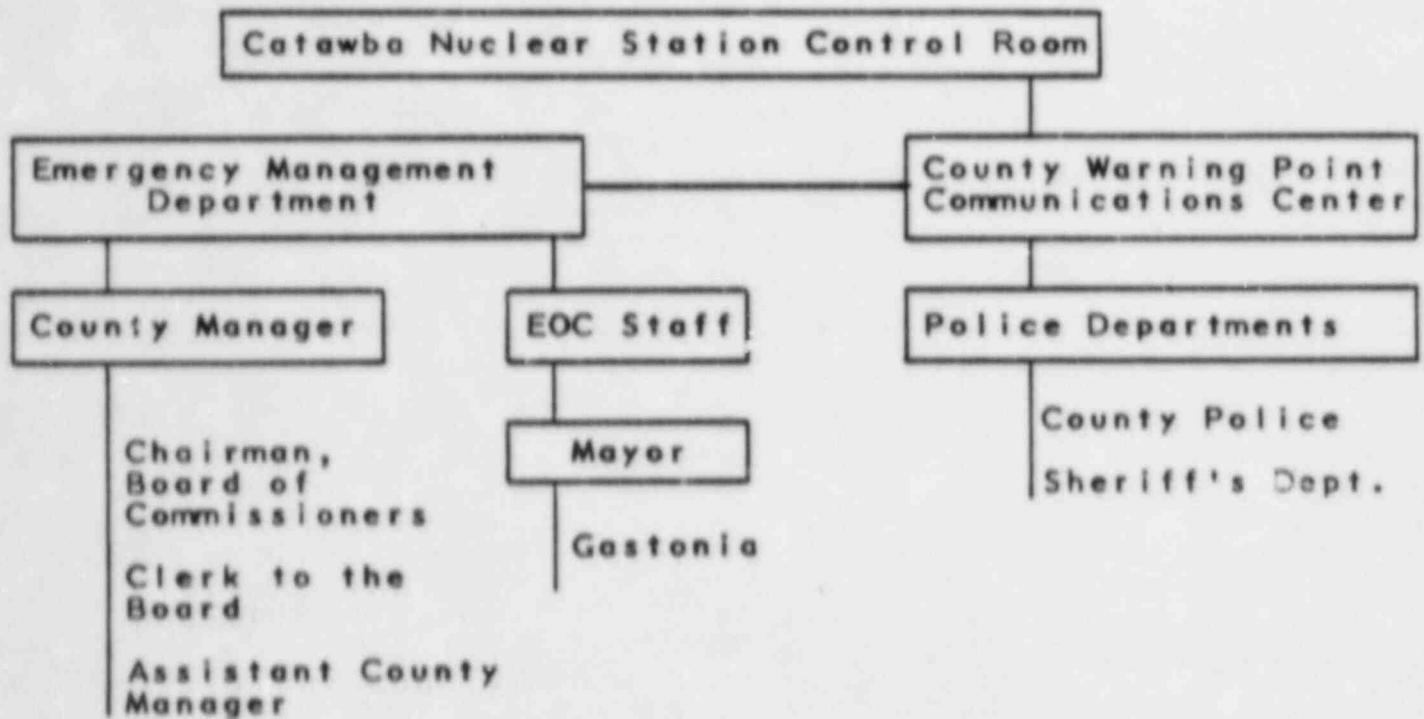
Figure 2 (Cont'd.)

IV. EXECUTION.

- A. The initial warning of any one of the four classes of an emergency action level is transmitted from the Catawba Nuclear Station Control Room to the State warning point, the Mecklenburg County warning point and the Gaston County warning point located in the Communications Center at the Gaston County Law Enforcement Building. Local government will rely on information and recommendations provided by the Catawba Station for determination of minimum off-site response measures. The four classes of emergencies are:
1. **NOTIFICATION OF AN UNUSUAL EVENT** - Provides early and prompt notification of minor events which could lead to more serious consequences.
 2. **ALERT** - Same basic situations as **UNUSUAL EVENT** with potential of becoming more serious.
 3. **SITE AREA EMERGENCY** - Reflects conditions on site where some significant radiation releases are occurring or are likely to occur but where a core melt situation is not indicated. Full mobilization of emergency personnel in the near site environs is indicated.
 4. **GENERAL EMERGENCY** - Involves actual or imminent substantial core degradation or melting with potential for loss of containment.
- B. Warning and Notification Methods and Procedures.
1. The initial notification of any one of the four classes of an emergency is transmitted from the Catawba Station Control Room to the County warning point. A dedicated ringdown speaker telephone line is the primary means of transmitting the notification. Commercial telephone is the secondary means and voice radio is to be the tertiary means of notification.
 2. Messages received must be authenticated. The two methods by which a message reporting an emergency action level can be authenticated are:
 - a. The telecommunicator at the County warning point verifies that the code word transmitted is on the list of authenticator code words.
 - b. Upon completion of the call, the telecommunicator calls back to the Catawba Station to verify that the report is authentic.

3. The telecommunicator determines the method of authentication. If transmitted by radio, the message must be authenticated by code word.
4. The message format for reporting an emergency situation to the County warning point is shown in Annex F. The same format will be used for initial and follow-up messages.
5. The telecommunicator on duty at the County warning point is to complete a warning message form at the time the report is being transmitted. Particular attention will be given to the action level classification, time, date and the name of the individual making the report.
6. The N.C. Division of Emergency Management is responsible for supplying the County warning point with the current list of authenticator code words.
7. The individual in charge of the operation of the County warning point is responsible for making immediately available to all telecommunicators/dispatchers the list of authenticator code words.
8. Coordinating Instructions.
 - a. Due to the sensitive nature of the information included in the notification of an emergency and the requirement for speed, the telephone is to be used by all participants to the maximum extent possible in transmitting and relaying a notification of an emergency, follow-up information, and subsequent reports.
 - b. If necessary, the County Sheriff's Deputies will hand deliver written copies of the notification to the individuals shown on the Gaston County Priority Alert List on file in the Emergency Management Agency and the County warning point. (See Figure 3, Key Alert Notification Chart.)
 - c. Follow-up information and subsequent reports are to be transmitted immediately by the fastest means possible to the individuals shown on the Gaston County Alert List.
9. Gaston County will have the responsibility for all warning within the county. When public notification has been recommended by the Catawba Station Control Center or ordered by SERT after it has

GASTON COUNTY KEY ALERT NOTIFICATION CHART



All emergency action level messages for an Alert, Site Area Emergency, or General Emergency will be relayed to each office or agency noted on the Key Alert List. The Notification of an Unusual Event to all persons or agencies on the Key Alert List is at the discretion of Gaston County. Telephone will be the primary means of passing this information.

Figure 3

assumed command and control, emergency personnel will immediately implement all means at their disposal to gain the attention of the area residents and tell them what to do. The fixed siren system, with activation controls located in the Gaston County warning point, will serve as the primary public alerting system. Once activated, this siren system is designed to warn immediately all areas of Gaston County within the 10-mile EPZ. Vehicles with sirens and/or public address (PA) systems will serve as a back-up and will be activated only as required to substitute or complement the primary fixed siren system. If necessary, door to door alerting will be accomplished by the back-up warning system. (See Figure 4, this PART.)

10. If the back-up system is used, emergency vehicles with effective sound devices will be dispatched along preassigned routes, stop each quarter (1/4) mile in populated areas, and make the following announcement: **ATTENTION. ATTENTION. AN EMERGENCY SITUATION HAS DEVELOPED IN THIS AREA THAT CAN AFFECT YOUR SAFETY. TURN ON YOUR RADIO OR TELEVISION FOR INFORMATION AND INSTRUCTIONS.** Including the stops to make the announcements, it is estimated that each vehicle will average fifteen miles per hour (15 MPH). This estimate is used to determine how rapidly the complete 10-mile EPZ within Gaston County can be warned by the back-up system. See Figure 4, Back-up Alert and Notification Time Table. If the entire area within the 10-mile EPZ does not need to be warned by the primary fixed siren system, this warning time estimate might be reduced by concentrating warning vehicles in smaller operational areas.

CAUTION: THE EMERGENCY BROADCAST SYSTEM MUST BE ACTIVATED JUST PRIOR TO OR AT THE SAME TIME EITHER SIREN SYSTEM IS USED TO GAIN THE ATTENTION OF THE PUBLIC.

11. Zone Warning Responsibility.
 - a. Fire, police, and rescue personnel within the 10-mile EPZ will be prepared to dispatch all available vehicles with sirens and/or PA systems over preassigned routes to alert and inform residents of the area. (See Figure 5, this PART.)

BACK-UP ALERT AND NOTIFICATION TIME TABLE

Zone F-3

Sub-Zone: F-3-A (1)

Description: Union Road Fire District

Miles Populated: 14.0 miles

Warning Responsibility: 1 vehicle - Union Road VFD

2 minutes to station
1 minute to area
<u>14 minutes to alert</u>
<u>17 minutes total time</u>

Sub-Zone: F-3-A (2)

Description: Union Road Fire District

Miles Populated: 14.0 miles

Warning Responsibility: 1 vehicle - Union Road VFD

2 minutes to station
0 minutes to area
<u>17 minutes to alert</u>
<u>19 minutes total time</u>

Sub-Zone: F-3-B (1)

Description: New Hope Fire District

Miles Populated: 6.0 miles

Warning Responsibility: 1 vehicle - New Hope VFD

2 minutes to station
2 minutes to area
<u>14 minutes to alert</u>
<u>18 minutes total time</u>

Sub-Zone: F-3-B (2)

Description: New Hope Fire District

Miles Populated: 11.0

Warning Responsibility: 1 vehicle - New Hope VFD

2 minutes to station
2 minutes to area
<u>18 minutes to alert</u>
<u>22 minutes total time</u>

Sub-Zone: F-3-C

Description: South Point Fire District

Miles Populated: 7.0

Warning Responsibility: 1 vehicle - South Point VFD

2 minutes to station
1 minute to area
<u>11 minutes to alert</u>
<u>14 minutes total time</u>

Figure 4

ZONE WARNING RESPONSIBILITY

ZONE F-3WARNING**F-3-A**

Union Road
Fire District

Union Road Volunteer
Fire Department

F-3-B

New Hope
Fire District

New Hope Volunteer
Fire Department

F-3-C

South Point
Fire District

South Point Volunteer
Fire Department

Figure 5

-
- b. These units will be augmented by a predetermined number of vehicles from outside the EPZ from the Gaston County Police and Sheriff's Departments.
 - c. Local law enforcement personnel will immediately establish traffic control points at predetermined locations.
 - d. The fixed sirens located at the fire departments within the EPZ will be immediately activated. Fire and rescue personnel will be prepared to dispatch vehicles upon arrival at the stations.
12. To avoid extreme apprehension and possible panic on the part of the public, it is imperative that the television and radio stations have received and are transmitting the EBS message prepared by the County PIO. (See Annex D for EBS message format.)
 13. Maximum efforts will be made to ensure receipt of the warning message by all members of the community by completing the warning cycle twice in an attempt to assure 100% notification. (However, this procedure will not guarantee 100% notification.)

C. Accident Assessment.

1. Gaston County has limited capabilities and resources for assessing and monitoring actual or potential consequences of a radiological emergency within the plume exposure pathway EPZ.
2. Gaston County has a Radiological Defense Officer (RDO) trained in monitoring and sampling. Both fire and rescue personnel within the area have monitoring equipment and have been trained by the RDO.
3. The Catawba Station will assess and monitor actual or potential off-site consequences of a radiological emergency within the affected area, to the extent possible.
4. If an evacuation is ordered, the Gaston County Sheriff's Department will establish traffic control points and the Gaston County volunteer fire departments, rescue squads, and Landfill Department will establish monitoring and decontamination stations at the points indicated on the Operations Map in Annex I.
5. The North Carolina State Highway Patrol will be prepared to establish traffic control points at the same locations.
6. Local response operations and survey teams will be activated through the Gaston County Emergency Management Department.
 - a. Primary means of notification will be the telephone. Radio will be the secondary means of notification and will be used for reporting back to the EOC.
 - b. All teams will be composed of not less than three members.
7. Upon arrival, the North Carolina Radiation Protection Section (RPS) will assume responsibility for assessment and sampling.

D. Public Education and Information.

1. The Gaston County Public Information Officer (PIO), or the authorized representative, will represent Gaston County in the preparation and release of emergency public information and instructions

concerning a nuclear radiation incident or accident at the Catawba Station.

2. Coordinating Instructions.

- a. Since knowledge of the potential duration of release and the time available before expected off-site exposures is important in determining specific public instructions, the radiation protection component of the Gaston County EOC must make available to the public information staff all data necessary to prepare bulletins and statements.
- b. The PIO assigned to the Gaston County EOC staff will coordinate all public information activities between Gaston County, and the State and Duke Power Company.
- c. As a member of the County EOC staff, the PIO will be supported by a secretary-typist from the Gaston County Manager's office.
- d. Facilities for county public information personnel (and for State, Federal, or utility staff, if required) will be provided at the EOC.
- e. The PIO will be responsible for the collection and release of all information to the news media, verifying and resolving rumors (all rumors must be reported to SERT) and any other conflicting information, scheduling news briefings, and copying releases for distribution in Gaston County.

3. Gaston County government will inform the news media on the status of plans to cope with emergencies resulting from accidents at Catawba annually, at a minimum. The public information staffs of Gaston County, Duke Power Company, and SERT will jointly prepare the programs and present them to the media. The presentations will include:

- a. A briefing on the status of the State, Gaston County, and Catawba Station emergency response plans.
- b. An orientation on radiation and its effects on people and the environment.
- c. Procedures and points-of-contact to be used by the media in obtaining pertinent information.

- d. Other information as requested by media.
4. The three principal points-of-contact for media personnel to obtain current information during an emergency are:
 - a. The Duke Power Company Media Center located at the O.J. Miller Auditorium in Charlotte.
 - b. The field command post for SERT.
 - c. The Gaston County EOC.
5. Communications to the Public.
 - a. The primary means of communications to the public are broadcast radio, television, and cablevision. Twenty-five radio stations and five television stations serve the area of Gaston County within the 10-mile EPZ.
 - b. Gaston County EBS stations are in the Charlotte Operational Area. (See Annex E.) The common program control station for the Charlotte area is radio station WEZC.
 - c. The secondary means of communications to the public is the National Weather Service radio station in Charlotte.
6. Information and instructions transmitted to the public during periods when an emergency condition exists may (and probably will) refer to information published and distributed during non-emergency periods, such as:
 - a. Geographical areas or political subdivisions of Gaston County within the 10 mile radius of the Catawba Station.
 - b. Travel routes and shelter facilities should an evacuation be required.
 - c. The effects of radioactivity on people.
 - d. Instructions concerning the use of drugs or medicines to off-set the effects of radiation.
 - e. Instructions on how the public will be alerted and informed of an emergency condition, or a potential threat, particularly between the hours of midnight and 6 a.m.
7. Concept of Operations.

- a. During normal, non-emergency periods, the PIO will participate in all annual exercises conducted by Gaston County and DCCPS and will prepare and maintain on file in Gaston County the following:
 - (1) Draft news releases concerning accidents at the Catawba Station that would require Gaston County authorities to alert and warn the public.
 - (2) Educational materials explaining radiation, nuclear power plant operations, possible effects from radioactive releases, and self-help methods of protection.
 - (3) Camera-ready newspaper copy, slides for television, and simple verbal directions for radio describing evacuation routes and shelter locations.
- b. Upon notification of an accident at the Catawba Station, the Gaston County PIO will:
 - (1) Be prepared to report to the Gaston County EOC.
 - (2) Immediately review and update all prepared warning and evacuation information.
 - (3) Review and update, if necessary, all educational materials for release to the news media during the emergency.
 - (4) Brief local news media representatives on the local situation.
 - (5) Establish contact with DCCPS and provide a Gaston County briefing, if requested.
 - (6) Make recommendations to the County Manager concerning public release of information.
 - (7) Take other actions as directed by the County Manager.
- c. Following an emergency, the PIO will maintain contact with SERT and be prepared to support the SERT PIO when directed.

E. Protective Response.

1. During the initial hours of an emergency, approximately 7 to 9 hours, representatives from the Catawba Station will recommend protective response actions for Gaston County. Once command and control is assumed by SERT, the State will be responsible for protective response actions.
2. Until SERT assumes control, the Chairman of the Board of County Commissioners will take the final responsibility for ordering evacuation.
3. If conditions warrant immediate activation of alerting procedures, the dispatcher will follow the recommendations of a representative from the Catawba Station. At other times the dispatcher will make every effort to contact the Emergency Management Coordinator, the County Police Chief, and the County Commissioners. If after five minutes, the dispatcher is unable to contact the required persons, recommendations from the Catawba Station will be followed.
4. Basic protective actions for the public and emergency workers will be based on recommendations of the Environmental Protection Agency (EPA) in EPA 520/1-75-001 and the U.S. Department of Health and Human Services, and the Federal Drug Administration (FDA) regarding human food and animal feed as published in the Federal Register of October 22, 1982 (47 FR 47073).
5. Protective Actions May Include:
 - a. Area evacuation of all or segments of the population. Evacuation routes, shelters, monitoring points, hospitals, and the population density are detailed on the operations map in Annex I. See Figure 6, for the designated shelters for Gaston County.
 - b. Advising the people to stay indoors by PA systems, radio and television, and door to door alerting, where necessary. See Paragraph IV.B. this PART, Warning and Notification Methods and Procedures.
 - c. Administration of potassium iodide (KI) tablets to emergency workers and institutionalized persons.
 - d. Control of water supply intake.

- e. Diversion, embargo, or destruction of agricultural products.
 - f. Respiratory protection (e.g. handkerchiefs over mouth).
 - g. Other appropriate actions such as advising the public to wash home grown products prior to consumption.
6. The immobility of hospital and nursing home patients may preclude evacuation of these facilities. If so, the following protective actions may be advised:
- a. Close windows and doors.
 - b. Discontinue use of air conditioners.
 - c. Stay indoors and relocate to the best protection factor (PF) in the building, if necessary.
 - d. After consultation with DHR, administer KI as a blocking agent. (See PART 1, Paragraph IV.E.7.) The Gaston County Health Department will be responsible for delivering KI to hospitals and nursing homes.
7. Distribution and Administration of Radiological Protective Drugs.
- a. The Gaston County Health Department Director will be responsible for the storage and distribution of KI.
 - b. The Health Department Director, after consultation, or reasonable efforts to consult with RPS and other DHR officials, is empowered to authorize the distribution of KI to emergency workers and institutionalized persons if the total thyroid exposure of an individual is reasonably suspected, projected, or confirmed to reach or exceed 15 rems from inhalation or ingestion of radioiodine.
 - c. If the total thyroid exposure is suspected, projected, or confirmed to reach or exceed 25 rems, the Health Department Director will recommend the administration of KI to emergency workers and institutionalized persons in affected areas.

- d. KI tablets are stored at the Gaston County Health Department.
 - e. South Point High School will be the staging area for emergency workers.
8. Transportation for Evacuation.
- a. Primary means of transportation will be private vehicles.
 - b. News releases will urge the sharing of rides with persons without transportation.
 - c. Projected traffic capacity on major evacuation routes is 1200-3000 vehicles per hour. (See PART 1, Paragraph IV.E.5.)
 - d. Non-ambulatory patients will be transported by the county rescue squads. Mutual aid agreements with the rescue units in surrounding counties will be implemented when necessary.
 - e. Gaston County school buses may be utilized where needed to publicize pickup points. W.A. Bess Elementary School, Robinson Elementary, and Ashebrook High school buses will transport evacuees to appropriate shelters.
 - f. Pickup points will be established for those without transportation. These evacuees should start walking to the nearest traffic control point.
9. The Gaston County Sheriff's Department and County Police Department assisted by the State Highway Patrol and local fire departments will control access to evacuation routes.
10. The State Department of Transportation assisted by county and municipal public works departments will clear evacuation routes of any impediments such as snow, ice, debris, or equipment.
11. The N.C. Department of Transportation will be responsible for posting evacuation route signs.
12. Gaston County Red Cross will be responsible for the management of shelters including the registration and feeding of evacuees. Personnel from fire departments will monitor evacuees at shelters as conditions warrant. The North Carolina RPS will provide additional assistance and specially

GASTON COUNTY DESIGNATED SHELTERS

<u>SHELTER</u>	<u>SPACES</u>
Ashley Junior High School 800 N. York Street Gastonia, NC	3308
Mt. Holly Junior High School Hawthorne Street Mt. Holly, NC	1215

- (1) These shelters will be staffed by the Red Cross, supplemented by county social services and mental health personnel where needed.
- (2) Personnel for radiological monitoring and decontamination at these shelters will be furnished by the Sheriff's Department, rescue squads, and fire departments.
- (3) These shelter spaces are based on 40 square feet per shelteree. If more shelterees arrive than anticipated, this figure can be reduced without creating discomfort to the shelterees.
- (4) If evacuation is necessary during school hours, those children who reside inside the-10 mile evacuation area should remain at the school they attend, provided that school is outside the evacuated area.
- (5) If necessary, the EOC-emergency shelter communication link will be supplemented by amateur radio support and/or by positioning a radio equipped law enforcement vehicle at each shelter.

