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**ENTERGY NUCLEAR NORTHEAST  
 JAMES A. FITZPATRICK NUCLEAR POWER PLANT  
 P.O. BOX 110  
 LYCOMING, NY 13093  
 DOCUMENT TRANSMITTAL AND RECEIPT ACKNOWLEDGEMENT FORM**

**DATE: April 27, 2001  
 CONTROLLED COPY NUMBER: 34**

**TO: U.S.N.R.C. Document Center/Washington, DC**

**FROM: KATHY LOCKWOOD - EMERGENCY PLANNING DEPARTMENT**

**SUBJECT: EMERGENCY PLAN AND IMPLEMENTING PROCEDURES**

Enclosed are revisions to your assigned copy of the JAFNPP Emergency Plan and Implementing Procedures. Please remove and **DISCARD** the old pages. Insert the attached, initial and date this routing sheet and return the completed routing sheet to ***Kathy Lockwood in the Emergency Planning Department within 15 days.*** If this transmittal is not returned within 15 days, your name will be removed from the controlled list.

**PLEASE INSERT THE DOCUMENTS LISTED BELOW!**

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<b>VOLUME 3 Update List Dated April 27, 2001</b>			
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ENTERGY NUCLEAR NORTHEAST  
JAMES A. FITZPATRICK NUCLEAR POWER PLANT  
EMERGENCY PLAN VOLUME 1

PROCEDURE NO.: N/A

TITLE: TABLE OF CONTENTS\*

PORC Review: Meeting No.: N/A Date: N/A

Approved By: *M. [Signature]*  
Emergency Planning Coordinator

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ENTERGY NUCLEAR NORTHEAST  
JAMES A. FITZPATRICK NUCLEAR POWER PLANT

EMERGENCY PLAN VOLUME 1

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ENERGY NUCLEAR NORTHEAST  
JAMES A. FITZPATRICK NUCLEAR POWER PLANT

EMERGENCY PLAN VOLUME 1

PROCEDURE NO.: APPENDIX A

TITLE: EMERGENCY PLAN (VOLUMES 2 & 3)  
IMPLEMENTING PROCEDURES\*

PORC REVIEW: Meeting No. N/A Date N/A

APPROVED BY: *[Signature]*  
Emergency Planning Coordinator

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ENTERGY NUCLEAR NORTHEAST  
JAMES A. FITZPATRICK NUCLEAR POWER PLANT

EMERGENCY PLAN VOLUME 1

PROCEDURE NO.: APPENDIX B

TITLE: JAFNPP POLICY STATEMENT\*

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APPROVED BY:



Emergency Planning Coordinator

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APPENDIX B  
JAFNPP POLICY STATEMENT\*

Immediate response, assessment, and the implementation of protective and corrective measure pertaining to an emergency condition at the James A. Fitzpatrick Nuclear Power Plant (JAFNPP) shall be the responsibility of the JAFNPP Emergency Director. The individual who shall act in the capacity of Emergency Director is determined as follows:

Immediately upon the occurrence of an emergency, the Shift Manager on duty at the plant shall assume the role of Emergency Director. The Shift Manager shall continue to perform the functions of the Emergency Director, as described in the Emergency Plan, until relieved of that responsibility by a designated Emergency Director.

The Emergency Director shall implement applicable portions of the Emergency Plan to prevent or mitigate the consequences of emergencies at the JAFNPP. He shall have the authority to act on the behalf of the company in all matters concerning an emergency, at least until such time as the scope, severity and potential radiological consequences have been assessed, and the appropriate protective and corrective actions have been implemented. Following that critical period, but still with complete regard for health and safety, major decisions and commitments are the responsibility of corporate management.

Throughout the course of an emergency condition, all expertise and support available within the corporation shall be provided at the request of the JAFNPP Emergency Director.

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ENTERGY NUCLEAR NORTHEAST  
JAMES A. FITZPATRICK NUCLEAR POWER PLANT

EMERGENCY PLAN VOLUME 1

PROCEDURE NO.: APPENDIX D

TITLE: NEW YORK STATE PLAN AND PROCEDURES\*

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Emergency Planning Coordinator

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APPENDIX D

NEW YORK STATE PLAN AND PROCEDURES\*

The New York State Plan and Procedures are maintained in the JAFNPP Technical Support Center and the JAFNPP Emergency Operations Facility.

