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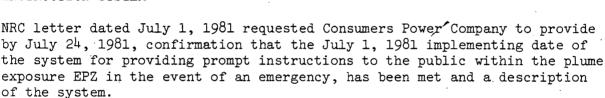
COMMISSION

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DOCKET 50-255 - LICENSE DPR-20 - PALISADES PLANT - EPZ ALERTING AND PROMPT INSTRUCTION SYSTEM



The description of the Consumers Power Company Palisades Plant system is provided in attachment 1. Consumers Power Company successfully tested this system June 18, 1981. The Federal Emergency Management Agency was notified of the test and is being provided results under a seperate cover letter.

A telephone discussion with NRC representative William Axelson July 20, 1981, indicated that Consumers Power Company was planning on an alerting and prompt instruction zone having an 8 mile radius based on theoretical X/Q valves. Recent calculations however, using actual X/Q valves, have shown the 2^{l_1} hour integrated whole body dose at a radius of 5 miles to be less than 110 rems for 5% meteorolgy at the probable wind speed of 5 m/s. Thus the alerting and prompt instruction zone is within a 5 mile radius for the Palisades Plant.

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CC Director, Office of Nuclear Reactor Regulation Director, Office of Inspection and Enforcement NRC Resident Inspector-Palisades IE04 51/1

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APP

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ATTACHMENT I

PALISADES PUBLIC WARNING SYSTEM

I SYSTEM

A System Description

- The Public Warning System is a solid-state electronic siren system designed to produce three distinct warning signals at a siren power level of 115 dB(c) at 100 feet, and, when operated in the Public Address mode, provides 2000 watts of peak voice power.
- The system consists of 45 pole-mounted speaker assemblies, each of which contains 16 speakers arranged in four columns of four speakers. The columns are separated by 90 degrees to provide a 360-degree coverage. A radio receiver, tone generator, speaker amplifiers and a continuous-duty power supply are contained in an equipment cabinet mounted near the base of each pole.
- 3 The system may be activated by encoder devices located at three separate public safety control centers. Each encoder, when activated, generates a tone-coded signal that is transmitted to the radio receivers at each pole location. Through push button and switch preselection, the transmitted coded signal is capable of activating all units, geopgraphically related units, or individual units, depending upon the desired area to be covered.
- Precautions against false and inadvertant unit activation include the use of a public-safety radio frequency encoded with a continuous subaudio tone in addition to the use of unique six-digit coding. This greatly reduces the probability of false triggering of the system by random radio signals.
- Although the system has been designed to provide warning signals and notification instructions to the public within a five-mile radius of the Palisades Nuclear Plant, the siren sound levels produced at the ground are below the 123 dB(c) hearing damage threshold limits proscribed by Federal guidelines for outdoor warning devices.

B SYSTEM OPERATIONAL MODES

1 Attention or Alert Warning

This is a steady tone (800 Hz) for three to five minutes and is used as authorized by local government officials to alert the public to peacetime emergencies. The Alert Signal shall mean to all persons in the United States to turn on the radio or TV for information.

2 Local Alert

This is a rapidly alternating two-tone (435 Hz and 641 Hz) signal to alert local government emergency personnel, ie, volunteer fire fighters.

3 National Attack Warning

This is a wailing tone (from 425 Hz to 970 Hz) for three to five minutes, indicating that an actual attack against the country has been detected and that protective action should be taken immediately. The National Attack Warning signal shall be re-peated as often as warnings are disseminated over the National Warning System or as deemed necessary by the local government authorities to obtain the required response by the population, including taking protective action related to the arrival of fallout. The signal is appropriate for initial attack warning and any subsequent attacks, and will also be used for accidental missile launch warnings.

4 Public Address

This mode uses the loudspeaker capability of the warning system to announce the nature of the conditions which caused the siren warning. This feature is to be used in conjunction with all siren soundings (including testing) to inform the listening area of the purpose of the warning and to receive immediate protective action information following the siren sound.

5 Prerecorded Message

This mode employs either the PUB WARN or LOC ALRT siren in conjunction with the PA mode to provide pre-recorded test or emergency information. Through the use of the tape recorder, a voice announcement from a pre-recorded tape precedes and follows a sounding of the Public Warning and Local Alert Warning Siren signals.

C OPERATIONAL AUTHORIZATION AND RESTRICTIONS

- 1 The System may be activated by authority of the following:
 - a National Warning System (NAWAS)
 - b National Weather Service (NWS)
 - c Van Buren County Sheriff Department
 - d Covert Township Fire Department
 - e South Haven Police Department
 - f South Haven State Police Post
- 2 THE SYSTEM MAY BE USED ONLY FOR PUBLIC WARNING AND NOTIFICATION OF EMERGENCY CONDITIONS. Each activation shall be recorded by each system control agency (see Attachment I).

II MONTHLY TESTS

A TEST TIME AND DAY

Monthly tests shall be performed at 12:00 noon (EST or EDT) on the first Saturday of each month. (Per FEMA's Civil Preparedness Guide 1-17).

B DURATION OF TEST

Each test consists of a 10-second voice announcement followed by a 40-second siren (Alert) signal and a second ten-second voice announcement.