



**Wisconsin
Electric**
POWER COMPANY

Point Beach Nuclear Plant
6610 Nuclear Rd., Two Rivers, WI 54241

(414) 755-2321

March 1, 1988

Mr. Wallace Weaver
FEMA Region V
175 W. Jackson, 4th Floor
Chicago, IL 60604

Dear Mr. Weaver:

**SCOPE AND OBJECTIVES - POINT BEACH NUCLEAR PLANT MEDICAL
EMERGENCY DRILL, MARCH 16, 1988**

Enclosed is a copy of the "Scope and Objectives for the Point Beach Nuclear Plant Medical Emergency Drill," scheduled for March 16, 1988. As you know, this is a drill and not an exercise. This drill is being conducted in conjunction with the annual utility medical emergency drill and is designed to allow for successful demonstration of offsite objectives pertaining to medical services. The conduct of this medical drill is in keeping with the requirement of the FEMA guidance memorandum MS-1, "Medical Services," and specific objectives to be demonstrated are described in the November 4, 1987 draft of FEMA guidance memorandum EX-3, "Managing Pre-Exercise Activities and Post-Exercise Meetings."

A time schedule of real and simulated events for the drill is also enclosed.

If you have any questions regarding the content of the enclosures, please contact our emergency planning coordinator, David R. Stevens at (414)755-2321.

Very truly yours,

James J. Zach
Manager - PBNP

pah

Attachments

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POINT BEACH NUCLEAR PLANT

MEDICAL EMERGENCY DRILL

MARCH 16, 1988

1.0 INTRODUCTION

- 1.1 This drill will involve activation of onsite and offsite human resources and facilities necessary to respond to a simulated medical emergency at the Point Beach Nuclear Plant involving radioactive contamination of the victim.
- 1.2 The drill will be conducted during normal day shift working hours and will last from 4 to 6 hours.
- 1.3 This drill is designed to satisfy the requirements of:
 - 1.3.1 Point Beach Nuclear Plant Emergency Plan, Chapter 8.0, Section 3.5.3.
 - 1.3.2 NUREG 0654, Planning Standard N.2.c.
 - 1.3.3 FEMA Guidance Memorandum MS-1, Medical Services.
 - 1.3.4 FEMA Guidance Memorandum (Draft, November 4, 1987) EX-3, Objectives 23 and 24.

2.0 PARTICIPATING ORGANIZATIONS

2.1 Wisconsin Electric Power Company

- 2.1.1 Nuclear Power Department
- 2.1.2 Communications Department
- 2.1.3 Other departments as required

2.2 Manitowoc County

The Manitowoc County Sheriff's Department will participate in the drill primarily from a communications standpoint. However, the department will coordinate the actual dispatch of a medical emergency vehicle to the Point Beach Nuclear Plant. It should be noted that the ambulance service and hospital facilities used during this drill are the same as those which would be used should an accident occur which involved injury and radioactive contamination of a member of the offsite public in Manitowoc County.

2.3 Two Rivers Community Hospital

The Two Rivers Community Hospital (TRCH) will implement appropriate portions of their "Condition Black - Nuclear" emergency response plan, as required by the scenario.

2.4 Mishicot Area Ambulance Service

The Mishicot Area Ambulance Service will respond, to the fullest extent, to the simulated medical emergency.

2.5 Kewaunee County

Kewaunee County will participate in the drill from a communications standpoint. It should be noted that the ambulance service and hospital facilities used during this drill are the same as those which would be used should an accident occur which involved injury and radioactive contamination of a member of the offsite public in Kewaunee County.

2.6 State of Wisconsin

The Division of Emergency Government will support the drill from a communications standpoint. Communicators will participate from Warning Center 2 at the State EOC.