The New York State Radiological Emergency Preparedness Plan and Procedures received Federal approval on February 1, 1985. Attached is a FEMA Fact Sheet listing the chronology of events prior to approval.



FEDERAL EMERGENCY  
MANAGEMENT AGENCY

# FACT SHEET

Region II / 26 Federal Plaza / New York, NY 10278

(For further information contact  
Marianne C. Jackson or Nancy Kelly  
(212) 264-8980)

2/5/85 85-5

## FACT SHEET

### Off-Site Emergency Planning Chronology for Nine Mile Point

#### Federal Emergency Management Agency - Region II

Following the accident at Three Mile Island, the Federal Emergency Management Agency (FEMA) was assigned responsibility for reviewing and approving state and local emergency plans for nuclear power plants. Frank P. Petrone heads FEMA Region II which covers New York, New Jersey, Puerto Rico and the Virgin Islands. Commercial nuclear power plants are operating in New York State at Ginna, Indian Point and Nine Mile Point. The Nuclear Regulatory Commission (NRC), the licensing authority, reviews and approves the utilities' on-site emergency plans.

July 15, 1981: The State of New York submits off-site emergency plans for Nine Mile Point to the Director of FEMA Region II for review and approval. The plans consist of Oswego County's plan for the Emergency Planning Zone, (the area within a ten mile radius of the plant) and the state's site specific plan for assisting the county in the event of an accident. The plans are reviewed, under FEMA direction, by the Regional Assistance Committee comprised of representatives from 8 federal agencies.

September 15, 1981: The first full scale radiological emergency exercise in New York State is conducted to assess the adequacy of the response plans for New York State and Oswego County. 22 federal observers evaluate the response of county and state personnel to a simulated accident at the plant. On September 30, FEMA issues a post exercise assessment of the exercise. The assessment identifies deficiencies which state and county officials target for improvement.

November 4, 1981: A public meeting is held in Oswego to answer questions about the off-site plans and receive recommendations for changes.

August 11, 1982: A 24 member federal observer team observes the second full scale exercise of off-site emergency response by New York State and Oswego County. On October 29, the post exercise assessment is issued for the exercise.

September 28, 1983: A 22 member off-site team observes a third full scale exercise. On October 12, federal observers evaluate a medical drill. The post exercise assessment evaluating both the full scale exercise and the medical drill is issued in December 1983.

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September 28, 1984: FEMA Region II Director Petrone forwards the evaluation of the New York State and Oswego plans to FEMA National Office. The submission includes an evaluation of the plans, the full-scale exercises and issues raised at the public meeting.

November 16, 1984: The Alert and Notification System is activated and successfully tested.

February 1, 1985: Based on the evaluation by FEMA Region II Director Petrone and the review by FEMA headquarters staff, FEMA Associate Director Samuel W. Speck certifies to the Nuclear Regulatory Commission that the State and Oswego plans and preparedness are adequate to protect the health and safety of the public in the vicinity of Nine Mile Point. This is both the first approval for radiological plans and the first approval of an alert and notification system in New York State.

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ENERGY NUCLEAR NORTHEAST  
JAMES A. FITZPATRICK NUCLEAR POWER PLANT

EMERGENCY PLAN VOLUME 1

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TITLE: OSWEGO COUNTY PLANS AND PROCEDURES\*

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Emergency Planning Coordinator

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APPENDIX E

OSWEGO COUNTY PLANS AND PROCEDURES\*

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The Oswego County Radiological Emergency Preparedness Plan and Procedures received Federal approval on February 1, 1985. Attached is a FEMA Fact sheet listing the chronology of events prior to approval.



FEDERAL EMERGENCY  
MANAGEMENT AGENCY

# FACT SHEET

Region II / 26 Federal Plaza / New York, NY 10278

2/5/85 85-5

(For further information contact  
Marianne C. Jackson or Nancy Kelly  
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ENTERGY NUCLEAR NORTHEAST  
JAMES A. FITZPATRICK NUCLEAR POWER PLANT

EMERGENCY PLAN VOLUME 1

PROCEDURE NO.: APPENDIX F

TITLE: TYPICAL SUPPORT COMPANIES AND ORGANIZATIONS\*

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Emergency Planning Coordinator