Figure 6

equipped teams when significant problems are identified at specific shelters.

13. Time estimates for evacuation of zones F3-A, F3-B and F3-C in Gaston County are shown on Figure 17 in PART 1 and on the operations map, Annex I.

F. Radiological Exposure Control.

1. Prior to the assumption of command and control by the State, the Gaston County Department of Emergency Management and Duke Power Company are the two primary organizations responsible for insuring that radiation doses received by the public and emergency workers are below the normally acceptable maximum levels. The EPA recommended Protective Action Guides (PAGs) will be used as the maximum acceptable levels of radiation for the public and emergency workers during an emergency. These levels are specified in PART 1. A general summary of the Protective Response Options is shown in Figure 7, this PART.
2. The Gaston County Board of Commissioners has the decision-making authority for all operations. A representative from Duke Power Company is responsible for making recommendations to the commissioners concerning the use of the protective response options specified in Part 1.
3. The RDO for the Gaston County Department of Emergency Management will support Duke Power Company by issuing instruments to those fire and rescue workers who do not already have them. These emergency workers have been trained in the use of CDV-700 survey meters, CDV-138 dosimeters, and CDV-750 dosimeter chargers.
 - a. In the event of an emergency, the RDO will provide all Gaston County personnel who may receive significant radiation exposure a thermoluminescent dosimeter (TLD). The TLDs will be supplied by the North Carolina RPS or Duke Power Company as resources allow in accordance with written agreement. RPS is responsible for reading and analyzing the dosage levels shown on the TLDs and making appropriate recommendations concerning the health and safety of the individuals concerned. (See Part 1, Section IV.G.3.)
 - b. The County RDO and a representative from Duke Power Company will assist in reading and analyzing the dosage levels shown on the TLDs

**EMERGENCY CLASSIFICATION SYSTEM
AND PROTECTIVE RESPONSE OPTIONS**

Emergency Classification

Protective Response Options

Notification of an Unusual Event

Unusual events have occurred or are in progress. No release of radioactive material requiring off-site response or monitoring are expected.

1. Notify all persons on Priority and Key Alert Lists.
2. Stand by for escalation to a more severe emergency classification or cancellation.

Alert

Events are in progress or have occurred which involve an actual or potential substantial degradation of safety level at the plant site.

1. Notify all persons on Priority and Key Alert Lists.
2. Alert to standby status key emergency personnel including monitoring teams and associated communications.
3. Stand by for escalation to a more severe emergency classification or cancellation.

Site Area Emergency

Events are in progress which involve actual or probable major failures of plant functions needed for protection to the public.

1. Notify all persons on Priority and Key Alert Lists.
2. Prepare news releases as recommended by Duke Power Company for immediate release.
3. Activate EOC with full or partial staffing as required.
4. Alert to standby status additional emergency personnel needed to alert community residents and prepare for evacuation as recommended by Duke Power Company.
5. Stand by for escalation to a more severe emergency classification or cancellation.

General Emergency

Events have occurred or are in progress which involve imminent or actual substantial core degradation or melting with potential of loss of containment.

1. Recommend sheltering (staying inside) rather than evacuation until an assessment can be made that an evacuation is indicated and can be completed prior to any significant amount of radioactive material reaching the affected area.
2. Complete actions 1-4 above.

and make appropriate recommendations concerning the safety and health of the individuals concerned.

- c. All dosimetry records will be made available to the exposed individuals and employing organizations.
4. During the course of the emergency, radiation dose levels and other exposure records will be reviewed by the RDO and Duke Power Company to formulate recommendations to the Gaston County Board of Commissioners and to assure that workers exposure remains below EPA recommended PAGs.
 - a. Communications will be maintained between the Gaston County RDO and the appropriate authority on-site at the Catawba Station to assure that exposure levels of emergency workers moving on- and off- site are below recommended PAGs.
 - b. The policy under this plan is to prevent emergency workers from receiving a radiation dose in excess of the stated PAGs. The Gaston County RDO, a representative from the Catawba Station, and a representative from RPS may recommend to the Gaston County Board of Commissioners that emergency workers be allowed to exceed the PAGs if workers cannot be rotated and the activities involved are critical to public protection.

The senior elected official has final approval authority. Permission to exceed a whole body exposure of 75 rems will not be granted.

5. The Gaston County volunteer fire departments, rescue squads, and Landfill Department have the responsibility for coordination of monitoring, decontamination, and waste disposal actions (with support from Duke Power Company).
6. When any monitoring station obtains radiation readings which reach two times the normal background readings, the monitoring station will take the following actions:
 - a. Notify the Gaston County RDO and/or the representative from Duke Power Company.

- b. Be prepared to assist in decontamination and in the containment and disposal of wastes such as clothes, water, or materials resulting from decontamination.
 7. When decontamination is to be conducted, a representative from the Catawba Station Off-Site Radiation Coordination Unit or from SERT will be dispatched to the scene to supervise the decontamination and waste disposal activities, if possible.
- G. Recovery, Reentry, and Post-Accident Operations.
1. The problems involved in reentry and recovery operations are in direct proportion to the amount of radioactive contamination received and remaining. The North Carolina RPS will be the lead agency in the collection and analysis of monitoring reports and air, foliage, and water samples. RPS will be assisted by qualified personnel from the Catawba Nuclear Station.
 2. Analysis findings will be submitted to the Chief of RPS who will forward the findings with his recommendations to the SERT leader. This information will then be submitted to the highest elected official of the government concerned with a recommendation for reentry or for continued evacuation of the area.
 3. Reentry authorization will be made by the senior elected official of the area concerned. Emergency service organizations will be immediately informed and the PIO will release the announcement to the news media with any additional instructions or information as appropriate.
 4. Recovery and post-accident operations will continue as long as required after a reentry is authorized. These actions will include:
 - a. Decontamination of people, animals, property, food, and water.
 - b. Continued security of all public and private property, including unauthorized entry into contaminated areas.
 - c. Health and medical services for evacuees.
 - d. Continuous monitoring of people and property, including long-term monitoring.
 - e. Proper radioactive waste disposal.

5. The Gaston County EOC will coordinate local support during the reentry and recovery phase, utilizing the same resources used in the evacuation phase.

V. **SUPPORT RESOURCES, PROCEDURES, FACILITIES, AND EQUIPMENT.**

A. **Emergency Response Support and Resources.**

1. Resources and support assistance from sources external to State government and Gaston County may be required to conduct emergency operations within the EPZ. To assure that these resources are committed in an efficient and effective manner, Gaston County may dispatch a representative to the Catawba Station Emergency Operations Facility.
2. Duke Power Company and the Gaston County Emergency Management Department have designated representatives to serve with SERT as the representative of the licensee and the Board of County Commissioners, respectively.
3. Procedures for control and allocation of resources required to support emergency operations in Gaston County will be prescribed by the Chairman of the Gaston County Board of Commissioners.
4. A resource manual containing the identification, location, and procurement of resources is maintained by the Gaston County Department of Emergency Management.
5. Coordinating Instructions.
 - a. Requisitions for personnel, supplies, and equipment during an emergency will be directed to the Emergency Management Coordinator at the County EOC.
 - b. The types and quantities of resources committed by county departments during an emergency are to be reported to the Emergency Management Coordinator at the County EOC.
 - c. Local resources to support Federal response, will be made available to the extent possible.
 - d. Federal support will be coordinated through the State.

B. **Medical and Public Health Support.**

1. RPS systematically visits and evaluates the capabilities, procedures, and willingness of North

Carolina hospitals to accept and treat radiation accident victims.

2. Few hospitals in the State have the internal capability to evaluate radiation exposure and radioactive material intake. These limitations are adequately compensated for by agreements with private companies to provide whole body counting equipment and with laboratory analysis from medical institutions, the Federal government and private commercial laboratories. See Paragraph V.B., PART 1.
3. Gaston Memorial Hospital will provide support for treating radiation accident victims. (See Paragraph V.B., PART 1, for other hospitals in the vicinity of the Catawba Station.)

Gaston Memorial Hospital, Inc

Telephone: 704/866-2000

Administrator: Thomas R. Matherlee, President

Bed Capacity: 479

Location: 2525 Court Drive, Gastonia, N.C.

Heliport: Cement pad behind hospital

Distance from Catawba Station: 25 miles

Contact Person: Thomas R. Matherlee

704/866-2129

Hospital has a plan to treat 5 patients.

4. The Emergency Medical Services (EMS) Section, Facility Services Division, Department of Human Resources is responsible for developing plans to marshal ambulance and rescue resources and for coordinating emergency medical services at radiation accident sites and shelters.
 5. In the event of an accident at the Catawba Station, RPS and the Gaston County rescue representative on the County EOC staff will advise the Region "F" EMS Office of the medical facilities to be evacuated and those capable of receiving radiated patients. At the staging area EMS personnel will be issued dosimeters, briefed on the nature and extent of the accident, and assigned missions.
 6. If necessary, the Military Assistance to Safety and Traffic Programs (MAST) will be used to assist in transporting non-ambulatory persons to and from medical facilities.
- C. Emergency Facilities and Equipment.
1. Gaston County government conducts emergency command

and control functions from the Gaston County EOC located in the Emergency Management Department in the basement of the County Law Enforcement Building in Gastonia, N.C.

2. Gaston County, to the extent possible, will provide off-site monitoring in the vicinity of the facility.
3. The County EOC houses a communications center and is equipped with an emergency power generator, eating and sleeping quarters, and other necessities required for continuous operation.
4. The County EOC is equipped with commercial telephone service (in-place), two-way radio and a dedicated ringdown speaker telephone line between the Catawba Station and the EOC.
5. The decision to activate the Gaston County EOC, will be made by the Emergency Management Coordinator.
6. The time required from notification of EOC staff to establishment of command and control, under varying conditions, is shown in Figure 8.
7. The Gaston County Department of Emergency Management will provide radiological monitoring equipment and personnel.
 - a. All emergency services personnel who have been trained in radiological monitoring have been issued monitoring and dosimetry equipment.
 - b. The inventory and distribution of radiological monitoring equipment are shown in Figure 9.
 - c. Radiological monitoring equipment used by Gaston County government is inventoried, inspected, and given an operational check every three months and after each use.
8. Field monitoring data collected during the approximately first 7 to 9 hours of an announced emergency will be transmitted or delivered to the Gaston County Department of Emergency Management for analysis. Duke Power Company will assist in the interpretation of this data.

**GASTON COUNTY EOC STAFF
ALERT AND NOTIFICATION TIME TABLE**

Time Period	Weather Conditions	Notify EOC Staff	Travel Time To Gastonia	Establish Co. EOC	Estimated Time To Complete Activation of County EOC
Mon-Fri 0800-1700	Fair	15 min.	20 min.	25 min.	1 hr.
	Rain, sleet, snow	15 min.	40 min.	25 min.	1 hr. 20 min.
Mon-Fri 1700-0800	Fair	30 min.	20 min.	25 min.	1 hr. 15 min.
	Rain, sleet, snow	30 min.	40 min.	25 min.	1 hr. 35 min.
Saturday, Sunday and Holidays	Fair	45 min.	20 min.	25 min.	1 hr. 30 min.
	Rain, sleet, snow	45 min.	40 min.	25 min.	1 hr. 50 min.

Figure 8

**GASTON COUNTY
RADIOLOGICAL MONITORING INSTRUMENT INVENTORY**

<u>Type of Instrument</u>	<u>Inventory</u>	<u>Location or Department</u>
CDV 700	1	New Hope Volunteer Fire Dept.
	1	Union Road Volunteer Fire Dept.
	1	South Point Volunteer Fire Dept.
	1	Cramerton Volunteer Fire Dept.
	1	South Point Rescue Squad
	1	South Gastonia Volunteer Fire Dept.
	1	Ranlo Fire and Rescue Squad
	1	Lowel Volunteer Fire Dept.
	1	Belmont Fire Dept.
	1	Cramerton Police Dept.
	1	Gastonia Fire Dept.
	1	Gaston County Police Dept.
	1	Gastonia Police Dept.
	1	Gaston County Sheriff's Dept.
	36	Storage
	<u>50</u>	Total
CDV 715	1	New Hope Volunteer Dept.
	1	Union Road Volunteer Fire Dept.
	1	South Point Volunteer Fire Dept.
	1	Cramerton Volunteer Fire Dept.
	1	South Point Rescue Squad
	1	South Gastonia Volunteer Fire Dept.
	1	Ranlo Fire and Rescue Squad
	1	Lowell Volunteer Fire Dept.
	1	Belmont Fire Dept.
	1	Cramerton Police Dept.
	1	Gastonia Fire Dept.
	1	Gastonia Police Dept.
	1	Gaston County Police Dept.
	1	Gaston County Sheriff's Dept.
	36	Storage
	<u>50</u>	Total
CDV 742	6	New Hope Volunteer Fire Dept.
	6	Union Road Volunteer Fire Dept.
	6	South Point Volunteer Fire Dept.
	6	Cramerton Volunteer Dept.
	6	South Point Rescue Squad
	6	South Gastonia Volunteer Fire Dept.
	6	Ranlo Fire and Rescue Squad

Figure 9

<u>Type of Instrument</u>	<u>Inventory</u>	<u>Location or Department</u>
CDV 742	6	Lowell Volunteer Fire Dept.
	6	Belmont Fire Dept.
	6	Cramerton Police Dept.
	6	Gastonia Fire Dept.
	6	Gastonia Police Dept.
CDV 742	6	Gaston County Police Dept.
	6	Gaston County Sheriff's Dept.
	<u>284</u>	Storage
	<u>368</u>	Total
CDV 750	1	New Hope Volunteer Dept.
	1	Union Road Volunteer Fire Dept.
	1	South Point Volunteer Fire Dept.
	1	Cramerton Volunteer Fire Dept.
	1	South Point Rescue Squad
	1	South Gastonia Volunteer Fire Dept.
	1	Ranlo Fire & Rescue Squad
	1	Lowell Volunteer Fire Dept.
	1	Belmont Fire Dept.
	1	Cramerton Police Dept.
	1	Gastonia Fire Dept.
	1	Gastonia Police Dept.
	1	Gaston County Police Dept.
	1	Gaston County Sheriff's Dept.
	<u>36</u>	Storage
<u>50</u>	Total	
518 Total all instruments		

Figure 9 (Cont'd.)

VI. EMERGENCY COMMUNICATIONS.

- A. Provisions have been made for communications networks to support all emergency response organizations throughout the course of an emergency. These networks are formed using commercial telephone service, Duke Power Company radio systems, local government emergency services two-way radio systems, and State and Federal government communications.
- B. To assure that an immediate level of alert and notification readiness is available, the following emergency response facilities are staffed 24 hours a day:
1. The Catawba Nuclear Station Control Room.
 2. The State warning point located at the Highway Patrol Communications Center in Raleigh, N.C.
 3. The Gaston County warning point located at the County Communications Center.
 4. The National Weather Service Forecast Office for North Carolina and the Raleigh-Durham Airport.
 5. The National Weather Forecast Office in Charlotte, N.C., serving Gaston County.
- C. The following principal emergency response organizations are not staffed 24 hours a day, but are required to have key personnel on call.
1. Gaston County Department of Emergency Management.
 2. Gaston County EOC.
 3. The North Carolina Department of Crime Control and Public Safety.
 4. The State EOC.
 5. The Radiation Protection Section, Department of Human Resources
- D. Communications between response organizations.
1. Commercial telephone is the primary means of communication between Gaston County and the State and Federal response organizations.
 2. "Area E" Emergency Management radio network is the primary two-way radio communication link with contiguous local governments.

3. The Police Information Network (PIN), with terminals located in the Gaston County EOC, contiguous local governments, and both North Carolina and South Carolina EOCs can be used for emergency communications between the two State Governments and Gaston County.
 4. Communications for alerting Gaston County emergency response personnel are specified in Paragraph IV.B.
- E. Communications between Duke Power Company, the State, and Gaston County.
1. The primary means of communications between the Catawba Station, SERT headquarters and the Gaston County EOC will be ARD lines and speaker telephones.
 2. The primary means of communication between these points and the State EOC will be commercial telephone.
 3. Back-up communications between these points will be two-way radio systems. These systems will be provided by expanding the existing systems now operated by Duke Power Company, the North Carolina DEM, and the Gaston County Emergency Management Department System expansion in all cases will include the addition of temporary base stations, mobile units, and hand-carried portable units, as required.
- F. Medical Services Communications.
1. Gaston County rescue vehicles can communicate with each other and with contiguous counties and hospitals.
 2. Gaston Memorial Hospital can communicate with supporting hospitals and contiguous county rescue squads.
- G. Radiological Monitoring and Decontamination Communications.
1. Information from the field will be transmitted via Gaston County Fire Department frequency. The Gaston County Police Department frequency will be the secondary means for transmission.
 2. Information on radiological monitoring from SERT will be transmitted via Channel 2 Area "E" radio network control.

H. Periodic Communications Tests.

1. Gaston County's emergency services radios are utilized constantly. Therefore, testing is not necessary.
2. Communications with the State will be tested on a monthly basis.
3. Communications between County EOC, State EOC, and field assessment teams will be tested annually.
4. See Section VI, PART 1 for testing of State and Federal communications links.

I. Additional Back-up Communication.

1. The North Carolina State Highway Patrol will position a radio equipped patrol car at the County EOC to provide additional back-up communications.
2. In an extreme emergency, this patrol car may transport hard-copy messages.
3. If necessary, the EOC-emergency shelter communications link, commercial telephone, will be supplemented by amateur radio support or by positioning a radio-equipped law enforcement vehicle at each shelter.

VII. PLANS, EXERCISES, DRILLS, AND TRAINING.

A. Exercises.

1. Exercises will be conducted on an annual basis. The scenario will differ from year to year to insure that all major elements of response are tested within a five year period.
2. There will be varied starting times for exercises to assure that at least one exercise will begin between midnight and 6 a.m. and one between 6 p.m. and midnight every six years.
3. Some exercises will be conducted during adverse weather conditions.
4. Some exercises will be announced.
5. The scenario for each exercise will include:
 - a. An off-site release to assure response by Gaston County's emergency services. These

services will be listed in the narrative of the scenario.

- b. The exercise objectives and evaluation criteria.
 - c. Dates, time, and participating organizations.
 - d. Simulated events and a time schedule of real and simulated events.
 - e. A narrative summary.
 - f. A description of the arrangements and advance materials to be provided to controllers, evaluators, and official observers.
6. Evaluation and Critique.
- a. A critique will be held as soon after the exercise as possible by Federal, State, and local qualified observers.
 - b. All participating organizations will correct areas of concern as soon as possible.

B. Drills.

1. Monthly communications drills will be conducted with Mecklenburg and York Counties.
2. Annual communications drills will be conducted between Gaston County EOC, the State EOC, the Catawba Station, and the field assessment teams.
3. An annual medical emergency drill involving transportation and treatment of simulated radiological contaminated patients will be conducted.
4. Radiological monitoring drills will be conducted to the extent possible by Gaston County at least annually.
5. Qualified observers will evaluate all of the above drills.

C. Radiological Emergency Response Training.

1. A training program for instructing and qualifying personnel who will implement the response plan for Gaston County will include the following personnel:
 - a. Gaston County Emergency Management Coordinator.

- b. Accident assessment and damage control personnel.
 - c. Police, fire, rescue, and medical support personnel.
 - d. Radiological monitoring team personnel.
 - e. Personnel from neighboring counties that have mutual aid agreements with Gaston County.
 - f. Personnel and dispatchers responsible for emergency information and instructions.
2. Initial training and retraining of personnel will be done annually. Duke Power Company will provide training assistance.
 3. Included in this training will be:
 - a. Notification procedures.
 - b. Basic radiation protection.
 - c. The Standard Civil Defense Radiological Monitoring Course (Basic Radiation Emergency Preparedness Course).
 - d. Expected roles in support of radiological emergency response plans.
 - e. For those local support organizations who will enter the Catawba Station site, training shall also include site access procedures and on-site control procedures.

D. Responsibility for Planning and Periodic Review.

1. The Gaston County Emergency Management Coordinator is the emergency planning coordinator for the County.
2. The Emergency Management Coordinator will:
 - a. Participate in training personnel for emergency planning, when available.
 - b. Update this plan and agreements for this plan on an annual basis and make certain that proper distribution of changes is made. Revised pages will be dated and marked to show where changes have been made.

- c. Ensure that this plan contains a detailed listing of supporting plans and their sources.
- d. Ensure that this plan and supporting plans are reviewed, updated, and certified current on an annual basis. Any update will take into account the need for changes identified by drills and exercises.
- e. Ensure that telephone numbers in this plan and in supporting procedures are updated quarterly.

