50-769
Superseded Per Rev 40 to Crisis Mgt Plan Dtd 10/7/91
9110300283

DUKE POWER COMPANY

CRISIS MANAGEMENT PLAN

FOR

NUCLEAR STATIONS

RBF M. S. Tuckman
Approved

8/15/91
Date Approved

Revision 39 August 15, 1991

LIST OF FIGURES

B. On-site Emergency Organization

Planning Standard B in NUREG-0654 addresses the need for an on-site staff and Crisis Management Center (CMC) Staff capable of response in a timely manner, able to be augmented as needed, and with certain specific technical and managerial expertise.

B.1/B.2/B.3 Plant Staff Under Emergency Conditions
(See Nuclear Station Emergency Plan Section B)

B.4 Protective Action Recommendations - Emergency Coordinator/Recovery Manager

The Emergency Coordinator and Recovery Manager are the individuals responsible for making protective action recommendations to the state and county agencies. When the Crisis Management Center is operational, the Recovery Manager has sole responsibility. Prior to operation of the CMC, the Emergency Coordinator is responsible for making protective action recommendations. This responsibility may not be delegated to other members of the CMC Staff nor the station staff.

B.5 Minimum Staffing Requirements For Emergencies

Table B-1 of NUREG-0654 addresses only one member of the CMC staff in its staffing and response time requirements. The Senior Manager of the EOF (Recovery Manager) is listed as necessary for response in 60 minutes from declaration of the emergency. As specified in the station emergency plans, the Emergency Coordinator performs the role and function of the Recovery Manager until the CMC is activated. Thus, the ability to manage the overall response effort and make Protective Action Recommendations is not compromised.

B.6 On-site Functional Area Interfaces During An Emergency - Description and Block Diagram

Figures B-1 and B-2 describe and specify the interfaces between and among the functional areas of emergency activity, licensee headquarters support, local services support, and state/local government response organizations. Figure B-1 is for use prior to activation of the CMC. Figure B-2 is for use after the CMC is established.

B.7 CORPORATE SUPPORT OF ON-SITE EMERGENCY ORGANIZATION

The organization identified in this section is capable of continuous (24 hours) operations for a protracted period. The individual responsible for assuring continuity of resources is the Recovery Manager. Each group's operational plan is specified in the Crisis Management Implementing Procedures.

B.7.6 Radiological Assessment Manager and Staff

The Radiological Assessment Manager and staff are shown on Figure B-8. Implementing Plan CMIP-7 describes the working of this group in more detail. The responsibilities of each position and the designated individuals to fill each position are as follows:

1. RADIOLOGICAL ASSESSMENT MANAGER

   This position provides support to the Recovery Manager in matters relating to off-site radiological conditions, on-site health physics, radwaste, and chemistry.

2. OFF-SITE DOSE ASSESSMENT DIRECTOR

   This position is responsible for environmental liaison with local, State and Federal agencies, and is responsible for off-site monitoring and dose projections. In addition, this position makes recommendations to the Recovery Manager through the Radiological Assessment Manager concerning the public protection from radiological hazards.

3. TECHNICAL SERVICES DIRECTOR

   This position directs and coordinates the efforts of the Health Physics, Chemistry, and Radwaste Sections and provides input to the Radiological Assessment Manager.

4. RESOURCE COORDINATOR

   This position assists the Radiological Assessment Group in obtaining resources as needed.

5. RADIATION PROTECTION

   This position directs the technical support and assistance to the station staff concerning radiation protection aspects of recovery operations.

6. CHEMISTRY COORDINATOR

   This position directs the technical support and assistance to the station staff regarding chemistry concerns and radwaste processing aspects of recovery operations.

E. NOTIFICATION METHODS AND PROCEDURES

E.1 Response Organization Notification Procedures

A coordinated Emergency Message Format has been established for use by the Company's Nuclear Stations and the Crisis Management Center in transmitting information to and for notifications of county, state, federal agencies or other organizations. The format is shown in Figure E-6. Use of this format includes verification procedures. The station emergency plans, Section E address notification procedures consistent with the emergency classification and action level scheme.

