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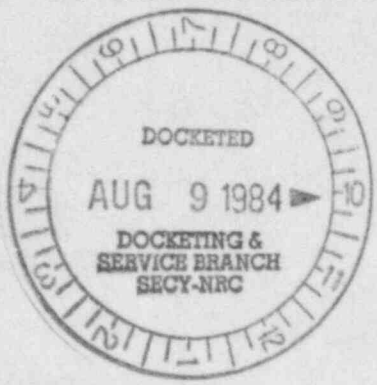


LONG ISLAND LIGHTING COMPANY

175 EAST OLD COUNTRY ROAD • HICKSVILLE, NEW YORK 11801

Direct Dial Number

April 6, 1984



U. S. NUCLEAR REGULATORY COMMISSION

EXHIBIT No. 41
Applicant Staff Intervenor
Identified Received Rejected
Date: 4/6/84 - 6/9/84
Reporter: Moylle H. Drayton

Mrs. Christine Loeb
Millcrest Rest Home
Mill Road
P. O. Box 56
Yaphank, New York 11980

Dear Mrs. Loeb:

Enclosed for your review are two copies of a draft Millcrest Rest Home Protective Action Implementation Plan in the Event of a Radiological Emergency at the Shoreham Nuclear Power Station (SNPS). This is a preliminary draft which we will modify based on your review and comments.

We look forward to working with you to develop the draft Plan further. If you have any questions, please feel free to call me at 733-4884 or Steve Dudar at 733-5079.

Very truly yours,

Eileen M. Ryan

Eileen M. Ryan
Local Emergency Response
Implementing Organization

cc: Mrs. V. Bryant

EMR/nbr

Enclosures

bcc: Messrs. J. A. Weismantle
C. A. Daverio
M. L. Miele
C. A. Gentile
S. M. Dudar
D. Glazer
J. N. Christman

Ms. E.D. Robinson
M. Randles
K. E. B. McCleskey
R. Falzone
LERC File

Mill Crest Rest Home
Protective Action Implementation
Plan in the Event of a
Radiological Emergency at
the Shoreham Nuclear Power Station (SNPS)

DRAFT

Revision 0

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A. GLOSSARY

The terms listed below are listed in these procedures or may be used in the emergency broadcast messages which you may hear on your tone alert radio in the event of a radiological emergency at the Shoreham Nuclear Power Station (SNPS). Underlined words cited in the definitions are cross-indexed.

ALERT

An alert would be declared if there were an actual or potential safety problem at the plant. Chances of a radioactive release are small. An Alert condition is declared to ensure that emergency personnel, including radiation survey teams, are on standby in case the situation becomes more serious. LILCO informs all government agencies of the Alert condition and conducts briefings for the press.

CONTAMINATION

The presence of radioactive material in undesirable locations.

DECONTAMINATION

The reduction or removal of radioactive contaminants from an object, person or area, as by cleaning or washing with water or detergents.

DOSE

A quantity of energy absorbed from ionization per unit mass of tissue. The rem is a unit of absorbed dose.

EMERGENCY OPERATIONS CENTER (EOC)

The command, coordination, and communication center operated by LERO which will be activated to evaluate the radiological emergency and make and coordinate protective action recommendations along with other efforts that may be implemented for emergency response.

EMERGENCY PLANNING ZONE (EPZ)

The area about a nuclear power plant for which planning is accomplished to assure that prompt and effective actions can be taken to protect the public in the event of a radiological emergency. The plume exposure EPZ is an area approximately 10 miles in radius around a nuclear power plant.

EVACUATION

The protective action that entails the actual movement of people out of the affected area.

EXERCISE

A preplanned event that tests a major portion of all of the basic elements within the radiological emergency response plan. This event tests the capability of the emergency preparedness organization to successfully respond to a radiological emergency that could result in offsite consequences.

GENERAL EMERGENCY

A General Emergency would be declared if there were potential or actual fuel core damage and radiation releases were expected to exceed limits beyond which the government requires protective action.

LERO

Local Emergency Response Organization

MONITORING, RADIOLOGICAL

The operation of locating and measuring radioactivity by means of survey instruments that can detect and measure (as dose rates) ionizing radiation.

NUCLEAR POWER PLANT

A commercial nuclear electric power generating facility.

NUCLEAR REACTOR

A device in which a fission chain reaction can be initiated, maintained, and controlled. Its essential component is a core with fissionable fuel.