3.0 OBJECTIVES

3.1 Wisconsin Electric

3.1.1 General

- a. Involve a local ambulance service in a medical emergency response to PBNP involving a victim with injuries complicated by radioactive contamination.
- b. Provide a situation which will cause the PBNP Health Physics group to work with a local ambulance service in transporting a contaminated-injured person from the plant site to the Two Rivers Community Hospital.
- c. Provide a number of simulated victims with varying injuries or radiation overexposures which will cause the Two Rivers Hospital to implement their "Condition Black-Nuclear" policy.
- d. Provide a simulated event which will cause implementation of various portions of:
 1. EPIP 11.2, "Injured Person's Immediate Care"
 2. EPIP 11.3, "Hospital Assistance"
- e. Demonstrate the ability of onsite personnel to assess the nature of a victim's injuries and to administer appropriate first-aid in response to that assessment.
- f. Demonstrate the ability of onsite personnel to muster necessary first-aid equipment (e.g., trauma kit, stretcher, etc.) at the scene of the injury.
- g. Demonstrate the ability of onsite personnel to notify the control room in a timely fashion following discovery of an injured person.
- h. Demonstrate the ability of onsite personnel discovering an injured person to communicate the following information to the control room:
 1. Location of accident scene
 2. Assistance required

- i. Demonstrate timely notification of onsite emergency response personnel of an emergency plan activation.
- j. Demonstrate timely notification of key corporate emergency support personnel:
 - 1. Emergency support manager
 - 2. Emergency director
 - 3. Vice-president communications (or designee)
- k. Demonstrate the ability of emergency response facilities to communicate using, as appropriate, the following:
 - 1. Dedicated telephone lines
 - 2. Radio
- l. Demonstrate the ability to provide regular (e.g., hourly) status reports to the NRC.
- m. Demonstrate the ability of personnel using radios to communicate effectively.

3.1.2 Control Room

- a. Demonstrate the ability to coordinate the immediate response to a report of personnel injury complicated by radioactive contamination.
- b. Demonstrate the ability to perform communications necessary to obtain offsite medical assistance for PBNP personnel with injuries complicated with radioactive contamination. This includes notification of:
 - 1. The Manitowoc County Sheriff's Department
 - 2. The Two Rivers Community Hospital
- c. Demonstrate the ability of control room personnel to accurately communicate the following information to the Two Rivers Community Hospital in advance of their receipt of injured personnel:
 - 1. Number of victims
 - 2. The victims' condition

3. Whether the victims are clean or contaminated
 4. Expected time of arrival of ambulance at the nuclear first aid room (NFAR).
- d. Demonstrate the ability of control room staff to correctly classify an emergency event using EPIPs 1.1 and 1.2.
 - e. Demonstrate the ability to notify onsite personnel of emergency classification using the plant Gai-tronics and alarm system.
 - f. Demonstrate the ability to notify the State DEG and both counties of event classification within 15 minutes using EPIP 1.3.
 - g. Demonstrate the ability to notify the NRC within one hour of event classification using EPIP 1.3.
 - h. Demonstrate the ability to provide regular (e.g., hourly) status reports to appropriate state and county agencies.
 - i. Demonstrate the ability of the shift superintendent to request of the Manitowoc County Sheriff's dispatcher that a contaminated ambulance remain at the TRCH until decontamination is complete.

3.1.3 Health Physics Support

- a. Demonstrate the ability to organize, dispatch, and manage a first aid team into a contaminated area.
- b. Demonstrate the use of respiratory protection equipment and associated communications equipment (skull mikes, boom boxes, etc.) as is deemed necessary by the supervisor in charge.
- c. Demonstrate the ability to monitor and control exposure of all persons assigned to the medical emergency response.
- d. Demonstrate the ability and resources necessary to properly outfit response teams with protective clothing based upon anticipated environmental conditions.

- e. Demonstrate the ability to assure contamination control:
 - 1. At the plant site
 - 2. In the ambulance
- f. Demonstrate the ability to assist offsite medical emergency responders in donning protective clothing.
- g. Demonstrate the ability to arrive at the Two Rivers Community Hospital nuclear first aid room in advance of an ambulance dispatched from the PBNP site.
- h. Demonstrate the ability to set up the nuclear first aid room at the TRCH in a timely fashion.
- i. Demonstrate the ability to provide contamination and exposure control during transfer of a contaminated-injured victim from a contaminated area to a medical emergency vehicle.
- j. Demonstrate the ability to provide contamination and exposure control at the nuclear first aid room.
- k. Demonstrate the ability to assist hospital personnel in the decontamination of the victim.
- l. Demonstrate the ability to control and minimize the spread of contamination at the Two Rivers Community Hospital.
- m. Demonstrate the ability to monitor hospital personnel entering and leaving the restricted area established at the TRCH.
- n. Demonstrate the ability to decontaminate the treatment room, adjoining areas, equipment and the ambulance as required.
- o. Demonstrate the ability to bag and label all disposable or contaminated items at the TRCH.