- b. Accident assessment and damage control personnel.
 - c. Police, fire, rescue, and medical support personnel.
 - d. Radiological monitoring team personnel.
 - e. Personnel from neighboring counties that have mutual aid agreements with Gaston County.
 - f. Personnel and dispatchers responsible for emergency information and instructions.
2. Initial training and retraining of personnel will be done annually. Duke Power Company will provide training assistance.
 3. Included in this training will be:
 - a. Notification procedures.
 - b. Basic radiation protection.
 - c. The Standard Civil Defense Radiological Monitoring Course (Basic Radiation Emergency Preparedness Course).
 - d. Expected roles in support of radiological emergency response plans.
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ATTACHMENT 1
AUTHORITIES, REFERENCES AND AGREEMENTS

**ATTACHMENT 1
AUTHORITIES, REFERENCES AND AGREEMENTS**

A. Authorities and References.

1. Chapter 166A of the North Carolina General Statutes.
2. Gaston County State of Emergency Ordinance.
3. Gaston County Disaster Relief and Assistance Plan.
4. Duke Power Company Crisis Management Plan for Nuclear Stations.

B. Letters of Agreement.

1. Gaston County Department of Emergency Management and Duke Power Company.
2. Gaston County State of Emergency Ordinance.

GASTON COUNTY



RECEIVED

JAN 6 1982

EMERGENCY MANAGEMENT

P. O. Box 1578 - Phone 865-3303
Gastonia, North Carolina 28052

Catawba Nuclear Station	
Steam Production	
Station Manager	Code Initial
Supt.	
Sec. Serv.	
Stud. Seca. Serv.	1
Supt. Operations	
Maintenance Supt.	
ROUTING CODES	
Mr. [unclear]	C-Cat
Mr. [unclear]	E-Ref

January 4, 1982

J. W. Hampton
Catawba Nuclear Station
Clover, S. C. 29710

Dear Sir:

This letter of Agreement is to confirm that the Gaston County Department of Emergency Management will plan for and assist in the management of a radiological emergency at the Catawba Nuclear Station. This planning and assistance will be in accordance with our disaster plan and in accordance with the special aspects of our plan for the Catawba Nuclear Station.

It is understood that the Catawba Nuclear Station will provide early notification of an emergency condition to the Gaston County Warning Point as soon as the condition is discovered. In addition to early notification, it is agreed that the Catawba Nuclear Station will provide other information including protective action recommendations, plant status information, actual and projected exposure data for members of the general population, meteorological information, requests for support of off-site agencies and a prognosis for worsening or termination of any general condition.

It is also agreed that the Gaston County Department of Emergency Management will utilize existing warning and notification methodology to ensure that members of the general population in Gaston County are adequately informed of any protective actions that may be required in the event a radiological emergency may exist at Catawba Nuclear Station.

Sincerely yours,

Bob E. Phillips
Bob E. Phillips, Coordinator
Gaston County Department
of Emergency Management

BEP/dg

cc Mike Bolch

PART 2

ATTACHMENT 2
SUPPORTING PLANS AND THEIR SOURCES

**ATTACHMENT 2
SUPPORTING PLANS AND THEIR SOURCES**

PLANSSOURCE

North Carolina Disaster
Relief and Assistance
Plan

North Carolina Division of
Emergency Management, DCCPS

Gaston County Disaster
Relief and Assistance
Plan

Gaston County Emergency
Management Department

Gaston County Resources
Management Plan

Gaston County Emergency
Management Department

Duke Power Company
Crisis Management Plan
for Nuclear Stations

Duke Power Company

Catawba Nuclear Stataion
Emergency Plan

Duke Power Company

STANDARD OPERATING PROCEDURESSOURCE

Emergency Operations Center

Gaston County Emergency
Management Department

Standard Operating Procedures
(SOP) for Gaston County

Gaston County Emergency
Management Department

PART 2

**ATTACHMENT 3
EMERGENCY EQUIPMENT**

Rev.1 Jan. 84

**ATTACHMENT 3
EMERGENCY EQUIPMENT**

COMMUNICATIONS

- (1) Three communication consoles operating seven days a week on a 24-hour basis.
- (2) One mobile communication van for use in any emergency, disaster, or power failure.

RADIOLOGICAL

- (1) Fifty kits, each of which contains the following instruments:
 - 1 CDV 700
 - 1 CDV 715
 - 1 CDV 742
 - 1 CDV 750
- (2) For a list of Gaston County's inventory of radiological monitoring instruments, see figure 9 on pages 41-42.

**MECKLENBURG COUNTY PROCEDURES TO SUPPORT THE
CATAWBA NUCLEAR STATION**

I. PURPOSE.

- A. To meet the United States Nuclear Regulatory Commission Regulation #0654 Revision 1, dated November 1980, requiring that local governments develop an emergency response plan for all areas that lie within 10 miles of a fixed nuclear facility. A portion of Mecklenburg County lies within the 10-mile radius of Duke Power Company's Catawba Nuclear Station.
- B. To prescribe those actions to be taken by Mecklenburg County to protect the health and safety of the general public who may be affected by radiation exposure and environmental contamination resulting from an accident at the Catawba Station.
- C. To define the roles of the county and local political subdivisions prior to, during, and after the need to evacuate any portion of Mecklenburg County.
- D. To provide the coordination, direction, control, and continuity of governments in this and similar disaster situations.
- E. To provide the basis for preparation of detailed emergency operating procedures and training by the various public and private disaster support agencies within and outside this county.

II. CONCEPT OF OPERATIONS.

- A. In the event of an emergency at the Catawba Station, the plant will immediately notify, among others, the Mecklenburg County warning point in the Mecklenburg County Police Communications Center. This notification will include the class of the emergency, other amplifying information, and recommendations for protective actions.
- B. If the emergency poses a radiation threat to the surrounding community, local government will immediately take appropriate actions to inform the residents in the threatened areas of the emergency and what actions they should take for their own safety. The population will be alerted by fixed and mobile siren systems, public address announcements, door to door alerting, Emergency Broadcast System (EBS) radio and television announcements, and any other

communication systems such as the National Weather Service (NWS) that are appropriate to the situation. (See Annex E, EBS Procedures.)

- C. Local government and emergency service organizations must plan for and be prepared to direct all off-site emergency operations for approximately the first 7 to 9 hours of the emergency or until assistance can be expected from the State Emergency Response Team (SERT).
- D. The State assumes direction and control authority when SERT dispatches a message to each county concerned, the State EOC, the South Carolina EEOC, the licensee, and the State warning point. This message states either:
 - 1. **Option A:** At the request of the county or counties concerned, SERT has been established and assumes direction and control authority effective at the specified date and time, or;
 - 2. **Option B:** A State of Disaster or Emergency has been declared, SERT has been established and assumes direction and control authority effective at the specified date and time.
- E. The Charlotte-Mecklenburg County Emergency Management Director will be in charge of planning, organizing, and coordinating the general response conducted by the Mecklenburg County government.
- F. Mecklenburg County is capable of continuous 24-hour operations for a protracted period.
- G. The head of each county government department will be responsible for assuring continuity of resources.
- H. Emergency communications links among State, local, and Federal agencies, and between Duke Power Company and State and County governments are staffed 24 hours a day. (See Emergency Communications, Section VI.)
- I. In summary, this PART contains emergency plans to be implemented throughout the EPZ. In developing the emergency response concept of operations, two time frames were considered. During the first period, when an emergency condition exists at the facility but is not serious enough to warrant a declaration of a state of emergency by the Governor, the county assists local residents in the affected area and directs the actions of county emergency response personnel. In the second period, when the emergency condition has escalated to

such a level that the Governor declares a state of emergency, the State assumes responsibility for direction and control of all emergency operations.

III. ORGANIZATION AND RESPONSIBILITIES. This section assigns responsibility for county emergency response organizations to inform, protect, and evacuate, if necessary, in the event an accident at the Catawba Station poses a threat to any portion of Mecklenburg County. It also establishes the responsibilities of other organizations to provide personnel, equipment, and expertise in a supporting role. (See Organizational Chart, Figure 1.)

- A. The overall responsibility for decision-making within Mecklenburg County rests with the Mecklenburg County Commissioners, who have the ultimate responsibility for the protection of life and property within this county. Mecklenburg County shall provide the basic planning, guidance and evacuation support, as required, to the local township and municipal authorities.
- B. Any county or municipal agency or department may be tasked with an emergency mission. The department head is responsible for accomplishment of an assigned task or function. All department assignments are listed in the following paragraphs. In addition, these departments are assigned the following general tasks:
 - 1. Provide personnel, equipment, and facilities on a 24-hour basis.
 - 2. Plan and provide for the safety of employees and protection of public property in the event of an emergency.
 - 3. Coordinate actions with the Charlotte-Mecklenburg County Emergency Management Office and with other departments having related tasks.
 - 4. Train personnel assigned with emergency tasks and participate in exercises to test emergency plans and procedures.
 - 5. Provide personnel to staff the Mecklenburg County EOC and a liaison to SERT.
 - 6. Provide for record keeping and documentation of the emergency and actions taken.
 - 7. Manage radiation exposure of personnel and maintain exposure records.
 - 8. Prepare damage and loss survey reports.

C. Board of County Commissioners.

1. The Mecklenburg County Commissioners have the ultimate responsibility for protection of people and property within Mecklenburg County until the State of North Carolina assumes responsibility.
2. The Chairman of the Board of County Commissioners assumes command of emergency response action within the county in close coordination with other units of government. (See Organization Chart Figure 1.)

D. Mecklenburg County Manager.

1. Assume command of the EOC staff.
2. Insure that all agencies of the county are made available to assist, as required and within their capabilities in emergency operations.

E. Director of Emergency Management Office.

1. Prepare and maintain radiological emergency response plans in coordination with the Environmental Health Department.
2. Conduct training courses in radiological monitoring and shelter management as required.
3. Provide radiation detection instruments for monitoring and decontamination operations.
4. Activate the EOC if required.
5. Coordinate activities of all departments from the EOC and recommend response actions to governmental officials. Maintain liaison with the State. Assist SERT after the State has assumed command and control of off-site protective actions.

F. Environmental Health Director.

1. Coordinate with the Emergency Management Office in preparing and maintaining emergency response plans to cope with emergencies at the Catawba Station.
2. Dispatch a radiation protection emergency team to the incident site, if requested.
3. Determine the severity level of radiation release and report level to the EOC.

4. Establish and supervise a system for radiological monitoring excluding the monitoring of vehicles and people at traffic control points and shelters.
5. Report monitor readings to the EOC and plot and interpret this information.
6. Recommend measures to lessen radiation hazards for the public and emergency workers.
7. Recommend measures for controlling the spread of radiation.
8. Provide radiological technical direction to other agencies.
9. Make recommendations for evacuation of threatened communities and for subsequent reentry and recovery.
10. Serve as a lead agency for assessment of radiological damage to land, crops, livestock and other personal property.
11. Designate a representative to SERT to coordinate technical advice and assistance with State radiation protection personnel.
12. Assist State radiation protection personnel after the State has assumed command and control of all off-site protective actions.

G. County Police Chief.

1. Operate the county warning point 24 hours a day and notify local government officials when notice is received of a radiation emergency at the Catawba Station.
2. Designate a briefing officer for the EOC.
3. Be prepared to warn the general public of reported radiation emergencies at Catawba.
4. Provide traffic control for evacuation, in the vicinity of shelters, and around contaminated areas.
5. Assist in the warning and notification operations on Lake Wylie and the Catawba River.
6. Assist emergency response personnel in the monitoring of evacuees and vehicles for contamination.

7. Direct contaminated persons and vehicles to designated decontamination stations.
8. Protect public and private property against looting and other threats.

H. Fire Administrator.

1. Coordinate with volunteer fire departments in warning the general public of reported radiation emergencies at the Catawba Station.
2. Establish and operate decontamination stations.
3. Be prepared to decontaminate equipment, roads or structures, if required.
4. Provide area lighting with generators and flood light sets, if required.
5. Provide equipment and personnel to conduct search and rescue missions.
6. Provide fire protection.

I. Emergency Medical Services Director.

1. Direct emergency medical services and rescue squads in Mecklenburg County.
2. Provide communications with hospital, ambulances, and rescue squads.
3. Obtain additional ambulance and rescue resources, if needed.

J. Social Services Director.

1. Assist American National Red Cross and officials of the University of North Carolina at Charlotte (UNCC) in shelter management.
2. Provide personnel for training in shelter management and radiological monitoring, if requested.

K. Chairman, Agricultural Extension Service.

1. Support mass feeding of evacuees.
2. Coordinate with North Carolina Department of Agriculture in obtaining samples of produce and

livestock feed for radiological monitoring, if required.

3. Prohibit the sale, production and distribution of contaminated livestock, produce, fish, and processed food products.
4. Close contaminated areas of lakes and streams to the taking of all fish.
5. Locate sources of uncontaminated feed for livestock.
6. Assist Mecklenburg County Environmental Health Department in assessment of radiological damage to land, crops, livestock, and other personal property.

L. Public Service and Information (PSI) Director.

1. Make arrangements with radio and television news media for rapid dissemination of warning and evacuation information.
2. Draft initial news releases.
3. Collect and release all information from the EOC to the news media.
4. Schedule news briefings.
5. Assist news media in resolving conflicting information.
6. Copy news releases for distribution.
7. Prepare and distribute in a timely manner facsimiles of news releases for officials and department heads.

M. Charlotte-Mecklenburg Utility Director.

1. Monitor water supply for level of radiation before it enters the distribution system.
2. Discontinue pumping water into storage tanks when instructed to do so by county officials.
3. Ration water when instructed to do so by county officials.

N. Superintendent of Schools.

1. Prepare and maintain radiological emergency response plans for the schools located within 10

miles of the Catawba Nuclear Station in accordance with this plan.

2. Make available school buses, trucks and other equipment that may be required during an evacuation.

O. City of Charlotte Officials.

1. Assist with firefighting, police services, and transportation with transit buses.
2. Police Department will be prepared to dispatch helicopter to assist in the warning process on Lake Wylie.

P. Officials of Pineville.

1. Assist in the execution of this plan.
2. Develop and maintain any supporting plans, procedures, and alerting lists necessary for the execution of this plan.
3. Assist departments of Mecklenburg County government in the preparation and execution of this plan, if requested.

Q. Mecklenburg County Red Cross Director.

1. Operate the shelter at UNCC or at any other designated shelter location as required.
2. Assign shelter staff members to radiological monitoring training.
3. Augment Mecklenburg County medical personnel, equipment, and blood products.

R. Mecklenburg County Public Health Director.

1. Coordinate all public health functions.
2. Provide medical liaison with County EOC and provide medical technical assistance and consultation as needed.
3. Determine the medical components needed to respond to the emergency.
4. Follow Annex F - Medical and Health Services to Charlotte-Mecklenburg County Emergency Management Emergency Operations Plan in coping with the emergency.

S. State and Federal Agencies in Supporting Role.

1. North Carolina Department of Crime Control and Public Safety. Coordinate overall State effort to provide support.
2. North Carolina State Highway Patrol. Provide law enforcement, traffic control (including control points), and radiological monitoring.
3. National Weather Service, Charlotte. Prepare and release emergency public service messages via National Oceanic and Atmospheric Administration (NOAA) weather radio.

T. Private Businesses, Industries, and Electric Utility Companies.

1. Duke Power Company.
 - a. Develop emergency response plan to support the Catawba Station.
 - b. Provide prompt and accurate reports of abnormal activity at the Catawba Station as required by the United States Nuclear Regulatory Commission (NRC).
 - c. Provide accident assessment and recommendations to local government concerning protective measures for the public.
 - d. Provide equipment and training required to support local government.
2. Radio Station WEZC will be the common program control station for EBS to broadcast emergency instructions and information to the public on a 24-hour basis.

U. Mecklenburg County Coordinating Instructions.

1. Many tasks to be undertaken during the conduct of emergency operations will require the resources and the efforts of more than one government agency.
2. Some may require the efforts of various combinations of Federal, State and local agencies.
3. Some Mecklenburg County agencies have the resources and the capability to accomplish the same task.

4. To attempt to fix responsibility for a single task with one agency of government in a predetermined manner is impractical in that it would deny the Emergency Management Director the flexibility required to respond to a situation which could (and probably would) be changing continually.
5. Mecklenburg County department and agency directors, supervisors, chiefs, and managers are responsible for preparing their organizations to accept the role of "lead agency" when directed by the appropriate authority.

MECKLENBURG COUNTY ORGANIZATIONAL CHART

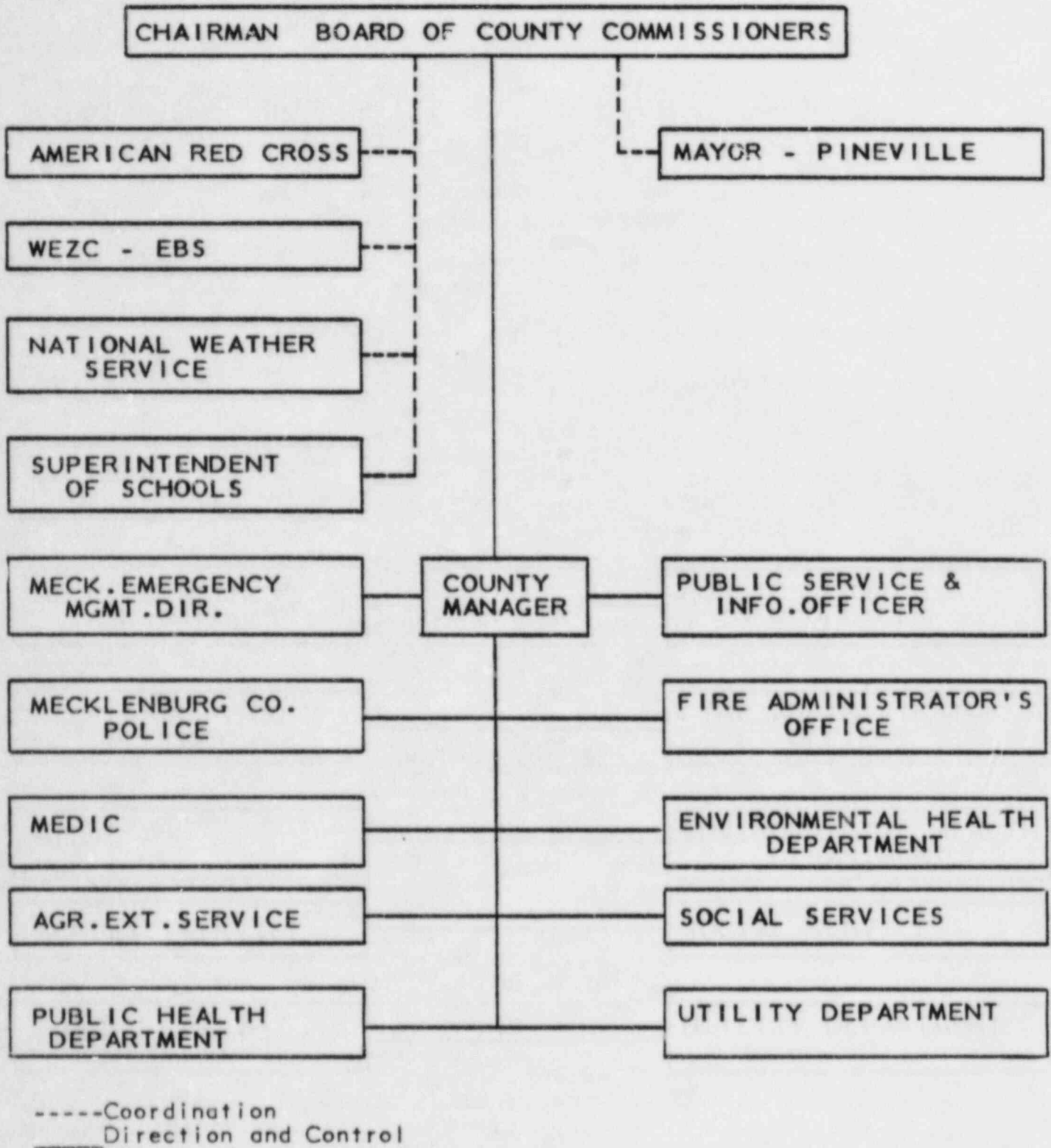


Figure 1

V. **Primary and Support Responsibility Summary.**

1. Basic organizational units and responsible individuals for Mecklenburg County:

<u>Government Entity</u>	<u>Title of Key Individual</u>
Mecklenburg County	Chairman of Board of County Commissioners
Administration	County Manager
Emergency Management	Director
Social Services	Director
Environmental Health Dept.	Director
Fire Service	Fire Administration Officer
Mecklenburg Co. Vol. Fire Depts.	Chief
Public Health Dept.	Director
Emergency Medical Services	Emergency Director
Communication Center	Director
Rescue Squads	Chiefs
Maintenance Dept.	Supervisor
Agricultural Extension Service	Director
Board of Education	Superintendent
Landfill Dept.	Supervisor

2. Figure 2 lists the major functions, response organizations, and the level of responsibility for emergency operations. The ranking member of the unit of government participating in the special function is responsible for organizing, training, equipping, committing, and controlling personnel for emergency response.
3. The fact that a unit of government (or the individual in charge of the unit) is assigned primary responsibility for a specific function does not necessarily mean that the unit possesses the capability to perform all tasks included in the function. The term "primary responsibility" as used herein is intended to mean "responsible for carrying out the function or seeing that it is carried out." Personnel with primary and support responsibility are to be employed in a cohesive manner under the direction of the individual in charge of the unit with primary responsibility.