OFFSITE

The area beyond the property boundary line of a nuclear power plant.

ONSITE

The area including and around the nuclear power plant enclosed by the property boundary line.

PROTECTIVE ACTION GUIDELINES

Projected radiological doses to individuals in the general population and emergency workers, that warrant protective actions following a release of radioactive material.

PROTECTIVE ACTIONS

The measures taken in anticipation of, during, or after a release of radioactive material. The purpose is to reduce the radiological doses to persons that would be likely to occur if the actions were not taken.

RADIATION

The emission or propagation of waves or particles such as light, sound, radiant heat, particles or waves emitted by radioactivity including any or all of the following: alpha particles, beta particles, gamma rays, X-rays, neutrons, high-speed electrons, high-speed protons and other atomic particles.

RADIOLOGICAL EMERGENCY

Any event involving actual or potential radiation exposure or radiological contamination to the environment.

RELEASE

Escape of radioactive materials into the environment.

REM

A measure of radiation's biological effect, similar to the way degrees measure temperature or inches measure distance.

SHELTERING

The protective action consisting of going indoors, closing doors and windows, and turning off ventilation systems.

SITE AREA EMERGENCY

This classification would be declared if there were actual or potential major failures of plant systems. At this level, radioactive releases which might require people living near the site boundary to take protective action may occur. If a Site Area Emergency is declared, emergency personnel would report to their stations, radiation survey teams would be dispatched, and government agencies and the public would be notified.

UNUSUAL EVENT

This classification would be declared if there were potential for a safety problem, but there had been no release of radiation. At this level, there may be no need for a change in the operational status of the plant. LILCO would inform government authorities of the Unusual Event.

B. Concept of Operations

I. Introduction

Under the Shoreham Plan, emergencies are to be classified using four categories of increasing seriousness: Unusual Event, Alert, Site Area Emergency, and General Emergency. Only at a General Emergency would there be the possibility that a release of radioactivity would be of sufficient magnitude to potentially exceed, in the plume Emergency Planning Zone (EPZ), the Environmental Protection Agency's Protective Action Guideline dose levels.

Your facility will be notified initially of any emergency at Shoreham requiring protective actions by anyone in the EPZ by the tone alert radio provided to your facility by LERO. If your tone alert radio is activated at the Alert Classification there will be no need for adult/nursing homes to take any protective actions at that emergency classification. If at a higher classification protective actions are recommended for adult/nursing homes, LERO would also contact your facility by telephone to verify that you received the protective action recommendation.

Protective actions of sheltering or evacuation are recommended based upon the projected radiation doses that may be received in particular areas of the plume EPZ, and the amount of time available in which to respond relative to the amount of time necessary to implement a response. While it is unlikely that an accident resulting in a release would occur at Shoreham, it is more unlikely that a release would occur that would make it necessary to take protective action out to the 10-mile boundary.

II. Sheltering

In sheltering your residents during a release of radioactivity from Shoreham, the residents are being protected from two kinds of exposure: (1) external exposure to radiation from an overhead plume and (2) internal exposure from inhaling radioactive particulates from the plume.

III. Evacuation

It is possible to postulate a highly unlikely accident scenario that would result in the conclusion that it would be necessary to evacuate Mill Crest Rest Home. However, Mill Crest Rest Home is located near the edge of the plume EPZ and in most accident scenarios, a radioactive release from Shoreham would not present your facility with an immediate emergency (as would, for example, a fire), giving your facility ample time to implement protective actions. In addition, government studies indicate that the probability of large radiation doses, even from a worse case accident at the plant, drops off substantially at about 10 miles from the reactor (NUREG 0396, Pg. I-37). If evacuation is recommended, LERO will provide your facility with transportation to a reception center outside the EPZ.

**C. Mill Crest Rest Home
Protective Action Implementation
Plan in the Event of a
Radiological Emergency at
the Shoreham Nuclear Power Station (SNPS)**

Revision 0

C. MILL CREST ADULT HOME
PROTECTIVE ACTION IMPLEMENTATION PROCEDURE
FOR THE
SHOREHAM NUCLEAR POWER STATION (SNPS)

1.0 PURPOSE

This procedure provides guidance for the implementation of sheltering and evacuation efforts in the event of a radiological emergency at the Shoreham Nuclear Power Station (SNPS).

2.0 RESPONSIBILITY

The administrator or her designee at the time of the emergency is responsible for implementing this procedure.