E.2 Activation of the Crisis Management Center

This section describes the necessary communication steps to be taken to alert or activate the Crisis Management Center for each emergency class described in Section D. (See Crisis Management Plan Implementing Procedures for specific callout procedures.)

NOTIFICATION OF UNUSUAL EVENT

The actions required for this emergency class are performed by station personnel. Outside organizations (Nuclear Production Duty Engineer, NRC, State and local officials) are notified of the event for information. Unless deemed necessary by the Emergency Coordinator or Recovery Manager, the Crisis Management Center is not activated for this emergency class.

If an Unusual Event occurs, a station representative calls the Nuclear Production Duty Engineer, the NRC, the State, and appropriate local officials. The Nuclear Production Duty Engineer notifies Corporate Communications and the Recovery Manager. (See Figure E-2.) The Corporate Communications representative notifies media representatives and public officials per established public information procedures.

ALERT, SITE AREA EMERGENCY, AND GENERAL EMERGENCY

In these emergency classes, the alert or activation of the Crisis Management Center is accomplished in a similar way. (See Figure E-3.) The Emergency Coordinator or his designee, contacts the Nuclear Production Duty Engineer. The Duty Engineer contacts the Recovery Manager and the CMC Group Managers (or alternates), and those persons call the appropriate members of their groups.

For these three emergency classes, the station is responsible for the initial notification of appropriate off-site agencies and for activating the on-site Technical Support Center and on-site Operational Support Center. Further, the TSC staff is responsible for updating off-site agencies until the activation of the Crisis Management Center.

In an alert, the Recovery Manager will determine the need to activate the CMC. This will enable the facilities to be staffed and activated in timely fashion. Further, the callout procedures established in each group's implementing procedure will allow timely alerting of the Crisis Management Center. If the Recovery Manager and his alternates cannot be reached in an alert, the Duty

Engineer will staff the CMC by calling each group manager or alternate. The CMC will not take overall responsibility for direction and control of the emergency response without the Recovery Manager position being staffed.

The callout method of the Crisis Management Center is displayed within the Implementing Procedures.

The pre-arranged method format for giving information to alert/activate members of the Crisis Management Center is shown in Figure E-5.

E.3 Emergency Message Format - Initial Message to State and Local Governments

Figure E-6 is the emergency message form for use at the Company's nuclear stations in providing emergency information to county and state agencies in North Carolina and South Carolina. Crisis Management Implementation Procedure, CMIP-13 provides guidance on the use of this form.

E.4 Emergency Message Format - Follow-up Message To State and Local Governments

Figure E-6 is also for follow-up notifications to state and county governments.

E.5 State and Local Organizations - Disseminating Public Information

The State and local governments have established means for disseminating public information over the EBS. (See State and Local plans).

E.6 Alert and Notification System

An alerting and notification system which meets the criteria of Appendix 3, NUREG-0654, FEMA-REP-1, Rev. 1 is installed and operational at each station. (See Appendix 3 of this plan.)

E.7 Supporting Information For Public Information Messages

The portion of Figure E-6 in which protective action recommendations are made assists the state and local authorities in preparing messages for the public's information via the EBS (Emergency Broadcast System).

EBS message formats are described in the North Carolina and South Carolina Emergency Plans.

Figure E-1

EMERGENCY MESSAGE FORMAT
Nuclear Station To
Nuclear Production Duty Engineer

Station shall contact:

Name: _____ Phone: (704) 373-5491
(Nuclear Production Duty Engineer)

Date: _____ Time: _____

****

1. This is _____ at _____ Station.
(Name)

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 #___.
(Time)

3. Initiating condition: _____
_____
_____
_____

4. Corrective measures being taken: _____
_____
_____
_____

5. There (____have) (____have not) been any injuries to plant personnel.

6. Release of radioactivity: ____ is taking place
____ is not taking place

7. Notifications made: NRC ___Yes ___No State ___Yes ___No Counties ___Yes ___No

8. I can be reached at _____ for follow-up information.
(Telephone Number)

9. Additional Comments: _____
_____
_____
_____

Figure E-1

EMERGENCY MESSAGE FORMAT
Nuclear Station To
Nuclear Production Duty Engineer

Operating Unit Engineer/Duty Engineer shall contact:

Name: _____ Phone: (704) 373-5491
(Nuclear Production Duty Engineer) Date: _____
Time: _____

Provide CMC Notification through the Nuclear Production Duty Engineer.

