

STATION DIRECTIVE 3.8.2

APPROVAL *W. V. [Signature]*

DATE ORIGINAL ISSUED 4/8/80

REVISION 8 DATE 10/6/82

DUKE POWER COMPANY
McGUIRE NUCLEAR STATION
STATION EMERGENCY ORGANIZATION

OBJECTIVE

This directive establishes the Station Emergency Organization and the functions it is responsible for in effectively supporting the normal operating shift in the management of any emergency condition at the station. It particularly addresses the augmentation of the operating shift resources for accident response situations where the health and safety of station personnel and members of the general public are concerned. It provides a structure by which the normal functions of the operating shift are augmented and immediately directed to accident termination and mitigation, offsite consequence determination, and plant recovery operations.

GENERAL

Initial activities during any emergency condition are directed by the Shift Supervisor from the control room, in accordance with the McGuire Emergency Plan and any Implementing Procedure. The Shift Supervisor shall assume the functions of the Emergency Coordinator until the arrival of the Station Manager or his designee at which time the Station Manager or his designee assumes the responsibility of the Emergency Coordinator. The Emergency Coordinator will assure that the

following emergency objectives are achieved during the initial phases of any emergency condition described in the appropriate Emergency Procedure:

1. Initiation of emergency actions within the provisions of the Emergency Plan, including notification of and protective action recommendations to authorities responsible for coordinating offsite protective actions, enabling the Shift Supervisor to devote full attention to remedial measures within the station. This authority to notify and make protective action recommendations to offsite authorities may not be delegated to other personnel within the emergency organization.
2. Notification and activation of the Station, Corporate, North Carolina, and the Nuclear Regulatory Commission emergency organizations having a response role.
3. Continued assessment of actual or potential consequences both onsite and offsite throughout the evolution of the emergency condition.
4. Effective implementation of emergency measures in the environs including protective actions and or evacuation of affected areas, implementation of emergency monitoring teams and facilities to evaluate the environmental consequences of the emergency condition, prompt notification and communications with offsite authorities.
5. Continued maintenance of an adequate state of emergency preparedness until the emergency situation has been effectively managed and the station is returned to a normal or safe operating condition.

IMPLEMENTATION

Onsite Emergency Organization

1. The Onsite Emergency Organization shall be that organization of normal plant operating shift augmented with additional personnel as deemed necessary by the Shift Supervisor/Emergency Coordinator, the Station Manager or as required by any Emergency Procedure or Station Directive.

2. The Shift Supervisor on duty shall ensure that all actions required by any initiating Emergency Procedure or by any emergency condition have been performed and that all actions necessary for the protection of persons and property are being taken. The Shift Supervisor upon being relieved of the Emergency Coordinator functions shall continue to take all actions necessary to ensure that any emergency situation is brought under control.
3. The Emergency Coordinator shall have the authority and responsibility to initiate any emergency actions within the provisions of the Emergency Plan, including the notifications and exchange of information with those authorities responsible for coordinating offsite emergency measures. The Emergency Coordinator will work closely with the Shift Supervisor, other Station Management and Engineering and Technical support personnel at the Technical Support Center (T.S.C.) (See Enclosure (1)). He shall also maintain communications with offsite personnel at the Crisis Management Center, County Emergency Operations Center(s) and with the North Carolina State Emergency Operations Center initially, then with the North Carolina State Emergency Response Team headquarters as this organization is activated. This function will later be assumed by the Recovery Manager at Duke Power Crisis Management Center.
4. The Control Room is the initial onsite center of emergency control. It is designed for evaluation and control over the initial aspects of an emergency and for those actions necessary for coping with the emergency condition. These actions include but are not limited to:
 - (a) Continuous evaluation of the magnitude and potential consequences of the emergency condition,
 - (b) Initial notifications and communications with those station personnel and offsite agencies responsible for coordinating effective response measures for the emergency condition.The control room shall be staffed with one operating shift, the Emergency Coordinator and any other personnel the Shift Supervisor, Station Manager or Emergency Coordinator may require in response to the emergency condition.

5. The Onsite Technical Support Center (T.S.C) acts in support of the command and control function of the control room and to display current plant status and diagnostic information to those individuals who are knowledgeable and responsible for engineering, technical, and management support of reactor operation in any emergency condition. The Technical Support Center is located in offices 911, 912, 913, 914 in the service building at elevation 767 (See Enclosure (3), Technical Support Center Layout) and has the capability to house 25 persons, necessary communication equipment, diagnostic display information, plant drawings, layouts, maps, and charts necessary to support the emergency organization. In the event the Technical Support Center located in offices 911, 912, 913, 914 becomes environmentally uninhabitable due to radiological or other conditions and the control room remains secure (habitable), Phase I of the Technical Support Center shall move to offices 930 and 931 inside the control room. Phase II shall evacuate to the administration building, Cowan's Ford Hydro or the Technical Training Center as directed by the Station Manager. In the event the control room also becomes uninhabitable due to radiological or other conditions, Phase I of the Technical Support Center will evacuate to the administration building, Cowan's Ford Hydro or the Technical Training Center as directed by the Station Manager.

The Technical Support Center shall be activated by the Emergency Coordinator in accordance with the applicable Emergency Procedure. The Control Room shall notify and activate the members of the Technical Support Center by notifying the Emergency Coordinator and Superintendents in accordance with Enclosure (4), who shall be responsible for notifying the personnel under their direction for implementation of Phase II of the Technical Support Center. The Section heads in Phase II shall be responsible for notifying the personnel under their direction assigned to the Technical Support Center and any other personnel that they may deem necessary to support the Emergency Condition.

Phase I of the Technical Support organization shall be operational in 60 minutes and will be staffed and organized as per Enclosure (1), or as deemed necessary by the Station Manager.

NOTE: In the event that radiological emergency conditions exist, the Health Physics section of the T.S.C. shall be activated with Phase I of the Technical Support Center organization as deemed necessary by the Station Manager or the Superintendent of Technical Services.

A. Phase I of the Technical Support Center shall include but not be limited to the following personnel:

- (1) The Station Manager (Emergency Coordinator) or in his absence a designated alternate per Enclosure (1). The Station Manager shall have complete responsibility for activation of the Technical Support Center and the Corporate Crisis Management Plan. He shall staff the Technical Support Center with those personnel listed in Enclosure (1) or at his discretion with those personnel deemed necessary to effectively assess the emergency condition. He shall institute those procedures necessary to allow the control room to gain immediate control of the emergency condition. The Station Manager will have direct communications via telephone or radio with the Recovery Manager at the Crisis Management Center, each county Emergency Operating Center, the North Carolina State Emergency Response Team and via telephone only to Nuclear Regulatory Commission. He shall maintain lines of communication and consultation with these agencies to ensure that they are informed of the emergency condition at all times in accordance with the Emergency Plan.

- (2) The Superintendent of Operations when designated shall assume the duties of the Station Manager. He will provide expertise to the Station Manager and the Shift Supervisor regarding solutions to operational problems. He shall ensure that each operating shift is manned with competent personnel trained and prepared to manage all operation emergency conditions and he shall augment his personnel resources as necessary to accomplish this goal. He shall provide technical expertise to other members of the Technical Support Center and shall work closely with the Superintendent of Maintenance in restoring station equipment to an operational status during and after the emergency condition.
- (3) The Superintendent of Technical Services when designated shall assume the duties of the Station Manager. He will provide expertise to the Station Manager and the Shift Supervisor regarding solutions to operational problems. He shall provide technical expertise to the other members of the Technical Support Center in the areas of Health Physics, Chemistry, Performance, and Reactor Engineering and in Licensing and Engineering support programs. He shall ensure that all areas of responsibility under his direction are staffed with competent personnel properly trained and prepared to support any operational emergency conditions.
- (4) The Superintendent of Maintenance when designated shall assume the duties of the Station Manager. He will provide expertise to the Station Manager and the Shift Supervisor regarding solutions to operational problems. He shall provide technical expertise to the other members of the T.S.C. in areas of Mechanical Maintenance, Planning, Instrument and Electrical Maintenance, and Materials Support. He will ensure that all areas of responsibility under his direction are staffed with competent personnel properly trained and prepared to support any operational emergency conditions.

- (5) The Superintendent of Administration when designated shall assume the duties of the Station Manager. He will provide Technical Expertise to the Station Manager and the Shift Supervisor regarding solutions to administrative problems associated with emergency conditions at the station. He shall provide technical expertise to other members of the Technical Support Center in the areas of Contract Services, Administrative Coordination and Training/Safety. He shall ensure that all areas under his direction are staffed and prepared to manage administrative support for any emergency condition.

- B. Phase II of the Technical Support Center organization shall be operational in 14 hours and will be staffed and organized as per Enclosure (1), or as deemed necessary by the Station Manager. In the event that radiological emergency conditions exist, the Health Physics section of the T.S.C. shall be activated with Phase I of the T.S.C. organization as deemed necessary by the Station Manager or the Superintendent of Technical Services. Phase II of the Technical Support Center shall include as a minimum the following personnel:

- (1) The Operating Engineer shall assume the duties of the Superintendent of Operations when so designated. He will provide technical expertise to the Superintendent of Operations and other members of the Technical Support Center as required. He will assist the Superintendent of Operations in coordinating Operation activities during the Emergency condition by developing work schedules, equipment and material procurement, guidance and assistance to the Shift Supervisor, communication with the Crisis Management Center incident report preparation, and other support functions as needed or required to restore the plant status to normal. He shall ensure that all areas under his direction are staffed and prepared to manage operational support for any emergency condition.

- (2) The Assistant Operating Engineer shall assume the duties of the Operating Engineer when so designated. He will provide technical expertise to the Superintendent of Operations, the Operating Engineer and other members of the Technical Support Center as required. He shall assist the Operating Engineer in assessment and evaluation of the emergency condition and in any other areas of expertise deemed necessary to the Technical Support Center organization.
- (3) The Health Physics section of the T.S.C. shall consist of the Station Health Physicist or his designated alternate, an Environmental Surveillance Coordinator, a Data Evaluation Specialist and a Radio Operator and other Health Physics personnel as deemed necessary by the Station Health Physicist to support the Health Physics functions during the emergency condition.

NOTE: The Environmental Surveillance teams shall be predesignated in the Station Health Physics Manual.

The Station Health Physicist shall assume the duties of the Superintendent of Technical Services when so designated. He will provide technical expertise to the Superintendent of Technical Services, the Station Manager, and other members of the Technical Support Center as required. The Health Physics section shall be responsible for gathering and compiling onsite and offsite radiological monitoring data from N.R.C., State, Corporate and Station radiological monitoring and evaluation teams and for providing this information to other members of the Technical Support Center as required. The Station Health Physicist shall provide for input to and distribution of Offsite Dose Calculations for

Airborne Releases (ODCAR) information accessible by Health Physics personnel. The Station Health Physicist shall make recommendations to the Station Manager through the Superintendent of Technical Services on Protective Actions deemed necessary to ensure that station personnel and members of the general public do not exceed exposure limits to radioactive materials. The Station Health Physicist shall also work closely with the appropriate members of the Corporate Crisis Management Center to ensure that radiological hazards during any emergency condition are minimized. The Station Health Physicist shall ensure that all areas under his direction are staffed and prepared to manage health physics support for any emergency condition.

- (4) The Station Chemist shall assume the duties of the Superintendent of Technical Services when so designated. He will provide technical expertise to the Superintendent of Technical Services and to other members of the Technical Support Center as required. He is responsible for coordinating chemical technical support and for initiating necessary action to insure adequate chemical sampling and evaluation to support the emergency condition. The Station Chemist shall ensure that all areas under his direction are staffed and prepared to manage chemistry support for any emergency condition.
- (5) The Performance Engineer shall assume the duties of the Superintendent of Technical Services when so designated. He will provide technical expertise to the Superintendent of Technical Services and to other members of the Technical Support Center as required. He will assure that adequate levels of technical and engineering manpower are available to: manage test procedure review, carry out special test procedures, ensure control and accountability of special nuclear materials, evaluate plant and reactor performance and provide plant data information from the Operator Aid Computer to the Vax Computer System. The Performance Engineer shall ensure that all areas under his direction are staffed and prepared to manage Performance support for any emergency condition.

- (6) The Reactor Engineer shall assume the duties of the Performance Engineer or the Superintendent of Technical Services when so designated. He will provide technical expertise to the Performance Engineer and to other members of the Technical Support Center as required. The Reactor Engineer shall ensure that all areas under his direction are staffed and prepared to manage technical support for any emergency condition.
- (7) The Projects and Licensing Engineer shall assume the duties of the Superintendent of Technical Services when so designated. He will provide technical expertise to the Superintendent of Technical Services and to other members of the Technical Support Center as required. He is responsible for coordinating station activities with regulating agencies, coordinating the reporting and investigation of all incidents and for providing review of appropriate Station technical matters. Special Assistants assigned to his area will provide technical expertise in Emergency Preparedness, Quality Assurance, Nuclear Safety, and Computer Interface. The Projects and Licensing Engineer shall ensure that all areas under his direction are staffed and prepared to manage technical support for any emergency condition.
- (8) The Instrument and Electrical Engineer shall assume the duties of the Superintendent of Maintenance when so designated. He will provide technical expertise to the Superintendent of Maintenance and to other members of the Technical Support Center as required. He is responsible for maintaining all station I&E equipment in an operational state. The Instrument and Electrical Engineer shall ensure that all areas under his direction are staffed and prepared to manage any I&E support for any emergency condition.
- (9) The Planning Engineer shall assume the duties of the Superintendent of Maintenance when so designated. He will provide technical expertise to the Superintendent of Maintenance and to other members of the Technical Support Center as required. He is responsible for the implementation and evaluation of the maintenance management program and for the administration of the materials procurement programs. The Planning Engineer shall ensure that all areas under his direction are staffed and prepared to manage planning and materials support for any emergency condition.

- (10) The Mechanical Maintenance Engineer shall assume the duties of the Superintendent of Maintenance when so designated. He will provide technical expertise to the Superintendent of Maintenance and to other members of the Technical Support Center as required. He is responsible for preventive and actual maintenance for all station mechanical equipment and facilities. The Mechanical Maintenance Engineer shall ensure that all areas under his direction are staffed and prepared to manage maintenance support for any emergency condition.
- (11) The Contract Services Coordinator shall assume the duties of the Superintendent of Administration when so designated. He will provide technical expertise to the Superintendent of Administration and to other members of the Technical Support Center as required. He is responsible for coordinating Security, Utility Services and Food Vending Service's for the Station. The Contract Services Coordinator shall ensure that all areas under his direction are staffed and prepared to manage Contract Services for any emergency condition.
- (12) The Administrative Coordinator shall assume the duties of the Superintendent of Administration when so designated. She will provide technical expertise to the Superintendent of Administration and to other members of the Technical Support Center as required. She is responsible for coordinating and maintaining general administrative functions and support for personnel at the station, including a TSC Log Recorder and Clerical Support. This area is also responsible for distribution of plant status sheets and update of the TSC status boards, typing, copy service, and other miscellaneous clerical functions that may be required. The Administrative Coordinator shall ensure that all areas under her direction are staffed and prepared to manage administrative functions during any emergency condition.

(13) The Training and Safety Coordinator shall assume the duties of the Superintendent of Administration when so designated. He will provide technical expertise to the Superintendent of Administration and to other members of the Technical Support Center as required. He is responsible for coordinating the station training and safety activities Fire Protection and Medical Services in support of the emergency organization. He is also responsible for maintaining documentation of those personnel who participate in the emergency response organization during actual emergencies and during exercises and drills. The Training and Safety Coordinator shall ensure that all areas under his direction are staffed and prepared to provide needed training and safety evaluations during any emergency condition.