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Rev. No.: 11

APPENDIX F

TYPICAL SUPPORT COMPANIES AND ORGANIZATIONS\*

<u>NAME</u>	<u>SERVICE</u>
Bartlett Nuclear, Inc	Health Physics support personnel
Teledyne Brown Engineering Environmental Services	Evaluation of environmental TLDs and samples
Duratek	Solidification of liquid waste, Shipping cask rental, waste burial, Tool and equipment decontamination
NUMANCO L.L.C. (NUMANCO)	Engineering support
Stone and Webster Engineering Corporation	A/E Engineering support
General Electric Company	Nuclear maintenance support
EA Engineering, Science And Technology	Evaluation of environmental samples
Framatome Technologies	Liquid and gas sample analysis

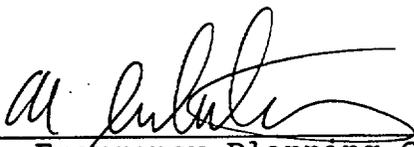
CONTROLLED COPY # 34

ENTERGY NUCLEAR NORTHEAST  
JAMES A. FITZPATRICK NUCLEAR POWER PLANT  
EMERGENCY PLAN VOLUME 1

PROCEDURE NO.: APPENDIX H

TITLE: PUBLIC INFORMATION PROGRAM\*

PORC REVIEW: Meeting No. N/A Date N/A

APPROVED BY:   
Emergency Planning Coordinator

EFFECTIVE DATE: April 27, 2001

PERIODIC REVIEW DUE DATE: April 2002

Rev. No. 25

APPENDIX H  
PUBLIC INFORMATION PROGRAM\*

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## APPENDIX H

### PUBLIC INFORMATION PROGRAM\*

#### 1. GENERAL

In order to maintain the awareness of the public and the new media, JAFNPP has instituted a program of public information prior to and during an emergency.

#### 2. PRE-EMERGENCY INFORMATION

JAFNPP in conjunction with the NMPNS Staff, the NYSEMO, and OCEMO has established a public information program for the permanent and transient population within the plume exposure EPZ. Information is provided in several forms: brochure, signs and telephone book insert.

##### a. Information Brochure

An information brochure containing radiological emergency response information and instructions has been prepared and mailed to all residents of the plume exposure EPZ. It presents the following information:

1. General Information
2. Radiological health
3. Public notification systems
4. Courses of action
5. General preparedness
6. Sheltering
7. General evacuation
8. Relocation to a public shelter or someone's home
9. Bus information (including pick-up points) for transit-dependent people
10. Obtaining special assistance
11. School evacuation
12. Maps describing ERPAs, evacuation routes, location of reception centers and bus pickup locations
13. Phone numbers for further information

These brochures shall be updated and mailed to all residences in the plume exposure EPZ annually. A sample of this information is included as Attachment 1.

b. Signs

In order to provide information to people visiting the area who may not have seen the public information brochure, emergency information signs have been prepared for posting in public places. Areas to be posted have been selected by the OCEMO. The signs present a summary of the key information contained in the brochure described above. These signs shall be updated annually. A sample of the signs is included as Figure 1 and 2.

c. Telephone Book Inserts

Emergency information is also provided to the resident and transient population through inserts in telephone books covering the plume exposure EPZ. The information provided is similar to that provided on the sign (Figure 1) and shall be updated annually, or as updated by the phone book publication. Inserts are provided in local telephone books.

3. PUBLIC INFORMATION DURING EMERGENCIES

During an emergency, the Spokesperson shall provide information to the news media and the public.

The designated location for the dissemination of coordinated information regarding JAFNPP, State and County emergency response to the news media is the Joint News Center located on Co. Rt. 176 in the Town of Volney. It shall be activated during an Alert, a Site Area Emergency and General Emergency and may be activated during an Unusual Event.

The Joint News Center provides working space and communications for State, County, Federal and company media relations staff and the news media. It is equipped for large briefings and has the capability for the video taping of those briefings.

The Joint News Center is also the location where rumor control is provided through off-air monitoring of radio and television broadcasts and the use of staffed telephones which the public can call. Response to media inquiries shall be handled through telephones at the Joint News Center.