4. The policy development and major decision making elements of the command and control function are carried out as prescribed by the Chairman of the Mecklenburg County Board of Commissioners or the designated representative.
5. The overall operational elements of the command and control function are the responsibility of the Chairman of the Mecklenburg County Board of Commissioners. The Chairman has delegated to the Mecklenburg County Manager, the authority to act on his behalf in all matters related to and dealing with the operational aspects of command and control in the conduct of emergency response actions.
6. The Mecklenburg County Manager utilizes the County EOC staff to carry out the function of overall command and control and other functions for which the Chairman of the Mecklenburg County Board of Commissioners is responsible.
7. The Charlotte-Mecklenburg County Emergency Management Office is available and on call 24 hours a day.
8. Figure 2 lists major function and responsibility assignments. It is not intended to be all inclusive but rather to summarize the operational concept employed.

PRIMARY AND SUPPORT RESPONSIBILITY SUMMARY

<u>FUNCTION</u>	<u>ORGANIZATION</u>	<u>RESPONSIBILITY</u>	
		<u>PRIMARY</u>	<u>SUPPORT</u>
Command and Control	Mecklenburg Co. Manager	x	
	Mecklenburg Co. Emergency Management Office		x
Warning	Mecklenburg Co. Police Dept.	x	
	National Weather Service		x
	Police Information Network		x
	Radio and television stations		x
	Volunteer Fire Departments		x
	Rescue Squads		x
Notification Communications	Mecklenburg Co. Police Dept.	x	
	Police Information Network		x
	Southern Bell		x
	Duke Power Company		x
Public Information	Mecklenburg Co. PSI	x	
	Charlotte PSI		x
	Mecklenburg Co. Emergency Management Office		x
	Duke Power Company		x
	Radio and television stations		x
	Local newspapers		x
Law Enforcement	Mecklenburg Co. Police Dept.	x	
	Charlotte Police Dept.		x
	Pineville Police Dept.		x
Transportation	Charlotte Dept. of Transp.	x	
	Mecklenburg Co. Bd. of Education		x
Accident Assessment	Duke Power Company	x	
	Mecklenburg Co. Emergency Management Office		x
	Mecklenburg Co. Environmental Health Dept.		x
Public Health	Mecklenburg Co. Public Health Dept.	x	
	Mecklenburg Co. Environmental Health Dept.		x
	Charlotte-Mecklenburg Utility Dept.		x

Figure 2

PRIMARY AND SUPPORT RESPONSIBILITY SUMMARY

<u>FUNCTION</u>	<u>ORGANIZATION</u>	<u>RESPONSIBILITY</u>	
		<u>PRIMARY</u>	<u>SUPPORT</u>
Shelter and Mass Feeding	Mecklenburg Co. Red Cross	x	
	Mecklenburg Co. Dept. of Social Services		x
	Mecklenburg Co. Emergency Management Office		x
Fire	Mecklenburg Co. Volunteer Fire Depts.	x	
	Charlotte Fire Dept.		x
Rescue	Mecklenburg Co. Rescue Squads	x	
	Charlotte-Mecklenburg Fire Depts.		x
Traffic Control	Mecklenburg Co. Police Dept.	x	
	Charlotte Police Dept.		x
	State Highway Patrol		x
Emergency Medical Service	Mecklenburg Co. Emergency Medical Service	x	
	Mecklenburg Co. Rescue Squads		x
Protective Response	Mecklenburg Co. Emergency Management Office	x	
	Mecklenburg Co. Bd. of Education		x
	Mecklenburg Co. Dept. of Social Services		x
	Mecklenburg Co. Police Dept.		x
	Mecklenburg Co. Volunteer Fire Depts.		x
	Mecklenburg Co. Rescue Squads		x
	Mecklenburg Co. Agricultural Service		x
	Radio and television stations		x
	Mecklenburg Co. Environ- mental Health Dept.		x
	Mecklenburg Co. Emergency Medical Service		x
	Duke Power Company		x

Figure 2 (Cont'd.)

PRIMARY AND SUPPORT RESPONSIBILITY SUMMARY

<u>FUNCTION</u>	<u>ORGANIZATION</u>	<u>RESPONSIBILITY</u>		
		<u>PRIMARY</u>	<u>SUPPORT</u>	
Radiological Exposure Control and Sanitation	Mecklenburg Co. Environ- mental Health Dept.	x		
	Mecklenburg Co. Emergency Management Office		x	
	Mecklenburg Co. Agricultural Extension Service		x	
	Mecklenburg Co. Police Dept.		x	
	Mecklenburg Co. Volunteer Fire Depts.		x	
	Mecklenburg Co. Emergency Medical Service		x	
	Charlotte-Mecklenburg Utility Dept.		x	
	Duke Power Company		x	

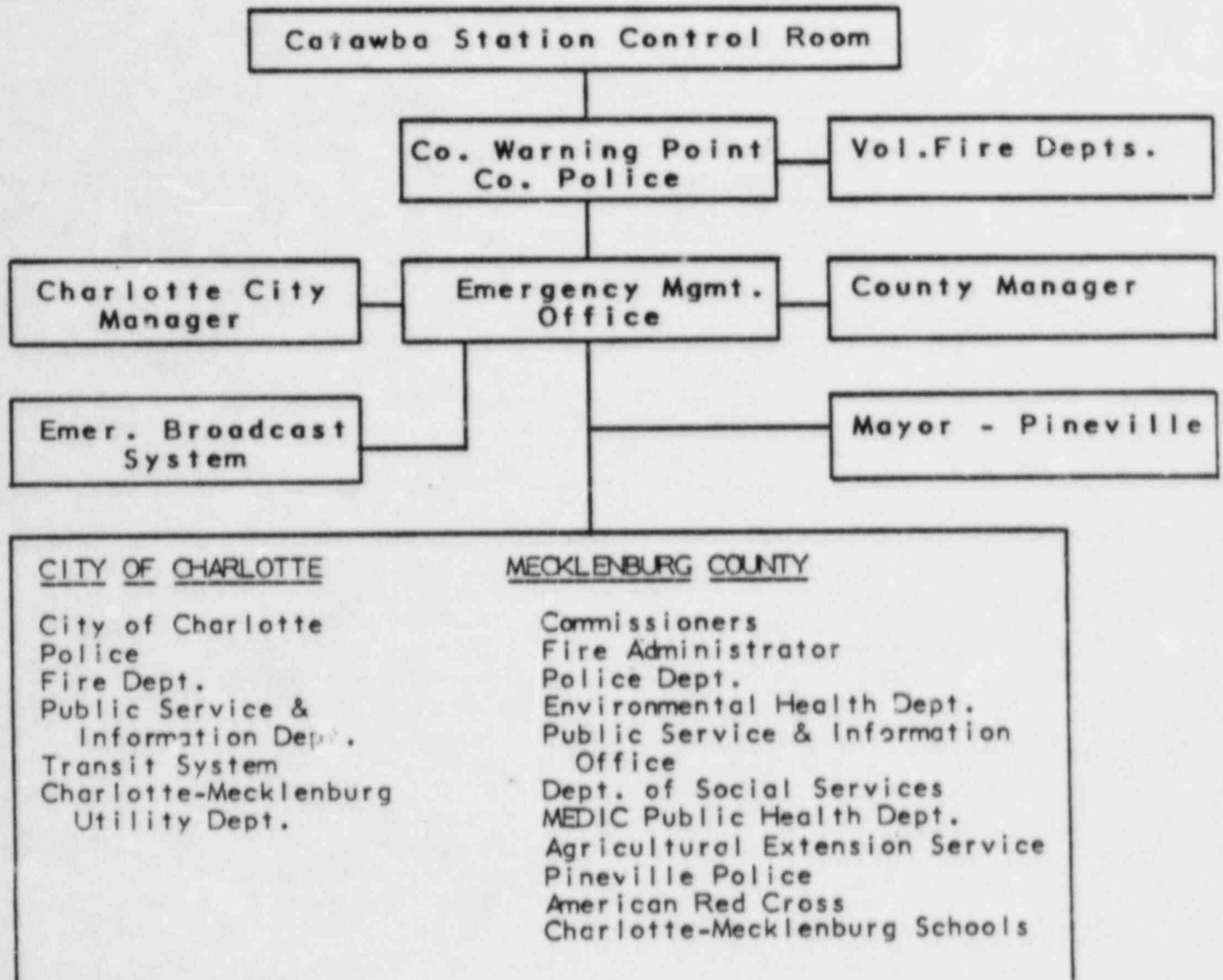
Figure 2 (Cont'd.)

IV. EXECUTION.

- A. The initial warning of any one of the four classes of an emergency action level is transmitted from the Catawba Nuclear Station Control Room to the State warning point, the Gaston County warning point, and the Mecklenburg County warning point located in the Mecklenburg County Police Communications Center. Local government will rely on information and recommendations provided by the Catawba Station for determination of minimum off-site response measures. The four classes of emergencies are:
1. **NOTIFICATION OF AN UNUSUAL EVENT** - Provides early and prompt notification of minor events which could lead to more serious consequences.
 2. **ALERT** - Same basic situations as **UNUSUAL EVENT** with potential of becoming more serious.
 3. **SITE AREA EMERGENCY** - Reflects conditions on site where some significant radiation releases are occurring or are likely to occur but where a core melt situation is not indicated. Full mobilization of emergency personnel in the near site environs is indicated.
 4. **GENERAL EMERGENCY** - Involves actual or imminent substantial core degradation or melting with potential for loss of containment.
- B. Warning and Notification Methods and Procedures.
1. The initial notification of any one of the four classes of an emergency is transmitted from the Catawba Station Control Room to the County warning point. A dedicated ringdown speaker telephone line is the primary means of transmitting the notification. Commercial telephone is the secondary means and voice radio is to be the tertiary means of notification.
 2. Messages received must be authenticated. The two methods by which a message reporting an emergency action level can be authenticated are:
 - a. The telecommunicator at the County warning point verifies that the code word transmitted is on the list of authenticator code words.
 - b. Upon completion of the call, the telecommunicator calls back to the Catawba Station to verify that the report is authentic.

3. The telecommunicator determines the method of authentication. If transmitted by radio, the message must be authenticated by code word.
4. The message format for reporting an emergency situation to the County warning point is shown in Annex F. The same format will be used for initial and follow-up messages.
5. The telecommunicator on duty at the County warning point is to complete a warning message form at the time the report is being transmitted. Particular attention will be given to the action level classification, time, date, and the name of the individual making the report.
6. The N.C. Division of Emergency Management is responsible for supplying the County warning point and the Catawba Station with the current list of authenticator code words.
7. The individual in charge of the operation of the County warning point is responsible for making immediately available to all telecommunicators/dispatchers the list of authenticator code words.
8. Coordinating Instructions.
 - a. Due to the sensitive nature of the information included in the notification of an emergency and the requirement for speed, the telephone is to be used by all participants to the maximum extent possible in transmitting and relaying a notification of an emergency, follow-up information, and subsequent reports.
 - b. If necessary, County Police or other agency personnel will be used to hand deliver written copies of the notification to the individuals shown on the Mecklenburg County Priority Alert List on file in the Emergency Management Office and the County warning point. (See Figure 3, Key Alert Notification Chart.)
 - c. Follow-up information and subsequent reports are to be transmitted immediately by the fastest means possible to the individuals shown on the Mecklenburg County Alert List.

MECKLENBURG COUNTY KEY ALERT NOTIFICATION CHART



All emergency action level messages for an Alert, Site Area Emergency, or General Emergency will be relayed to each office or agency noted on the Key Alert List. The Notification of an UNUSUAL EVENT to all persons or agencies on the Key Alert List is at the discretion of Mecklenburg County. Telephone will be the primary means of passing this information.

Figure 3

9. Mecklenburg County will have the responsibility for all warning within the county. When public notification has been recommended by the Catawba Station Control Center or ordered by SERT after it has assumed command and control, emergency personnel will immediately implement all means at their disposal to gain the attention of the area residents and tell them what to do. The fixed siren system, with activation controls located in the Mecklenburg County warning point, will serve as the primary public alerting system. Once activated, this siren system is designed to warn immediately all areas of Mecklenburg County within the 10-mile EPZ. Vehicles with sirens and/or public address (PA) systems will serve as a back-up and will be activated only as required to substitute or complement the primary fixed siren system. If necessary, door to door alerting will be accomplished by the back-up warning system.

10. If the back-up system is used, emergency vehicles with effective sound devices will be dispatched along preassigned routes, stop each quarter (1/4) mile in populated areas, and make the following announcement: **ATTENTION. ATTENTION. AN EMERGENCY SITUATION HAS DEVELOPED IN THIS AREA THAT CAN AFFECT YOUR SAFETY. TURN ON YOUR RADIO OR TELEVISION FOR INFORMATION AND INSTRUCTIONS.** Including the stops to make the announcements, it is estimated that each vehicle will average fifteen miles per hour (15 MPH). This estimate is used to determine how rapidly the complete 10-mile EPZ within Mecklenburg County can be warned by the back-up system. See Figure 4, Back-up Alert and Notification Time Table. If the entire area within the 10-mile EPZ does not need to be warned by the primary fixed siren system, this warning time estimate might be reduced by concentrating warning vehicles in smaller operational areas.

CAUTION: THE EMERGENCY BROADCAST SYSTEM MUST BE ACTIVATED JUST PRIOR TO OR AT THE SAME TIME EITHER SIREN SYSTEM IS USED TO GAIN THE ATTENTION OF THE PUBLIC.

11. Zone Warning Responsibility.
 - a. The fixed sirens located in the fire departments within the EPZ will be immediately activated. Fire departments and rescue squads in the 10-mile EPZ will be prepared to dispatch

all available vehicles with sirens and/or PA systems over preassigned routes if the back-up alert system is necessary. (See Figure 5.)

- b. These units will be prepared to be augmented by a predetermined number of vehicles from outside the 10-mile EPZ (e.g., county and city police departments and volunteer fire departments).
- c. Local law enforcement personnel will immediately establish traffic control points at predetermined locations.
- d. The Mecklenburg County Police Department will assist in the warning and notification operations on Lake Wylie and the Catawba River.
- e. The Charlotte Police Department will dispatch the police helicopter to assist in warning and notification on Lake Wylie. The helicopter pilot will be given the same instructions given to surface patrol officers.

BACK-UP ALERT AND NOTIFICATION TIME TABLE

ZONE A-0

Description: York Road (Hwy. 49) at Youngblood Road west to Catawba River, Youngblood Road south to McKee Road, McKee Road south to State line.

Miles Populated: 2.9

Warning Responsibility: Steele Creek VFD 1 and 2 and Pineville VFD

7.0 minutes to station
 5.0 minutes to zone
 30.0 minutes to alert
42.0 minutes total time

ZONE A-1

Description: Steele Creek Road (Hwy. 160) at Hwy. 49 south to State line, Hwy. 49 at Hwy. 160 west to Youngblood Road.

Miles Populated: 2.0

Warning Responsibility: Steele Creek VFD 1 and 2 and Pineville VFD

7.0 minutes to station
 4.0 minutes to zone
 30.0 minutes to alert
41.0 minutes total time

ZONE A-2

Description: Steele Creek Road (Hwy. 160) at Sledge Road south to Hwy. 49, Hwy. 49 at Hwy. 160 west to Catawba River, Sledge Road west to Shopton Road north to Woody Point, Woody Point west to Catawba River.

Miles Populated: 2.3

Warning Responsibility: Steele Creek VFD 1 and 2 and Pineville VFD

3.0 minutes to station
 2.0 minutes to zone
 30.0 minutes to alert
35.0 minutes total time

ZONE A-3

Description: Steele Creek Road at Westinghouse Boulevard south to Sledge Road, Westinghouse Boulevard west to Catawba River.

Miles Populated: 2.5

Warning Responsibility: Steele Creek VFD 1 and 2 and Pineville VFD

4.0 minutes to station
 3.0 minutes to zone
 35.0 minutes to alert
42.0 minutes total time

Figure 4

BACK-UP ALERT AND NOTIFICATION TIME TABLE

ZONE A-4

Description: Shopton Road at Dixie River Road south to Westinghouse Boulevard, Dixie River Road west to Catawba River.

Miles Populated: 2.3

Warning Responsibility: Carmel VFD
 10.0 minutes to station
 5.0 minutes to zone
30.0 minutes to alert
 45.0 minutes to total time

ZONE A-5

Description: Hwy. 160 at Dixie River Road south to Westinghouse Boulevard, Westinghouse Boulevard east to York Road, York Road north to Beam Road north to Shopton Road, Shopton Road west to Hwy. 160.

Miles Populated: 3.2

Warning Responsibility: Carmel VFD
 6.0 minutes to station
 4.0 minutes to zone
35.0 minutes to alert
 45.0 minutes total time

ZONE A-6

Description: Hwy. 160 at Westinghouse Boulevard south to Hwy. 49, Hwy. 49 northeast to Westinghouse Boulevard, Westinghouse Boulevard west to Hwy. 160.

Miles Populated: 1.8

Warning Responsibility: Carmel VFD
 7.0 minutes to station
 5.0 minutes to zone
20.0 minutes to alert
 32.0 minutes total time

ZONE A-7

Description: Hwy. 160 at Hwy. 49 south to State line, Hwy. 49 at Hwy. 160 northeast to Carowinds Boulevard, Carowinds Boulevard south to State line.

Miles Populated: 2.0

Warning Responsibility: Carolina VFD
 8.0 minutes to station
 5.0 minutes to zone
30.0 minutes to alert
 43.0 minutes total time

Figure 4 (Cont'd.)

BACK-UP ALERT AND NOTIFICATION TIME TABLE

ZONE A-8

Description: Hwy.49 at Carowinds Boulevard to Arrowood Road (city limits), follow city limits east to I-77, I-77 south to State line.

Miles Populated: 2.2

Warning Responsibility: Carolina VFD
7.0 minutes to station
7.0 minutes to zone
30.0 minutes to alert
44.0 minutes total time

ZONE A-9

Description: Charlotte city limits at I-77 east to Pineville city limits, Charlotte city limits at I-77 south to State line.

Miles Populated: 2.3

Warning Responsibility: Matthews VFD
10.0 minutes to station
5.0 minutes to zone
30.0 minutes to alert
45.0 minutes total time

ZONE A-10

Description: Town of Pineville

Warning Responsibility: Pineville Police Department and Pineville VFD
0.0 minutes to station
0.0 minutes to zone
25.0 minutes to alert
25.0 minutes total time

Figure 4 (Cont'd.)

ZONE WARNING RESPONSIBILITY

<u>ZONE</u>	<u>RESPONDING DEPARTMENTS</u>	<u>RESPONDING UNITS</u>
A-0	Steele Creek VFD 1 and 2 and Pineville VFD	7 units
A-1	Steele Creek VFD 1 and 2 and Pineville VFD	7 units
A-2	Steele Creek VFD 1 and 2 and Pineville VFD	7 units
A-3	Steele Creek VFD 1 and 2 and Pineville VFD	7 units
A-4	Carmel VFD	3 units
A-5	Carmel VFD	3 units
A-6	Carmel VFD	3 units
A-7	Carolina VFD	2 units
A-8	Carolina VFD	2 units
A-9	Matthews VFD	2 units
A-10	Pineville Police Dept. and Pineville VFD	All units 2 units

Figure 5

- f. For notification and warning procedures for boaters on Lake Wylie and the Catawba River, refer to Annex G.
12. To avoid extreme apprehension and possible panic on the part of the public, it is imperative that the television and radio stations have received and are transmitting the EBS message prepared by the County PSI officer. (See Annex D for EBS message format.)
13. Maximum efforts will be made to ensure receipt of warning message by all members of the community by completing the warning cycle twice in an attempt to assure 100% notification. (However, this procedure will not guarantee 100% notification.)
14. If Mecklenburg County officials decide to activate EBS, the Mecklenburg County warning point will notify the Federal Aviation Administration Airport Traffic Tower at the Charlotte/Douglas International Airport and dispatchers of both the Southern and Seaboard/Coastline Railroads.

C. Accident Assessment.

1. Mecklenburg County Environmental Health Department has limited capabilities and resources for assessing and monitoring actual or potential consequences of a radiological emergency within the plume exposure pathway EPZ.
2. Mecklenburg County has three radiological defense officers (RDO) trained in monitoring and sampling. Fire and rescue personnel within the area have monitoring equipment and have been trained by the RDO.
3. The Catawba Station will assess and monitor actual or potential off-site consequences of a radiological emergency within the affected area, to the extent possible.
4. If an evacuation is ordered, the Mecklenburg County and the Charlotte Police Departments will establish traffic control points and Mecklenburg County volunteer fire departments will establish monitoring and decontamination stations at the points designated on the Operations Map in Annex I.
5. The North Carolina State Highway Patrol will be prepared to establish traffic control points at the same locations.