3.1.4 Security

- a. Demonstrate the ability to obtain preassembled emergency entrance packets for dissemination to the ambulance crew following notification from the Control Room.

- b. Demonstrate the ability to rezero dosimeters contained in the emergency entrance packets.
- c. Demonstrate the ability to provide a rapid entry of a medical emergency vehicle to the plant site.
- d. Demonstrate the ability to obtain the last name of each offsite medical emergency responder upon entry to the site.
- e. Demonstrate the ability to control access to the plant site.

3.1.5 Communications Department

- a. Demonstrate the ability to provide accurate and timely information to the public.
- b. Demonstrate the ability to provide advance coordination with offsite agencies of information released to the public.

3.2 Mishicot Ambulance

Demonstrate the adequacy of vehicles, equipment, procedures and personnel for transporting contaminated, injured or exposed individuals. (FEMA Objective #23)

3.3 Two Rivers Community Hospital

- 3.3.1 Demonstrate the adequacy of hospital facilities, equipment, procedures and personnel for handling contaminated, injured or exposed individuals. (FEMA Objective #24)
- 3.3.2 Demonstrate the ability to staff the nuclear first aid room with one doctor and one nurse trained to handle a radiological medical emergency.

3.4 Manitowoc County

- 3.4.1 Demonstrate the adequacy of vehicles, equipment, procedures and personnel for transporting contaminated, injured or exposed individuals. (FEMA Objective #23)
- 3.4.2 Demonstrate the adequacy of hospital facilities, equipment, procedures and personnel for handling contaminated, injured or exposed individuals. (FEMA Objective #24)

3.5 Kewaunee County

- 3.5.1 Demonstrate the adequacy of vehicles, equipment, procedures and personnel for transporting contaminated, injured or exposed individuals. (FEMA Objective #23) Although the Mishicot Ambulance is not the primary responder to an offsite contaminated-injury event in Kewaunee County, such service would be provided under the provisions of mutual aid agreements.
- 3.5.2 Demonstrate the adequacy of hospital facilities, equipment, procedures and personnel for handling contaminated, injured or exposed individuals. (FEMA Objective #24)

4.0 DRILL SCOPE

The 1988 Point Beach Nuclear Plant Medical Emergency Drill will require implementation of portions of the Point Beach Nuclear Plant Emergency Plan Implementing Procedures. Response by Health Physics, Operations, Security, and Communications personnel will be required. Additional company groups may become involved depending upon the actions of drill players.

The drill will require dispatch of the Mishicot Area Ambulance by the Manitowoc County Sheriff's Department to the Point Beach Nuclear Plant and subsequent transport of at least one contaminated-injured victim from the plant site to the Two Rivers Community Hospital.

The drill scenario will require implementation of the Two Rivers Community Hospital "Condition Black - Nuclear Policy." Implementation of this policy will result in use, at a minimum, of the nuclear first aid room (NFAR), for patient decontamination and treatment.

The events which lead up to the required medical emergency response are as follows:

A routine transfer of radioactive resins from a storage tank to a shipping liner will be simulated at the Point Beach Nuclear Plant. During the transfer operation a leak develops at the camlock hose fitting on top of the shipping liner. Immediate attempts to secure the resin flow are unsuccessful due to a valve sticking open (AOV-14). A contractor technician climbs atop the shipping liner and attempts to retighten the camlock to prevent the leakage. Upon touching the camlock, the hose blows off the fitting, contaminating and knocking the technician from the liner top to the floor. As a result of the fall, the technician suffers a severe laceration of the head and a compound fracture of the leg. He is conscious and bleeding severely. Contaminated resin continues to flow from the hose for about 60 seconds. The radwaste supervisor in charge of the transfer operation is severely exposed, but not contaminated.

The drill will be terminated upon satisfaction of drill objectives. This is likely to occur shortly after the contaminated victim has been decontaminated, medical conditions have been stabilized and he has been moved to a "clean" area for continued medical evaluation and treatment.