4. FIGURES, FORMS AND ATTACHMENTS

Figure 1, Sample Information Sign

Attachment 1, Sample Oswego County Emergency Planning and You Booklet

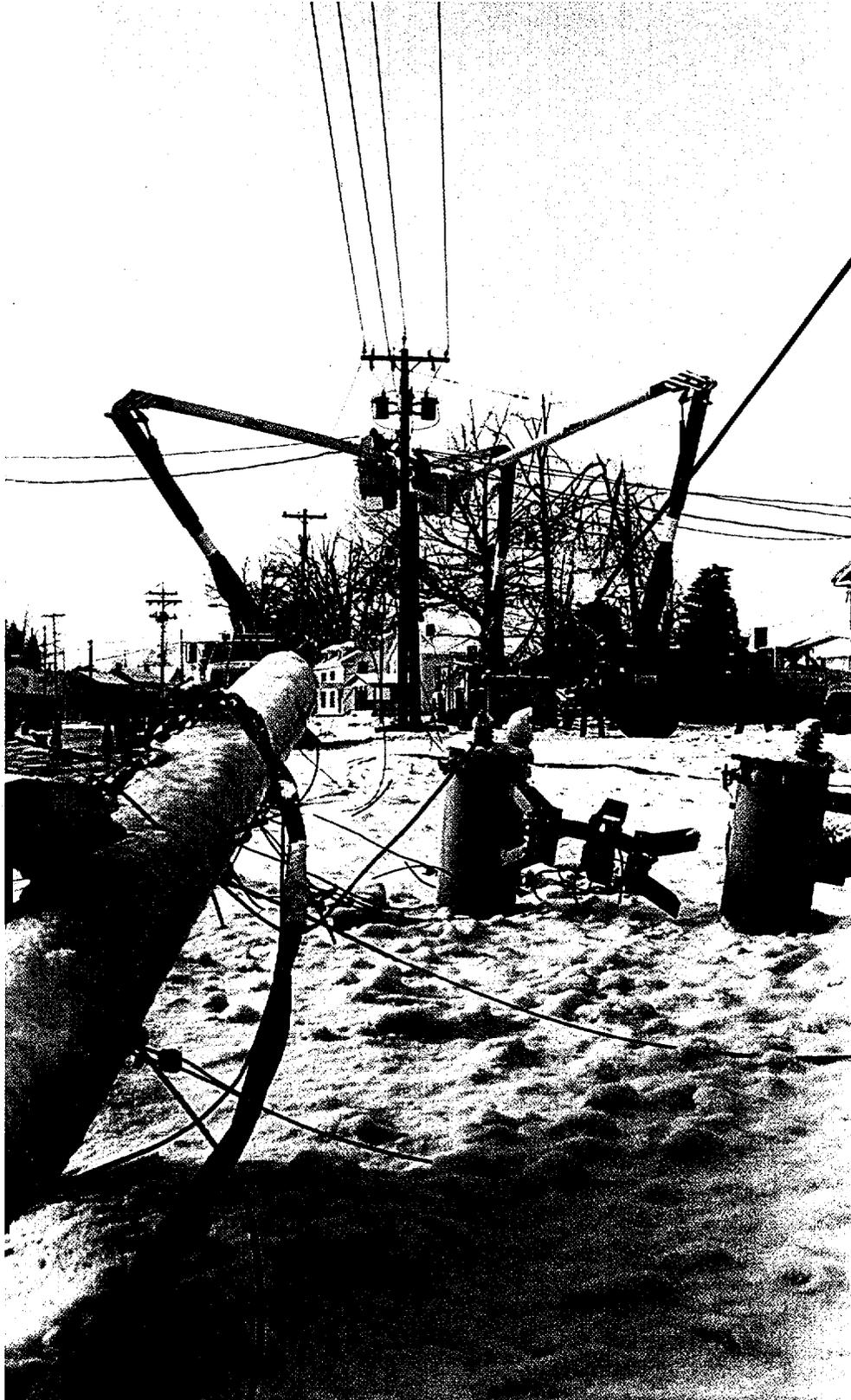


# OSWEGO COUNTY

## EMERGENCY PLANNING and YOU

Radiation,  
Hazardous Materials,  
Weather

2001



Oswego County Legislature  
Oswego County Emergency  
Management Office  
New York State Disaster  
Preparedness Commission  
Niagara Mohawk Power Corporation  
Entergy Nuclear Northeast



*James A. FitzPatrick  
Nuclear Power Plant*

**If you hear a three-to-five minute siren, you are being notified of an emergency in your area.**

## *Here's what to do*

- 1.** Turn on your radio. The Emergency Alert System (EAS) radio will have the most timely and accurate information concerning the emergency. The EAS stations are listed on page 5.
- 2.** If told by an EAS message to stay indoors, remain in your home or place of business. For details, turn to page 6.
- 3.** If you are told by an EAS message to leave the area, please turn to maps beginning on page A1 for detailed information.
- 4.** Please don't use the telephone except to call for help, so lines will not be overloaded.