6. The Onsite Operations Support Center (O.S.C.) shall be located in Room 909 (operators' kitchen). In the event the Onsite Operations Support Center becomes environmentally uninhabitable, personnel assigned shall move to offices 930 and 931 inside the control room ventilation system. It shall be staffed with operators not assigned to the control room, Health Physics personnel and as needed Instrument and Electrical, Maintenance, or Chemistry personnel in support of the emergency condition as per Enclosure (2). The normal station telephone system with a backup radio system (P&T frequency hand held) shall serve as a line of direct communication. The personnel assigned to the Operations Support Center shall be under the direct supervision of the Shift Supervisor.
- The Operations Support Center shall be activated by the Emergency Coordinator in accordance with the applicable Emergency Procedure. The Shift Supervisor shall alert the onshift operations personnel and the Health Physics Supervisor listed on Enclosure (5) to the Emergency condition. The Health Physics Supervisor shall alert the Health Physics Technicians listed on Enclosure (5) to the activation of the Onsite Operations Support Center. The Operations Support Center will be staffed and organized as per Enclosure (2), or as deemed necessary by the Shift Supervisor or Emergency Coordinator. The Operations Support Center shall include as a minimum the following personnel:

Operators: Operators on shift who are not actually assigned to the Control Room and additional call out operators as required or deemed necessary by the Shift Supervisor or Emergency Coordinator.

Health Physics: A Health Physics support group consisting of a Health Physics Supervisor and two technicians or additional technicians as deemed necessary by the Station Health Physicist shall be designated to serve in a support function to the Operations Support Center. The Health Physics group supporting the Operations Support Center shall be physically located in the Operations Support Center. The Health Physics Supervisor shall ensure that adequate instrumentation, respiratory protective equipment, protective clothing, and any other material needs are provided in support of the Health Physics coverage for the Operations Support Center.

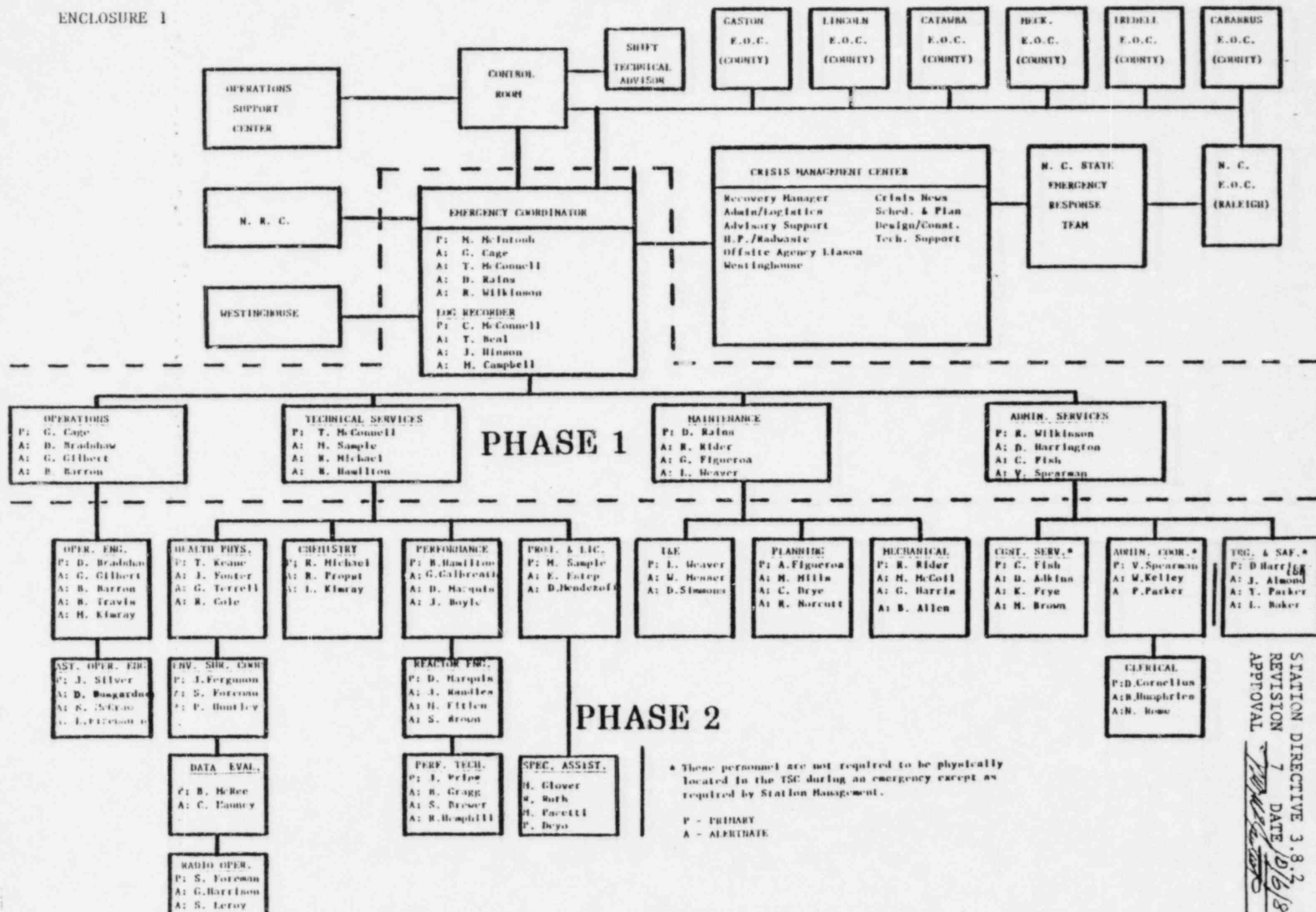
NOTE: An Emergency Kit containing supplies listed in PT/O/A/4600/11 is stored in the Operators kitchen.

ENCLOSURES

1. Enclosure (1), ONSITE TECHNICAL SUPPORT CENTER AND AUGMENTING AGENCIES
2. Enclosure (2), ONSITE OPERATIONS SUPPORT CENTER
3. Enclosure (3), ONSITE TECHNICAL SUPPORT CENTER, (PHYSICAL LAYOUT)
4. Enclosure (4), ONSITE TECHNICAL SUPPORT CENTER TELEPHONE ACTIVATION
5. Enclosure (5), ONSITE OPERATIONS SUPPORT CENTER TELEPHONE ACTIVATION

TECHNICAL SUPPORT CENTER and AUGMENTING AGENCIES

ENCLOSURE 1

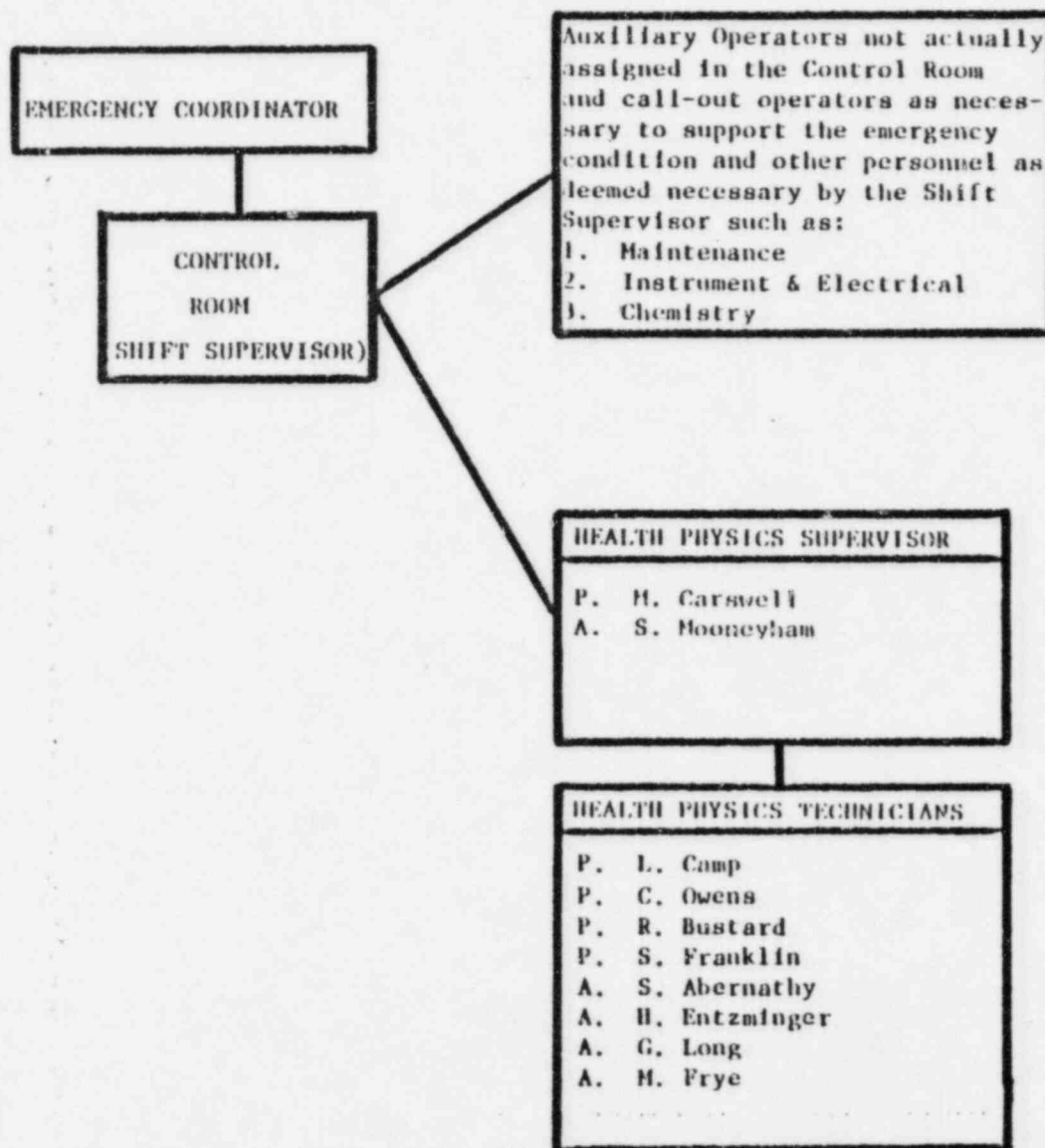


STATION DIRECTIVE 3.8.2
REVISION 7 DATE 10/6/82
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OPERATIONS SUPPORT CENTER

STATION DIRECTIVE 3.8.2

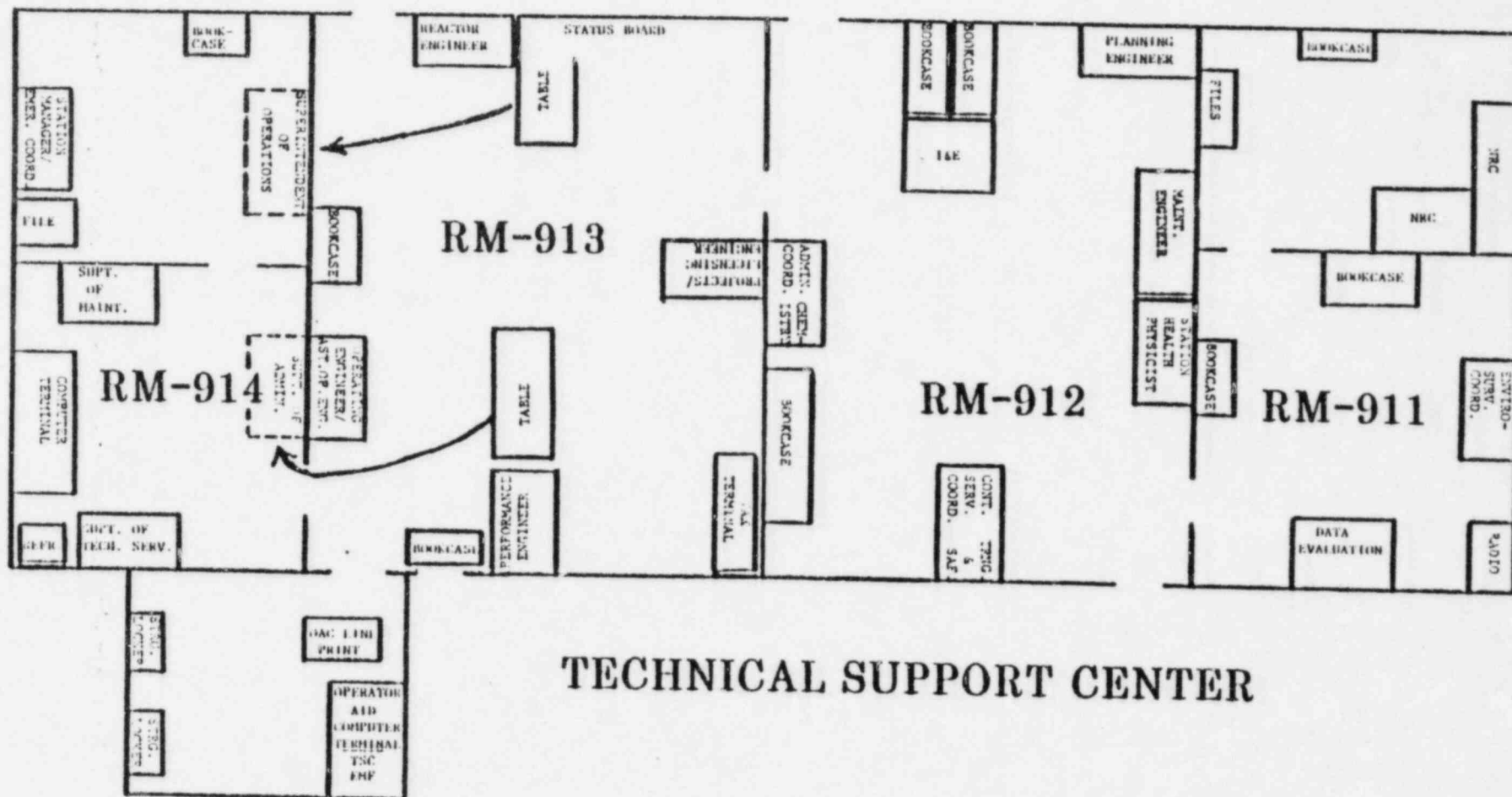
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APPROVAL *[Signature]*