1. This is _____ at _____ Station.
(Name and Title)

2. This _____ is _____ is not a drill. An _____ Unusual Event _____ Alert _____ Site Area Emergency _____ General emergency was declared at _____ on Unit number _____.
(Time)

3. Initiating condition: (Give as close to the emergency plan 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 taking place ____ is not taking place and is/is not affecting the CMC.

7. NRC ____ Yes ____ No; State ____ Yes ____ No; Counties ____ Yes ____ No; have been notified.

8. The Crisis Management Center should/should not be activated. (Station recommendation)

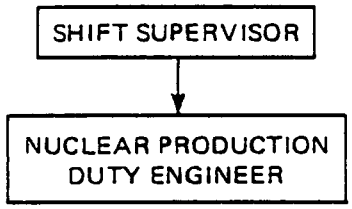
9. I can be reached at _____ for follow-up information.
(Telephone number)

10. Additional Comments: _____

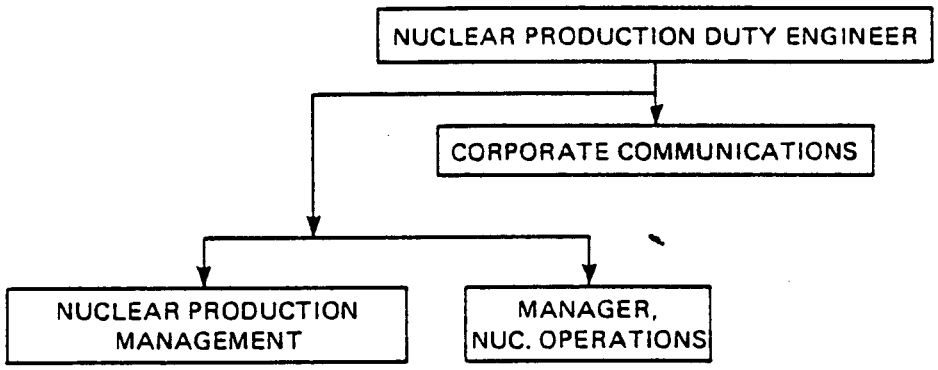
Figure E-2

COMMUNICATIONS PROCEDURE
WHEN THE CMC WILL NOT BE ACTIVATED

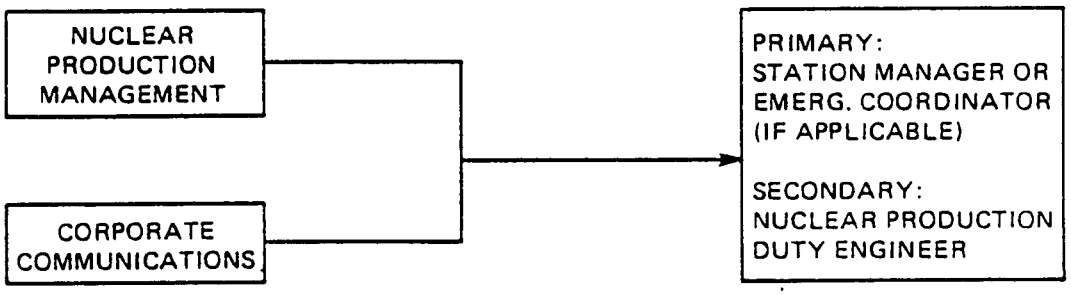
INITIAL CALLS (STATION TO GENERAL OFFICE)