***To report a police, fire, or  
medical emergency, dial 911***

**My Emergency Response  
Planning Area (ERPA) # \_\_\_\_\_**

*Nine Mile Point  
Units One and Two  
Nuclear Power Plants*

# *Contents*

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**Dear Neighbor of the  
Nine Mile Point Nuclear Power Plants:**

**T**his important booklet is being provided to you to help protect you and your family in the event of an emergency in the vicinity of the Nine-Mile Point and James A. FitzPatrick nuclear power plants. The information it contains is part of an emergency preparedness program coordinated by the Oswego County Emergency Management Office, the New York State Disaster Preparedness Commission, Entergy Nuclear, and Niagara Mohawk Power Corporation.

I strongly encourage you to take a few moments to review the contents of the booklet and to discuss it with your family. Remember to keep this booklet in a handy place for future reference (maybe with your phone book).

If you ever have any questions, thoughts, or suggestions about any part of the emergency plan, please call our friendly people at the Oswego County Emergency Management Office at 315/591-9150 or 1-800-962-2792.



Sincerely,

*Morris Sorbello*

Morris Sorbello  
Chairman  
Oswego County Legislature

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# *The need for emergency planning*

**E**ach year thousands of Americans are faced with disaster – from natural hazards such as floods, hurricanes, winter storms, and tornadoes, and from large incidents such as explosions, fires, and serious transportation accidents.

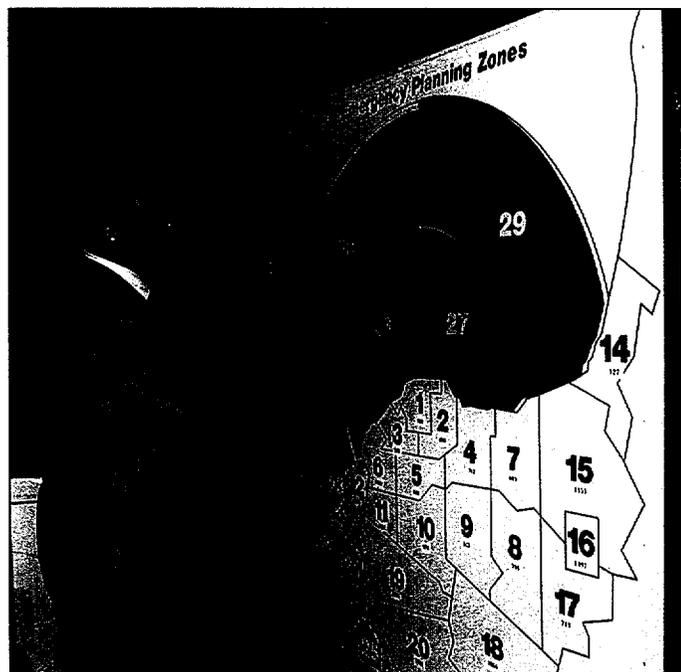
To protect the lives and property of the public at such times, government agencies, private companies, and non-profit organizations coordinate their emergency planning efforts. The Federal Emergency Management Agency (FEMA) oversees federal involvement in these plans. Similarly, the New York State Disaster Preparedness Commission as well as county emergency management agencies continually update and test their emergency plans.

The operators of the Nine Mile Point Units One and Two and the James A. FitzPatrick Nuclear Power Plant recognize that, like many other industrial facilities, these plants have the potential for releasing hazardous materials to the environment despite the stringent safety standards under which they operate. Niagara Mohawk Power Corporation and Entergy Nuclear Northeast work closely with federal, state, county, and local officials to improve plans for handling an emergency. Teams of personnel from Oswego County, New York State, Niagara Mohawk, and Entergy Nuclear Northeast have been trained continuously and tested on a regular basis by appropriate federal agencies since 1980 to ensure the health and safety of Oswego County residents in the event of an accident.