P - PRIMARY
A - ALTERNATE

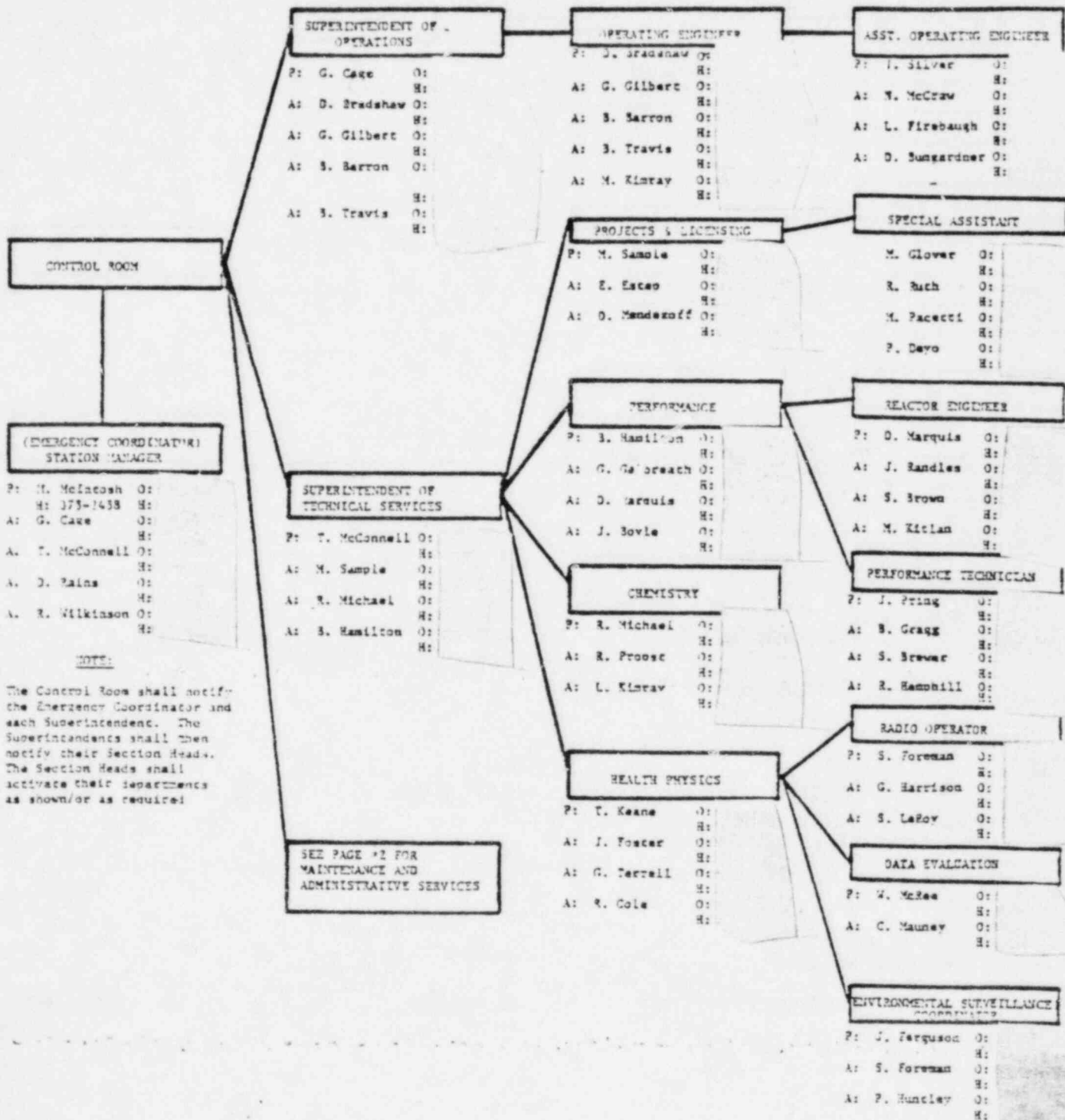
ENCLOSURE 3

STATION DIRECTIVE 3.8.2
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 APPROVAL *[Signature]*



TECHNICAL SUPPORT CENTER

ENCLOSURE 4
TECHNICAL SUPPORT CENTER
PHASE 1 **PHASE 2**

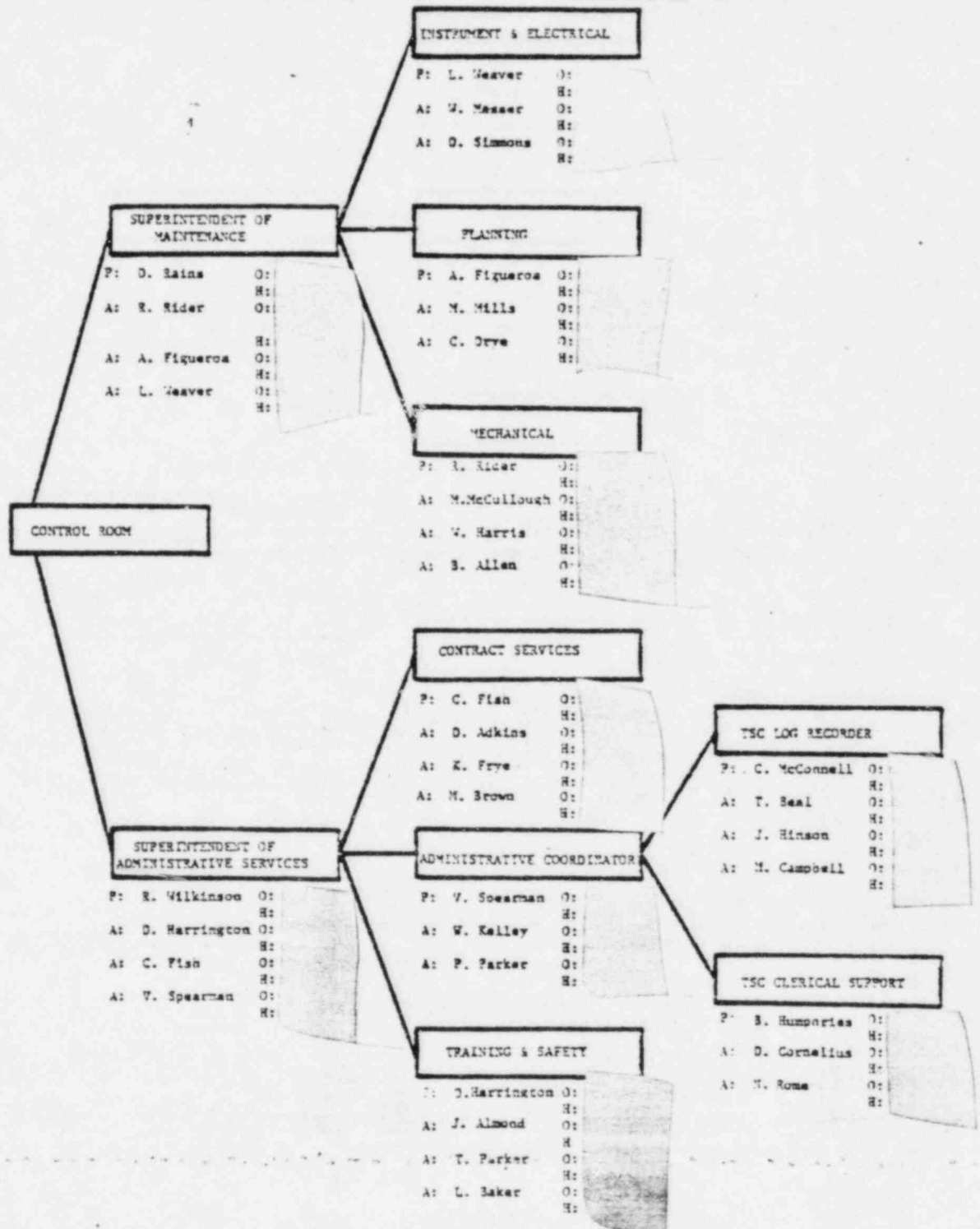


ENCLOSURE 4

TECHNICAL SUPPORT CENTER

PHASE 1

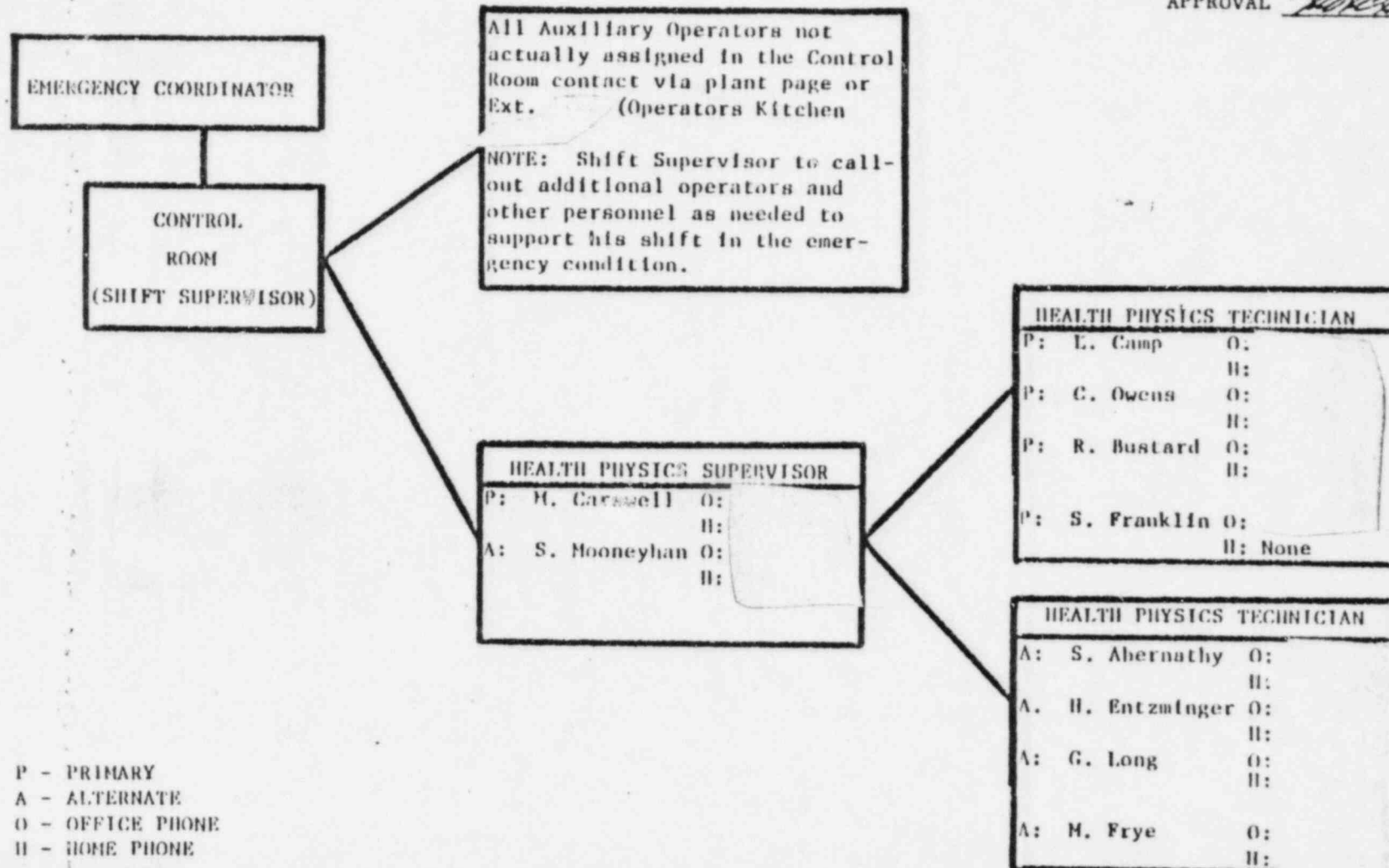
PHASE 2



OPERATIONS SUPPORT CENTER

STATION DIRECTIVE 3.8.2

REVISION 4 DATE 10/6/92

APPROVAL *[Signature]*

DUKE POWER COMPANY
PROCEDURE PREPARATION
PROCESS RECORD

(1) ID No: EP/0/A/5000/05
Change(s) 0 to
0 Incorporated

(2) STATION: McGuire Nuclear Station

(3) PROCEDURE TITLE: Notification of Unusual Event

(4) PREPARED BY: M. S. Glover

DATE: 10/6/82

(5) REVIEWED BY: AD Gilbert

DATE: 10-6-82

Cross-Disciplinary Review By: _____

N/R: ADG

(6) TEMPORARY APPROVAL (IF NECESSARY):

By: _____ (SRO) Date: _____

By: _____ Date: _____

(7) APPROVED BY: George L. Lyle

Date: 10-6-82

(8) MISCELLANEOUS:

Reviewed/Approved By: _____ Date: _____

Reviewed/Approved By: _____ Date: _____

DUKE POWER COMPANY
McGUIRE NUCLEAR STATION
NOTIFICATION OF UNUSUAL EVENT

1.0 Symptoms

1.1 This condition exists whenever unusual events are in process or have occurred which indicate a potential degradation of the level of safety of the plant.

2.0 Immediate Actions

2.1 Automatic

None

2.2 Manual

2.2.1 The Shift Supervisor shall be informed of all events initiating this procedure.

3.0 Subsequent Action

Initial/N/A

 /

3.1 The Shift Supervisor shall assure that the appropriate emergency condition (Notification of Unusual Event, Alert, Site Area Emergency, or General Emergency) is declared by evaluating the actual plant condition with Enclosure 4.1, Emergency Classification Flowchart and Enclosure 4.2, List of Initiating Conditions, Emergency Action Levels, and Associated Emergency Procedure/Document.

 /

3.2 The Shift Supervisor shall assure that all actions required by the initiating Emergency Procedure will be performed and that all actions necessary for the protection of persons and property are being taken.

NOTE

If at any time in the course of events in this procedure, site evacuation or personnel assembly/accountability appears necessary, refer to Station Directive 3.8.1.

 /

3.3 The Shift Supervisor shall assume the function of the Emergency Coordinator until the arrival of the Station Manager or his designee at which time the Station Manager or his designee assumes the responsibility of the Emergency Coordinator.

- /
- 3.4 The Emergency Coordinator shall assure prompt (within about 15 minutes of declaring the emergency) notification of the North Carolina State and Local County Warning Points indicated on Enclosure 4.3. He shall also assure notification of all other personnel listed in Enclosure 4.3.

NOTE 1.

See Enclosure 4.4, Telephone Listing, for notification, telephone numbers/radio codes/pager codes.

NOTE 2.

See Enclosure 4.5, Notification of Emergency Conditions, for information to be provided to State/County Warning Points.

NOTE 3.

See Enclosure 4.6, Emergency Plan Message Format for information to be provided to Nuclear Production Duty Engineer.

- /
- 3.5 In the event a release or potential release of radioactive materials is a threat to plant personnel or members of the general public the Emergency Coordinator shall request Health Physics personnel to evaluate the consequences utilizing the appropriate Health Physics procedure, HP/O/B/1009/05, HP/O/B/1009/06, HP/O/B/1009/08, HP/O/B/1009/09 or HP/O/B/1009/10.
- /
- 3.6 The Emergency Coordinator shall provide protective action recommendations as necessary to the affected county warning point(s) and to the North Carolina warning point (Emergency Operations Centers if established) or the State Radiological Protection Section, Department of Human Resources (see Enclosure 4.4 Telephone Listing) as directed by the state in accordance with the North Carolina Radiological Emergency Response Plan. If actual release of radioactive materials will result in a projected dose (REM) to the population of: (EPA Protective Action Guidelines).
- 3.6.1 Whole body <1, thyroid <5, NO protective action is required. Monitor environmental radiation levels to verify.

- 3.6.2 Whole body 1 to <5, thyroid 5 to <25, recommend seeking shelter and wait for further instructions. Consider evacuation particularly for children and pregnant women. Monitor environmental radiation levels. Control access to affected areas.
- 3.6.3 Whole body 5 and above, thyroid 25 and above, recommend mandatory evacuation of populations in the affected areas. Monitor environmental radiation levels and adjust area for mandatory evacuation based on these levels. Control access to affected areas.