3.0 PRECAUTIONS

You may be notified at the alert level and will be notified at all higher emergency classifications that there is an emergency situation at the SNPS by the message broadcast over your tone alert radio.

Protective action recommendations will not be made by LERO for nursing/adult homes until a site area or general emergency is declared.

4.0 PREREQUISITES

An Alert, Site Area emergency or General Emergency condition is in progress and has been verified.

5.0 ACTIONS

5.1 The administrator or her designee on duty at the time of the emergency will do the following:

- 5.1.1 Upon notification of an Alert or higher emergency classification from SNPS via the tone alert receiver provided to your facility, note that Millcrest Adult Home is in Zone L. All EBS messages which require protective actions are keyed to the 19 zone letters, A through S. See Attachment 1 for a map illustrating the EPZ.
- 5.1.2 Continue to listen to your tone alert radio for further EBS messages.
- 5.1.3 If sheltering or evacuation is recommended for Zone L, the LERO Health Facilities Coordinator will contact you with further instructions via commercial telephone.
- 5.1.4 If the LERO Health Facilities Coordinator recommends sheltering go to step 5.1.5 of this procedure. If the LERO Health Facilities Coordinator recommends an evacuation go to step 5.1.6 of this procedure.
- 5.1.5 Upon notification of sheltering do the following:
 - a. Brief your staff on the status of the emergency.
 - b. All staff and residents should move to the basement.
 - c. Close all outside door and windows.
 - d. Turn off outside ventilation.
 - e. Move a small amount of food and drink down to the basement.
 - f. Move the tone alert radio down to the basement.
- 5.1.6 Upon notification of an evacuation do the following:
 - a. When the LERO Health Facilities Coordinator calls with evacuation instructions, provide him with the number of residents that can be transported by bus and the number of residents that require an ambulette/van.

- b. Brief your staff on the status of the emergency.
- c. Make sure the residents take any medications that they might need.
- d. Make sure the residents take sufficient clothes for a 1-2 day stay.
- e. Instruct a sufficient number of staff to accompany the residents to _____.
- f. Advise the remaining staff to report to work at the reception center as needed.
- g. Notify relatives and friends about the location of residents and convey their new location and telephone numbers. *Bring card file w/ telephone numbers to relocation center*
- h. Lock up the building after everyone has been evacuated.

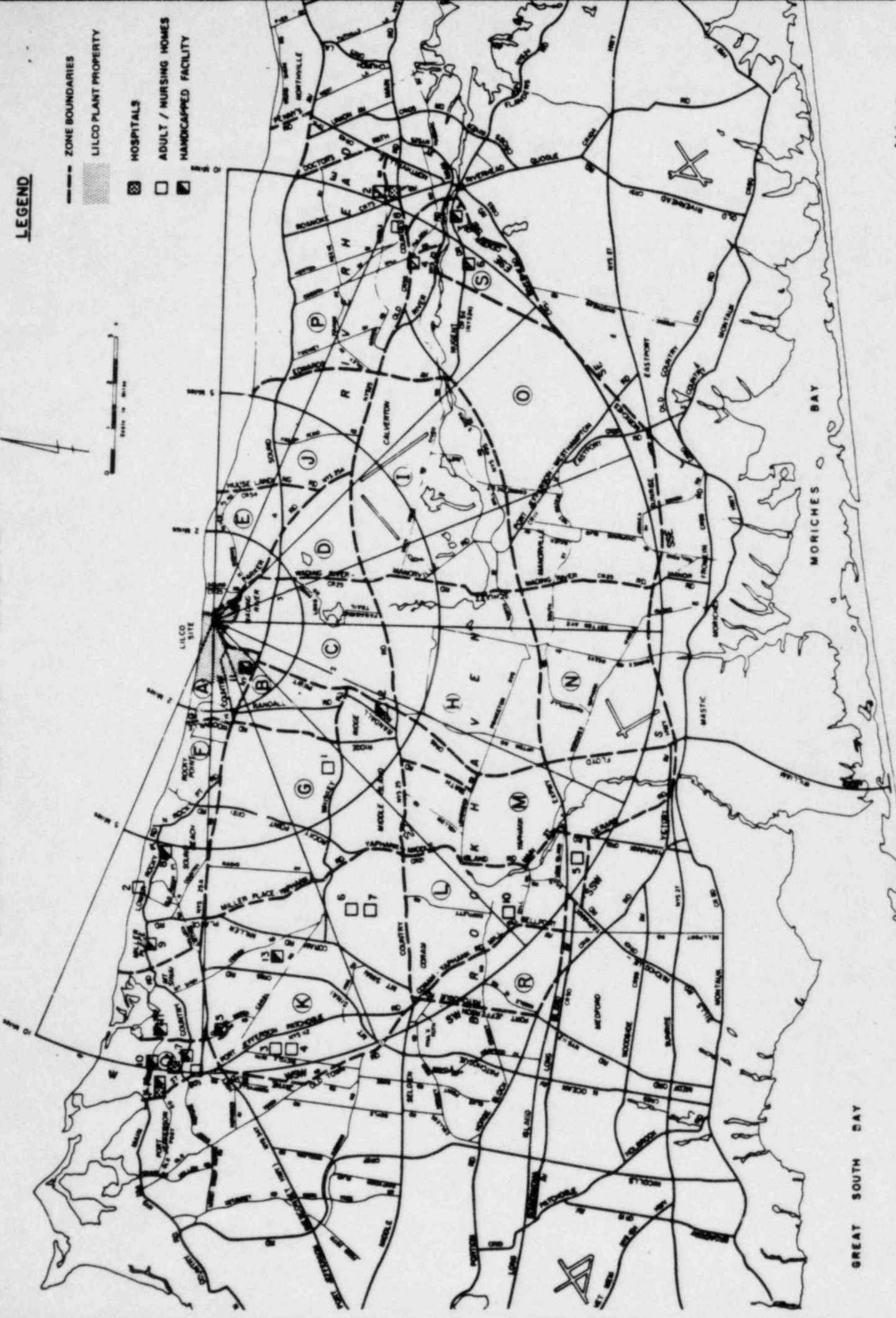
5.1.7 Notify the LERO Health Facilities Coordinator (516-XXX-XXXX) when the protective action has been completed.