NOTIFICATIONS



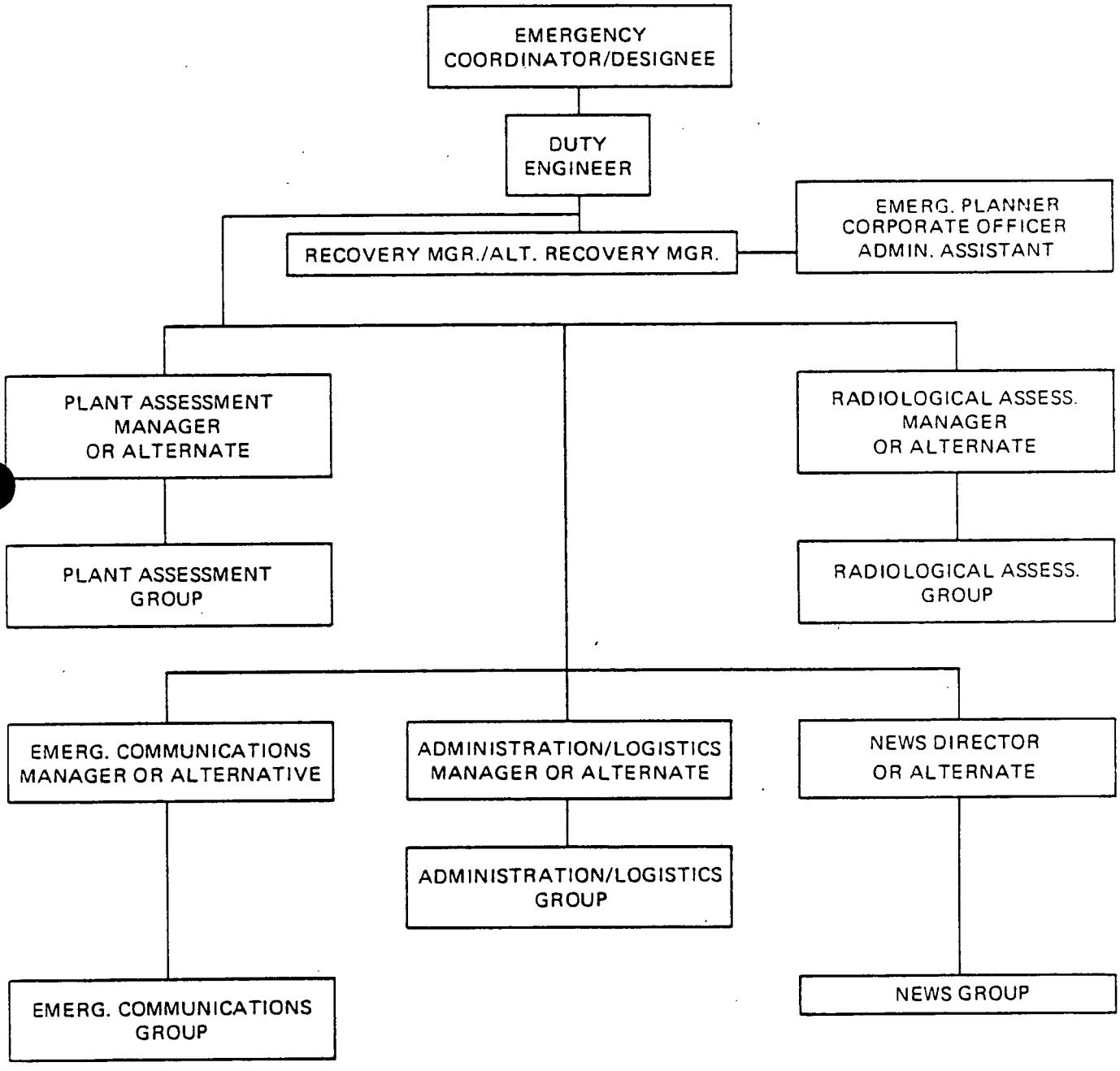
FOLLOWUP CALLS FOR INFORMATION



Rev. 23
August 15, 1987

Figure E-3

ALERTING THE CRISIS MANAGEMENT CENTER



Rev. 25
February 8, 1988

Figure E-4, Pages E-7, E-8, and E-9

have been deleted from the

Crisis Management Plan as of

January 15, 1990

Rev. 34
January 15, 1990

I. ACCIDENT ASSESSMENT

I.1 Emergency Conditions - Initiating Conditions/Emergency Action Levels

The Nuclear Station Emergency Plan, Section D, addresses plant system and effluent parameter values characteristic of a spectrum of off-normal conditions. These Emergency Action Levels (EALs) serve as the basis for determination of emergency class. CMIP-16 describes the plant parameters available to be monitored by the Crisis Management Center.