NOTE

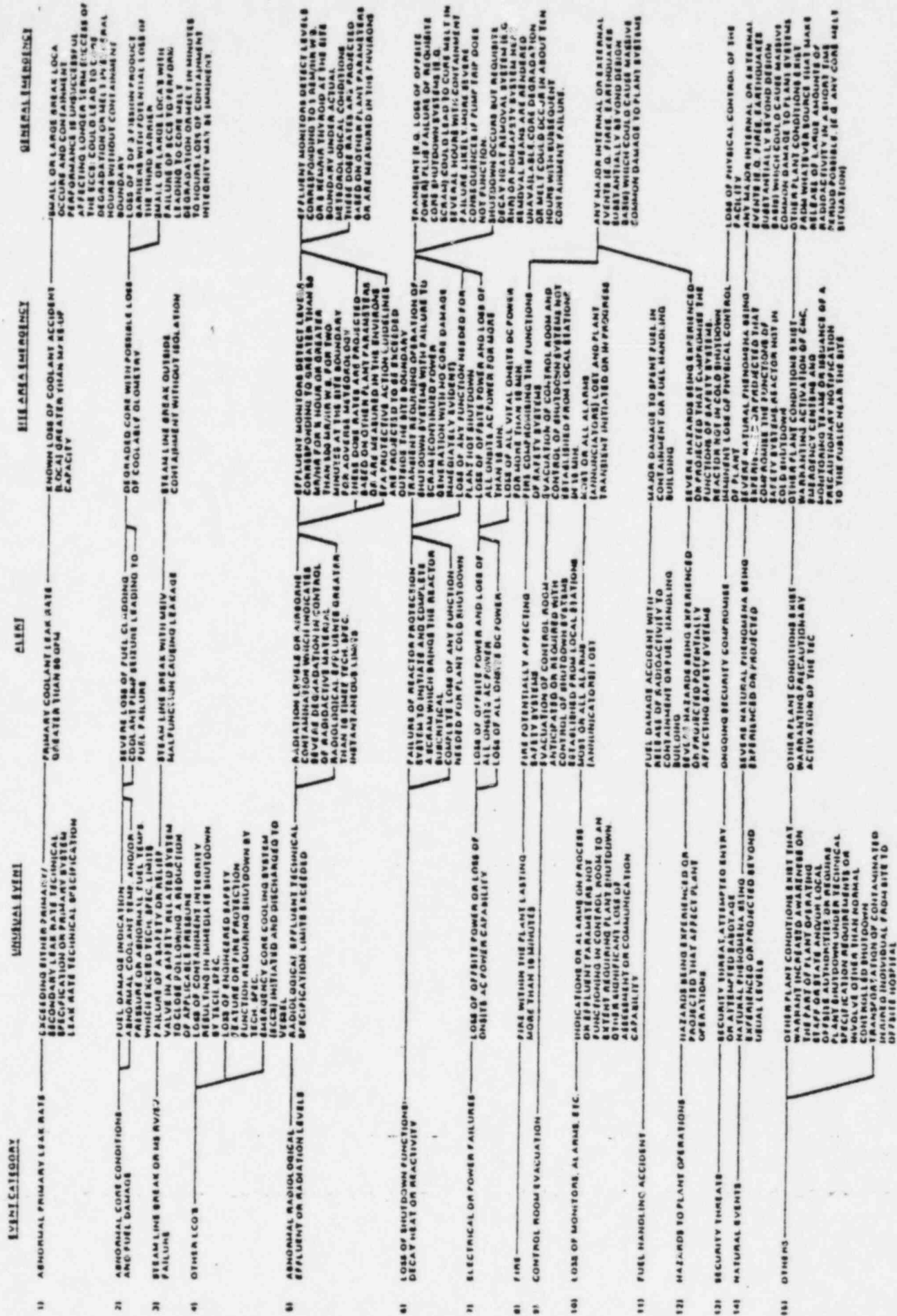
See Enclosure 4.4, Telephone Listing for notification.

- / 3.7 The Emergency Coordinator shall augment on shift resources to assess and respond to the emergency situation as needed to ensure the protection of persons and property.
- / 3.8 The Emergency Coordinator will assess the Emergency Condition and determine the need to remain in a Notification of Unusual Event, escalate to a more severe class or close out the emergency.
- / 3.9 The Projects and Licensing Engineer or his designee will close out the Emergency with verbal summary to county and State authorities, notified in Step 3.4, followed by written summary within 24 hours.

4.0 Enclosures

- 4.1 Emergency Classification Guide Flowchart
- 4.2 List of Initiating Conditions, Emergency Action Levels, and Associated Emergency Procedure/Document.
- 4.3 Notification Chart
- 4.4 Telephone Listing
- 4.5 Notification of Emergency Conditions.
- 4.6 Emergency Plan Message Format

EMERGENCY CLASSIFICATION GUIDE FLOWCHART



LIST OF INITIATING CONDITIONS, EMERGENCY ACTION LEVELS, AND
ASSOCIATED EMERGENCY PROCEDURE/DOCUMENT

Initiating Conditions	Emergency Action Level (EAL)	Emergency Procedure/Document
4.2.1 Emergency Core Cooling Initiated (SI) and discharge to vessel has occurred.	Safety Injection signal verification by redundant indication and indication of discharge to vessel.	EP/1/A/5000/01, EP/1/A/5000/02, EP/1/A/5000/03, EP/1/A/5000/04, AP/1/A/5500/35
4.2.2 Radiological effluent Technical Specification limits exceeded.	EMF49, 50, 35, 36, 37 Alarm indicating Technical Specification Limits exceeded.	Tech Specs 3/4.11, Environmental Tech Specs, HP/O/B/1009/09, HP/O/B/1009/10, HP/O/B/1009/05
4.2.3 Fuel Damage Indication:		
a. High coolant activity sample exceeding Tech. Specs.	a. $>1 \mu\text{Ci}/\text{gram}$ Dose Equivalent I-131 or $>100 \mu\text{Ci}/\text{gram}$ gross activity. E-	AP/1/A/5500/18
	NOTE: These calculations available from counting facility on request.	
b. Failed fuel monitor indicates increase greater than 0.1% equivalent fuel failures within 30 minutes.	b. Increase in I-131 concentration by $7\mu\text{Ci}/\text{ml}$ over a 30 minute period, or, I-131 concentration is in the range of $70\mu\text{Ci}/\text{ml}$ to $350 \mu\text{Ci}/\text{ml}$ verified by increased EMF-48 readings and laboratory analysis.	
4.2.4 Abnormal coolant temperature and/or pressure or abnormal fuel temperature outside of Technical Specification Limits.	Figure 2.1-1 Tech Specs exceeded and Core Subcooling Monitor less than acceptable. (Below Curve) Verified as necessary by redundant Instrumentation. (e.g, narrow and wide range pressure/temperature subcooling monitors)	AP/1/A/5500/05

Initiating Conditions	Emergency Action Level (EAL)	Emergency Procedure/Document
4.2.5 Exceeding either primary/secondary leak rate requiring shutdown by Tech. Specs. or primary leak rate requiring shutdown by Tech. Specs.	>1GPM total P/S leakage >500 GPD from any S/G >10GPM Identified Primary Leakage Verified by EMF readings, level control, make-up rate, and or chemical/radiological analysis.	EP/1/A/5000/02, EP/1/A/5000/04, AP/1/A/5500/10
4.2.6 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).	Valid accoustical monitor indication of valve failure.	EP/1/A/5000/02, AP/1/A/5500/11, EP/1/A/5000/03
4.2.7 Loss of offsite power or loss of onsite AC power capability.	Undervoltage alarms on 7KV buses or blackout load sequencers actuated.	AP/1/A/5500/07
4.2.8 Loss of containment integrity requiring shutdown by Tech Specs (3/4.6.1).	Any automatic containment isolation valve found to be open and inoperable and unisolable or both air lock doors on a lock inoperable, or penetration(s) fail leak test per Tech Specs when containment integrity required.	AP/1/A/5500/24
4.2.9 Loss of engineered safety feature or fire protection system function requiring shutdown by Tech Specs (e.g., malfunction, personnel error, or procedural inadequacy).	ESF actuation system found inoperable or Fire Suppression Water System found inoperable per Tech Specs.	AP/1/A/5500/19, AP/1/A/5500/21, AP/1/A/5500/20, Tech Specs 3/4.5, 3/4.7.10, 3/4.7.11

Initiating Conditions	Emergency Action Level (EAL)	Emergency Procedure/Document
4.2.10 Fire within the plant lasting more than 10 minutes.	Observation <u>or</u> fire detection alarm with confirming observation of a fire lasting more than 10 minutes.	Station Directive 2.11
4.2.11 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., all meteorological instrumentation, or radio networks).	Loss of process or effluent radiation monitoring system <u>or</u> loss of all meteorological instrumentation onsite <u>or</u> loss of all radio/telephone communications capability offsite.	OP/O/A/6700/03, Tech Specs 3/4.3
4.2.12 Security threat or attempted entry or attempted sabotage.	As notified by Security Force.	Station Security Plan
4.2.13 Natural phenomenon being experienced or projected beyond usual levels.		
a. Any earthquake felt in plant or detected on station seismic instrumentation.	(<.08gH, <.053gV), Annunciator Alarm, (AD-13)	
b. 50-year flood or low water, hurricane surge, seiche (lake tidal wave)	As observed	
c. Any tornado on site	As observed	
d. Any hurricane	Winds >73 mph/from National Weather Service information.	AP/O/A/5500/29, AP/O/A/5500/30

Initiating Conditions	Emergency Action Level (EAL)	Emergency Procedure/Document
4.2.14 Other hazards being experienced or projected.		
a. Aircraft crash onsite or unusual aircraft activity over facility.	As observed	
b. Train derailment on site.	As observed	
c. Near site or onsite explosion.	As observed	
d. Near site or onsite toxic or flammable gas release.	As observed	AP/O/A/5500/31
e. Turbine rotating component failure causing rapid plant shutdown (Loss of Condenser Heat Sink).	Turbine trip and observation of a turbine malfunction or failure.	AP/O/A/5500/23, AP/O/A/5500/32, AP/O/A/5500/02
4.2.15 Other plant conditions exist that in the judgment of the Shift Supervisor, the Operations Duty Engineer, the Superintendent of Operations, or the Station Manager warrant increased awareness on the part of State and/or local offsite authorities or require plant shutdown under Tech Specs requirements or involve other than normal controlled shutdown (e.g., cooldown rate exceeding Tech Specs limits, pipe cracking found during operation).	As determined by the Shift Supervisor/ Emergency Coordinator.	As directed by plant conditions.

Initiating Conditions	Emergency Action Level (EAL)	Emergency Procedure/Document
4.2.16 Transportation of contaminated injured individual from site to offsite hospital.	As observed.	AP/O/A/5500/27
4.2.17 Rapid depressurization of secondary side.	As observed and actuation of 4.2.1 and 4.2.6 above.	AP/1/A/5500/06

NOTIFICATION CHART
NOTIFICATION OF UNUSUAL EVENT

INITIATING CONDITIONS (from ENCLOSURE 4.2)

	4.2.1	4.2.2	4.2.3	4.2.4	4.2.5	4.2.6	4.2.7	4.2.8	4.2.9	4.2.10	4.2.11	4.2.12	4.2.13	4.2.14	4.2.15	4.2.16	4.2.17	INITIAL
Shift Supervisor	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
OPS. Duty Engineer	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Station Manager	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Supt. of Operations	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Supt. of Tech. Services	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Project/Licen. Engineer	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Nuclear Prod. Duty Eng.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
M.C. State Warning Point	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Hecklenburg Warning Pt.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Catawba Co. Warning Pt.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Lincoln Co. Warning Pt.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Gaston Co. Warning Pt.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Iredell Co. Warning Pt.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Cabarrus Co. Warning Pt.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
NRC Via ENS	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
NRC (Station Rep.)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Construction Proj. Mgr.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Station Health Physicist	NO	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	NO
Station Safety Supervisor	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Supt. of Maintenance	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Supt. of Administration	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO

a - whenever radiological hazards may be involved

X - To be notified

TELEPHONE LISTING

- 4.4.1 Operations Duty Engineer (PA System)
P&T Pager -
- 4.4.2 Station Manager -
Home - - System Speed -
Home - System Speed -
- 4.4.3 Superintendent of Operations -
Home - - System Speed -
- 4.4.4 Superintendent of Technical Services -
Home - System Speed -
- 4.4.5 Projects & Licensing Engineer -
Home - - System Speed -
- 4.4.6 Nuclear Production Duty Engineer - - System Speed -
P&T Pager
- 4.4.7 NC State Warning Point, Raleigh - - System Speed -
- 4.4.8 Mecklenburg County Warning Point - Primary: Ring Down Phone
Back-up: - System Speed
Back-up: Emergency Radio, Code: -
- 4.4.9 Lincoln County Warning Point - Primary: Ring Down Phone
Back-up: - System Speed
Back-up: Emergency Radio, Code: -
- 4.4.10 Catawba County Warning Point - Primary: Ring Down Phone
Back-up: - System Speed
Back-up: Emergency Radio, Code: -
- 4.4.11 Iredell County Warning Point - Primary: Ring Down Phone
Back-up: - System Speed
Back-up: Emergency Radio, Code: -
- 4.4.12 Gaston County Warning Point - Primary: Ring Down Phone
Back-up: - System Speed
Back-up: Emergency Radio, Code: -
- 4.4.13 Cabarrus County Warning Point - Primary: Ring Down Phone
Back-up: - System Speed
Back-up: Emergency Radio, Code: -

NOTE

Radio Code will activate
all county radio units.

- 4.4.14 N.R.C. Operation Center, Emergency Notification System (ENS phone)
- 4.4.15 N.R.C. Station Representative
Office -
Home - - System Speed -
Columbia Pager - - System Speed -
(On tone, leave brief message)
P&T Pager
- 4.4.16 Construction Project Manager: Construction
Home - - System Speed
- System Speed
- 4.4.17 Station Health Physicist
Home - - System Speed -
P&T Pager
- 4.4.18 Station Safety Supervisor -
Home - - System Speed
- 4.4.19 Superintendent of Maintenance -
Home - - System Speed
- 4.4.20 Superintendent of Administration -
Home - - System Speed -
- 4.4.21 Radiation Protection Section Department of Human Resources
- System Speed -

MCGUIRE NUCLEAR STATION
NOTIFICATION OF EMERGENCY CONDITIONS

- 4.5.1 Include as a minimum, the following information to the North Carolina State Warning Point, the six County Warning Points, (Mecklenburg, Catawba, Iredell, Lincoln, Gaston, and Cabarrus) and the South Carolina Warning Point.

NOTE 1: See Enclosure 4.4, Telephone Listing

- NOTE 2: A. Complete Part I of this format as a minimal first notification of a reportable incident.
B. Complete Part I and II of this format to provide minimal followup information.

PART I: Initial Emergency Message Information

☒ ACKNOWLEDGEMENT

TELEPHONE RESPONSE:

"This is McGuire Nuclear Station.
Please acknowledge when you are
ready to copy Emergency Information."

Mecklenburg	_____
Gaston	_____
Iredell	_____
Lincoln	_____
Cabarrus	_____
Catawba	_____

1. This is McGuire Nuclear Station.
2. My name is _____.
3. This message (Number)
 - _____ a. Reports a real emergency.
 - _____ b. Is an exercise message.
4. My telephone number is _____.
5. Message Authentication: _____.
6. The class of emergency is:
 - _____ a. Notification of an Unusual Event
 - _____ b. Alert
 - _____ c. Site Area Emergency
 - _____ d. General Emergency
7. The Classification of Emergency was declared at: _____ on
(A.M./P.M.)

(Date)

8. The initiating event causing the Emergency Classification is:

9. The Emergency Condition (Select one of the below options):

- ☐ 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: (select one of the below options)

- ☐ a. No protective action is recommended at this time.
- ☐ b. People living in zones _____ remain indoors with 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 in your alert procedures for an incident at McGuire Nuclear Station.

NOTE: Record the Name, Title, Date, Time, and Warning Point at end of Part II.

PART II: Followup Emergency Message Information

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.
Wind speed: _____ 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.

(1)	(Name)	Communicator (Title)
	(Date)	(Time)
		Mecklenburg (Warning Point)
(2)	(Name)	Communicator (Title)
	(Date)	(Time)
		Gaston (Warning Point)
(3)	(Name)	Communicator (Title)
	(Date)	(Time)
		Iredell (Warning Point)
(4)	(Name)	Communicator (Title)
	(Date)	(Time)
		Catawba (Warning Point)
(5)	(Name)	Communicator (Title)
	(Date)	(Time)
		Lincoln (Warning Point)
(6)	(Name)	Communicator (Title)
	(Date)	(Time)
		Cabarrus (Warning Point)
(7)	(Name)	Communicator (Title)
	(Date)	(Time)
		North Carolina (Warning Point)

(Nuclear Station to Nuclear Production Duty Engineer)

10. Additional Comments: _____

DUKE POWER COMPANY
PROCEDURE PREPARATION
PROCESS RECORD

(1) ID No: EP/O/A/5000/06
Change(s) 0 to
0 Incorporated

(2) STATION: McGuire Nuclear Station

(3) PROCEDURE TITLE: Alert

(4) PREPARED BY: M. S. Glover

DATE: 10/06/82

(5) REVIEWED BY: [Signature]

DATE: 10-6-82

Cross-Disciplinary Review By: _____

N/R: [Signature]

(6) TEMPORARY APPROVAL (IF NECESSARY):

By: _____ (SRO) Date: _____

By: _____ Date: _____

(7) APPROVED BY: George W. Lyle

Date: 10-6-82

(8) MISCELLANEOUS:

Reviewed/Approved By: _____ Date: _____

Reviewed/Approved By: _____ Date: _____

DUKE POWER COMPANY
McGUIRE NUCLEAR STATION
ALERT

1.0 Symptoms

- 1.1 Events are in process or have occurred which involve an actual or potential substantial degradation of the level of safety of the plant.