POINT BEACH NUCLEAR PLANT

MEDICAL EMERGENCY DRILL

MARCH 16, 1988

TIME SCHEDULE OF REAL AND SIMULATED SCENARIO EVENTS

- 0730 Plant employees begin work day.
- 0745 Pre-job discussion with contractor HPs, Operations supervisor, shift superintendent, WE HPs and auxiliary operators in preparation for resin transfer per Operating Instruction 20, Attachment F, "Resin Transfer from Storage Tank T112 to Shipping Liner on Truck Via ATCOR Bypass Line."
- 0800 Initiate resin transfer procedure.
- 0805 Resin flow into shipping liner begins.
- 0810 Dump hose connection on fill head begins to leak.
- 0811 Chem-nuclear technician and radwaste supervisor position ladder on the west side of the liner to observe and verify the leak. Leak appears to be caused by loose wing on the camlock fitting.
- Radwaste supervisor orders the resin dump to be terminated.
- Air operated valve 14 (AOV 14) sticks open preventing immediate termination of the resin dump.
- 0812 Chem-nuclear technician goes on top of the shipping liner and attempts to resecure the camlock fitting. Upon touching the camlock, the dump hose blows off the fitting initiating a spill of radioactive resin and water.
- The Chem-nuclear technician is knocked from the shipping liner top to the floor by the resin dump hose. He has suffered a severe laceration to the face and compound fracture of the leg. He is conscious, but bleeding severely from the fracture wound. He is laying in an area now contaminated by water and resin.
- 0813 The radwaste supervisor's protective clothing is slightly contaminated and he has received a significant overexposure.
- Area radiation monitor, RE-108 alarms in the control room indicating high activity in the radwaste area.

0815 WE personnel report to the accident scene; a limited plant evacuation is possible.

0820 Dose rates in the general area are reduced by factor of 10 due to the resin pile going down the drain to the -19' sump.

Area radiation monitor, RE-108 clears in the control room.

(0825) PBNP control calls the Manitowoc County sheriff to request an ambulance.

(0830) Manitowoc County Sheriff's Department notifies the Mishicot Ambulance Service that a response to PBNP is required.

(0835) The Two Rivers Community Hospital is notified by the Point Beach Control Room that at least one injured person will be transported to the TRCH.

(0840) Two Rivers Community Hospital calls PBNP to verify the message received from PBNP.

(0845) The Mishicot Ambulance arrives at the PBNP southgate.

(0855) Emergency medical technicians arrive at scene of victim.

PBNP Health Physics personnel depart for the Two Rivers Community Hospital to aid in setup of the NFAR.

(0915) PBNP will activate the technical support center to coordinate event response and post-accident cleanup.

(0915) The victim is moved from the PBNP controlled zone to the Mishicot Ambulance. The ambulance becomes contaminated.

(0925) PBNP declares an Unusual Event due to the transportation of a seriously injured person to a hospital from the plant site.

(0930) The Mishicot Ambulance departs the PBNP site for the Two Rivers Community Hospital.

(0940) The state and counties are notified of the Unusual Event declaration by PBNP.

(0945) The Mishicot Ambulance arrives at the Two Rivers Community Hospital.

- (1000) The NRC is notified of the Unusual Event declaration by PBNP.
- (1015) The injured victim's medical condition is stabilized.
- (1030) The injured victim has been successfully decontaminated.
- (1045) The Mishicot Ambulance has been surveyed and decontaminated.
- (1100) The TRCH nuclear first aid room has been successfully decontaminated.
- (1130) The drill is terminated when the injured victim has been stabilized and transported from the NFAR and when the exposed victim has been evaluated and a treatment plan developed.
- (1230) Post-drill critique at the Two Rivers Community Hospital
 - 1. Hospital staff
 - 2. Mishicot Ambulance staff
 - 3. Wisconsin Electric HP supervision from the site and the NFAR

Times noted in parentheses are estimated. The time that each of the events occurs is dependent upon player actions and response.

NOTE: THIS TRANSMITTAL CONTAINS EMERGENCY PREPAREDNESS EXERCISE
INFORMATION THAT SHOULD NOT BE RELEASED TO THE PUBLIC DOCUMENT
ROOM BEFORE March 17, 1988

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