IF MILL CREST ADULT HOME
 DECIDES TO ISSUE POTASSIUM IODIDE
 (KI) TO THEIR RESIDENTS SEE
 ATTACHMENT #2 FOR KI INSTRUCTIONS

LONG ISLAND SOUND

LEGEND

- ZONE BOUNDARIES
- ▨ LILCO PLANT PROPERTY
- ☒ HOSPITALS
- ADULT / NURSING HOMES
- ▣ HANDICAPPED FACILITY



GREAT SOUTH BAY

ATTACHMENT 2

Potassium Iodide (KI) Distribution Instructions

I. General Background on KI:

KI blocks radioiodine, which might be ingested or inhaled by an exposed person, from entering the thyroid gland by saturating the gland with nonradioactive iodine. If radioiodine exposure has occurred or is anticipated, the Administrator or her designee can recommend the use of KI as a protective action, in conjunction with sheltering.

Because KI works by saturating the thyroid gland with nonradioactive iodine before radioiodine reach the thyroid, it is very important to take KI shortly before or soon after any exposure to radioiodine. This concept is illustrated by the fact that KI is over 95 percent effective when taken at the time of exposure to radioiodine and is only 50 percent effective when taken 3-4 hours after exposure. It is important to remember that KI protects only the thyroid gland and does not protect the rest of the body from radiation exposure.

II. Decision Authority:

II. Decision Authority:

LILCO will not make a recommendation for the use of KI as a protective action. The decision to recommend KI will be made by the Administrator or his designee.

III. Recommended Dose and Frequency:

The recommended dosage is one (1) 130 mg. tablet per day (equivalent to 100 mg. of iodine) to all individuals over one year of age and one-half ($\frac{1}{2}$) of a 130 mg. tablet under day (equivalent to 50 mg. of iodine) to infants under one (1) year of age.

KI will not be required after ten (10) days if other protective measures are taken. These protective measures could include interruption of contaminated milk supplies or evacuation.

Radioiodine already present in the body but blocked from entering the thyroid gland by KI will continue to circulate for up to 48 hours after cessation of exposure. Thus, it takes the body two (2) days to eliminate radioiodine by renal excretion. The thyroid gland must be protected for this 48 hour period to prevent uptake of

radioiodine from other parts of the body. Continued use of KI is, three (3) days.

IV. Side Effects:

Read the manufacturer's brochure for possible side effects to KI. If the side effects are severe or if a person has an allergic reaction, they should contact a doctor.

V. Storage:

There are no special storage requirements for this type of KI, provided that each bottle remains tightly closed. It is recommended, however, that all KI be kept under lock and key to ensure against possible misuse.