2.0 Immediate Action

2.1 Automatic

None

2.2 Manual

- 2.2.1 The Shift Supervisor shall be informed of all events initiating this procedure.

3.0 Subsequent Actions

Initial / N/A

/

- 3.1 The Shift Supervisor shall assure that the appropriate emergency condition (Notification of Unusual Event, Alert, Site Area Emergency, or General Emergency) is declared by evaluating the actual plant condition with Enclosure 4.1, Emergency Classification Flowchart and Enclosure 4.2, List of Initiating Conditions, Emergency Action Levels, and Associated Emergency Procedure/Document.

/

- 3.2 The Shift Supervisor shall ensure that all actions required by the initiating Emergency Procedure will be performed and that all actions necessary for the protection of persons and property are being taken.

NOTE

If at any time in the course of events in this procedure, site evacuation or personnel assembly/accountability appears necessary, refer to Station Directive 3.8.1.

/

- 3.3 The Shift Supervisor shall assume the function of the Emergency Coordinator until the arrival of the Station Manager or his designee, at which time the Station Manager or his designee assumes the responsibility of the Emergency Coordinator.

- / 3.4 The Emergency Coordinator shall assure prompt (within about 15 minutes of declaring the emergency) notification of the North Carolina State and Local County Warning Points indicated on Enclosure 4.3. He shall also assure notification of all other personnel listed in Enclosure 4.3.

NOTE 1

Activation of the Technical Support Center (TSC), and Operations Support Center (OSC) shall be in accordance with Station Directive 3.8.2. Activation of the Crisis Management Center (CMC) shall be in accordance with Enclosure 4.6.

NOTE 2

See Enclosure 4.4, Telephone Listing, for notification, telephone numbers/radio codes/pager codes.

NOTE 3

See Enclosure 4.5, Notification of Emergency Conditions, for information to be provided to State/County Warning Points.

- / 3.5 The Emergency Coordinator in direct contact with the Technical Support Center and the Crisis Management Center will assess and respond to the emergency by:

- 3.5.1 Dispatching onsite monitoring teams with associated communications equipment.
- 3.5.2 Providing periodic plant status updates to offsite authorities (at least every 15 minutes).
- 3.5.3 Providing periodic meteorological assessments to offsite authorities and, if any releases are occurring, dose estimates for actual releases.

NOTE

In the event a release or potential release of radioactive materials is a threat to plant personnel or members of the general public, the Emergency Coordinator shall request Health Physics personnel to evaluate the consequences utilizing the appropriate Health Physics procedure, HP/O/B/1009/05, HP/O/B/1009/06, HP/O/B/1009/08, HP/O/B/1009/09, or HP/O/B/1009/10.

/ 3.6 The Emergency Coordinator shall provide protective action recommendations as necessary to the affected county warning point(s) and to the North Carolina warning point (Emergency Operations Centers if established) or to the state Radiological Protection Section, Department of Human Resources (See Enclosure 4.4, Telephone Listing) as directed by the state in accordance with the North Carolina Radiological Emergency response plan. If evaluation indicates that a potential for or an actual release of radioactive materials will result in a projected dose (REM) to the population of: (EPA Protective Action Guidelines).

3.6.1 Whole body <1, thyroid <5, NO protective action is required. Monitor environmental radiation levels to verify.

3.6.2 Whole body 1 to <5, thyroid 5 to <25, recommend seeking shelter and wait for further instructions. Consider evacuation particularly for children and pregnant women. Monitor environmental radiation levels. Control access to affected areas.

3.6.3 Whole body 5 and above, thyroid 25 and above, recommend mandatory evacuation of populations in the affected areas. Monitor environmental radiation levels and adjust area for mandatory evacuation based on these levels. Control access to affected areas.

NOTE

See Enclosure 4.4 for Telephone Listing for notification.

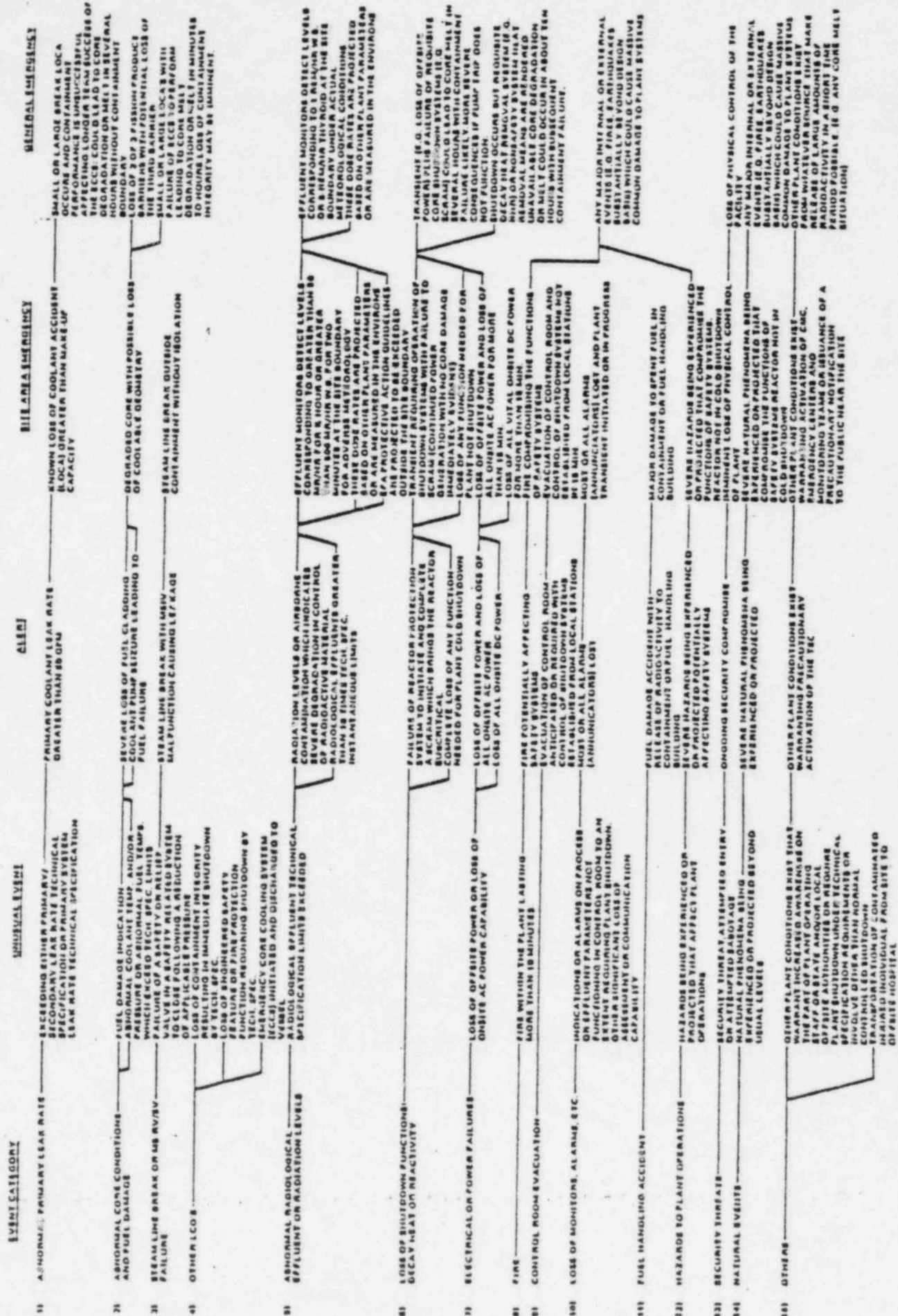
/ 3.7 The Emergency Coordinator in coordination with the Recovery Manager at the Crisis Management Center, will assess the emergency condition and determine the need to remain in an Alert Status, escalate to a more severe class, reduce the emergency class or close out the emergency.

/ 3.8 The Station Manager or his designee will close out the Emergency with a verbal summary to County and State authorities notified in Step 3.4, followed by a written summary within 8 hours.

4.0 Enclosures

- 4.1 Emergency Classification Guide Flowchart
- 4.2 List of Initiating Conditions, Emergency Action Levels, and Associated
Emergency Procedure/Document.
- 4.3 Notification Chart.
- 4.4 Telephone Listing.
- 4.5 Notification of Emergency Conditions.
- 4.6 Emergency Plan Message Format

EMERGENCY CLASSIFICATION GUIDE FLOWCHART



LIST OF INITIATING CONDITIONS, EMERGENCY ACTION LEVELS, AND
ASSOCIATED EMERGENCY PROCEDURE/DOCUMENT

Initiating Conditions	Emergency Action Level (EAL)	Emergency Procedure/Document
4.2.1 Severe loss of fuel cladding:	a. Very high coolant activity sample (e.g., 300 μ Ci/cc equivalent of I-131) b. Failed fuel monitor (EMF-48) or lab analysis indicates increase greater than 1% fuel failures within 30 minutes or 5% total fuel failure.	Tech Specs 3/4.6.7
4.2.2 Rapid gross failure of one Steam Generator tube with loss of off-site power.	Pressurizer low pressure alarm and reactor trip <u>and</u> , pressurizer low level alarm <u>and</u> , pressurizer low pressure safety injection signal <u>and</u> , undervoltage alarm on 7KV buses. EMF 32, 33, and 34 Alarm(s).	EP/1/A/5000/04, AP/1/A/5500/07
4.2.3 Rapid failure of Steam Generator tubes.	Several hundred gpm primary to secondary leak rate indicated by: a. as above in 4.2.2 for pressurizer and EMF indicators. b. Steam generator level increasing in one or more generator(s) and falling in the others/due to reactor trip.	EP/1/A/5000/04

Initiating Conditions	Emergency Action Level (EAL)	Emergency Procedure/Document
4.2.4 Steam line break with significant primary to secondary leak rate.	<p>Greater than 10gpm, rapidly decreasing reactor coolant Tavg, pressurizer pressure and level <u>and</u>,</p> <ol style="list-style-type: none"> 1. Steam line differential pressure safety injection signal and increased containment building pressure/ if break is in containment. 2. High steam flow and Lo Lo Tavg or low steam pressure safety injection signal for rupture downstream of MSIV's. 	EP/1/A/5000/04, EP/1/A/5000/03
4.2.5 Primary coolant leak rate greater than 50 gpm.	Leak >50gpm as indicated by calculation or other indication. (i.e., sump levels)	EP/1/A/5000/02, AP/1/A/5500/10
4.2.6 High radiation levels or high airborne contamination which indicates a severe degradation in the control of radioactive materials.	Increase by a factor of 1,000 in radiation monitor reading within the station.	HP/0/B/1009/05
4.2.7 Loss of offsite power <u>and</u> loss of all onsite AC power for up to 15 minutes. (See Site Area Emergency EP/0/A/5000/07, for extended loss).	Undervoltage alarm on 7KV buses, <u>and</u> blackout load sequencers actuated.	AP/1/A/5500/07
4.2.8 Loss of all onsite DC power.	DC bus undervoltage alarms on all buses.	Tech Specs 3/4.8.2.3, Tech Specs 3/4.8.2.4
4.2.9 Coolant pump seizure leading to fuel failure.	Reactor coolant pump auto trip alarm, <u>and</u> reactor trip on low coolant flow, <u>and</u> failed fuel monitor alarm <u>EHF48</u> .	AP/1/A/5500/04, AP/1/A/5500/08, OP/0/A/6150/14, AP/1/A/5500/05

Initiating Conditions	Emergency Action Level (EAL)	Emergency Procedure/Document
4.2.10 Complete loss of functions needed for plant cold shutdown.	RHR not functional and inability to sustain natural or forced circulation.	AP/1/A/5500/17, OP/1/A/6100/04
4.2.11 Failure of the reactor protection system to initiate and complete a scram which brings the reactor subcritical.	Reactor remains critical after all attempts to trip reactor have been completed.	AP/O/A/5500/34
4.2.12 Fuel damage accident with release of radioactivity to containment or fuel handling building.	Observation of damage to spent fuel assembly, and 1. EMF-16 and 17 alarm. 2. EMF-38, 39, 40, or 42 alarm.	AP/1/A/5500/25
4.2.13 Fire potentially affecting safety systems.	Observation of a fire that could affect safety systems.	Station Directive 2.11 Series, Tech Specs 3/4.5
4.2.14 Most or all alarms (annunciators) lost.	As observed.	OP/O/A/6350/01A
4.2.15 Radiological effluents greater than 10 times Tech Specs instantaneous limits (an instantaneous rate which, if continued over 2 hours, would result in about 1mr at the site boundary under average meteorological conditions or whenever effluent monitors or radiological monitoring detect these levels).	For EMF35 - Low Range offscale High Range 1×10^4 cpm For EMF36 - Low Range 2×10^6 cpm High Range 5×10^2 cpm	HP/O/B/1009/05
4.2.16 Ongoing security compromise.	As reported by Security force.	Station Security Plan

Initiating Conditions	Emergency Action Level (EAL)	Emergency Procedure/Document
4.2.17 Severe natural phenomena being experienced or projected:		AP/O/A/5500/30, AP/O/A/5500/29
a. Earthquake greater than Operational Basis Earthquake Levels	>0.08gH, >.053gV, Annunciator Alarm, (AD-13).	
b. Flood, low water, hurricane surge, seiche near design levels. (Lake tidal wave)	As observed.	
c. Any tornado striking facility.	As observed.	
d. Hurricane winds near design basis level.	As observed (95 mph)/from National Weather Service information.	
4.2.18 Other hazards being experienced or projected.		AP/O/A/5500/32, AP/O/A/5500/31 AP/1/A/5500/23
a. Aircraft crash on facility.	As observed.	
b. Missile impacts from whatever source on facility.	As observed.	
c. Know explosion damage to facility affecting plant operation.	As observed.	
d. Entry into facility environs of toxic or flammable gases.	As observed.	
e. Turbine failure causing casing penetration.	Turbine trip and observation of turbine malfunction or failure.	