6. Local response operations will be activated through the Charlotte-Mecklenburg County Emergency Management Office.
 - a. Primary means of notification will be the telephone. Radio will be the secondary means of notification and will be used for reporting back to the EOC.
 - b. All teams will be composed of not less than three members.
 7. Upon arrival, the North Carolina Radiation Protection Section (RPS) will assume responsibility for assessment and sampling.
- D. Public Education and Information.
1. The Mecklenburg County PSI officer, or the authorized representative, will represent Mecklenburg County in the preparation and release of emergency public information and instructions concerning a nuclear radiation accident at the Catawba Station.
 2. Coordinating Instructions.
 - a. Since knowledge of the potential duration of a release and the time available before expected off-site exposures is important in determining specific public instructions, the radiation protection component of the Mecklenburg County EOC must make available to the PSI staff all data necessary to prepare bulletins and statements.
 - b. The PSI officer assigned to the Mecklenburg County EOC staff will coordinate all public information activities between Mecklenburg County and the State and Duke Power Company.
 - c. Facilities for county PSI personnel (and for State, Federal, or utility staff, if required) will be provided at the EOC.
 - d. The PSI officer will be responsible for the collection and release of all information to the news media, verifying and resolving rumors (all rumors must be reported to SERT) and any other conflicting information, scheduling news briefings, and copying releases for distribution in Mecklenburg County.
 3. Mecklenburg County government will inform the news media on the status of plans to cope with emergen-

cies resulting from accidents at Catawba annually, at a minimum. The public information staffs of Mecklenburg County, Duke Power Company, and SERT will jointly prepare the programs and present them to the media. The presentations will include:

- a. A briefing on the status of the State and Mecklenburg County government emergency response plans.
 - b. An orientation on radiation and its effects on people and the environment.
 - c. A briefing on emergency response plans for the Catawba Nuclear Station.
 - d. Procedures and points-of-contact to be used by the media in obtaining pertinent information.
 - e. Other information as requested by the media.
4. The three principal points-of-contact for media personnel to obtain current information during an emergency are:
- a. The Duke Power Company Media Center located at the O.J. Miller Auditorium in Charlotte.
 - b. The field command post for SERT.
 - c. The Mecklenburg County EOC.
5. Communications to the Public.
- a. The primary means of communications to the public are broadcast radio, television, and cablevision. Fourteen radio stations and five television stations and a cablevision operation serve the area of Mecklenburg County within the 10-mile EPZ.
 - b. Mecklenburg County EBS stations are in the Charlotte Operational Area. (See Annex E.) The common program control station for the Charlotte area is radio station WEZC.
 - c. The secondary means of communications to the public is the National Weather Service radio station in Charlotte.
6. Information and instructions transmitted to the public during periods when an emergency condition exists may (and probably will) refer to information published and distributed during non-emergency

periods such as:

- a. Geographical areas or political subdivisions of Mecklenburg County within the 10-mile radius of the Catawba Station.
- b. Travel routes and shelter facilities should an evacuation be required.
- c. The effects of radioactivity on people.
- d. Instructions concerning the use of drugs or medicines to off-set the effects of radiation.
- e. Instructions on how the public will be alerted and informed of an emergency condition, or a potential threat, particularly between the hours of midnight and 6 a.m.

7. Concept of Operations.

- a. During normal, non-emergency periods, the PSI officer will participate in all annual exercises conducted by Mecklenburg County and DCCPS and will prepare and maintain on file in Mecklenburg County the following:
 - (1) Draft news releases concerning accidents at the Catawba Station that would require the Mecklenburg County authorities to alert and warn the public.
 - (2) Educational materials explaining radiation, nuclear power plant operations, possible effects from radioactive releases, and self-help methods of protection.
 - (3) Camera-ready newspaper copy, slides for television, and simple verbal directions for radio describing evacuation routes and shelter locations.
- b. Upon notification of an accident at Catawba, the Mecklenburg County PSI officer will:
 - (1) Be prepared to report to the Mecklenburg County EOC.
 - (2) Immediately review and update all prepared warning and evacuation information.

- (3) Review and update, if necessary, all educational materials for release to the news media during the emergency.
- (4) Brief local news media representatives on the local situation.
- (5) Establish contact with DCCPS and provide Mecklenburg County briefings, if requested.
- (6) Make recommendations to the County Manager concerning public release of information.
- (7) Take other actions as directed by the County Manager.

c. Following an emergency, the PSI officer will maintain contact with SERT and be prepared to support the SERT PIO when directed.

E. Protective Response.

1. During the initial hours of an emergency, approximately 7 to 9 hours, representatives from the Catawba Station will recommend protective response actions for Mecklenburg County. Once command and control is assumed by SERT, the State will be responsible for protective response actions.
2. Until SERT assumes control, the Mecklenburg County Chairman of the Board of County Commissioners will take the final responsibility for ordering evacuation.
3. If conditions warrant immediate activation of alerting procedures, the dispatcher will follow the recommendations of a representative from the Catawba Station. At other times the dispatcher will make every effort to contact the Emergency Management Director, the police, and the County Commissioners. If after five minutes, the dispatcher is unable to contact the required persons, recommendations from the Catawba Station will be followed.
4. Basic protective actions for the public and emergency workers will be based on recommendations of the Environmental Protection Agency (EPA) in EPA 520/1-75-001 and of the U.S. Department of Health and Human Services and the Federal Drug Administration (FDA) regarding human food and animal feed as

published in the Federal Register of October 22, 1982 (47 FR 47073).

5. Protective Actions May Include:
 - a. Area evacuation of all or segments of the population. Evacuation routes, shelters, monitoring points, hospitals, and the population density are detailed on the operations map in Annex I.
 - b. Advising the people to stay indoors by PA systems, radio and television, and door to door alerting, where necessary. (See Paragraph IV.B., Warning and Notification Methods and Procedures.)
 - c. Administration of potassium iodide (KI) tablets to emergency workers and institutionalized persons.
 - d. Control of water supply intake.
 - e. Diversion, embargo, or destruction of agricultural products.
 - f. Respiratory protection (e.g. handkerchiefs over mouth).
 - g. Other appropriate actions such as advising the public to wash home grown products prior to consumption.
6. The immobility of hospital and nursing home patients may preclude evacuation of these facilities. If so, the following protective actions may be advised:
 - a. Close windows and doors.
 - b. Discontinue use of air conditioners.
 - c. Stay indoors.
 - d. After consultation with DHR, the Mecklenburg County Environmental Health Department will administer KI as a blocking agent. (See PART 1, Paragraph IV.E.7) The Mecklenburg County Environmental Health Department will be responsible for delivering KI to hospitals and nursing homes, and other designated locations.

7. Distribution and Administration of Protective Drugs.
 - a. The Mecklenburg County Environmental Health Department will be responsible for the storage and distribution of KI.
 - b. The Environmental Health Department, after consultation, or reasonable efforts to consult with RPS and other DHR officials, is empowered to authorize the distribution of KI to emergency workers and institutionalized persons if the total thyroid exposure of an individual is reasonably suspected, projected, or confirmed to reach or exceed 15 rems from inhalation or ingestion of radioiodine.
 - c. If the total thyroid exposure is suspected, projected, or confirmed to reach or exceed 25 rems, the Environmental Health Department will recommend the administration of KI to emergency workers and institutionalized persons in affected areas.
 - d. KI in tablet form is stored at the Mecklenburg County Environmental Health Department.
 - e. The Environmental Health Department will provide vehicles to deliver a supply of KI to the Pineville and Steele Creek No. 2 volunteer fire departments.
8. Transportation for Evacuation.
 - a. Primary means of transportation will be private vehicles.
 - b. News releases will urge the sharing of rides with persons without transportation.
 - c. Projected traffic capacity on major evacuation routes is 1200-3000 vehicles per hour. (See PART 1, Paragraph IV.E.5.)
 - d. Non-ambulatory patients will be transported by MEDIC. Mutual aid agreements with rescue units in surrounding counties will be invoked where necessary.
 - e. Students in the three schools located in the EPZ will be transported on school buses.

- f. Pickup points will be established for those without transportation. These evacuees should start walking to the nearest traffic control point. Charlotte Department of Transportation will dispatch buses to designed pickup points. School buses may also be used to transport these evacuees.
 - g. Charlotte city buses will also be used to transport unescorted children from Carowinds Amusement Park to a reception center in Charlotte.
9. The Mecklenburg County Police Department, assisted by the State Highway Patrol, will control access to evacuation routes.
 10. The State Department of Transportation and county and municipal public works departments will clear evacuation routes of any impediments such as snow, ice, debris or equipment.
 11. The North Carolina Department of Transportation will be responsible for posting evacuation route signs.
 12. The Mecklenburg County Red Cross with assistance from the Mecklenburg Department of Social Services will be responsible for the management of shelters and the registration and feeding of evacuees in accordance with established procedures. Personnel from volunteer fire departments assisted by local medical personnel will monitor evacuees at shelters as conditions warrant. North Carolina RPS will provide additional assistance and specially equipped teams when significant problems are identified at specific shelters.
 13. Time estimates for evacuation of Zones A-0 through A-10 in Mecklenburg County are shown on the operations map , Annex I and on Figure 17, PART 1.

F. Radiological Exposure Control.

1. Prior to the assumption of command and control by the State, the Mecklenburg County Environmental Health Department and Duke Power Company are responsible for insuring that radiation doses received by the public and emergency workers are below the normally acceptable maximum levels. The EPA recommended Protective Action Guides (PAGs) will be used as the maximum acceptable levels of radiation exposure for the public and emergency workers during an emergency.

MECKLENBURG COUNTY DESIGNATED SHELTERS

<u>SHELTER</u>	<u>Spaces</u>
University of North Carolina at Charlotte Highway 49 . Charlotte, NC	20,100

- (1) The designated shelter will be staffed by the Red Cross and County Social Services.
- (2) Personnel for radiological monitoring and decontamination at these shelters will be furnished by the Charlotte-Mecklenburg Emergency Management Office and volunteer fire departments.
- (3) The shelter spaces are based on 40 square feet per shelteree. If more shelterees arrive than anticipated, this figure can be reduced without creating discomfort to the shelterees.
- (4) If evacuation is necessary during school hours, those children who reside inside the 10-mile evacuation area should remain at the school they attend, provided that school is outside the evacuated area.
- (5) If necessary, the EOC-emergency shelter communication link will be supplemented by amateur radio support or by positioning a radio equipped law enforcement vehicle at each shelter.

Figure 6

These levels are specified in PART 1. A general summary of the protective response options is shown in Figure 7, this PART.

2. The Mecklenburg County Board of Commissioners has the decision-making authority for all operations. A representative from Duke Power Company is responsible for making recommendations to the commissioners concerning the use of the protective response options specified in PART 1.
3. The Charlotte-Mecklenburg Emergency Management office and Duke Power Company will issue instruments to those police, fire, and rescue workers who do not already have them. These emergency workers have been trained in the use of:
 - 1) CDV-138 dosimeter, 2) CDV-700 survey meter, 3) CDV-715 survey meter, 4) CDV-742 dosimeter and 5) CDV-750 dosimeter charger. Additional CDV-742 dosimeters will be issued to any person expected to be exposed to radiation.
 - a. In the event of an emergency at Catawba, the Mecklenburg County Environmental Health Department will provide all County personnel who may receive significant exposure a thermoluminescent dosimeter (TLD). TLDs will be supplied by the North Carolina RPS or Duke Power Company as resources allow in accordance with written agreement. RPS is responsible for reading and analyzing the dosage levels shown on the TLDs and making appropriate recommendations concerning the health of the individuals concerned. (See Part 1, Section IV.G.3.)
 - b. Representatives from the Mecklenburg County Environmental Health Department and Duke Power Company will assist in reading and analyzing the dosage levels shown on the TLDs and make appropriate recommendations concerning the safety and health of the individuals concerned.
 - c. All dosimetry records will be made available to the exposed individuals and employing organizations.
4. During the course of the emergency, radiation dose levels and other exposure records will be reviewed by the Mecklenburg County Environmental Health Department and Duke Power company representatives to formulate recommendations for the Mecklenburg County Board of Commissioners and to assure that workers' exposure levels remain below EPA recommended PAGs.

**EMERGENCY CLASSIFICATION SYSTEM
AND PROTECTIVE RESPONSE OPTIONS**

Emergency Classification

Protective Response Options

Notification of an Unusual Event

Unusual events have occurred or are in progress. No release of radioactive material requiring off-site response or monitoring are expected.

1. Notify all persons on Priority and Key Alert Lists.
2. Stand by for escalation to a more severe emergency classification or cancellation.

Alert

Events are in progress or have occurred which involve an actual or potential substantial degradation of safety level at the plant site.

1. Notify all persons on Priority and Key Alert Lists.
2. Alert to standby status key emergency personnel including monitoring teams and associated communications.
3. Activate EOC with full or partial staffing as required.
4. Stand by for escalation to a more severe emergency classification or cancellation.

Site Area Emergency

Events are in progress which involve actual or probable major failures of plant functions needed for protection to the public.

1. Notify all persons on Priority and Key Alert Lists.
2. Prepare news releases as recommended by Duke Power Company for immediate release.
3. Alert to standby status additional emergency personnel needed to alert community residents and prepare for evacuation as recommended by Duke Power Company.
5. Stand by for escalation to a more severe emergency classification or cancellation.

General Emergency

Events have occurred or are in progress which involve imminent or actual substantial core degradation or melting with potential of loss of containment.

1. Recommend sheltering (staying inside) rather than evacuation until an assessment can be made that an evacuation is indicated and can be completed prior to any significant amount of radioactive material reaching the affected area.
2. Complete actions 1-4 above.

Figure 7

- a. Communications will be maintained between the Mecklenburg County Environmental Health Department and the appropriate authority on-site at the Catawba Station to assure that exposure levels of emergency workers moving on-and off-site are below EPA recommended PAGs.
 - b. The policy under this plan is to prevent emergency workers from receiving a radiation dose in excess of the stated PAGs. Representatives from the Mecklenburg County Environmental Health Department, Duke Power Company, and RPS may recommend to the Mecklenburg County Board of Commissioners that emergency workers be allowed to exceed the PAGs if workers cannot be rotated and the activities involved are critical to public protection. The senior elected official has final approval authority. Permission to exceed a whole body exposure of 75 rems will not be granted.
5. The Mecklenburg County fire departments have the responsibility for coordination of monitoring, decontamination, and waste disposal actions (with support from Duke Power Company).
 6. When any monitoring station obtains radiation readings which reach two times the normal background readings, the monitoring station will take the following actions:
 - a. Notify the Mecklenburg County Environmental Health Department and/or the representative from Duke Power Company.
 - b. Be prepared to assist in the decontamination and in disposal of wastes such as clothes, water, or materials resulting from decontamination.
 7. When decontamination is to be conducted, the Catawba Station Environmental Radiation and Control Unit will be dispatched to the scene to supervise the decontamination and waste disposal activities, if possible.
- G. Recovery, Reentry, and Post-Accident Operations.
1. The problems involved in reentry and recovery operations are in direct proportion to the amount of radioactive contamination received and remaining. The North Carolina RPS will be the lead agency in the collection and analysis of monitoring reports and of air, foliage and water samples. RPS

will be assisted by qualified personnel from the Catawba Nuclear Station.

2. Analysis findings will be submitted to the Chief of RPS who will forward the findings with his recommendations to the SERT leader. This information will then be submitted to the highest elected official of the government concerned with a recommendation for reentry or for continued evacuation of the area.
3. Reentry authorization will be made by the senior elected official of the area concerned. Emergency service organizations will be immediately informed and the PIO will release the announcement to the news media with any additional instructions or information as appropriate.
4. Recovery and post-accident operations will continue as long as required after reentry is authorized. These actions will include:
 - a. Decontamination of people, animals, property, food, and water.
 - b. Continued security of all public and private property, including unauthorized entry into contaminated areas.
 - c. Health and medical services for evacuees.
 - d. Continuous monitoring of people and property, including long-term monitoring.
 - e. Proper radioactive waste disposal.
5. The Mecklenburg County EOC will coordinate local support during the reentry and the recovery phase, utilizing the same resources used in the evacuation phase.

V. SUPPORT RESOURCES, PROCEDURES, FACILITIES, AND EQUIPMENT.

A. Emergency Response Support and Resources.

1. Resources and support assistance from sources external to State government and Mecklenburg County may be required to conduct emergency operations within the EPZ. To assure that these resources are committed in an efficient and effective manner, Mecklenburg County may dispatch a representative to the Catawba Station Emergency Operations Facility.

2. Duke Power Company and the Charlotte-Mecklenburg Emergency Management Office have designated individuals to serve with SERT as the representative of the licensee and the Board of County Commissioners, respectively.
 3. Procedures for control and allocation of resources required to support emergency operations in Mecklenburg County will be prescribed by the Chairman of the Mecklenburg County Board of Commissioners.
 4. A resource manual containing the identification and location of resources and the appropriate point of contact for procurement is maintained by the Charlotte-Mecklenburg Emergency Management Office.
 5. Coordinating Instructions.
 - a. Requisitions for personnel, supplies, and equipment during an emergency will be directed to the Emergency Management Director at the Mecklenburg County EOC.
 - b. The types and quantities of resources committed by county departments during an emergency are to be reported to the Mecklenburg County Manager at the Mecklenburg County EOC.
 - c. Local resources to support the Federal response, will be made available to the extent possible.
 - d. Federal support will be coordinated through the State.
- B. Medical and Public Health support.
1. RPS systematically visits and evaluates the capabilities, procedures and willingness of North Carolina hospitals to accept and treat radiation accident victims.
 2. Few hospitals in the State have the internal capability to evaluate radiation exposure and radioactive material intake. These limitations are adequately compensated for by agreements with private companies to provide whole body counting equipment and with laboratory analysis from medical institutions, the Federal government, and private commercial laboratories. See Paragraph V.B., PART 1.

3. Charlotte Memorial Hospital has been designated the Mecklenburg hospital for treating radiation accident victims. (See Paragraph V.B., PART 1, for other hospitals in the vicinity of Catawba.)

Charlotte Memorial Hospital, Charlotte, N.C.

Telephone: 704/331-2121 Ext. 2145

Administrator: Harry A. Nurkin, President

Bed Capacity: 853

Location: 1000 Blythe Boulevard

Heliport: Grassed area suitable for use

Distance from the Catawba Station: 27 miles

Contact Person: John Baker, M.D.

704/331-2121 Ext. 3181

Hospital has a plan to treat 10 patients.

4. The Emergency Medical Services (EMS) Section, Facility Services Division, Department of Human Resources is responsible for developing plans to marshal ambulance and rescue resources and for coordinating emergency medical services at radiation accident sites and shelters.
5. In the event of an accident at the Catawba Station, RPS and the Mecklenburg County rescue representative on the County EOC staff will advise the Region "F" EMS Office of the medical facilities to be evacuated and those capable of receiving radiated patients. At the staging area EMS personnel will be issued dosimeters, briefed on the nature and extent of the accident, and assigned missions.
6. If necessary, the Military Assistance to Safety and Traffic Programs (MAST) would be used to assist in transporting non-ambulatory persons to and from medical facilities.

C. Emergency Facilities and Equipment.

1. Mecklenburg County government conducts emergency command and control functions from the Mecklenburg County EOC. The facility is located at 618 N. College Street, Charlotte, N.C.
2. Mecklenburg County, to the extent possible, will provide off-site monitoring in the vicinity of the facility.
3. The County EOC houses a communications center and is equipped with an emergency power plant generator.

4. The County EOC is equipped with commercial telephone service (in-place), two-way radio, and a dedicated ringdown telephone line between the McGuire Plant and the primary EOC location.
5. The decision to activate the Mecklenburg County EOC, from which the County Commissioners and other key officials will exercise command and control functions, will be made by the Mecklenburg County Manager or designated authority.
6. The time required from notification of EOC staff to establishment of command and control, under varying conditions, is shown in Figure 8, this PART.
7. The Charlotte-Mecklenburg Emergency Management Office will provide radiological monitoring equipment and personnel.
 - a. All emergency services personnel who have been trained in radiological monitoring have been issued monitoring and dosimetry equipment.
 - b. The inventory and distribution of radiological monitoring equipment are shown in Figure 9, this PART.
 - c. Radiological monitoring equipment used by Mecklenburg County government is inventoried, inspected, and given an operational check every six months and after each use.
8. Field monitoring data collected within the plume exposure pathway during the approximately first 7 to 9 hours of an announced emergency will be transmitted or delivered to the Mecklenburg Environmental Health Department for analysis. Duke Power Company will assist in the interpretation of this data.

**MECKLENBURG COUNTY EOC STAFF
ALERT AND NOTIFICATION TIME TABLE**

Time Period	Weather Conditions	Notify EOC Staff	Travel Time To Charlotte	Establish Co. EOC	Estimated Time To Complete Activation of County EOC
Mon-Fri 0800-1700	Fair	15 min.	20 min.	25 min.	1 hr.
	Rain, sleet, snow	15 min.	40 min.	25 min.	1 hr. 20 min.
Mon-Fri 1700-0800	Fair	30 min.	20 min.	25 min.	1 hr. 15 min.
	Rain, sleet, snow	30 min.	40 min.	25 min.	1 hr. 35 min.
Saturday, Sunday and Holidays	Fair	45 min.	20 min.	25 min.	1 hr. 30 min.
	Rain, sleet, snow	45 min.	40 min.	25 min.	1 hr. 50 min.