Each individual in the area should also be prepared for any type of emergency that may arise. This booklet summarizes the emergency plans in the event of a radiological incident at the Nine Mile Point Nuclear Power site and in other types of natural or man-made hazardous incidents as well.

*Please read this booklet and ask others in your family to read it, and put it in a place where you can find it quickly. Discuss it with your family to be sure that everyone understands it.*

We, the companies and agencies that develop these emergency plans, are prepared to put them to use. With the understanding and cooperation of you and your neighbors, we are confident that your health and safety will be protected in an emergency.



*Emergency Response Planning Areas are reviewed by a member of the emergency response team.*

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**Oswego County Legislature  
Oswego County Emergency Management Office  
New York State Disaster Preparedness Commission  
Niagara Mohawk Power Corporation  
Entergy Nuclear Northeast**

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# How would you know there is an emergency?

**E**mergency sirens and tone alert weather radios have been installed throughout the Emergency Planning Zone to alert you of any emergency situation that would require you to take action. Thirty-seven sirens, located in heavily populated areas, emit steady, loud, high-pitched signals for three to five minutes.

In less populated areas where the sirens may not be heard clearly, residents are provided with special "tone alert weather radios" that are tuned to a National Weather Service frequency. These weather radios will sound an alarm to warn residents of an emergency. The alarm is followed by a message indicating why the alarm sounded.

The emergency sirens are tested, one at a time, four times a year and a full scale, simultaneous activation of all 37 sirens takes place once each year. The tone-alert radios are tested each Wednesday, approximately at 11 am to noon.

If you believe you live in an area where you cannot hear the sirens clearly, call the Oswego County Emergency Management Office at 1-800-962-2792. The office will determine if you are eligible to receive a tone-alert weather radio.

If you hear the sirens for an extended period of time—about three minutes—or if you hear a message on your tone alert radios that tells you there is an emergency at one of the nuclear power plants, you should do one thing: **turn on your commercial AM FM radio or television to an Emergency Alert System station.** The Emergency Alert System replaces the former Emergency Broadcast System.

*Emergency messages will be broadcast on the following primary EAS stations:*

*WSYR - AM 570 kHz, Syracuse  
WHEN - AM 620 kHz, Liverpool  
WYYY - FM 94.5 MHz, Syracuse  
WBBS - FM 104.7 MHz, Syracuse  
WWHT - FM 107.9 MHz, Liverpool  
WSTM - TV Channel 3, Syracuse*

*EAS messages are also expected to be broadcast on the following stations:*

*WZZZ - AM 1300 kHz, Fulton  
WNYO - FM 88.9 MHz, SUNY Oswego  
WRVO - FM 89.9 MHz, Oswego  
WSCP - AM 1070, Pulaski  
WSCP - FM 101.7 MHz, Pulaski  
WTVH - TV Channel 5, Syracuse  
WIXT - TV Channel 9, East Syracuse  
WNYS - TV Channel 43, Syracuse  
WSYT - TV Channel 68, Syracuse*

You should stay tuned to these stations and follow their directions carefully until they announce that the emergency has ended.

Emergency Alert System messages will originate with state and county officials. You should take only the actions advised by these officials and broadcast on the EAS stations. For visitors and those not familiar with the area, information on what to do in an emergency has been posted in parks and other public places.

Boaters and people fishing on the Oswego River and Lake Ontario will be notified either by the U.S. Coast Guard or by the Oswego County Sheriff Department.

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## Siren Test Schedule 2001

<b>May 7-11</b>	<b>4:00 p.m. - 8:00 p.m.</b>
<b>August 6-10</b>	<b>8:00 a.m. - 4:00 p.m.</b>
<b>November 5-9*</b>	<b>8:00 a.m. - 4:00 p.m.</b>
<b>February 5-8, 2002</b>	<b>8:00 a.m. - 4:00 p.m. Tentative</b>

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\* Full-scale activation and EAS test scheduled November 9

If you hear a steady, uninterrupted siren sounding for three to five minutes and there is **no** Emergency Alert System message on the radio or television, then there is **no** emergency at Nine Mile Point.

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# *What would you be asked to do?*

## **Staying Indoors**

If there is a chemical or radiological emergency, actions may be taken that would avoid the need for evacuation. A chemical or radiological release would be scattered into the air and become diluted as it moves with the wind.