Initiating Conditions	Emergency Action Level (EAL)	Emergency Procedure/Document
4.2.19 Other plant conditions exist that in the judgment 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.	As determined by Shift Supervisor/ Emergency Coordinator.	As dictated by Plant Conditions.
4.2.20 Evacuation of control room anticipated or required with control of shutdown systems established from local station.	As determined by Shift Supervisor/ Emergency Coordinator.	AP/1/A/5500/17, OP/1/A/6100/04

NOTIFICATION/ACTIVATION
ALERT

Notify/Activate the following personnel/or Emergency Centers for all Initiating Conditions listed in Enclosure 4.2. (See Enclosure 4.4 for Telephone Listing)

NOTIFY/ACTIVATE

NOTIFICATION COMPLETE-INITIAL

Shift Supervisor

Operations Duty Engineer

Station Manager

Superintendent of Operations

Superintendent of Technical Services

Projects and Licensing Engineer

Station Health Physicist

North Carolina State Warning Point

Mecklenburg County Warning Point

Lincoln County Warning Point

Catawba County Warning Point

Iredell County Warning Point

Gaston County Warning Point

Cabarrus County Warning Point

N.R.C. via ENS (Red Phone)

N.R.C. Station Representative

Construction Project Manager

Superintendent of Maintenance

Superintendent of Administration

Activate T.S.C. (Station Directive 3.8.2)

Activate O.S.C. (Station Directive 3.8.2)

Activate C.M.C. (Enclosure 4.6)

TELEPHONE LISTING

- 4.4.1 Operations Duty Engineer (PA System)
P&T Pager -
- 4.4.2 Station Manager
Home - - System Speed -
Home - - System Speed -
- 4.4.3 Superintendent of Operations -
Home - - System Speed
- 4.4.4 Superintendent of Technical Services -
Home - - System Speed
- 4.4.5 Projects and Licensing Engineer -
Home - - System Speed
- 4.4.6 Station Health Physicist -
Home - - System Speed -
P&T Pager
- 4.4.7 NC State Warning Point, Raleigh - - System Speed -
- 4.4.8 Mecklenburg County Warning Point - Primary: Ring Down Phone
Back-up: - System Speed
Back-up: Emergency Radio, Code: -
- 4.4.9 Lincoln County Warning Point - Primary: Ring Down Phone
Back-up: - System Speed
Back-up: Emergency Radio, Code: -
- 4.4.10 Catawba County Warning Point - Primary: Ring Down Phone
Back-up: - System Speed
Back-up: Emergency Radio, Code: -
- 4.4.11 Iredell County Warning Point - Primary: Ring Down Phone
Back-up: - System Speed
Back-up: Emergency Radio, Code: -
- 4.4.12 Gaston County Warning Point - Primary: Ring Down Phone
Back-up: - System Speed
Back-up: Emergency Radio, Code: -
- 4.4.13 Cabarrus County Warning Point - Primary: Ring Down Phone
Back-up: - System Speed
Back-up: Emergency Radio, Code: -

NOTE

Radio Code will activate
all county radio units.

TELEPHONE LIST

- 4.4.14 N.R.C. Operation Center, Emergency Notification System (ENS Phone)
- 4.4.15 N.R.C. Station Representative
Office
Home - System Speed -
Columbia Pager - System Speed -
(On tone, leave brief message)
P&T Pager
- 4.4.16 Construction Project Manager Construction
Home : system Speed -
System Speed -
- 4.4.17 Superintendent of Maintenance
Home System Speed -
- 4.4.18 Superintendent of Administration
Home - System Speed -
- 4.4.19 Nuclear Production Duty Engineer
P&T Pager - System Speed -
- 4.4.20 Radiation Protection Section, Department of Human Resources-
System Speed -

MCGUIRE NUCLEAR STATION
NOTIFICATION OF EMERGENCY CONDITIONS

- 4.5.1 Include as a minimum, the following information to the North Carolina State Warning Point, the six County Warning Points, (Mecklenburg, Catawba, Iredell, Lincoln, Gaston, and Cabarrus) and the South Carolina Warning Point.

NOTE 1: See Enclosure 4.4, Telephone Listing

- NOTE 2: A. Complete Part I of this format as a minimal first notification of a reportable incident.
- B. Complete Part I and II of this format to provide minimal followup information.

PART I: Initial Emergency Message Information

☒ ACKNOWLEDGEMENT

TELEPHONE RESPONSE:

"This is McGuire Nuclear Station.
Please acknowledge when you are
ready to copy Emergency Information."

Mecklenburg	_____
Gaston	_____
Iredell	_____
Lincoln	_____
Cabarrus	_____
Catawba	_____

1. This is McGuire Nuclear Station.
2. My name is _____.
3. This message (Number)
 - _____ a. Reports a real emergency.
 - _____ b. Is an exercise message.
4. My telephone number is _____.
5. Message Authentication: _____.
6. The class of emergency is:
 - _____ a. Notification of an Unusual Event
 - _____ b. Alert
 - _____ c. Site Area Emergency
 - _____ d. General Emergency
7. The Classification of Emergency was declared at: _____ on
(A.M./P.M.)

(Date)

8. The initiating event causing the Emergency Classification is:

9. The Emergency Condition (Select one of the below options):

- ____ 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: (select one of the below options)

- ____ a. No protective action is recommended at this time.
____ b. People living in zones _____ remain indoors with 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 in your alert procedures for an incident at McGuire Nuclear Station.

NOTE: Record the Name, Title, Date, Time, and Warning Point at end of Part II.

PART II: Followup Emergency Message Information

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.

Wind speed: _____ 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.

- | | | |
|-----|---------------|-----------------|
| (1) | _____ | Communicator |
| | (Name) | (Title) |
| | _____ | Mecklenburg |
| | (Date) (Time) | (Warning Point) |
| (2) | _____ | Communicator |
| | (Name) | (Title) |
| | _____ | Gaston |
| | (Date) (Time) | (Warning Point) |
| (3) | _____ | Communicator |
| | (Name) | (Title) |
| | _____ | Iredell |
| | (Date) (Time) | (Warning Point) |
| (4) | _____ | Communicator |
| | (Name) | (Title) |
| | _____ | Catawba |
| | (Date) (Time) | (Warning Point) |
| (5) | _____ | Communicator |
| | (Name) | (Title) |
| | _____ | Lincoln |
| | (Date) (Time) | (Warning Point) |
| (6) | _____ | Communicator |
| | (Name) | (Title) |
| | _____ | Cabarrus |
| | (Date) (Time) | (Warning Point) |
| (7) | _____ | Communicator |
| | (Name) | (Title) |
| | _____ | North Carolina |
| | (Date) (Time) | (Warning Point) |

EMERGENCY PLAN MESSAGE FORMAT
(Nuclear Station to Nuclear Production Duty Engineer)

1. This is _____ at McGuire Nuclear Station.
(Name and Title)
2. This is/is not a Drill. An _____ Unusual Event
_____ Alert
_____ Site Area Emergency
_____ General Emergency
was declared by the Emergency Coordinator at _____ on Unit Number _____.
(Time)
3. Initiating Condition: (Give as close to the emergency procedure description as possible together with station parameters used to determine emergency status)

4. Corrective Measures Being Taken: _____

5. There Have/Have Not been any injuries to plant personnel.
6. Release of radioactivity: Is/Is not taking place, and is/is not affecting the Crisis Management Center.
7. NRC ____ Yes ____ No, State ____ Yes ____ No, Counties ____ Yes ____ No, have been notified.
8. The Crisis Management Team should/should not be activated. Corporate Communications and Company Management should be notified (Unusual Event Only).
9. I can be reached at _____ for follow-up information.
(Telephone Number)
10. Additional Comments: _____



DUKE POWER COMPANY
PROCEDURE PREPARATION
PROCESS RECORD

(1) ID No: EP/O/A/5000/07
Change(s) 0 to
0 Incorporated

(2) STATION: McGuire Nuclear Station

(3) PROCEDURE TITLE: Site Area Emergency

(4) PREPARED BY: M. S. Glover DATE: 10/6/82

(5) REVIEWED BY: [Signature] DATE: 10-6-82

Cross-Disciplinary Review By: _____ N/R: [Signature]

(6) TEMPORARY APPROVAL (IF NECESSARY):

By: _____ (SRO) Date: _____

By: _____ Date: _____

(7) APPROVED BY: [Signature] Date: 10-6-82

(8) MISCELLANEOUS:

Reviewed/Approved By: _____ Date: _____

Reviewed/Approved By: _____ Date: _____

DUKE POWER COMPANY
MCGUIRE NUCLEAR STATION
SITE AREA EMERGENCY

1.0 Symptoms

- 1.1 Events are in process or have occurred which involve actual or likely major failures of plant functions needed for protection of the public.

2.0 Immediate Action

2.1 Automatic

None

2.2 Manual

- 2.2.1 The Shift Supervisor shall be informed of all events initiating this procedure.

3.0 Subsequent Actions

Initial/N/A

 /

- 3.1 The Shift Supervisor shall assure that the appropriate emergency condition (Notification of Unusual Event, Alert, Site Area Emergency, or General Emergency) is declared by evaluating the actual plant condition with Enclosure 4.1, Emergency Classification Flowchart and Enclosure 4.2, List of Initiating Conditions, Emergency Action Levels, and Associated Emergency Procedure/Document.

 /

- 3.2 The Shift Supervisor shall ensure that all actions required by the initiating Emergency Procedure will be performed and that all actions necessary for the protection of persons and property are being taken.

NOTE

If at any time in the course of events in this procedure, site evacuation or personnel assembly/accountability appears necessary, refer to Station Directive 3.8.1.

 /

- 3.3 The Shift Supervisor shall assume the function of the Emergency Coordinator until the arrival of the Station Manager or his designee at which time the Station Manager or his designee assumes the responsibility of the Emergency Coordinator.

- /
- 3.4 The Emergency Coordinator shall assure prompt (within about 15 minutes of declaring the emergency) notification of the North Carolina State and Local County Warning Points indicated on Enclosure 4.3. He shall also assure notification of all other personnel listed in Enclosure 4.3.

NOTE 1

Activation of the Technical Support Center (TSC), Operations Support Center (OSC), shall be in accordance with Station Directive 3.8.2. Activation of the Crisis Management Center (CMC) shall be in accordance with Enclosure 4.6.

NOTE 2

See Enclosure 4.4, Telephone Listing, for notification, telephone numbers/radio codes/pager codes.

NOTE 3

See Enclosure 4.5, Notification of Emergency Conditions to be provided to State/County Warning Points.

- /
- 3.5 The Emergency Coordinator in direct contact with the Technical Support Center and the Crisis Management Center will assess and respond to the emergency by:
- 3.5.1 Dispatching the Onsite and Offsite Monitoring teams with associated communications.
 - 3.5.2 Providing meteorological and dose estimates to offsite authorities for actual releases via a dedicated individual or automated data transmission.
 - 3.5.3 Providing release and dose projections based on available plant condition information and foreseeable contingencies to offsite authorities.

NOTE

In the event a release or potential release of radioactive materials is a threat to plant personnel or members of the general public, the Emergency Coordinator shall request Health Physics personnel to evaluate the consequences utilizing the appropriate Health Physics procedure, HP/O/B/1009/05, HP/O/B/1009/06, HP/O/B/1009/08, HP/O/B/1009/09, HP/O/B/1009/10.

/

3.6 The Emergency Coordinator shall provide protective action recommendations as necessary to the affected county warning point(s) and to the North Carolina Warning Point (Emergency Operations Centers if established) or the Radiological Protection Section, Department of Human Resources (see Enclosure 4.4, Telephone Listing) as directed by the state in accordance with the North Carolina Radiological Emergency response plan. If evaluation indicates that a potential for or an actual release of radioactive materials will result in a projected dose (REM) to the population of: (EPA Protective Action Guidelines).

- 3.6.1 Whole body <1, thyroid <5, NO protective action is required. Monitor environmental radiation levels to verify.
- 3.6.2 Whole body 1 to <5, thyroid 5 to <25, recommend seeking shelter and wait for further instructions, consider evacuation particularly for children and pregnant women. Monitor environmental radiation levels and adjust area for mandatory evacuation based on these levels. Control access to affected areas.
- 3.6.3 Whole body 5 and above, thyroid 25 and above, recommend mandatory evacuation of populations in the affected areas. Monitor environmental radiation levels and adjust area for mandatory evacuation based on these levels. Control access to affected areas.

NOTE

See Enclosure 4.4, Telephone Listing for notification.

/

3.7 The Emergency Coordinator in coordination with the Recovery Manager, at the Crisis Management Center, will provide or make available:

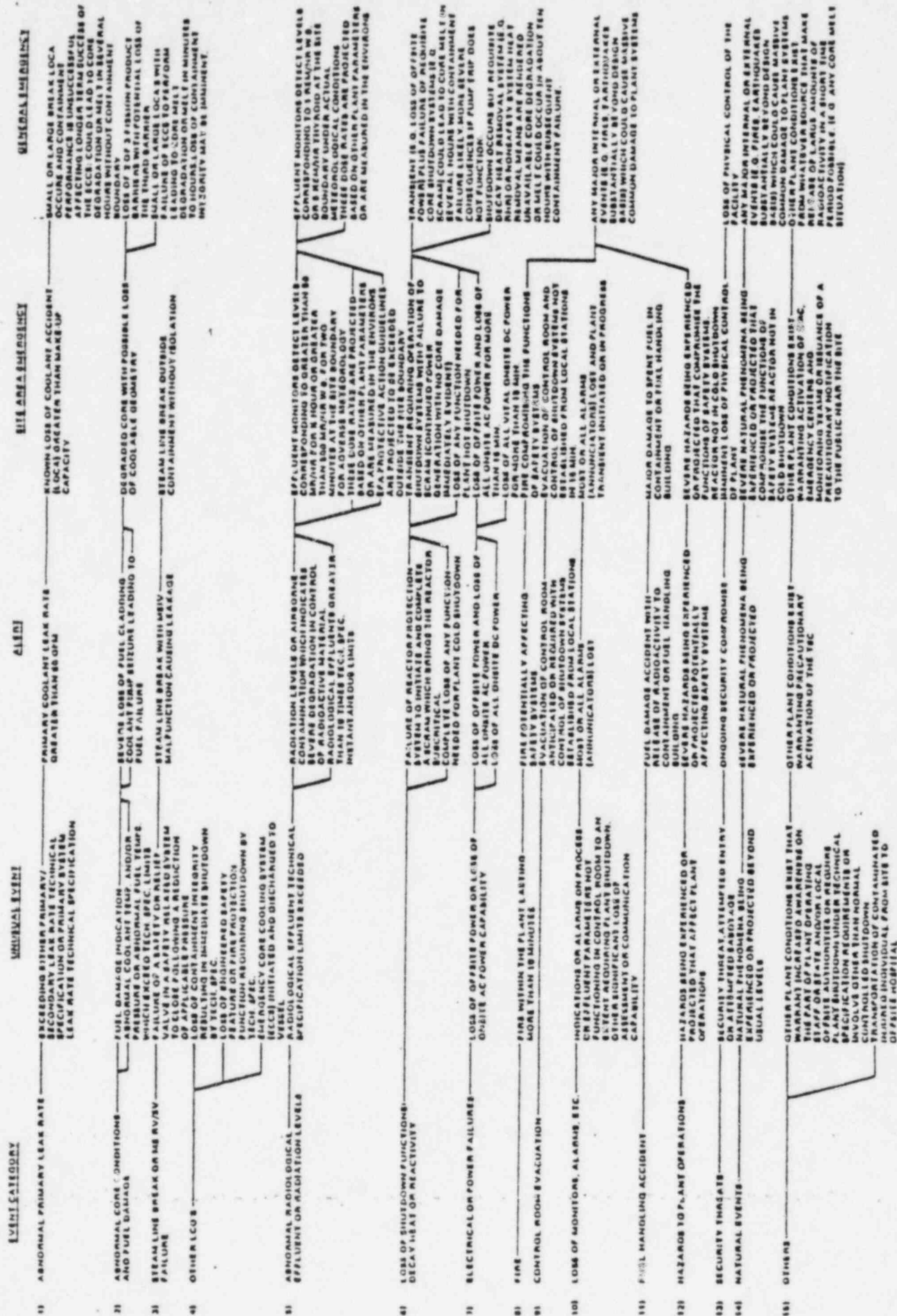
- 3.7.1 A dedicated individual for plant status updates to offsite authorities and periodic press briefings.
- 3.7.2 Senior technical and management staff onsite available for consultation with the NRC and State on a periodic basis.

- / 3.8 The Emergency Coordinator in coordination with Recovery Manager at the Crisis Management Center, will assess the emergency condition and determine the need to remain in a Site Area Emergency, escalate to a more severe class, reduce the emergency class, or close out the emergency.
- / 3.9 The Recovery Manager at the Crisis Management Center will close out or recommend reduction of the emergency class, by briefing of offsite authorities at the Crisis Management Center or by phone if necessary, followed by written summary within 8 hours.