Figure 8

**MECKLENBURG COUNTY
RADIOLOGICAL MONITORING INSTRUMENT INVENTORY**

<u>Type of Instrument</u>	<u>Inventory</u>	<u>Location or Department</u>
CDV-138	31	Char.-Meck. Emergency Management Office
Sub-total	31	
CDV-700	1	Charlotte Lifesaving Crew
	1	Carolina Volunteer Fire Dept.
	1	Mint Hill Volunteer Fire Dept.
	1	Statesville Road Volunteer Fire Dept.
	2	Derita Volunteer Fire Dept.
	2	Long Creek Volunteer Fire Dept.
	2	Hickory Grove Volunteer Fire Dept.
	2	Mallard Creek Volunteer Fire Dept.
	3	Gilead Volunteer Fire Dept.
	2	Pineville Volunteer Fire Dept.
	2	Newell Volunteer Fire Dept.
	2	Cook's Community Volunteer Fire Dept.
	3	Huntersville Volunteer Fire Dept.
	2	Pinoca Volunteer Fire Dept.
	2	Moore's Chapel Volunteer Fire Dept.
	2	Wilkinson Boulevard Volunteer Fire Dept.
	4	Steele Creek Volunteer Fire Dept.
	2	Meck. Co. Environmental Health Dept.
	11	Charlotte Fire Dept.
	13	Mecklenburg County Police Dept.
	16	Charlotte Police Dept.
	3	Meck. Co. Fire Administrator's Office
	3	MEDIC
	2	State Highway Patrol
	56	Storage
Sub-total	140	
CDV-715	1	Charlotte Lifesaving Crew
	11	Charlotte Fire Dept.
	13	Mecklenburg County Police Dept.
	16	Charlotte Police Dept.
	3	Meck. Co. Fire Administrator's Office
	3	MEDIC
	2	State Highway Patrol
	2	Meck. Co. Environmental Health Dept.
	2	Derita Volunteer Fire Dept.
	2	Long Creek Volunteer Fire Dept.
	2	Hickory Grove Volunteer Fire Dept.
	2	Mallard Creek Volunteer Fire Dept.
	3	Gilead Volunteer Fire Dept.

Figure 9

**MECKLENBURG COUNTY
RADIOLOGICAL MONITORING INSTRUMENT INVENTORY**

<u>Type of Instrument</u>	<u>Inventory</u>	<u>Location or Department</u>
	2	Pineville Volunteer Fire Dept.
	2	Newell Volunteer Fire Dept.
	1	Carolina Volunteer Fire Dept.
	1	Mint Hill Volunteer Fire Dept.
	2	Cook's Community Volunteer Fire Dept.
	3	Huntersville Volunteer Fire Dept.
	1	Statesville Road Volunteer Fire Dept.
	2	Pinoca Volunteer Fire Dept.
	2	Moore's Chapel Volunteer Fire Dept.
	2	Wilkinson Boulevard Volunteer Fire Dept.
	4	Steele Creek Volunteer Fire Dept.
	367	Storage
Sub-total	<u>451</u>	
CDV-742	4	Meck. Co. Environmental Health Dept.
	229	Charlotte Fire Dept.
	115	Mecklenburg County Police Dept.
	96	Charlotte Police Dept.
	6	Meck. Co. Fire Administrator's Office
	6	MEDIC
	2	Charlotte Lifesaving Crew
	4	State Highway Patrol
	8	Derita Volunteer Fire Dept.
	8	Long Creek Volunteer Fire Dept.
	8	Hickory Grove Volunteer Fire Dept.
	8	Mallard Creek Volunteer Fire Dept.
	10	Gilead Volunteer Fire Dept.
	4	Pineville Volunteer Fire Dept.
	4	Newell Volunteer Fire Dept.
	2	Carolina Volunteer Fire Dept.
	2	Mint Hill Volunteer Fire Dept.
	8	Cook's Community Volunteer Fire Dept.
	6	Huntersville Volunteer Fire Dept.
	2	Statesville Road Volunteer Fire Dept.
	8	Pinoca Volunteer Fire Dept.
	8	Moore's Chapel Volunteer Fire Dept.
	4	Wilkinson Boulevard Volunteer Fire Dept.
	20	Steele Creek Volunteer Fire Dept.
	1,406	Storage
Sub-total	<u>1,978</u>	

Figure 9 (Cont'd.)

**MECKLENBURG COUNTY
RADIOLOGICAL MONITORING INSTRUMENT INVENTORY**

<u>Type of Instrument</u>	<u>Inventory</u>	<u>Location or Department</u>
CDV-750	20	Mecklenburg County Police Dept.
	16	Charlotte Police Dept.
	3	Meck. Co. Fire Administrator's Office
	3	MEDIC
	1	Charlotte Lifesaving Crew
	2	State Highway Patrol
	2	Meck. Co. Environmental Health Dept.
	2	Derita Volunteer Fire Dept.
	2	Long Creek Volunteer Fire Dept.
	2	Hickory Grove Volunteer Fire Dept.
	2	Mallard Creek Volunteer Fire Dept.
	3	Gilead Volunteer Fire Dept.
	2	Pineville Volunteer Fire Dept.
	2	Newell Volunteer Fire Dept.
	1	Carolina Volunteer Fire Dept.
	1	Mint Hill Volunteer Fire Dept.
	2	Cook's Volunteer Fire Dept.
	3	Huntersville Volunteer Fire Dept.
	1	Statesville Road Volunteer Fire Dept.
	2	Pinoca Volunteer Fire Dept.
	2	Moore's Chapel Volunteer Fire Dept.
	2	Wilkinson Boulevard Volunteer Fire Dept.
	4	Steele Creek Volunteer Fire Dept.
	347	Storage
Sub-total	<u>427</u>	
TOTAL ALL INSTRUMENTS	<u>3,027</u>	

Figure 9 (Cont'd.)

VI. EMERGENCY COMMUNICATIONS.

- A. Provisions have been made for communications networks to support all emergency response organizations throughout the course of an emergency. These networks are formed using commercial telephone service, Duke Power Company radio systems, local government emergency services two-way radio systems, and State and Federal government communications.
- B. To assure that an immediate level of alert and notification readiness is available, the following emergency response facilities are staffed 24 hours a day:
1. The Catawba Nuclear Station Control Room.
 2. The State warning point located at the Highway Patrol Communications Center in Raleigh, N.C.
 3. The Mecklenburg County Police Communications Center. This center has been designated as the County warning point.
 4. The National Weather Service Forecast Office for North Carolina located at the Raleigh-Durham Airport.
 5. The National Weather Service Office serving Mecklenburg County, located in Charlotte.
- C. The following principal emergency response organizations are not staffed 24 hours a day, but are required to have key personnel on call.
1. Charlotte-Mecklenburg Emergency Management Office.
 2. Mecklenburg County EOC.
 3. The North Carolina Department of Crime Control and Public Safety.
 4. The State EOC.
 5. The Radiation Protection Section, Department of Human Resources.
- D. Communications Between Response Organizations.
1. Commercial telephone is the primary means of communications between Mecklenburg County, the State, South Carolina, and Federal response organizations.

2. "Area E" Emergency Management radio network is the primary two-way radio communication link with contiguous local governments.
 3. The Police Information Network (PIN) Terminal located in the Mecklenburg County Police Department, in contiguous local governments, and in both North and South Carolina EOCs can be used for emergency communications between the two State governments and Mecklenburg County.
- E. Communications between Duke Power Company, the State and Mecklenburg County.
1. The primary means of communications between the Catawba Station, SERT headquarters, and the Mecklenburg County EOC will be ARD lines with speaker telephones.
 2. The primary means of communication between these points and the State EOC will be commercial telephone.
 3. Back-up communications between these points will be two-way radio systems. These systems will be provided by expanding the existing systems now operated by Duke Power Company, the North Carolina DEM, and the Charlotte-Mecklenburg Emergency Management Office. System expansion in all cases will include the addition of temporary base stations, mobile units, and hand-carried portable units, as required.
- F. Medical Services Communications.
1. Mecklenburg County rescue vehicles can communicate with each other and with contiguous counties and hospitals.
 2. Mecklenburg County Hospitals can communicate with each other and contiguous county rescue squads.
- G. Radiological Monitoring and Decontamination Communications.
1. Information from the field will be transmitted via Mecklenburg County Fire Department frequency. The Mecklenburg County Police Department frequency will be the secondary means of transmission.
 2. Information on radiological monitoring from SERT will be transmitted via Channel 3 Area "E" radio network control.

H. Periodic Communications Tests.

1. Mecklenburg County's emergency services radios are utilized constantly. Therefore, testing is not necessary.
2. Communications with the State will be tested on a monthly basis.
3. Communications between the County EOC, State EOC, and field assessment teams will be tested annually.
4. See Section VI, PART 1, for testing of State and Federal communications links.

I. Additional Back-up Communications.

1. The North Carolina State Highway Patrol will position a radio equipped patrol car at the County EOC to provide additional back-up communications.
2. In an extreme emergency, this patrol car may transport hard copy messages.
3. If necessary, the EOC-emergency shelter communications link, commercial telephone, will be supplemented by amateur radio support or by positioning a radio-equipped law enforcement vehicle at each shelter.

VII. PLANS, EXERCISES, DRILLS, AND TRAINING.

A. Exercises.

1. Exercises will be conducted on an annual basis. The scenario will differ from year to year to insure that all major elements of response are tested within a five year period.
2. There will be varied starting times for exercises to assure that at least one exercise will begin between midnight and 6 a.m. and one between 6 p.m. and midnight every six years.
3. Some exercises will be conducted during adverse weather conditions.
4. Some exercises will be announced.
5. The scenario for each exercise will include:
 - a. An off-site release to assure response by Mecklenburg County's emergency services. These

services will be listed in the narrative of the scenario.

- b. The exercise objectives and evaluation criteria.
 - c. Dates, time, and participating organizations.
 - d. Simulated events and a time schedule of real and simulated events.
 - e. A narrative summary.
 - f. A description of the arrangements and advance materials to be provided to controllers, evaluators, and official observers.
6. Evaluation and Critique.
- a. A critique will be held as soon after the exercise as possible by Federal, State, and local qualified observers.
 - b. All participating organizations will correct areas of concern as soon as possible.

B. Drills.

1. Monthly communications drills will be conducted with Gaston and York Counties.
2. Annual communications drills will be conducted between the Mecklenburg County EOC, the State EOC, the Catawba Station, and the field assessment teams.
3. An annual medical emergency drill involving transportation and treatment of simulated radiological contaminated patients will be conducted.
4. Radiological monitoring drills will be conducted to the extent possible by Mecklenburg County at least annually.
5. Qualified observers will evaluate all of the above drills.

C. Radiological Emergency Response Training.

1. A training program for instructing and qualifying personnel who will implement the response plan for Mecklenburg County will include the following personnel:

- a. Charlotte-Mecklenburg Emergency Management Director.
 - b. Accident assessment and damage control personnel.
 - c. Police, fire, rescue, and medical support personnel.
 - d. Radiological monitoring team personnel.
 - e. Personnel from neighboring counties that have mutual aid agreements with Mecklenburg County.
2. Initial training and retraining of personnel will be done annually. Duke Power Company will provide training assistance.
 3. Included in this training will be:
 - a. Notification procedures.
 - b. Basic radiation protection.
 - c. The Standard Civil Defense Radiological Monitoring Course (Basic Radiation Emergency Preparedness Course).
 - d. Expected roles in support of radiological emergency response plans.
 - e. For those local support organizations who will enter the Catawba Station site, training shall also include site access procedures and on-site control procedures.
- D. Responsibility for Planning and Periodic Review.
1. The Charlotte-Mecklenburg Emergency Management Director is the emergency planning coordinator for the county.
 2. The Emergency Management Director will:
 - a. Participate in training personnel for emergency planning, when available.
 - b. Update this plan and agreements for this plan on an annual basis and make certain that proper distribution of changes is made. Revised pages will be dated and marked to show where changes have been made.

- c. Ensure that this plan contains a detailed listing of supporting plans and their sources.
- d. Ensure that this plan and supporting plans are reviewed, updated, and certified current on an annual basis. Any update will take into account the need for changes identified by drills and exercises.
- e. Ensure that telephone numbers in this plan and in supporting procedures are updated quarterly.

PART 3

ATTACHMENT 1
AUTHORITIES, AGREEMENTS AND REFERENCES

This Attachment lists authorities, references and agreements by title with other organizations and governmental jurisdictions that support PART 3.

CHARLOTTE-MECKLENBURG

EMERGENCY MANAGEMENT OFFICE

655 Independence Plaza Building
951 South Independence Boulevard at McDowell Street

Downtown on Highway US-74
(N.C. Courier Address: Box 520)

TELEPHONE (704) 374-2412 CHARLOTTE, NORTH CAROLINA 28202

November 14, 1983

Mr. J. W. Hampton
Catawba Nuclear Station
P.O. Box 256
Clover, South Carolina 29710

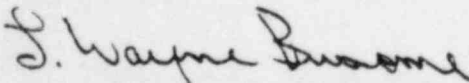
Dear Mr. Hampton:

This letter of agreement is to confirm that Charlotte-Mecklenburg Emergency Management Office will plan for and assist in response to and management of a radiological emergency at the Catawba Nuclear Station. The planning and assistance offered will be in accordance with local plans, state plans, and other planning documents associated with Catawba Nuclear Station.

It is understood that Catawba Nuclear Station will provide early notification of an emergency condition to Mecklenburg County Warning Point. In addition to early notification, it is further agreed that Catawba Nuclear Station will provide other information including protective action recommendations, actual or projected radiation exposure data, and other data as requested.

It is agreed that the Charlotte-Mecklenburg Emergency Management Office will utilize existing warning and notification procedures and methodology to ensure that members of the general public are informed in a timely manner of protective action in the event of a radiological emergency at Catawba Nuclear Station.

Sincerely,



L. Wayne Broome

cc: R. M. Glover
Mike Bolch

PART 3

**ATTACHMENT 2
SUPPORTING PLANS AND THEIR SOURCES**

This Attachment lists plans that support Mecklenburg County Procedures to support the Catawba Nuclear Station.

**ATTACHMENT 2
SUPPORTING PLANS AND THEIR SOURCES**

PLANSSOURCE

North Carolina Disaster
Relief and Assistance
Plan

North Carolina Division of
Emergency Management, DCCPS

Mecklenburg County
Disaster Relief and
Assistance Plan

Charlotte-Mecklenburg Emergency
Management Office

Duke Power Company
Crisis Management Plan
for Nuclear Stations

Duke Power Company

Catawba Nuclear Station
Emergency Plan

Duke Power Company

STANDARD OPERATING PROCEDURESSOURCE

Emergency Operations Center

Charlotte-Mecklenburg Emergency
Management Office

PART 3

ATTACHMENT 3
EMERGENCY EQUIPMENT

Rev.1 Jan. 84

**ATTACHMENT 3
EMERGENCY EQUIPMENT**

COMMUNICATIONS

The Mecklenburg County warning point (County Police Department) has radio communication with the following N.C. and S.C. counties and towns:

North Carolina

Albemarle City Police
Cabarrus County Sheriff
Cleveland County Sheriff
Gaston County Sheriff
Gastonia City Police Department
Iredell County Sheriff
Kannapolis City Police
Lincoln County Sheriff
Mooresville City Police
Monroe City Police
N.C. State Highway Patrol
Statesville City Police
Stanley County Sheriff
Police Information Network (PIN) Terminal
Union County Sheriff

South Carolina

Chester County Sheriff
Chester County Highway Patrol
Clover City Police
Fort Mill City Police
Fairfield County Sheriff
Gaffney Highway Patrol
Great Falls City Police
Lancaster City Police
Rock Hill City Police
Lancaster County Sheriff
York City Police
Winnsboro City Police
York County Sheriff

The communication center has five stations, standby power, and a secured entrance. The center can also communicate with all city and county departments via radio and/or telephone.

RADIOLOGICAL

Mecklenburg County has 3,027 radiological instruments for use in an emergency. See Figure 9, pages 43-45, for the inventory and distribution of this equipment.

ANNEX A
GLOSSARY OF TERMS

Affected Personnel - Persons who have received radiation exposure or have been physically injured as a result of an accident to a degree requiring special attention as individuals, e.g., decontamination, first aid, or medical services.

Alpha Particle - A particle, identical with the nucleus of a helium atom, emitted spontaneously from the nucleus of some radioactive elements. Alpha particles have very little penetrating power but are hazardous if ingested or inhaled.

Assessment Actions - Those actions taken during or after an accident to obtain and process information that is necessary to make decisions to implement specific emergency measures.

Beta Particle - A particle, identical with a high speed electron, emitted spontaneously from the nucleus of some radioactive atoms. Beta particles have little penetrating power but can be hazardous if inhaled, ingested, or brought into contact with the skin.

Corrective Actions - Emergency measures taken to ameliorate or terminate an emergency situation at or near the source of the problem, to prevent an uncontrolled release of radioactive material, or to reduce the magnitude of the release, (e.g., shutting down equipment, fire-fighting, repair and damage control.)

Crisis Management Center - The power company facility used for direction and control of all emergency and recovery activities with emphasis on the coordination of off-site activities such as dispatching mobile emergency monitoring teams, communications with local, State and Federal agencies, and coordination of corporate and other outside support.

Dose - The quantity of radiation absorbed, per unit of mass, by the body or by any portion of the body.

Dose Commitment - A predetermined dose level that is used for controlling radiation exposure for emergency workers or the general public.

Dose Rate - The amount of ionizing radiation delivered per unit of time.

Dosimeter - An instrument for measuring and registering total accumulated exposure to penetrating ionizing radiation.

Electromagnetic Radiation - A traveling wave motion consisting of oscillating magnetic and electric fields. Familiar electromagnetic radiations range from X-rays and gamma rays of

short wave length, through the ultraviolet, visible, and infrared regions, to radar and radio waves of relatively long wave length. Travels with the velocity of light.

Emergency - An occurrence that results in the loss of control of radioactive materials at a fixed nuclear facility and which involves an immediate or likely hazard to life, health, property, or the environment.

Emergency Action Levels - Plant conditions used to determine the existence of an emergency and to classify its severity. The conditions include radiological dose rates, specific contamination levels (airborne, waterborne, or surface-deposited concentrations), or specific instrument indications (including their rate of change) that may be used as thresholds for initiating specific emergency measures such as designating a particular class of emergency, a notification procedure, or taking a particular protective action.

Emergency Operations Center - The protected site from which government officials exercise direction and control in an emergency.

Emergency Planning Zone (EPZ) - The area 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 plume exposure EPZ is about 10 miles in radius and the ingestion exposure EPZ is about 50 miles in radius.

Emergency Worker - Any person engaged in operations required to minimize the effects of a fixed nuclear facility emergency.

Exclusion Area - The utility-owned area that surrounds a nuclear plant.

Fixation of Contaminated Areas - Processes used to contain radioactive materials in contaminated areas.

Fixed Contamination - Materials or areas contaminated with radiation which are difficult to move or decontaminate.

Fixed Nuclear Facility - Nuclear power plants, reactor fuel fabrication or processing plants, test and research reactors, and other facilities using or producing large quantities of radioactive material. Facility includes structures and secured grounds.

Gamma Rays - Electromagnetic radiation of high energy originating in atomic nuclei and accompanying many nuclear reactions. Gamma rays do not consist of particles, have no mass, travel at the speed of light, are highly penetrating, and may cause damage to living tissue.

Ingestion Exposure Pathway - The potential pathway of radioactive materials to the public through consumption of radiologically contaminated water or foods such as milk or fresh vegetables. The time of potential exposure could range in length from hours to months. Around a nuclear plant, this is usually described as the 50-mile radius EPZ.

Ion - An atom or molecule that has lost or gained one or more electrons, and thus has become electrically charged.

Ionizing Radiation - Any gamma rays, X-rays, alpha or beta particles, high speed electrons, protons, or nuclear particles that displace electrons from atoms or molecules as they pass through matter thereby producing ions. Ionizing radiation may produce skin, tissue, or organ damage.

Irradiation - The exposure to ionizing radiation.

Isotopes - Forms of elements having identical chemical properties but differing in atomic weight. See radioactive isotope.

Lead Agency - The State or local agency that has primary responsibility for a specific function and will direct the accomplishment of that function.

Milliroentgen - A one-thousandth (0.001) part of a roentgen. See roentgen.

Millirem - A one-thousandth (0.001) of a rem. See rem.

Neutron Radiation - A particular type of radiation having a finite mass and emanating from nuclear collisions. The neutron is an electrically neutral particle that can indirectly cause ionization by interaction with atoms.

Off-Site - All public and private property surrounding the fenced or otherwise secured fixed nuclear facility property.

On-Site - The fenced or otherwise secured fixed nuclear facility property.

Operations Center - The place designated for operations support personnel to report to in an emergency.

Plume Exposure Pathway - The potential pathway of radioactive materials to the public through (a) whole body external exposure to gamma radiation from the plume and from deposited materials and (b) inhalation of the passing radioactive plume. The time of potential exposure could range from hours to days.

Population-at-Risk - Those persons for whom protective actions are being or would be taken.

Protective Actions - Emergency measures taken for the purpose of preventing or minimizing radiological exposures.

Protective Action Guide (PAG) - The projected radiological dose to individuals in the general population that warrants taking protective action. The guide in no way implies an acceptable level of risk.

Protected Area - An area encompassed by physical barriers and to which access is controlled.

