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COMMUNICATIONS SYSTEMS

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Communications Systems

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Emergency Communication Facilities

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EMERGENCY COMMUNICATION FACILITIES

QEP 440-1
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ID/2N

A. PURPOSE

The purpose of this procedure is to describe the use of the emergency communication systems.

B. REFERENCES

1. 10 CFR 50.72.

C. PREREQUISITES

1. None.

D. PRECAUTIONS

1. None.

E. LIMITATIONS AND ACTIONS

1. None.

F. PROCEDURE

1. Nuclear Regulatory Commission Emergency Notification System - red phone.
 - a. Provides a dedicated telephone circuit between the station and NRC Operations Center, Bethesda, Maryland.
 - b. Telephones are located in the Control Room, Shift Engineer's Office, the Technical Support Center, the Emergency Operations Facility, and the onsite NRC office.
 - c. The phone is activated by lifting the handset from the cradle.
 - d. This phone will be used to provide notification of significant events per 10 CFR 50.72.
 - e. If the ENS phone is not operational, contact the NRC Operations Center by alternate means using the following:

TELEPHONE SYSTEM

TELEPHONE NUMBER

- | | |
|---|--------------------------------------|
| (1) Commercial Telephone System
to NRC Operations Center
(via Bethesda Central Office) | 202/951-0550 |
| (2) Commercial Telephone System
to NRC Operations Center
(via Silver Spring Central Office) | 301/427-4056 |
| (3) Health Physics Network to
NRC Operations Center | *22 (Touch-Tone)
22 (Rotary Dial) |
| (4) Commercial Telephone System
to NRC Operator
(via Bethesda Central Office) | 301/492-7000 |

2. Nuclear Regulatory Commission Health Physics Network - beige phone.

- a. Provides a dedicated telephone network with dialing capabilities for the transmission of primarily health physics information.
- b. Telephones are located in the Rad/Chem Supervisor's office, the Emergency Operations Facility, the Technical Support Center, and the onsite NRC office.
- c. The phone is activated by lifting the handset and dialing either 22 to reach NRC headquarters in Bethesda, Maryland, or 23 to reach Region III headquarters in Glen Ellyn, Illinois.
- d. This phone will normally be activated by NRC personnel.

3. State of Illinois Nuclear Accident Reporting System (NARS) - green phone.

- a. Provides a dedicated telephone network with dialing capabilities for communication to local and state agencies.
- b. Telephones are located in the Control Room, Technical Support Center and the Emergency Operations Facility.
- c. This phone is activated by lifting the handset and dialing the appropriate code.

- (1) Dial 23
 - State Emergency Services and Disaster Agency (SESDA).
 - Illinois Department of Nuclear Safety (DNS)
 - Rock Island Communications
 - Rock Island County ESDA
 - Commonwealth Edison Command Center.
 - System Power Supply Office (SPSO).
 - Scott County Sheriff.
 - Technical Support Center (TSC).
 - Emergency Operation Facility (EOF).
 - Clinton County Emergency Operations Center (EOC)
 - Iowa Emergency Operations Center - Des Moines
 - Whiteside County EOC
 - Whiteside County Sheriff
- (2) Dial 20
 - State Emergency Services and Disaster Agency (SESDA).
 - Illinois Department of Nuclear Safety (DNS)
- (3) Dial 27
 - Technical Support Center (TSC).
 - Control Room.
 - Emergency Operations Facility (EOF).
- (4) Dial 32
 - State Emergency Services and Disaster Agency (SESDA).
4. Commonwealth Edison Company Command Center - yellow phone.
 - a. Provides a dedicated telephone circuit between the station and the Corporate Command Center, 1230 Edison Bldg.
 - b. Telephones are located in the Technical Support Center and the Emergency Operation Facility.
 - c. The phone is activated by lifting the handset from the cradle.
 - d. This phone will be used to maintain open communications between the station and the Corporate Command Center.
5. Control Room to Technical Support Center - brown phone.
 - a. Provides a dedicated telephone circuit between the control room and the Technical Support Center. The Technical Support Center is to provide a location for plant management, technical and engineering support personnel to support the control room command and control function of assessing plant status and potential offsite impact.
 - b. Telephones are located in the Control Room and the Technical Support Center.
 - c. The phone is activated by lifting the handset from the cradle.
 - d. This phone will be used to maintain open communications between the control room and the Technical Support Center.