I.2 Post Accident Sampling, Radiation & Effluent Monitors, In-Plant Iodine Monitors, Containment Radiation Monitoring

The Station Emergency Plan Section I describes the post-accident sampling capability, radiation and effluent monitors, in-plant iodine instrumentation, and containment radiation monitoring systems.

I.3.a/I.3.b Method For Determining Release Source Term

Manual Procedures listed in the Emergency Dose Assessment Manual are used in the CMC for the calculation of potential off-site doses based on a design basis accident, release of primary coolant, or release of gap activity situation scaled to actual containment monitor readings. Provisions for use of actual source terms exist in the procedures.

The magnitude of the release is based on actual effluent monitoring readings, plant system parameters (containment pressure), area meteorology, and the duration of the release. A listing of these procedures is found in Table P-2.

I.4 Dose Calculation Methodology

The procedures referenced in I.3 establish the relationship between effluent monitor readings and on-site/off-site exposures and contamination for various meteorological conditions.

I.5 Meteorological Information Availability.

The Crisis Management Center, State authorities, and the NRC's Incident Response Center have the capability of acquiring meteorological information. An electronic data transmittal system has been developed for Oconee, McGuire and Catawba Nuclear Stations. This information is available to members of the TSC, CMC and NRC (Region Office and Headquarters), via telephone links to the DDP (Distributed Data Processor) System. State and county authorities have access to the information via the message format in Figure E-9. Training has been provided to both North and South Carolina to allow them access to the plant data on the DDP.

I.6 Release Rates/Projected Doses for Offscale Instrumentation Situations

If instrumentation used for dose assessment is offscale or inoperable, procedures exist at the Company's Nuclear Stations for determining dose rate inside the reactor building. The nuclear station plans, Part I, address these procedures.

J.7 Mechanism for Protective Action Recommendations

As described in section B.4, the Emergency Coordinator and the Recovery Manager are responsible for making protective action recommendations. Prior to activation/operation of the CMC, the Emergency Coordinator will be responsible for making these recommendations. After activation of the CMC, the Recovery Manager assumes this responsibility. Protective action recommendations will be provided to the off-site authorities (states and counties) who are responsible for implementing public protective actions. The pre-established warning message format (Figure E-9) will be used in transmitting the recommendations.

Figure K-2 is a flowchart which provides guidance on the decision-making process for making protective action recommendations.

The mechanism for making dose projections upon CMC activation is as follows: The Off-site Dose Assessment Director is responsible for making dose projections on a periodic basis. These calculations will use existing plant procedures to calculate projected dose to the population-at-risk for either potential or actual release conditions. For conditions in which a release has not occurred but fuel damage has taken place and radiation levels in the containment building atmosphere are significant, a scoping analysis will be performed to determine what recommendations would be made if containment integrity were lost at that time. The analysis will be based upon a design leak rate and upon a projected penetration failure indicated by a hole size of certain diameter. This analysis will include the use of actual containment pressure, realistic meteorology, and actual source term. A whole body and thyroid dose will be calculated at various distances from the plant (Site boundary, 2 miles, 5 miles, 10 miles). These dose projections are compared to the Protective Action Guides set forth in Figure K-2, which are derived from the "Manual of Protective Action Guides and Protective Actions For Nuclear Incidents (EPA-520/1-75-001). Based on these comparisons, protective action recommendations are developed by the Off-site Dose Assessment Director. If these recommendations involve sheltering or evacuation of the public around the plant, the Off-site Dose Assessment Director makes the Recovery Manager aware of the situation and his recommendations through the Radiological Assessment Manager.

J.8 Evacuation Time Estimates

The "evacuation time" is the time between the start of the notification process and the moment the last evacuee crosses out of the area being evacuated. Thus, it includes notification time and time spent preparing to leave, not just travel time.

Under normal weather and for the critical time period (weekday during school hours), the maximum evacuation time for the Catawba EPZ is 4 hours. The total evacuation time for the McGuire EPZ is also 4 hours. For the Oconee EPZ the maximum evacuation time is 3 hours 45 minutes. The critical component in the evacuation is the permanent resident population; all other segments of the population can be evacuated in less than the maximum time.