In such an instance some residents may be advised to remain indoors, or to shelter.

If the emergency sirens and tone alert radios sound or emergency workers drive through your area broadcasting instructions, and the Emergency Alert System reports that your area should be **sheltered**, you should:

- Stay tuned to Emergency Alert System (EAS) stations.**
- Stay off the roads. Unless told to evacuate, you will be safer staying indoors.
- Not use the telephone, except in the case of a special emergency, to avoid overloading phone lines.

You may be asked to take the following actions:

- Keep your family and pets inside the house.
- Close all doors and windows.
- Turn off air conditioners and other ventilation systems.
- Extinguish fires in fireplaces, allow the smoke to escape through chimney and then close flues.

## **Away From Home**

If you are outside the affected area—at work or on an errand—do not enter it until you have heard that all is clear. The news media will notify you when the emergency has ended, and give you additional actions that you should take.



*Oswego Fire Department firefighters Greg and Robert Smith respond to a hazardous materials incident involving chlorine.*

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## Leaving The Area

**Y**our county and state health and emergency management officials may decide that you should leave your home temporarily because of the possibility of a prolonged chemical or radiological release.

If the emergency sirens and tone alert radios sound or emergency workers drive through your area broadcasting instructions, and the Emergency Alert System reports that your area should be **evacuated**, you should:

- Remain calm; you will have ample time to leave.
  - Ignore all rumors. Stay tuned to the Emergency Alert System stations for official reports.
  - Not use the telephone, except for a special emergency, to avoid overloading phone lines.
  - Gather up the items you would need for a three-day visit, including:
    - Blankets or sleeping bags for everyone in the family.
    - Prescription medication.
    - Changes of clothing for three days.
    - Personal items, like shaving kits, soap and cosmetics.
    - Formula and other needs of infants and children.
    - Checkbook, credit cards and important papers.
    - Food for any pet you take with you. (Only pets in carriers will be allowed on public transportation.)
    - A portable radio and extra batteries.
    - First aid kit.
    - Flashlight and extra batteries.
    - This booklet.
- Be sure to lock all windows and doors.
  - Offer a ride to a neighbor who may not have a car.
  - Close the windows and air vents of your car and do not operate the air conditioner or heater until you have left the emergency area.
  - Leave by the route designated on the map in this booklet.
  - If you need transportation, walk to the nearest emergency bus pickup point, as shown on the map at the end of this booklet.

You and your family might be advised to go directly to the Reception Center for registration and/or radiation monitoring.

The Reception Center for your area is the New York State Fairgrounds in Syracuse. There you would be assigned to a nearby temporary relocation shelter operated by the American Red Cross, if you cannot stay at the home of a friend or relative outside the 10-mile Emergency Planning Zone. The relocation shelters will be professionally staffed and will offer food, medical care and communications facilities. **No firearms or alcoholic beverages will be allowed.**

Families going to the home of a friend or relative outside the 10-mile emergency planning zone may use the Reception Center as a meeting point and message center.

Whether you are going to a friend's home or to the Reception Center, remain calm, drive carefully and leave the emergency area by the route designated on the map to prevent unnecessary traffic congestion.

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# *What plans have been made for...*

## **Children in School?**

**W**hile not all situations require action by children in school, there are some emergencies where one or more of the following actions would be taken:

- If county emergency officials decide that children would be safer going home immediately, your school's regular early dismissal plan would be used.
- If county emergency officials decide that it would be safer to remain indoors, students and school personnel will be sheltered in their school buildings until they can safely return home.
- If the emergency is one that requires evacuation, students and school personnel will be evacuated for their safety. Buses will take them to the Reception Center at the New York State Fairgrounds.

## **People In Special Facilities?**

Hospitals, nursing homes, day-care centers and group homes are all considered special facilities.

Special facilities in the emergency planning area have tone alert radios which will notify the person in charge if there is an emergency situation. The person in charge will be advised what to do. If advised that staying indoors is safer, the person in charge will see that people in these facilities remain sheltered until advised to do otherwise.

If advised to evacuate, the person in charge will use normal evacuation procedures. Residents will be sent to the Reception Center or health care facilities outside the emergency planning area.