4.0 Enclosures

- 4.1 Emergency Classification Guide Flowchart
- 4.2 List of Initiating Conditions, Emergency Action Levels, and Associated Emergency Procedure/Document.
- 4.3 Notification Chart.
- 4.4 Telephone Listing.
- 4.5 Notification of Emergency Conditions.
- 4.6 Emergency Plan Message Format

EMERGENCY CLASSIFICATION GUIDE FLOWCHART



LIST OF INITIATING CONDITIONS, EMERGENCY ACTION LEVELS, AND
 ASSOCIATED EMERGENCY PROCEDURE/DOCUMENT

Initiating Conditions	Emergency Action Level (EAL)	Emergency Procedure/Document
4.2.1 Known loss of coolant accident greater than makeup pump capacity.	Pressurizer low pressure reactor trip <u>and</u> pressurizer low pressure safety injection signal <u>and</u> high containment building pressure, (INSP5040, 5050, 5060, 5070) <u>and</u> high containment building sump level, (INIP5260, 5270) <u>and</u> high containment humidity, (INSP5400, 5410) <u>and</u> EMF 38, 39, and 40 alarm.	EP/1/A/5000/02
4.2.2 Degraded core with possible loss of coolable geometry (indicators should include instrumentation to detect inadequate core cooling, coolant activity and/or containment radioactivity levels).	Valid readings on incore thermocouples above 700°F <u>and</u> ΔT rapidly increasing or no ΔT across core.	AP/1/A/5500/05
4.2.3 Rapid failure of steam generator tubes with loss of offsite power (e.g., several hundred gpm primary to secondary leak rate).	Pressurizer low pressure alarm and reactor trip, <u>and</u> pressurizer low level alarm, <u>and</u> EMF 32, 33, and 34 alarm, <u>and</u> undervoltage alarms on 7KV buses, and steam generator water level rapidly increasing in one or more steam generators falling in the others, <u>and</u> pressurizer level rapidly decreasing, (INCP5151, 5160, 5172) <u>and</u> possible lifting of steam generator PRV's and/or safety valves.	EP/1/A/5000/04, AP/1/A/5500/07

Initiating Conditions	Emergency Action Level (EAL)	Emergency Procedure/Document
4.2.4 Steam line break with greater than 50gpm primary to secondary leakage and indication of fuel damage.	Rapidly decreasing reactor coolant Tavg, pressurizer pressure and level. Steam line differential pressure safety injection signal, <u>and</u> High containment building pressure, if steamline break is in containment (INSP5040, 5050, 5060, 5070) <u>and</u> EMF 51A and/or B alarm, <u>or</u> high steam flow and Lo Lo Tavg or low steam pressure safety injection signal, <u>and</u> EMF 48 alarm.	EP/1/A/5000/03
4.2.5 Loss of offsite power <u>and</u> loss of onsite AC power for more than 15 minutes.	Undervoltage alarms on 7KV buses.	AP/1/A/5500/07
4.2.6 Loss of all vital onsite DC power for more than 15 minutes.	Blackout load sequencers actuated, DC bus undervoltage all buses <u>and</u> indications as in 4.2.5 above.	Tech Specs 3/8.2.3, 3/8.2.4
4.2.7 Complete loss of any function needed for plant hot shutdown.	Inability to establish charging pump injection, <u>and</u> Inability to establish emergency feedwater flow, <u>or</u> Inability to establish service water flow, <u>and</u> Inability to establish component cooling water flow.	OP/1/A/6100/04, AP/1/A/5500/17
4.2.8 Transient requiring operation of shutdown systems with failure to scram (continued power generation but no core damage immediately evident).	Reactor remains critical after all attempts to trip reactor have been completed.	EP/1/A/5000/01, AP/O/A/5500/34
4.2.9 Major damage to spent fuel in containment or fuel handling building (e.g., large object damages fuel or water loss below fuel level).	Observation of major damage to one or more spent fuel assemblies, or spent fuel pool water below fuel level, or EMF16, 17, 38, 39, 40, or 42 alarm.	AP/1/A/5500/25

Initiating Conditions	Emergency Action Level (EAL)	Emergency Procedure/Document
4.2.10 Fire compromising the function of safety systems.	Observation of a major fire that defeats redundant safety system or function.	Tech Specs 3/4.5, Station Directive 2.11 Series
4.2.11 Most or all alarms (annunciators) lost and plant transient initiated or in progress.	As determined by the Shift Supervisor/ Emergency Coordinator.	OP/O/A/6350/01A
4.2.12 Effluent monitors detect levels corresponding to greater than 50 mr/hr for 1/2 hour or greater than 500 mr/hr W.B. for two minutes (or five times these levels to the thyroid) at the site boundary for adverse meteorology (See Note 2).	For EMF35 Low Range, offscale, High Range 8×10^3 cpm. (See Note 1)	HP/O/B/1009/05, HP/O/B/1009/09
	For EMF36 Low Range 3×10^5 cpm High Range 7×10^5 cpm (See Note 1)	
	For EMF37 Change of 143 cpm/minute for 30 minutes or a change of 1430 cpm/minute for 2 minutes. (See Note 1).	

NOTE 1: These values are worst case calculations and may not reflect more favorable weather conditions.

NOTE 2: 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. (EPA Protective Action Guidelines are projected to be exceeded outside the site boundary).

Initiating Conditions	Emergency Action Level (EAL)	Emergency Procedure/Document
4.2.13 Imminent loss of physical control of plant.	Physical attack on the plant involving imminent occupancy of control room and auxiliary shutdown panels.	Station Security Plan
4.2.14 Severe natural phenomena being experienced or projected with plant not in cold shutdown.		AP/O/A/5500/29, AP/O/A/5500/30
4.2.14.1		
Earthquake greater than SSE (Safe Shutdown Earthquake) levels.	(>.15gII, >.1gV) as determined by monitoring seismic instrumentation and recording devices. (SMP-1)	
4.2.14.2		
Flood, low water, hurricane surge, seiche greater than design levels (lake tidal waves) or failure of protection of vital equipment at lower levels.	As determined by Shift Supervisor/ Emergency Coordinator.	
4.2.14.3		
Sustained winds or tornadoes in excess of design levels.	(>95mph) as observed or documented by the National Weather Service Information.	
4.2.15 Other hazards being experienced or projected with plant not in cold shutdown.		AP/O/A/5500/32, AP/O/A/5500/31

Initiating Conditions

Emergency Action Level (EAL)

Emergency Procedure/Document

4.2.15.1

Aircraft crash affecting vital structures by impact or fire.

Aircraft crash causing damage or fire to: Containment Building, Control Room, Auxiliary Building, Fuel Building, or Intake Structure.

4.2.15.2

Severe damage to safe shutdown equipment from missiles or explosion.

Loss of functions needed for hot shutdown as in 4.2.7.

4.2.15.3

Entry of uncontrolled flammable gases into vital areas. Entry of uncontrolled toxic gases into vital areas where lack of access to the area constitutes a safety problem.

Entry of uncontrolled or toxic or flammable gases into: Control Room, Cable Spreading Room, Containment Building, Switchgear Room, Safe Shutdown Panels or Diesel Rooms.

4.2.16

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 to the public near the site.

As determined by Shift Supervisor/ Emergency Coordinator.

As dictated by Plant Conditions.

Initiating Conditions	Emergency Action Level (EAL)	Emergency Procedure/Document
4.2.17 Evacuation of control room and control of shut-down systems not established from local stations in 15 minutes.	As determined by Shift Supervisor/	OP/O/A/6350/02, AP/1/A/5500/17

NOTIFICATION/ACTIVATION
GENERAL EMERGENCY

Notify/Activate the following personnel/or Emergency Centers for all Initiating Conditions listed in Enclosure 4.2. (See Enclosure 4.4 for Telephone Listing)

NOTIFY/ACTIVATE

NOTIFICATION COMPLETE-INITIAL

Shift Supervisor

Operations Duty Engineer

Station Manager

Superintendent of Operations

Superintendent of Technical Services

Projects and Licensing Engineer

Station Health Physicist

North Carolina State Warning Point

Mecklenburg County Warning Point

Lincoln County Warning Point

Catawba County Warning Point

Iredell County Warning Point

Gaston County Warning Point

Cabarrus County Warning Point

South Carolina State Warning Point

N.R.C. via ENS (Red Phone)

N.R.C. Station Representative

Superintendent of Maintenance

Superintendent of Administration

Construction Project Manager

Activate T.S.C. (Station Directive 3.8.2)

Activate O.S.C. (Station Directive 3.8.2)

Activate C.M.C. (Enclosure 4.6)

TELEPHONE LISTING

- 4.4.1 Operations Duty Engineer (PA System)
P&T Pager -
- 4.4.2 Station Manager
Home - - System Speed -
Home - - System Speed -
- 4.4.3 Superintendent of Operations -
Home - - System Speed
- 4.4.4 Superintendent of Technical Services -
Home - - System Speed
- 4.4.5 Projects and Licensing Engineer -
Home - - System Speed
- 4.4.6 Station Health Physicist -
Home - - System Speed -
P&T Pager
- 4.4.7 NC State Warning Point, Raleigh - - System Speed -
- 4.4.8 Mecklenburg County Warning Point - Primary: Ring Down Phone
Back-up: - System Speed
Back-up: Emergency Radio, Code: -
- 4.4.9 Lincoln County Warning Point - Primary: Ring Down Phone
Back-up: - System Speed
Back-up: Emergency Radio, Code: -
- 4.4.10 Catawba County Warning Point - Primary: Ring Down Phone
Back-up: - System Speed
Back-up: Emergency Radio, Code: -
- 4.4.11 Iredell County Warning Point - Primary: Ring Down Phone
Back-up: - System Speed
Back-up: Emergency Radio, Code: -
- 4.4.12 Gaston County Warning Point - Primary: Ring Down Phone
Back-up: - System Speed
Back-up: Emergency Radio, Code: -
- 4.4.13 Cabarrus County Warning Point - Primary: Ring Down Phone
Back-up: - System Speed
Back-up: Emergency Radio, Code: -

NOTE

Radio Code will activate
all county radio units.

TELEPHONE LIST

- 4.4.14 SC State Warning Point -
- 4.4.15 N.R.C. Operation Center, Emergency Notification System (ENS Phone)
- 4.4.16 N.R.C. Station Representative
Office -
Home - System Speed -
Columbia Pager - System Speed -
(On tone, leave brief message)
P&T Pager
- 4.4.17 Construction Project Manager Construction
Home : System Speed -
system Speed -
- 4.4.18 Superintendent of Maintenance -
Home - System Speed -
- 4.4.19 Superintendent of Administration
Home - System Speed -
- 4.4.20 Nuclear Production Duty Engineer - System Speed
P&T Pager
- 4.4.21 Radiation Protection Section, Department of Human Resources-
System Speed -

MCGUIRE NUCLEAR STATION
NOTIFICATION OF EMERGENCY CONDITIONS

- 4.5.1 Include as a minimum, the following information to the North Carolina State Warning Point, the six County Warning Points, (Mecklenburg, Catawba, Iredell, Lincoln, Gaston, and Cabarrus) and the South Carolina Warning Point.

NOTE 1: See Enclosure 4.4, Telephone Listing

- NOTE 2: A. Complete Part I of this format as a minimal first notification of a reportable incident.
B. Complete Part I and II of this format to provide minimal followup information.

PART I: Initial Emergency Message Information

☒ ACKNOWLEDGEMENT

TELEPHONE RESPONSE:

"This is McGuire Nuclear Station.
Please acknowledge when you are
ready to copy Emergency Information."

Mecklenburg _____
Gaston _____
Iredell _____
Lincoln _____
Cabarrus _____
Catawba _____

1. This is McGuire Nuclear Station.
2. My name is _____.
3. This message (Number)
 - _____ a. Reports a real emergency.
 - _____ b. Is an exercise message.
4. My telephone number is _____.
5. Message Authentication: _____.
6. The class of emergency is:
 - _____ a. Notification of an Unusual Event
 - _____ b. Alert
 - _____ c. Site Area Emergency
 - _____ d. General Emergency
7. The Classification of Emergency was declared at: _____ on
(A.M./P.M.)

(Date)

8. The initiating event causing the Emergency Classification is:

9. The Emergency Condition (Select one of the below options):

- ☐ 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: (select one of the below options)

- ☐ a. No protective action is recommended at this time.
- ☐ b. People living in zones _____ remain indoors with 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 in your alert procedures for an incident at McGuire Nuclear Station.

NOTE: Record the Name, Title, Date, Time, and Warning Point at end of Part II.

PART II: Followup Emergency Message Information

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.

Wind speed: _____ 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.

- | | | |
|-----|---------------|-----------------|
| (1) | _____ | Communicator |
| | (Name) | (Title) |
| | _____ | Mecklenburg |
| | (Date) (Time) | (Warning Point) |
| (2) | _____ | Communicator |
| | (Name) | (Title) |
| | _____ | Gaston |
| | (Date) (Time) | (Warning Point) |
| (3) | _____ | Communicator |
| | (Name) | (Title) |
| | _____ | Iredell |
| | (Date) (Time) | (Warning Point) |
| (4) | _____ | Communicator |
| | (Name) | (Title) |
| | _____ | Catawba |
| | (Date) (Time) | (Warning Point) |
| (5) | _____ | Communicator |
| | (Name) | (Title) |
| | _____ | Lincoln |
| | (Date) (Time) | (Warning Point) |
| (6) | _____ | Communicator |
| | (Name) | (Title) |
| | _____ | Cabarrus |
| | (Date) (Time) | (Warning Point) |
| (7) | _____ | Communicator |
| | (Name) | (Title) |
| | _____ | North Carolina |
| | (Date) (Time) | (Warning Point) |
| (8) | _____ | Communicator |
| | (Name) | (Title) |
| | _____ | South Carolina |
| | (Date) (Time) | (Warning Point) |

(Nuclear Station to Nuclear Production Duty Engineer)

10. Additional Comments: _____

DUKE POWER COMPANY
PROCEDURE PREPARATION
PROCESS RECORD

(1) ID No: EP/O/A/5000/08
Change(s) 0 to
0 Incorporated

(2) STATION: McGuire Nuclear Station

(3) PROCEDURE TITLE: General Emergency

(4) PREPARED BY: M. S. Glover

DATE: 10/6/82

(5) REVIEWED BY: G. D. Albert

DATE: 10-6-82

Cross-Disciplinary Review By: _____

N/R: FDH

(6) TEMPORARY APPROVAL (IF NECESSARY):

By: _____ (SRO)

Date: _____

By: _____

Date: _____

(7) APPROVED BY: George W. Lape

Date: 10-6-82

(8) MISCELLANEOUS:

Reviewed/Approved By: _____

Date: _____

Reviewed/Approved By: _____

Date: _____

DUKE POWER COMPANY
McGUIRE NUCLEAR STATION
GENERAL EMERGENCY

1.0 Symptoms

- 1.1 Events are in process or have occurred which involve actual or imminent substantial core degradation or melting with potential for loss of containment integrity.

2.0 Immediate Action

2.1 Automatic

None

2.2 Manual

- 2.2.1 The Shift Supervisor shall be informed of all events initiating this procedure.

3.0 Subsequent Actions

Initial/N/A

- / 3.1 The Shift Supervisor shall assure that the appropriate emergency condition (Notification of Unusual Event, Alert, Site Area Emergency, or General Emergency) is declared by evaluating the actual plant condition with Enclosure 4.1, Emergency Classification Flowchart and Enclosure 4.2, List of Initiating Conditions, Emergency Action Levels, and Associated Emergency Procedure/Document.
- / 3.2 The Shift Supervisor shall ensure that all actions required by the initiating Emergency Procedure will be performed and that all actions necessary for the protection of persons and property are being taken.