Under severe weather conditions (winter storm) the evacuation time for the Catawba EPZ is 6 hours 15 minutes. The evacuation time for the McGuire EPZ

N.1 EXERCISES AND DRILLS

N.1.a/N.1.b Exercises

Duke Power Company will conduct an emergency exercise at each of its Nuclear Stations once per calendar year. These exercises will be designed to meet the requirements of 10 CFR Part 50 Appendix E. The Crisis Management Center staff will participate in at least one exercise per calendar year; however, the CMC staff will participate in all full-scale exercises involving full participation by the affected state(s). (Re: January 6, 1984 letter from Darrell G. Eisenhut of NRC to Hal B. Tucker and facility operating license NFP-35 for Catawba Nuclear Station).

The exercises will be designed to test the integrated capability of those involved and a major portion of the basic elements existing within the plans and organizations. The scenario for these exercises will be varied from year to year such that all major elements of the plans and organizations will be tested within a five-year period. The exercises will be initiated at various times of the day, but in every six year period, one exercise at each station will begin between 6:00 P.M. and 4:00 A.M.

N.2 Drills

The Station Emergency Plans, Section N, address the conduct of periodic drills.

N.2.a Communications Drill

The Nuclear Stations will conduct communications drills as described in appropriate station procedures. CMC procedures CMIP-19 and CMIP-20 describe the communications checks made from the CMC.

N.2.b Fire Drills

Refer to the Station Emergency Plans, Section N.

N.2.c Medical Emergency Drills

Refer to the Station Emergency Plans, Section N.

N.2.d Radiological Monitoring Drills

A drill involving on-site and off-site radiological monitoring teams will be conducted once per calendar year. The monitoring teams will actually collect and analyze air samples, as appropriate. The drill controllers will provide monitoring team members simulated analysis results indicative of contamination or plume location after the samples have been drawn and analyzed. Soil, water, and vegetation samples will be taken during these drills for McGuire and Catawba; however, these will not be taken during drills for Oconee since this is done by station personnel on a frequent basis as required by Technical Specifications.

Table P-2

IMPLEMENTING PROCEDURE CROSS REFERENCE

Cross Management Implementing Procedures:

- CMIP-1 Recovery Manager and Immediate Staff Procedure
- CMIP-2 News Group Procedure
- CMIP-3 (Reserved for future use.)
- CMIP-4 Administration and Logistics Group Procedure
- CMIP-5 Emergency Communications Group Procedure
- CMIP-6 Plant Assessment Group Procedure
- CMIP-7 Radiological Assessment Group Procedure
- CMIP-8 Oconee Crisis Phone Directory
- CMIP-9 McGuire/Catawba Crisis Phone Directory
- CMIP-10 Emergency Classification - Catawba
- CMIP-11 Emergency Classification - McGuire
- CMIP-12 Emergency Classification - Oconee
- CMIP-13 Notifications to States and Counties from the Crisis Management Center
- CMIP-14 Crisis Management Data Transmittal System for Offsite Agencies
- CMIP-15 (Reserved for future use.)
- CMIP-16 Crisis Management Data Transmittal System Access from the Crisis Management Center
- CMIP-17 (Reserved for future use.)
- CMIP-18 Maintaining Emergency Preparedness
- CMIP-19 Communications Test for McGuire/Catawba CMC
- CMIP-20 Communications Test for Oconee CMC
- CMIP-21 Quarterly Inventory Equipment Check
- CMIP-22 Telephone Number Updates

Procedures Used by CMC Dose Assessment Group
(Controlled Copies Maintained By System Emergency Planner)

Emergency Dose Assessment Manual:

- EDA-1 - Procedure for Estimating Food Chain Dose Under Post Accident Conditions (all stations)
- EDA-2 - Off-site Dose Projections for Catawba Nuclear Station
- EDA-3 - Off-site Dose Projections for McGuire Nuclear Station
- EDA-4 - Off-site Dose Projections for Oconee Nuclear Station
- EDA-5 - Class A Model for Catawba Nuclear Station
- EDA-6 - Class A Model for McGuire Nuclear Station
- EDA-7 - Class A Model for Oconee Nuclear Station
- EDA-8 - Environmental Monitoring for Emergency Conditions for Catawba Nuclear Station
- EDA-9 - Environmental Monitoring for Emergency Conditions for McGuire Nuclear Station
- EDA-10 - Environmental Monitoring for Emergency Conditions for Oconee Nuclear Station