Radiation - As used in nuclear terminology, refers to energy propagated in the form of high frequency electromagnetic waves such as X-rays and gamma rays, or in the form of nuclear particles such as alpha, beta, or neutron radiation. See ionizing radiation.

Radiation Protection Emergency Team - A team sent from the Radiation Protection Section, Department of Human Resources, to the emergency site to perform technical operations and advise the State Emergency Response Team.

Radioactive Isotope - (Radioisotope) An unstable isotope of an element that decays or disintegrates while spontaneously emitting radiation.

Radioactive Material - Any solid, liquid, or gas which spontaneously emits ionizing radiation.

Radiological Exposure Control - Actions that can be taken to protect the general public, emergency workers, livestock, food, water or property from radiation.

Recovery Actions - Those actions taken after the emergency to restore affected property as nearly as practicable to its pre-emergency condition.

Rem - A unit of measure of dose from any radiation (alpha particles, beta particles, gamma rays, or neutrons) to body tissue in terms of its estimated biological effects. This unit of measure takes into consideration the varying damage causing potential of exposure to X-rays, gamma rays, beta particles, and neutrons.

Roentgen - A unit of exposure of gamma (or X) radiation.

Shielding - Any material or obstruction that absorbs (stops) radiation.

Site - That part of the nuclear station property consisting of the reactor, auxiliary, turbine, and service buildings and grounds contained within the owner-controlled area fence.

State Emergency Response Team (SERT) - A team sent from the Department of Crime Control and Public Safety to the emergency site to coordinate all State actions (and local actions in a declared State of Disaster). The team may include representatives from other State agencies.

State Emergency Response Team Command Post - Field headquarters for SERT.

Technical Support Center - The facility utilized for evaluation of plant status by knowledgeable personnel in support of short-term operations during an emergency.

Warning Point - A facility that receives warning and other information and disseminates or relays this information in accordance with a prearranged plan.

Whole Body Exposure - The external exposure of a person or an animal to radiation.

**ANNEX B
ABBREVIATIONS**

AC	- Alternating current
ARD	- Automatic Ringdown
AUTOVON	- Automatic Voice Network
CC	- Cubic centimeters
CDNARS	- Civil Defense National Radio System
CDNATS	- Civil Defense National Teletype System
CDNAVS	- Civil Defense National Voice System
cfm	- Cubic feet per minute
Ci	- Curie
CPCS	- Common Program Control Station
DC	- Direct current
DCCPS	- Department of Crime Control and Public Safety
DHHS	- Department of Health and Human Services (U.S.)
DHR	- Department of Human Resources
DEM	- Division of Emergency Management
DOE	- Department of Energy (U.S.)
DOT	- Department of Transportation (N.C.)
EAN	- Emergency Action Notification
EBS	- Emergency Broadcast System
ECCS	- Emergency Core Cooling System
EDT	- Eastern Daylight Time
EMS	- Emergency Medical Services (DHR)
EMT	- Emergency Medical Technician
EOC	- Emergency Operations Center
EPA	- Environmental Protection Agency (U.S.)
EPZ	- Emergency Planning Zone
EST	- Eastern Standard Time
et seq.	- And the following
FDA	- Federal Drug Administration
FTS	- Federal Telecommunications System
gpm	- Gallons per minute
G.S.	- General Statutes of the State of North Carolina
IRAP	- Interagency Radiological Assistance Plan
KI	- Potassium Iodide
LOCA	- Loss of coolant accident
mCi	- Millicurie
mph	- Miles per hour
MDL	- Minimum detectable level
mR	- Milliroentgen
NAWAS	- National Warning System
NRC	- Federal Nuclear Regulatory Commission
NRCD	- Natural Resources and Community Development (N.C. Department of)
NWS	- National Weather Service
PA	- Public Address
PAG	- Protective Action Guide
PL	- Public Law
RAP	- Radiological Assistance Plan
RCS	- Reactor coolant system
RM	- Radiological Monitor

RPS - Radiation Protection Section (DHR)
SERT - State Emergency Response Team
SMRAP - Southern Mutual Radiological Assistance Plan
TLD - Thermoluminescent dosimeter
μ - Micro
USCG - United States Coast Guard
VAC - Volts, alternating current
VDC - Volts, direct current
WB - Whole body

ANNEX C
PUBLIC WARNING AND NOTIFICATION SYSTEM AND PROCEDURES

A. CONCEPT.

1. The public warning and notification system in the North Carolina EPZ for the Catawba Nuclear Station includes areas in Gaston and Mecklenburg Counties and water areas on Lake Wylie and the Catawba River. Regardless of whether the State or local authorities have direction and control responsibilities, county governments have responsibility for physically conducting warning and notification activities within their respective areas.
2. Prior to the assumption of direction and control by the State, each county has the authority to make the decision to warn and notify the population within its respective operational area. This decision will be coordinated between the two counties and the State if sufficient time exists. If there is not sufficient time for coordination prior to the notification of warning activities, the other county and the State will be notified as soon as feasible.
3. The Charlotte-Mecklenburg Emergency Management Office with assistance from the Mecklenburg County Police Department Lakes Enforcement Section, the N.C. Wildlife Resources Commission, and the Charlotte Police Department Airborne Division will be responsible for warning and notification of boaters on Lake Wylie and the Catawba River. Prior to the establishment of SERT, the Mecklenburg EOC or the Charlotte-Mecklenburg Emergency Management Office will receive recommendations for protective action from the Catawba Nuclear Station. After the establishment of SERT, the State will request the Charlotte-Mecklenburg Emergency Management Office to initiate warning and notification procedures in the water operational area.
4. Gaston and Mecklenburg Counties will coordinate warning and notification procedures with York County. If the State has assumed direction and control, SERT and the FEOC will coordinate the initiation of these procedure.

B. WARNING AND NOTIFICATION SYSTEM DESCRIPTION.

1. The land operational area system consists of the following components:
 - a. Warning points in Gaston and Mecklenburg Counties.
 - b. Fixed sirens in the 10-mile EPZ.

- c. Emergency service vehicles equipped with sirens and public address (PA) systems and operated by emergency service and law enforcement personnel of the two counties involved.
- d. The National Weather Service broadcast system serving the area in the EPZ.
- e. Police Information Network terminals in the following locations:

Gaston County	County Police Department
Mecklenburg County	County Police & Sheriff's Dept.
Gastonia	Police Department
Charlotte	Police Department
Raleigh	State Highway Patrol
Raleigh	State EOC

- f. National Warning System telephones are located in the Mecklenburg County Police Department, Charlotte Police Department, and State Highway Patrol Communications Center in Raleigh, N.C.
 - g. EBS for the Charlotte operational area.
2. The water operational area system consists of the following components:
- a. Mecklenburg County warning point.
 - b. Aircraft.
 - c. Boats with and without sirens and PA systems.
 - d. Marine radios.
 - e. SERT or the Charlotte-Mecklenburg Emergency Management Office will activate the Charlotte Area EBS and the National Weather Service Radio Broadcast System, if necessary, to support operations in the water operational area. (See Annex G.)

C. SYSTEM CAPABILITY AND OPERATIONS (See Paragraph IV.B in PARTS 2 and 3 and Annex G for detailed procedures).

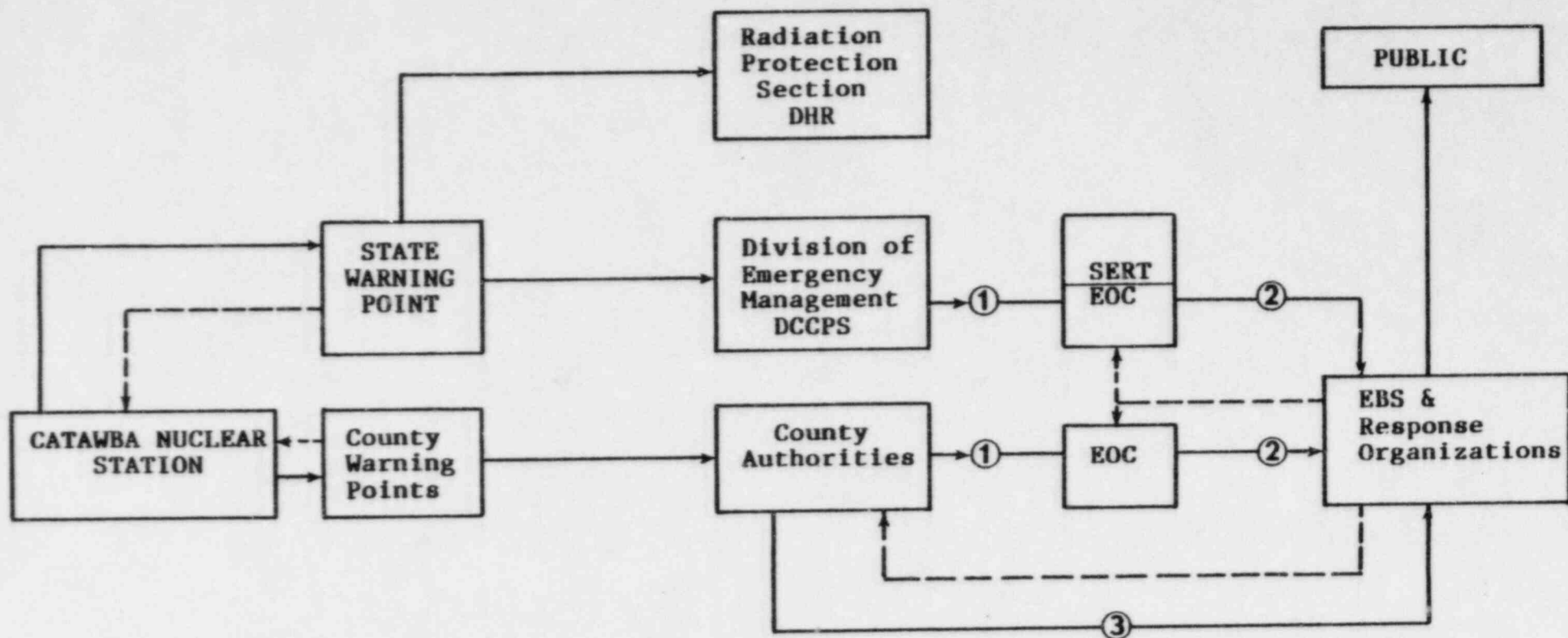
- 1. System Capability.
 - a. The system will provide both an alert signal and informational or instructional messages on an area-wide basis throughout the land portion of the 10-mile EPZ within approximately 15 minutes via fixed sirens and EBS.

- b. The system will provide both an alert signal and informational or instructional messages on an area-wide basis throughout the water portion of the 10-mile EPZ.
- c. The initial notification system will assure direct coverage of essentially 100 percent of the population within approximately five miles of the site.
- d. Maximum effort will be made to assure 100 percent coverage within 45 minutes of the population who may not have received the initial notification within the entire plume exposure pathway.

2. Operations.

- a. The public warning and notification system will be activated after local and State warning points have been informed by the Shift Supervisor at the Catawba Station that an emergency condition requiring such response exists.
- b. Either the State or the local warning points may activate the system. If the State has assumed control, it will order the initiation of public warning and notification procedures. The State will accomplish this by contacting the local governments and the EBS Common Program Control Station (CPCS).
- c. Both counties will warn the land areas and Mecklenburg County will ensure warning in the water areas in accordance with Annex G.
- d. EBS for the Charlotte operational area will be activated at the same time that the sirens are sounded. Details concerning the emergency situation and conditions and any instructions or protective actions to be taken by the public will be included in the emergency broadcast messages. These messages will be updated as often as necessary. Typical messages to be used for this purpose are in Annex D.

WARNING AND NOTIFICATION CHART



DECISIONS

1. Decision to activate the EOC.
2. Decision to warn public before SERT assumes direction and control.
3. Decision to activate EBS prior to activating an EOC. EBS would verify with appropriate county authorities.

⇨ Message Flow
 ⇨⇨ Message Verification
 (Warning Points to plant; EBS to SERT/EOC or County Authorities)

**ANNEX D
DRAFT MESSAGES FOR PUBLIC INFORMATION
AND INSTRUCTIONS**

- A. Included in this Annex are two draft messages that may be broadcast to the public within a 10-mile radius of the Catawba Nuclear Station.
 - 1. Message A is designed to provide emergency information and instructions to the public in the vicinity of Catawba.
 - 2. Message B is designed for the media to broadcast information to the public if the fixed siren system within the 10-mile EPZ were accidentally activated.
- B. Copies of these draft messages have been distributed to emergency managers in Gaston and Mecklenburg Counties, the State EOC, SERT, and the EBS Common Program Control Station.
- C. It may be necessary to modify the messages to fit the particular condition of an incident at the Catawba Station. Additional messages may be required as the situation develops.

Message A

1 of 2 pages

READ THIS SECTION

At _____ Duke Power Company officials informed State and local authorities that an incident has occurred at the Catawba Nuclear Station which requires prompt public notification.

SELECT ONE OPTION AND READ

_____ (Option 1) The incident involves the potential for the release of radioactive material but no radioactive material has been released.

_____ (Option 2) The incident involves the release of some radioactive material from the plant but at a level below that considered a public hazard.

_____ (Option 3) The incident involves the release of radioactive material from the plant at a level for which protective action is advisable.

SELECT ONE OPTION AND READ

_____ (Option A) No protective action is necessary at this time.

_____ (Option B) Pregnant women and children in zones _____ around the Catawba Nuclear Station should remain indoors with doors and windows closed and air conditioners and fans turned off until further notice. These zones are in a _____ direction from the station out to a distance of about _____ miles.

_____ (Option C) Pregnant women and children in zones _____ around the Catawba Nuclear Station should evacuate to the nearest shelter. These zones are in a _____ direction from the station out to a distance of about _____ miles. Clothing, bedding or sleeping bags, toilet articles and medicines should be carried to the shelter.

_____ (Option D) People living in zones _____ around the Catawba Nuclear Station should remain indoors with doors and windows closed and air conditioners and fans turned off until further notice. If you are out of doors, hold a cloth over your nose and mouth. These zones are in a _____ direction from the station out to a distance of about _____ miles.

Message A

2 of 2 pages

(Option E) People in zones _____ around the Catawba Nuclear Station should evacuate their homes and businesses. These zones are in a _____ direction from the plant out to a distance of about _____ miles. Before evacuating homes and businesses:

1. Close all windows and doors.
2. Turn off fans and air conditioners.
3. Shelter and provide food and water for livestock and pets.
4. Pack bedding or sleeping bags, necessary clothing, toilet articles, and medicines taken on a scheduled basis.
5. Pack any other items that will be required. Plans should be made to remain away from home for up to two weeks.

It may be possible to return to homes and businesses for short periods to check on items of special concern and to replenish food and water for livestock and pets.

Everyone is encouraged to use personal transportation if possible and move to motels or stay with relatives and friends located 20 or more miles from the Catawba Station.

Transportation and shelter will be provided if needed.

Assembly areas for people requiring transportation have been established in each community. Law enforcement officers and emergency workers are on duty in each community to guide people to assembly areas.

During your absence from home or business, local law enforcement officials will patrol the area to protect property. Unauthorized persons will not be permitted in the evacuated areas. Radiation levels will be monitored continually by Federal, State and local authorities and by Duke Power Company. These officials will determine when it is safe to return home briefly to check on pets, animals, and to pick up other needed items. When it is safe to return to your home, you will be notified promptly through the news media or by public officials.

READ THIS SECTION

State and local health officials are monitoring the situation. Should conditions change, additional detailed information and instructions for the public will be broadcast. Stay tuned to a radio or television station for further information.

Message B

1 of 1 pages

ACCIDENTAL ACTIVATION OF SIRENS**READ THIS SECTION**

At _____ the fixed siren system within the 10-mile radius of the Catawba Nuclear Station was accidentally activated. There is no emergency at the Catawba Station and no action by the public is necessary. Thank you for tuning to the emergency broadcast system. Had there been a real emergency, information concerning necessary action by the public would have been available.

ANNEX E
EMERGENCY BROADCAST SYSTEM PROCEDURES FOR
THE CATAWBA NUCLEAR STATION OPERATIONAL AREA

- A. **INTRODUCTION.** This Annex provides specific procedures for the broadcast media to disseminate emergency information and warnings to the general public in the vicinity of the Catawba Nuclear Station at the request of designated local and State officials.

Acceptance of or participation in this plan shall not be deemed as a relinquishment of program control, and shall not be deemed to prohibit a broadcast licensee from exercising independent discretion and responsibility in any given situation. Stations originating EBS emergency communications shall be deemed to have conferred rebroadcast authority. The concept of the management of each broadcast station exercising discretion regarding the broadcast of EBS emergency information and instructions to the general public is provided by FCC Rules and Regulations.

- B. **AUTHORITY.** Part 73, Subpart G and H, Federal Communications Commissions Rules and Regulations.

- C. **COMMON PROGRAM CONTROL STATION (CPCS-1).**

Radio station WEZC-FM is the CPCS-1 for the Catawba Nuclear Station EBS area.

TELEPHONE: (704) 372-106

ON-THE-AIR-HOURS: 24 HRS.

- D. **EBS ACTIVATION PROCEDURES.**

1. The following North Carolina State government officials may request the activation of EBS.
 - a. Governor, or the designated representative.
 - b. Secretary, DCCPS.
 - c. Director, DEM (SERT leader).
 - d. Assistant SERT leader.
 - e. Public Information Officer, DCCPS.

2. North Carolina local government officials who may request the activation of EBS are:
 - a. Chairman of the County Commission or the designated representative.
 - b. Mayor or the designated representative.
 - c. Sheriff.
 - d. City or county manager.
 - e. Emergency management coordinator or civil preparedness director.
 - f. City or county police chief.
 - g. City or county fire chief.
 - h. Warning point dispatcher (as authorized by appropriate county official.)
3. South Carolina State officials who may request activation of EBS for the Catawba station are:
 - a. The Governor or his designated representatives.
 - b. The Director, Emergency Preparedness Division or his designated representative.
4. South Carolina local government officials may request the activation of EBS for an emergency at the Catawba Nuclear Station are:
 - a. York County Manager.
 - b. Director, York County General Services/Public Information Officer.
 - c. Director, York County Emergency Preparedness Agency.
 - d. York County Sheriff (County warning point).
5. The activation of EBS for an accident at the Catawba Station will require coordination among the Emergency Management officials of Mecklenburg, Gaston, and York Counties and SERT (if established) and the South Carolina FEOC (if established) or the SEOC if the FEOC is not established.
6. Format for requesting activation of EBS.
 - a. The person calling will have a written script of the Emergency Action Notification (EAN) to be broadcast.

- b. Call the CPCS-1 control room and give name, title, and political subdivision represented.
 - c. Upon the signal that the station is ready to record, read the prepared EAN in an authoritative manner.
 - d. CPCS-1 will authenticate and activate.
7. Broadcast Station Procedures.
- a. The CPCS-1 will receive and authenticate the EAN from the affected agency. Upon authentication the EAN will be broadcast in accordance with the operational area plan.
 - b. Tests of the Emergency Broadcast Procedures will be run on a random or scheduled basis from a point which would originate the common emergency program (CPCS-1 radio station). The date and time of each test shall be recorded in the station operating log.

APPENDIX TO ANNEX E
CATAWBA AREA EBS STATIONS IN THE CHARLOTTE OPERATIONAL AREA

Gaston County, N.C

WCSL	1590 /1.0 KW D Cherryville, N.C.	Primary (704) 435-3297
WAAK	960 / 1.0 KW D Dallas, N.C.	Primary (704) 922-3411
WLTC	1370 /5.0 KW D Gastonia, N.C.	Primary (704) 865-1079
WGNC	1450 /1.0/0.25 KW Gastonia, N.C.	Primary (704) 865-8501
WGAS	1420 /0.5 KW Gastonia, N.C.	Primary (704) 865-5796
WZXI-FM	101.9 / 100.0 KW Gastonia, N.C.	Primary (704) 865-8501
WSGE-FM	91.7 / 3.0 KW Gastonia, N.C.	Primary (704) 922-7688
WCGC	1270 /1.0/0.5 KW Belmont, N.C.	Primary (704) 825-8224

Mecklenburg County, N.C.

WAME	1480 /5KW DA-2 Charlotte, N.C.	Primary (704) 377-5916
WAYS	610 /5/1 KW U DA-2 Charlotte, N.C.	Primary (704) 392-6191
WBT	1110 /50 KW U DA-N Charlotte, N.C.	Primary (704) 374-3834
WBCY	107.9 /97.0 KW Charlotte, N.C.	Primary (704) 374-3500
WEZC-FM	104.7 /100 KW Charlotte, N.C.	CPCS-1 Primary (704) 372-1106
WROQ	95.1 /11.5 KW Charlotte, N.C.	Primary (704) 392-6191
WQCC	1540 / 1 KW D Charlotte, N.C.	Primary (704) 372-1540

Mecklenburg County, N.C. (Cont'd.)