6. Control Room to Onsite Operational Support Center - brown phone.
 - a. Provides a dedicated telephone circuit between the Control Room and the Onsite Operational Support Center. The Onsite Operational Support Center is the location to which all in-plant personnel will report during an emergency and from which they will be dispatched for assignments.
 - b. Telephones are located in the Control Room and the Onsite Operational Support Center (meeting room adjacent to TSC).
 - c. The phone is activated by lifting the handset from the cradle.
 - d. This phone will be used to maintain open communications between the Control Room and the Onsite Operational Support Center.
7. Radio Communications Microwave Link (GSEP radio).
 - a. Provides a dedicated microwave radio link between the Commonwealth Edison Company Command Center and the Technical Support Center, the Control Room and the Emergency Operations Facility.
 - b. Provides a private line or scrambled mode radio frequency link to various mobile units from any of the locations listed in paragraph F.7.a.
 - c. The three onsite remote stations can communicate by lifting the handset from the cradle and depressing the INTERCOM BUTTON. In the intercom mode, no transmission occurs on the radio frequency. Two way communications can also occur between the Edison Command Center using the intercom mode without radio transmission occurring.
 - d. Communication to mobile units is by radio transmission. Radio transmission has three modes.
 - (1) Private Line (PL), Disabled, Scramble Off.
 - (a) Initiate private line disable by momentarily depressing the "PL MONITOR" button. This allows any receiver or transmitter on a frequency of 153.59 MHz to have two-way communications with the GSEP radio system.
 - (2) Private Line Enabled, Scramble Off.
 - (a) Initiate private line by momentarily depressing the "PL RESET" button. This allows only radios with the same private line code to communicate with the GSEP base radio.
 - (3) Scramble Mode.

- (a) Initiate the scramble mode by depressing the SCRAMBLE button and verify the SCRAMBLE ON indicator lights. This allows only mobile units with the same scramble mode code to communicate with the GSEP base. This mode eliminates the possibility of being intercepted.
 - (b) To release the SCRAMBLE MODE, depress the SCRAMBLE button and verify the SCRAMBLE OFF indicator lights.
 - (4) The radio transmission modes are activated by lifting the handset from the cradle and by using the push to talk button in the handset.
 - (5) When the handset is in the cradle, the remote station is automatically placed in the monitor mode.
8. Party line - blue phone.
- a. Provides an additional conference phone for Health Physics, Environmental, and Tech Staff usage.
 - b. Consists of three separate independent circuits on the MW system:
 - (1) Health Physics
 - (2) Environmental
 - (3) Tech Staff
 - c. Each circuit has phones located at the Technical Support Center, the Emergency Offsite Facility, and the respective service building offices.
 - d. Each circuit listed in step 8.b.(1), (2), and (3) is linked to the same circuit at the other Nuclear Stations, Emergency Offsite Facilities, Technical Support Centers, and the Corporate Command Center.
 - e. The individual circuits cannot be cross-linked.
 - (1) I.E., Health Physics cannot set up a conference call with the Environmental Group.
- Party line codes are listed in EOF-15, Attachment A for ringing individual phones.
9. GSEP Voice-Direct Dispatch - grey phone.
- a. Provides for a conference phone between control room, Shift Engineer, Technical Support Center, Emergency Offsite Facility, and the Corporate Command Center.

- b. Consists of one separate circuit for each station on MW system.
 - c. The phone is actuated by lifting the handset.
 - (1) When a phone activates the circuit, it will ring at the Corporate Command Center only.
 - (2) The Corporate Command Center has the capability of ringing individual phones on the circuit.
10. In addition to the system described above, QCNPS has other reliable intraplant and plant-to-offsite communications, including a public address system, a commercial phone system, security/operations radio consoles and handi-talkies, system power dispatcher microwave communications, sound-powered phones, a paging system, and vehicle radios.
- a. Public address system.

The public address system integrates a system of speakers, handset paging units, and telephones located throughout the plant. Paging can be initiated from any single handset unit, any telephone, or from microphones within the control room.
 - b. Commercial phone system.

The commercial telephone system consists of local telephone company PBX equipment and telephone stations located throughout the plant and the main control room.
 - c. Security/operations radio consoles and handi-talkies.

The intraplant radio system provides radio communications from a control point (base station) to various "Handie-Talkie" units through the plant, and it also provides direct radio communications from "Handie-Talkie" to "Handie-Talkie" via a repeater system. It is an independent subsystem of the plant communications system. The intraplant radio system includes the security network also. The station is also equipped with several page units that are set up to be activated through the operations radio frequency.
 - d. System power dispatcher microwave communications.

The microwave system consists of solid-state, battery-powered equipment designed and engineered primarily for the protective relaying of the transmission system. However, a voice channel is provided which serves as an additional offsite communication medium. The tones received via this channel have volume, fidelity, and freedom from extraneous noises comparable with the quality normally obtained on a commercial telephone.

e. Sound powered phone.

Sound-powered telephones are used in special areas where instrumentation racks and controls are installed. Jacks for sound-powered telephones are installed at local instrument racks and panels, and in the station control rooms. This type of communication is an aid to the instrument mechanics when testing and adjusting instrumentation and controls, and it can also be used for emergency communications.

f. Paging system.

The system is described under security/operations radio consoles and handi-talkies, section F.10.c.

g. Vehicle radios.

The station has a vehicle equipped with a radio for two-way communications with the control room on either the GSEP or operations radio frequencies.

G. CHECKLISTS

1. None.

H. TECHNICAL SPECIFICATION REFERENCES

1. None.