Table P-2 (cont'd)

IMPLEMENTING PROCEDURE CROSS REFERENCE

Sections of the CMP implemented by these plans/procedures: (cont'd)

Plan/Procedure	CMP Section Implemented
CMIP-1	B.7, C., D., E., F.
CMIP-2	B.7
CMIP-4	B.7
CMIP-5	B.7
CMIP-6	B.7
CMIP-7	B.7
CMIP-8	F
CMIP-9	F
CMIP-10	D
CMIP-11	D
CMIP-12	D
CMIP-13	E
CMIP-16	I
CMIP-18	P
CMIP-19	F, N
CMIP-20	F, N
CMIP-21	P
CMIP-22	P
Dose Assessment	I

Department of Energy
Savannah River Operations Office
P.O. Box A
Aiken, South Carolina 29802

MAR 13 1990

Mr. H. B. Tucker, Vice President
Nuclear Production Department
Duke Power Company
P. O. Box 33189
Charlotte, NC 28242

Dear Mr. Tucker,

U. S. DEPARTMENT OF ENERGY (DOE) AGREEMENT LETTER FOR EMERGENCY SUPPORT, DATED JUNE 13, 1985

This letter provides assurance that the subject agreement between DOE and Duke Power Company for its McGuire, Oconee, and Catawba Nuclear Stations remains in effect.

We understand your emergency preparedness plan requires formal agreements to be reviewed and updated on a periodic basis. The subject letter remains current and requires no revision at this time.

Requests for DOE emergency radiological assistance may be directed to the Savannah River Site Technical Support Center at (803) 725-3333. This is our 24-hour emergency assistance telephone number.

Routine program questions may be directed to D. J. Richards of Westinghouse Savannah River Company at (803) 725-8387. Questions regarding DOE policy may be directed to Sherry Southern of my staff at (803) 725-4723.

Sincerely,

James M. Gaver, Director
Office of External Affairs

ME:JMG:djr

cc: S. L. Southern, OEA
P. D. Lassiter, OEA
D. J. Richards, WSRC

EP 1103.3-1

Appendix 6

Distribution List - Crisis Management Plan

Recovery Manager and Immediate Staff

1. H. B. Tucker
4. R. E. Harris
6. J. J. Honeycutt
10. Open
13. W. H. Owen
16. M. S. Tuckman
30. L. V. Wilkie
63. J. W. Hampton
70. W. B. McRee
71. W. S. Lee
78. Mark-up copy (c/o R. E. Harris)
83. J. J. Honeycutt (ONS CMC Managers Area)
85. J. J. Honeycutt (Catawba/McGuire CMC Managers Area)
89. D. P. Simpson

Emergency Communications

5. E. M. Geddie
7. P. R. Herran

Administration & Logistics

9. R. F. Smith
73. E. D. Morton
74. S. M. Kessler
75. G. L. Allen

News Group

11. R. Bowman
14. M. Dembeck
20. News Center (R. Bowman)
23. R. Bowman

Plant Assessment

15. K. S. Canady
76. Open
77. R. B. Priory

Radiological Assessment

25. W. A. Haller
26. R. T. Simril
27. J. E. Cole
28. Open
29. W. P. Deal
64. Open
80. R. C. Futrell
84. C. D. Ingram
86-87. Open

Q.A.

79. Loretta Roberts

B&W

31. Jerry G. Brown

Westinghouse

32. Linda S. Kish

NRC

33. NRC Document Control Desk (transmitted via Helen Froebe)
34-35 NRC Regional Administrator (transmitted via Helen Froebe)
36. NRC Resident Inspector - Catawba (transmitted via Helen Froebe)
37. NRC Resident Inspector - McGuire (transmitted via Helen Froebe)
38. NRC Resident Inspector - Oconee (transmitted via Helen Froebe)

North Carolina

46. Dayne Brown
47. Elaine Wathen
48. Tim Miller
49. Jack Hughes

South Carolina

50. George Schneider
51. Heyward Shealy
52. Steve Overcash