WFAE-FM	90.9 /100 KW Charlotte, N.C.	Primary (704) 597-2555
WGIV	1600 /1/0.5 KW DA-N Charlotte, N.C.	Primary (704) 333-0131
WHVN	1310 / 1 KW Charlotte, N.C.	Primary (704) 596-1310
WIST/(OFF AIR)	1240 / 1/ 0.25 KW Charlotte, N.C.	Primary (704) 376-3511
WSOC	930 /5 /1 KW DA-N Charlotte, N.C.	Primary (704) 872-0930
WSOC-FM	103.7 /98 KW Charlotte, N.C.	Primary (704)872-0930
WDAV-FM	89.9 /20 KW Davidson, N.C.	Primary (704)892-1908
WTVI (TV)	Chan 42 /214 KW Charlotte, N.C.	Primary (704) 372-2442
WPCQ (TV)	Chan 36 /1 MEGW Charlotte, N.C.	Primary (704) 536-3636
WCCB (TV)	Chan 18 /518 KW Charlotte, N.C.	Primary (704) 372-1800
WSOC (TV)	Chan 9 /316 KW Charlotte, N.C.	Primary (704) 372-0930
WBTB (TV)	Chan 3 /100 KW Charlotte, N.C.	Primary (704) 374-3500

Union County, N.C.

WDEX	1430 / 2.5 KW Monroe, N.C.	Primary (704) 298-9444
WIXE	1190 /1.0 Kw D Monroe, N.C.	Primary (704)289-2525
WHAP	1060 /1.0 KW D Monroe, N.C.	Primary (704)283-8115

Cherokee County, S.C.

WAGI-FM	105.3 /100 KW Gaffney, S.C.	Primary (803)489-9066
WEAC	1500 /1 KW D Gaffney, S.C.	Primary (803)489-9066
WFGN	1570 /.25 KW D Gaffney, S.C.	Primary (803)489-4795
WYFG-FM	91.1 /98.0 KW Gaffney, S.C.	Non-Participant (803) 487-5836

Chester, S.C.

WDZK-FM	99.3 /3 KW Chester, S.C.	Primary (803)377-3193
WGCD	1490 1.0/0.25 KW Chester, S.C.	Primary (803)377-1111

Lancaster County, S.C.

WAGL	1560 /50.0 KW D Lancaster, S.C.	Primary (803)283-8431
WLCM	1360/ 1.0 KW D Lancaster, S.C.	Primary (803)283-2051
WPAJ-FM	107.1 /3.0 KW Lancaster, S.C.	Primary (803)283-2051

York County, S.C.

WBZK	980 /1.0 KW DA-D York, S.C.	Primary (803) 684-4241
WRHI	1340 /.25/ 1.0 KW Rock Hill, S.C.	Primary (803)327-2085
WTYC	1150 /1.0 KW D Rock Hill, S.C. 29731	Primary (803) 366-4148

ANNEX F
NUCLEAR PLANT TO WARNING POINT MESSAGE FORMAT

- A. This Annex contains the message format that is to be used by nuclear plants to transmit initial and follow-up warning messages to warning points.
- B. Blank copies of this format are positioned in the nuclear plant control room, at all warning points, and with appropriate individuals on the warning points' notification list.
- C. Since the information that can be transmitted by this format is minimal, it may be necessary to add additional comments. The intent of this format is not to limit the amount of information provided by the nuclear plant.
- D. Once communication is established between the nuclear plant and points other than the warning points (e.g., key individuals, EOCs, and SERT - see PART 1, Figure 2), the format may be modified by the government agency concerned to meet the needs of the developing situation. If necessary, the form may even be replaced by another message format by the government agency concerned. In any case, all messages will be assigned a message number. Messages not transmitted to warning points must be addressed to an individual, a specific EOC, or SERT.

WARNING MESSAGE: NUCLEAR FACILITY TO STATE/LOCAL GOVERNMENT**Instructions:**

- A. For Sender:
1. Complete Part I for the Initial Warning Message.
 2. Complete Parts I & II for followup messages.
- B. For Receiver:
1. Record the date, time and your name in the area below.
 2. Authenticate this message by verifying the code word or by calling back to the facility. (See Part I .5)

Time: _____ Date: _____

Message Received By: _____

PART I

1. This is: _____
(Insert name of facility)
2. My name is. _____
3. This message (number ___):
 _____ (a) Reports a real emergency.
 _____ (b) Is an exercise message.
4. My telephone number/extension is: _____
5. Message authentication: _____
(Verify code word or call back to the facility)
6. The class of the emergency is: _____ (a) Notification of Unusual Event
 _____ (b) Alert
 _____ (c) Site Emergency
 _____ (d) General Emergency
7. This classification of emergency was declared at: _____ (a.m./p.m.) on _____ (date).
8. The initiating event causing the emergency classification is: _____

9. The emergency condition: _____ (a) Does not involve the release of radioactive materials from the plant.
 _____ (b) Involves the potential for a release, but no release is occurring.
 _____ (c) Involves a release of radioactive material.

10. We recommend the following protective action:

- _____ (a) No protective action is recommended at this time.
- _____ (b) People living in zones _____ remain indoors with the doors and windows closed.
- _____ (c) People in zones _____ evacuate their homes and businesses.
- _____ (d) Pregnant women and children in zones _____ remain indoors with the doors and windows closed.
- _____ (e) Pregnant women and children in zones _____ evacuate to the nearest shelter/reception center.
- _____ (f) Other recommendations: _____

11. There will be:

- _____ (a) A followup message
- _____ (b) No further communications

12. I repeat, this message:

- _____ (a) Reports an actual emergency
- _____ (b) Is an exercise message

13. RELAY THIS INFORMATION TO THE PERSONS INDICATED ON YOUR ALERT PROCEDURE FOR AN INCIDENT AT A NUCLEAR FACILITY.

END OF INITIAL WARNING MESSAGE

PART II

1. The type of actual or projected release is:

- _____ (a) Airborne
- _____ (b) Waterborne
- _____ (c) Surface spill
- _____ (d) Other

2. The source and description of the release is: _____

3. _____ (a) Release began/will begin at ____ a.m./p.m.; time since reactor trip is ____ hours.
- _____ (b) The estimated duration of the release is ____ hours.

4. Dose projection base data:

Radiological release: _____ curies, or _____ curies/sec.

Windspeed: _____ mph

Wind direction: From _____°

Stability class: _____ (A,B,C,D,E,F, or G)

Release height: _____ Ft.

Dose conversion factor: _____ R/hr/Ci/m³ (whole body)

_____ R/hr/Ci/m³ (Child Thyroid)

Precipitation: _____

Temperature at the site: _____°F

5. Dose projections:

Dose Commitment

Distance	Whole Body Rem/hour	(Child Thyroid) Rem/hour of inhalation
Site boundary		
2 miles		
5 miles		
10 miles		

Projected Integrated Dose In Rem

Distance	Whole Body	Child Thyroid
Site Boundary		
2 miles		
5 miles		
10 miles		

6. Field measurement of dose rate or contamination (if available): _____

7. Emergency actions underway at the facility include: _____

8. Onsite support needed from offsite organizations: _____

9. Plant status:

(a) Reactor is: not tripped/tripped

(b) Plant is at: _____ % power/hot shutdown/cold shutdown/cooling down

(c) Prognosis is: stable/improving/degrading/unknown.

10. I repeat, this message:

_____ (a) Reports an actual emergency.

_____ (b) Is an exercise message.

11. Do you have any questions?

*****END OF FOLLOW-UP MESSAGE*****

NOTE: Record the name, title, date, time, and warning point notified. (Senders)

Record the name title, date, time, and persons notified per alert procedure. (Receivers)

1.	_____	_____	_____
	(name)		(title)
	_____	_____	_____
	(date)	(time)	(warning point)
2.	_____	_____	_____
	(name)		(title)
	_____	_____	_____
	(date)	(time)	(warning point)
3.	_____	_____	_____
	(name)		(title)
	_____	_____	_____
	(date)	(time)	(warning point)
4.	_____	_____	_____
	(name)		(title)
	_____	_____	_____
	(date)	(time)	(warning point)
5.	_____	_____	_____
	(name)		(title)
	_____	_____	_____
	(date)	(time)	(warning point)
6.	_____	_____	_____
	(name)		(title)
	_____	_____	_____
	(date)	(time)	(warning point)
7.	_____	_____	_____
	(name)		(title)
	_____	_____	_____
	(date)	(time)	(warning point)

ANNEX G
WARNING AND NOTIFICATION OF BOATERS
ON LAKE WYLIE AND THE CATAWBA RIVER

- I. **PURPOSE AND SCOPE.** Annex G establishes the organizational responsibilities and procedures for emergency warning and notification of boaters in the North Carolina areas on Lake Wylie and the Catawba River within a 10-mile radius of the Catawba Nuclear Station. These procedures ensure that boaters will be warned to evacuate the lake and monitor radio or television for further instructions.

- II. **ORGANIZATION.** The county and State organizations involved in the notification and warning of boaters are:
 - A. Charlotte-Mecklenburg Emergency Management Office
 - B. Mecklenburg County Police Department Communications Division (County warning point)
 - C. Mecklenburg County Police Department, Lakes Enforcement Section
 - D. Charlotte Police Department Airborne Division
 - E. North Carolina Wildlife Resources Commission, Enforcement Division

- III. **CONCEPT OF OPERATIONS.**
 - A. Actions will be based on the recommendations of Duke Power Company, as verified (to the extent possible) by Mecklenburg County and RPS.
 - B. Mecklenburg County and the State of South Carolina will activate warning procedures when conditions at Catawba warrant such action.
 1. Prior to the assumption of direction and control by the State, Mecklenburg County has the authority to make the decision to initiate warning and notification in the North Carolina water areas.
 2. After the establishment of SERT, the State will request the Charlotte-Mecklenburg Emergency Management Office to initiate warning procedures.
 3. These actions may include a precautionary evacuation of all water and land areas within two miles of the station.

- C. The Mecklenburg County warning point or the Emergency Management Office will initiate warning procedures for North Carolina areas of Lake Wylie and the Catawba River.
1. The senior law enforcement official of the Mecklenburg County Police Department, Lakes Enforcement Section will assume direction and control of warning operations for water areas in N.C.
 2. In the event that the police department is committed to another element, the N.C. Wildlife Resources Commission will assume the responsibility of direction and control.
- D. The warning and notification of boaters on the lake and river within a 10-mile radius of the Catawba Station will be accomplished using fixed sirens, boats with sirens, red smoke signals, PA systems, a fixed wind aircraft, and a helicopter.
1. In the event that inclement weather prevents the use of aircraft, boats only will be used to conduct warning.
 2. If the weather prohibits the use of boats and aircraft, warning and notification procedures will be conducted if and when the weather permits timely action. (**NOTE:** The fixed-siren system will be activated regardless of weather conditions.)
 3. When ordered to do so, the boats will cover pre-assigned areas of the lake, sound their sirens continuously, and release red smoke or flares.
 4. The aircraft will act as observers and as a communications link to Mecklenburg County government and the N.C. Wildlife Resources Commission.
- E. Signs informing boaters of the meaning of red smoke flares and siren signals are to be placed at boat access points on the lake. (See Appendixes 1 and 2.)
- F. Annex G is to be activated when a decision is made to institute notification and warning procedures for both North and South Carolina areas of Lake Wylie and the Catawba River.

IV. RESPONSIBILITIES.

A. Charlotte-Mecklenburg Emergency Management Office.

1. Institute notification and warning procedures for boaters on Lake Wylie and the Catawba River.
2. Direct and control notification and warning procedures for boaters on the lake and river.

B. Mecklenburg County Police Department Communications Division (County Warning Point).

1. Receive messages from the Catawba Station about an emergency or impending emergency.
2. Transmit information to the Charlotte-Mecklenburg Emergency Management Director and other officials.
3. When requested by the Emergency Management Director or other appropriate authority, instruct the following organizations immediately to begin notification and warning procedures on Lake Wylie and the Catawba River:

a. Enforcement Division, N.C. Wildlife Resources Commission.

John H. Smiley, Jr.	(704)983-1385
G.H. Hallman, Jr. (Alternate)	(704)463-1217
Harold Ragland	(704)879-8105
J.C. Story, Jr. (Alternate)	(704)438-4571

If these persons cannot be reached call the Wildlife Communications Center at the toll-free number 1/800/662-7137.

b. Charlotte Police Department, Airborne Division.

Contact Division Commander by telephone at (704) 374-2190.

c. Mecklenburg County Police Department, Lakes Enforcement Section.

C. Mecklenburg County Police Department, Lakes Enforcement Section.

1. Direct and control on-site operations on areas of Lake Wylie and the Catawba River located in North Carolina.

2. Coordinate warning and notification on the lake and river with South Carolina warning operations.
3. Provide one boat and operators to sound sirens and cover preassigned areas.

D. Charlotte Police Department, Airborne Division

1. Dispatch helicopter to Lake Wylie and make radio contact with the Wildlife Resources Commission aircraft in the area.
2. Using a PA system, assist Wildlife Resources Commission personnel in notifying boaters to leave the lake and monitor radio or television for additional instructions.
3. Maintain radio contact with the Mecklenburg County warning point and transfer messages to and from the Wildlife Resources Commission aircraft as necessary.

E. North Carolina Wildlife Resources Commission

1. Provide three boats with operators to sound sirens and cover preassigned areas of Lake Wylie and the Catawba River.
2. While under way, the boats will sound their sirens continuously and release red smoke from canisters during the day or display red flares at night.
3. After covering their assigned area, the boats will go back over the areas covered and inform any boaters remaining on the water to proceed to shore and turn on their radios.
4. The Wildlife Resources Commission fixed-wing aircraft will maintain radio contact with the boats and the Charlotte Police helicopter in addition to serving as a spotter to identify boats remaining on the water.

V. COORDINATING INSTRUCTIONS.

- A. To execute warning on the lake and river in an efficient and timely manner, Mecklenburg County will be in direct communication with Duke Power Company and South Carolina warning personnel.
1. Coordination between Duke Power Company, Mecklenburg County, SERT (if established), and the SC-FEOC and/or York County is imperative.

2. Commercial telephone and two-way radio will be the primary and back-up means of communications among the County and State response organizations.
 3. Two-way radio will be the primary means of communications among local and State personnel conducting warning.
- B. The senior law enforcement official of the Mecklenburg County Police Department, Lakes Enforcement Section will assume direction and control of all on-site operations for Annex G. In the event that the police department is committed to another element, the N.C. Wildlife Resources Commission will assume the responsibility of direction and control.
- D. Mecklenburg County will notify Gaston County and the State when the warning and notification procedures are initiated on the lake.

**APPENDIX 1 TO ANNEX G
NOTICE TO ALL BOATERS**

In the event of an emergency requiring evacuation of the lake, you will be notified by sirens and red smoke or flares. If these signals are observed, please:

1. Leave the lake immediately.
2. Turn on radio or television for information and instructions.

**APPENDIX 2 TO ANNEX G
LIST OF PLACES WHERE SIGNS ARE DISPLAYED**

GASTON COUNTY

Wildlife Club
South Point Road
Belmont, NC 28012

Wylie West Marina
South Point Road
Belmont, NC 28012

Fishermans Dock
Lower Armstrong Road

Duke Power
Plant Allen
"Hot Pole"
South Point Road

Seven Oaks Marina
South New Hope Road

Ti-Care Recreation Area
Cove Road

MECKLENBURG COUNTY

Terry's Marina - SR 113
McDowell Park (Mecklenburg County Park)
Camp Steere (Boys Scouts of America)
Joyner's Restaurant
Copperhead Access Area
Red Fez Shrine Club

PLAN CROSS REFERENCE

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<u>STATE GOVERNMENT DEPARTMENT</u>	<u>BASIC PLAN</u>	<u>PLAN CHANGES</u>	<u>EXERCISE DOCUMENTATION</u>
Administration General Services 431 N. Salisbury Street	1	1	1
Agriculture 1 W. Edenton Street	3	3	3
Commerce Utilities Commission Dobbs Building 430 N. Salisbury Street	2	2	
Correction Division of Prisons Randall Building 831 W. Morgan Street	3	3	3
Crime Control and Public Safety Archdale Building 512 N. Salisbury Street	6	6	6
Division of Emergency Management Administration Building 116 W. Jones Street	25	25	25
Highway Patrol Archdale Building/ Training Center/ Governor Morehead School	27	27	27
National Guard National Guard Center 4105 Reedy Creek Road	5	5	5
Civil Air Patrol N.C. Wing of CAP 6224 Wilkinson Blvd. Charlotte, 28214		1	1
Alcohol Law Enforcement Archdale Building 512 N. Salisbury ST.	1	1	1
State Fire Commission Administration Building	1	1	1
Public Instruction Education Building 114 W. Edenton Street	1	1	

Distribution 2

<u>STATE GOVERNMENT DEPARTMENT</u>	<u>BASIC PLAN</u>	<u>PLAN CHANGES</u>	<u>EXERCISE DOCUMENTATION</u>
Human Resources Albemarle Building 325 N. Salisbury Street	13	13	13
Radiation Protection 1330 St. Mary's Street	11	11	11
Health Services Bath Building	4	4	4
Emergency Medical Services 1330 St. Mary's Street	1	1	1
Justice Police Information Network 407 N. Blount Street	1	1	1
Natural Resources and Community Development Archdale Building 512 N. Salisbury Street	5	5	5
Wildlife Resources Commission Archdale Building 512 N. Salisbury Street	5	5	5
Revenue Revenue Building 2 S. Salisbury Street	1	1	
Transportation Murphy School Building	9	9	9
Division of Highways Highway Building 1 S. Wilmington Street	5	5	5
Governor's Office Administration Building 116 W. Jones Street	1	1	1
<u>FEDERAL GOVERNMENT</u>			
Director Department of Energy 1615 Peachtree St., N.E. Atlanta, Georgia 30367	1	1	1

<u>FEDERAL GOVERNMENT DEPARTMENT</u>	<u>BASIC PLAN</u>	<u>PLAN CHANGES</u>	<u>EXERCISE DOCUMENTATION</u>
Director Federal Emergency Management Agency Region IV 1375 Peachtree St., N.E. Atlanta, Georgia 30309	10	10	10
Federal Emergency Management Agency Region IV Federal Regional Center Thomasville, Georgia 31792	2	2	2
Meteorologist-in-charge National Weather Service Forecast Office Raleigh-Durham Airport P.O. Box 165 Morrisville, N.C. 27560	1	1	1
Meteorologist-In-Charge National Weather Service Office 5304 Morrisfield Drive Charlotte, N.C. 28208	1	1	1
Meteorologist-in-charge National Weather Service Office P.O. Box 8146 Greensboro, N.C. 27410	1	1	1
Savannah River Operations Office P.O. Box A Aiken, S.C. 29801	1	1	1
<u>OTHERS</u>			
American National Red Cross P.O. Box 3507 Charlotte, NC 28203	1	1	1
Emergency Response Coord. Duke Power Company P.O. Box 33189 Wachovia Center Charlotte, N.C. 28242	2	2	2
Emergency Planning Coord. Catawba Nuclear Station P.O. Box 293 Clover, S.C. 29710	1	1	1

Distribution 4

<u>FEDERAL GOVERNMENT DEPARTMENT</u>	<u>BASIC PLAN</u>	<u>PLAN CHANGES</u>	<u>EXERCISE DOCUMENTATION</u>
Manager, Catawba Nuclear Station P.O. Box 293 Clover, S.C. 29710	1	1	1
Public Affairs Norfolk & Western Railroad Company 3 North Jefferson Street Roanoke, Virginia 24042	1	1	1
Divisional Secretary Salvation Army 1051 E. Morehead Street Charlotte, NC 28204	1	1	1
Executive Director Southern States Energy Board One Exchange Plaza Peachford Road, Suite 1230 Atlanta, Georgia 30338	1	1	1
Manager WQDR FM P.O. Box 1511 Raleigh, N.C. 27602	1	1	1
Manager WPTF AM P.O. Box 1511 Raleigh, N.C. 17602	1	1	1
Vice President & General Mgr. WEZC P.O. Box 30247 Charlotte, N.C. 28230	1	1	1
General Manager WFMX 1117 Radio Road Statesville, N.C. 28677	1	1	1
Accounts Executive Southern Bell P.O. Box 32000 Raleigh, NC 27612	1	1	1
Director S.C. Emergency Preparedness Division Rutledge Building 1429 Senate Street Columbia, S.C. 29201	2	2	2

FEDERAL GOVERNMENT DEPARTMENT	<u>BASIC PLAN</u>	<u>PLAN CHANGES</u>	<u>EXERCISE DOCUMENTATION</u>
Nuclear Engineering Department N.C. State University Raleigh, NC	1	1	1
Wilmington Manufacturing Department General Electric Company Wilmington, NC	1	1	1
<u>COUNTY GOVERNMENT</u>			
<u>North Carolina</u>			
Gaston	50	50	1
Mecklenburg	50	50	1
Anson	1	1	
Burke	1	1	
Cabarrus	30	30	
Catawba	1	1	
Cleveland	30	30	
Iredell	1	1	
Lincoln	1	1	
Rowan	1	1	
Rutherford	1	1	
Stanly	1	1	
Union	30	30	
<u>South Carolina</u>			
Cherokee	1	1	
Chester	1	1	
Chesterfield	1	1	
Fairfield	1	1	
Kershaw	1	1	
Lancaster	1	1	
Newberry	1	1	
Spartanburg	1	1	
Union	1	1	
York	1	1	