NOTE

If at any time in the course of events in this procedure, site evacuation or personnel assembly/accountability appears necessary, refer to Station Directive 3.8.1.

- / 3.3 The Shift Supervisor shall assume the function of the Emergency Coordinator until the arrival of the Station Manager or his designee, at which time the Station Manager or his designee assumes the responsibility of the Emergency Coordinator.

- / 3.4 The Emergency Coordinator shall assure prompt (within about 15 minutes of declaring the emergency) notification of the North Carolina State and Local County Warning Points indicated on Enclosure 4.3. He shall also assure notification of all other personnel listed in Enclosure 4.3.

NOTE 1

Activation of the Technical Support Center (TSC) and Operations Support Center (OSC) shall be in accordance with Station Directive 3.8.2. Activation of the Crisis Management Center (CMC) shall be in accordance with Enclosure 4.6.

NOTE 2

See Enclosure 4.4, Telephone Listing, for notification, telephone numbers/radio codes/pager codes.

NOTE 3

See Enclosure 4.5, Notification of Emergency Conditions to be provided to State/County Warning Points.

- / 3.5 The Emergency Coordinator in direct contact with the Technical Support Center and the Crisis Management Center will assess and respond to the emergency by:

- 3.5.1 Dispatching the onsite and offsite monitoring teams with associated communications.
- 3.5.2 Provide meteorological and dose estimates to offsite authorities for actual releases via a dedicated individual or automated data transmission.
- 3.5.3 Provide release and dose projections based on available plant condition information and foreseeable contingencies to offsite authorities.

NOTE

In the event a release or potential release of radioactive materials is a threat to plant personnel or members of the general public, the Emergency Coordinator shall request Health Physics personnel to evaluate the consequences utilizing the appropriate Health Physics procedure, HP/O/B/1009/05, HP/O/B/1009/06, HP/O/B/1009/08, HP/C/B/1009/09, or HP/O/B/1009/10.

/ 3.6 The Emergency Coordinator shall provide protective action recommendations as necessary to the affected county warning point(s) and to the North Carolina Warning Point (Emergency Operations Centers if established) or to state Radiological Protection Section, Department of Human Resources (See Enclosure 4.4, Telephone Listing) as directed by the state in accordance with the North Carolina Radiological Emergency Response Plan. If evaluation indicates that a potential for an actual release of radioactive materials will result in a projected dose (REM) to the population of: (EPA Protective Action Guidelines)

3.6.1 Whole body <1, Thyroid <5, No protective action is required. Monitor environmental radiation levels to verify.

3.6.2 Whole body 1 to <5, Thyroid 5 to <25, recommend seeking shelter and wait for further instructions. Consider evacuation particularly for children and pregnant women. Monitor environmental radiation levels. Control access to affected areas.

3.6.3 Whole body 5 and above, Thyroid 25 and above, recommend mandatory evacuation of populations in the affected areas. Monitor environmental radiation levels and adjust area for Mandatory evacuation based on these levels. Control access to affected areas.

NOTE

See Enclosure 4.4 Telephone Listing for notification.

/ 3.7 The Emergency Coordinator in coordination with the Recovery Manager, at the Crisis Management Center, will provide or make available:

3.7.1 A dedicated individual for plant status updates to offsite authorities and periodic press briefings.

3.7.2 Senior technical and management staff onsite available for consultation with the NRC and State on a periodic basis.

- / 3.8 The Emergency Coordinator in coordination with the Recovery Manager at the Crisis Management Center will assess the emergency condition and determine the need to remain in a General Emergency, reduce the emergency class, or close out the emergency.
- / 3.9 The Recovery Manager at the Crisis Management Center will close out the emergency or recommend reduction of the Emergency class by briefing the offsite authorities at the Crisis Management Center or by phone if necessary, followed by written summary within 8 hours.

4.0 Enclosures

- 4.1 Emergency Classification Guide Flowchart
- 4.2 List of Initiating Conditions, Emergency Action Levels, and Associated Emergency Procedure/Document.
- 4.3 Notification Chart.
- 4.4 Telephone listing.
- 4.5 Notification of Emergency Conditions.
- 4.6 Emergency Plan Message Format

LIST OF INITIATING CONDITIONS, EMERGENCY ACTION LEVELS, AND
 ASSOCIATED EMERGENCY PROCEDURE/DOCUMENT

Initiating Conditions	Emergency Action Level (EAL)	Emergency Procedure/Document
<p>4.2.1 Effluent monitors detect levels corresponding to 1 rem/hr Whole Body or 5 rem/hr Thyroid at the site boundary under <u>actual meteorological conditions</u>.</p> <p>NOTE 1: These dose rates are projected base 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.</p> <p>NOTE 2: 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.</p>	As observed by control room personnel.	HP/O/B/1009/05
<p>4.2.2 Loss of 2 of 3 fission product barriers with a potential loss of 3rd barrier, (e.g., loss of primary coolant boundary, clad-failure, and high potential for loss of containment integrity).</p>	<ol style="list-style-type: none"> 1. Loss of coolant accident as identified in Site Area Emergency 4.2.1, and incomplete containment isolation. 2. Loss of coolant accident as identified in Site Area Emergency 4.2.1, and Containment Monitor alarms (EMF51A and/or B) greater than 10 R/hr and containment pressure greater than 14.8 psig for at least 2 minutes. 	HP/O/B/1009/05, AP/1/A/5500/05

Initiating Conditions	Emergency Action Level (EAL)	Emergency Procedure/Document
4.2.3 Loss of physical control of the facility. <u>NOTE:</u> Consider 2 mile precautionary evacuation.	Physical attack of the facility has resulted in occupation of the control room and auxiliary shutdown facility.	Station Security Plan.
4.2.4 Other plant conditions exist, from whatever source, that in the judgment 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 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 the plume exposure Emergency Planning Zone under this circumstance.	As determined by the Shift Supervisor/ Emergency Coordinator and verified by EAL's defined in Implementing Procedures utilized up to this point.	As dictated by plant conditions.

Initiating Conditions

Emergency Action Level (EAL)

Emergency Procedure/Document

- b. 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 downwind evacuation (45° and 90° sector).
- c. 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.

Initiating Conditions

Emergency Action Level (EAL)

Emergency Procedure/Document

- d. As release information becomes available adjust these actions in accordance with dose projections, time available to evacuate and estimated evacuation times given current conditions.

e. 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 to complete protective actions unless containment is not isolated). | Safety injection signal plus reactor trip and:

1. Safety injection and RHR pumps not running.

2. Flow indications for safety injection read "0".

3. High containment sump level. |
|--|---|

Initiating Conditions	Emergency Action Level (EAL)	Emergency Procedure/Document
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).	Reactor trip on Lo Lo Steam Generator level and wide range generator levels toward offscale low on all steam generators and emergency feedwater flow indicators indicate "0" flow or emergency feedwater pumps not running and cannot be restored within 30 minutes or >3% reactor power and loss of both main feedwater pumps, manually trip reactor.	AP/1/A/5500/06, EP/1/A/5000/04
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.	Reactor remains critical after all attempts to trip the reactor are complete and flow indicators on safety injection and RHR show "0" flow after initiation (NVP5440, NDP5190, 5191, 5180, 5181, NIP5120, 5450) or safety injection and RHR pumps not running with safety injection initiated.	AP/O/A/5500/34

Initiating Conditions	Emergency Action Level (EAL)	Emergency Procedure/Document
4. Failure of offsite and onsite power along with total loss of emergency feedwater makeup capability for several hours. Would lead to eventual core melt and likely failure of containment.	Undervoltage alarms on 7KV buses and blackout load sequencers actuated <u>and</u> auxiliary feedwater pump(s) fail to start.	AP/1/A/5500/07
5. Small LOCA and initially successful ECCS. Subsequent failure of containment heat removal system over several hours could lead to core melt and likely failure of containment.	Pressurizer low pressure reactor trip <u>and</u> pressurizer low pressure safety injection signal <u>and</u> RHR flow indicators show "0" flow after shift to RHR is attempted and for greater than 2 hours (NDP5190, 5191, 5180, 5181) <u>and</u> Reactor Coolant (NC) T ^O is rising, <u>and</u> containment air handling system fails to function.	EP/1/A/5000/02, AP/1/A/5500/05
<p><u>NOTE:</u> For melt sequences or for failure of containment isolation systems, the likely failure mode is melt through with release of gases.</p>		
4.2.5 Any major internal or external events (e.g., fires, earthquakes substantially beyond design levels) which could cause massive common damage to plant systems.	As determined by the Shift Supervisor/ Emergency Coordinator.	As dictated by plant conditions.

NOTIFICATION/ACTIVATION
GENERAL EMERGENCY

Notify/Activate the following personnel/or Emergency Centers for all Initiating Conditions listed in Enclosure 4.2. (See Enclosure 4.4 for Telephone Listing)

NOTIFY/ACTIVATE

NOTIFICATION COMPLETE-INITIAL

Shift Supervisor

Operations Duty Engineer

Station Manager

Superintendent of Operations

Superintendent of Technical Services

Projects and Licensing Engineer

Station Health Physicist

North Carolina State Warning Point

Mecklenburg County Warning Point

Lincoln County Warning Point

Catawba County Warning Point

Iredell County Warning Point

Gaston County Warning Point

Cabarrus County Warning Point

South Carolina State Warning Point

N.R.C. via ENS (Red Phone)

N.R.C. Station Representative

Superintendent of Maintenance

Superintendent of Administration

Construction Project Manager

Activate T.S.C. (Station Directive 3.8.2)

Activate O.S.C. (Station Directive 3.8.2)

Activate C.M.C. (Enclosure 4.6)

TELEPHONE LISTING

- 4.4.1 Operations Duty Engineer (PA System)
P&T Pager -
- 4.4.2 Station Manager
Home - - System Speed -
Home - - System Speed -
- 4.4.3 Superintendent of Operations
Home - - System Speed
- 4.4.4 Superintendent of Technical Services -
Home - - System Speed
- 4.4.5 Projects and Licensing Engineer -
Home - - System Speed
- 4.4.6 Station Health Physicist -
Home - - System Speed -
P&T Pager
- 4.4.7 NC State Warning Point, Raleigh - - System Speed -
- 4.4.8 Mecklenburg County Warning Point - Primary: Ring Down Phone
Back-up: - System Speed
Back-up: Emergency Radio, Code: -
- 4.4.9 Lincoln County Warning Point - Primary: Ring Down Phone
Back-up: - System Speed
Back-up: Emergency Radio, Code: -
- 4.4.10 Catawba County Warning Point - Primary: Ring Down Phone
Back-up: - System Speed
Back-up: Emergency Radio, Code: -
- 4.4.11 Iredell County Warning Point - Primary: Ring Down Phone
Back-up: - System Speed
Back-up: Emergency Radio, Code: -
- 4.4.12 Gaston County Warning Point - Primary: Ring Down Phone
Back-up: - System Speed
Back-up: Emergency Radio, Code: -
- 4.4.13 Cabarrus County Warning Point - Primary: Ring Down Phone
Back-up: - System Speed
Back-up: Emergency Radio, Code: -

NOTE

Radio Code will activate
all county radio units.

TELEPHONE LIST

- 4.4.14 SC State Warning Point -
- 4.4.15 N.R.C. Operation Center, Emergency Notification System (ENS Phone)
- 4.4.16 N.R.C. Station Representative
Office -
Home - - System Speed -
Columbia Pager - System Speed -
(On tone, leave brief message)
P&T Pager
- 4.4.17 Construction Project Manager Construction
Home : - System Speed -
system Speed -
- 4.4.18 Superintendent of Maintenance -
Home - System Speed -
- 4.4.19 Superintendent of Administration -
Home - System Speed -
- 4.4.20 Nuclear Production Duty Engineer - - System Speed
P&T Pager
- 4.4.21 Radiation Protection Section. Department of Human Resources-
- System Speed -

MCGUIRE NUCLEAR STATION
NOTIFICATION OF EMERGENCY CONDITIONS

4.5.1 Include as a minimum, the following information to the North Carolina State Warning Point, the six County Warning Points, (Mecklenburg, Catawba, Iredell, Lincoln, Gaston, and Cabarrus) and the South Carolina Warning Point.

NOTE 1: See Enclosure 4.4, Telephone Listing

NOTE 2: A. Complete Part I of this format as a minimal first notification of a reportable incident.
B. Complete Part I and II of this format to provide minimal followup information.

PART I: Initial Emergency Message Information

✓ ACKNOWLEDGEMENT

TELEPHONE RESPONSE:

"This is McGuire Nuclear Station.
Please acknowledge when you are
ready to copy Emergency Information."

Mecklenburg _____
Gaston _____
Iredell _____
Lincoln _____
Cabarrus _____
Catawba _____

1. This is McGuire Nuclear Station.
2. My name is _____.
3. This message (Number ____)
 - _____ a. Reports a real emergency.
 - _____ b. Is an exercise message.
4. My telephone number is _____.
5. Message Authentication: _____.
6. The class of emergency is:
 - _____ a. Notification of an Unusual Event
 - _____ b. Alert
 - _____ c. Site Area Emergency
 - _____ d. General Emergency
7. The Classification of Emergency was declared at: _____ on
(A.M./P.M.)

(Date)

8. The initiating event causing the Emergency Classification is:

9. The Emergency Condition (Select one of the below options):

- ☐ 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: (select one of the below options)

- ☐ a. No protective action is recommended at this time.
- ☐ b. People living in zones _____ remain indoors with 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 in your alert procedures for an incident at McGuire Nuclear Station.

NOTE: Record the Name, Title, Date, Time, and Warning Point at end of Part II.

PART II: Followup Emergency Message Information

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.

- | | | |
|-----|---------------|-----------------|
| (1) | _____ | Communicator |
| | (Name) | (Title) |
| | _____ | Macklenburg |
| | (Date) (Time) | (Warning Point) |
| (2) | _____ | Communicator |
| | (Name) | (Title) |
| | _____ | Gaston |
| | (Date) (Time) | (Warning Point) |
| (3) | _____ | Communicator |
| | (Name) | (Title) |
| | _____ | Iredell |
| | (Date) (Time) | (Warning Point) |
| (4) | _____ | Communicator |
| | (Name) | (Title) |
| | _____ | Catawba |
| | (Date) (Time) | (Warning Point) |
| (5) | _____ | Communicator |
| | (Name) | (Title) |
| | _____ | Lincoln |
| | (Date) (Time) | (Warning Point) |
| (6) | _____ | Communicator |
| | (Name) | (Title) |
| | _____ | Cabarrus |
| | (Date) (Time) | (Warning Point) |
| (7) | _____ | Communicator |
| | (Name) | (Title) |
| | _____ | North Carolina |
| | (Date) (Time) | (Warning Point) |
| (8) | _____ | Communicator |
| | (Name) | (Title) |
| | _____ | South Carolina |
| | (Date) (Time) | (Warning Point) |

EMERGENCY PLAN MESSAGE FORMAT
(Nuclear Station to Nuclear Production Duty Engineer)

1. This is _____ at McGuire Nuclear Station.
(Name and Title)
2. This is/is not a Drill. An _____ Unusual Event
_____ Alert
_____ Site Area Emergency
_____ General Emergency
was declared by the Emergency Coordinator at _____ on Unit Number _____.
(Time)
3. Initiating Condition: (Give as close to the emergency procedure description as possible together with station parameters used to determine emergency status)

4. Corrective Measures Being Taken: _____

5. There Have/Have Not been any injuries to plant personnel.
6. Release of radioactivity: Is/Is not taking place, and is/is not affecting the Crisis Management Center.
7. NRC ____ Yes ____ No, State ____ Yes ____ No, Counties ____ Yes ____ No, have been notified.
8. The Crisis Management Team should/should not be activated. Corporate Communications and Company Management should be notified (Unusual Event Only).
9. I can be reached at _____ for follow-up information.
(Telephone Number)
10. Additional Comments: _____