## **People With Disabilities?**

Special provisions have been made for people who may not be able to leave their homes on their own because of physical disabilities, confinement or advanced age. If you have a physical disability, or know of people in the area unable to fill out the card for themselves, please fill out the advance registration card at the end of this booklet now and mail it. Officials will use the cards to compile a list of area residents with disabilities, including blindness, hearing impairment, confinement to wheelchair, or other immobility. This will enable officials to make arrangements for people who need special attention to be picked up and transported to the Reception Center in the event of an evacuation, or to notify them to stay indoors if that is the recommended action. Sending in this card now is important so that any special needs can be met. When the card is received, they will be notified. **Even if a card was mailed last year, please mail a card this year to keep our records up to date.**

## **Transportation?**

If you do not have your own transportation, try to arrange a ride with a neighbor. Otherwise, you can ride one of the evacuation buses to the Reception Center at the New York State Fairgrounds.

Take your blanket and necessary personal items that you can carry to the nearest bus pickup point shown on the maps at the end of this booklet. Only pets in carriers will be allowed on public transportation.



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## *What should you do now?*

**T**o be sure that your family is fully prepared for any type of emergency, you should:

- Have members of your family read this booklet.
  - Discuss it with your family to be sure that everyone understands it.
  - Agree upon a destination if you should have to leave home. Select a friend or relative outside the 10-mile emergency planning zone shown on the map in this booklet, and try to arrange for your family to meet there in the event of an emergency.
  - Mail the enclosed card if you would need special attention during an emergency because of a physical disability, advanced age, or other special considerations. Also, send in the card if you know of others in your neighborhood who would need such attention.
- For all types of emergencies, be sure that you keep on hand a portable radio with extra batteries, a flashlight, a first aid kit, medicines needed by your family, a list of important papers and other items you should take with you. The most important items are water (in plastic jugs or other closed containers) and food (in cans or sealed packages) which require no refrigeration or cooking.
  - Put this booklet in a place where you can find it easily.

**Call the Oswego County Emergency Management Office at 1-800-962-2792 if you have any questions about these emergency plans. Do not call this number during an emergency.**

**During an emergency, the news media will provide you with a telephone number which you may call to verify conflicting reports.**

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# *Specific emergency information*

## **Radiological Emergencies**

**T**he principal health hazard of a nuclear plant is the possibility of radioactive materials being released to the environment. A major release is unlikely because nuclear plants are built with a variety of safety features and are surrounded by a massive concrete and steel containment building, which exists for the single purpose of holding radioactive material inside. These barriers are designed to prevent the release of radioactive materials even in the event of an accident.

A nuclear plant cannot explode like an atomic bomb. The kind of uranium used for fuel makes a nuclear explosion physically impossible.

Occasionally, nuclear power plants do have malfunctions. A problem with the pumps, valves, or pipes inside the plant can cause it to stop operating until the equipment is repaired. At times, a malfunction results in a leak of radioactive materials inside the containment building. The Nine Mile Point One, Nine Mile Point Two and the FitzPatrick Plants have never had a release of radiation that would require the public to take protective action. Nevertheless, as one more added precaution, plans have been developed as required by federal rules to protect the public, particularly people who live or work within 10 miles of the plants, in case radioactive materials were released.

In most cases, malfunctions would allow hours or even days before they resulted in a significant release of radiation, so the public would generally be notified well in advance of a health threat. Nearby residents may be advised to stay indoors temporarily. There is, however, a possibility that they may be advised to leave their homes until a potential danger has ended. In either event, your cooperation would be important.

More information on the nature and effects of radiation is included on pages 12 and 13.

## **Hazardous Materials**

**A** variety of chemicals and hazardous materials that may be dangerous is used by Oswego County industries and carried to facilities by trucks and trains. As soon as these materials are used and properly contained, they are no danger to the general public. However, because these materials may be poisonous, flammable, or explosive, an accident may make it necessary for the public to be protected. Local, state, and federal officials have developed plans for emergency responses to these types of accidents.

Facilities are required by law to provide information on the presence of hazardous chemicals and to assist communities in planning for local emergencies. Locally, the Oswego County Local Emergency Planning Committee works closely with the industries to prepare for and protect the public in hazardous-materials accidents.

Emergency responders are trained to recognize such incidents, and hazardous-materials teams are trained to respond. Toxic materials such as chlorine, pesticides, or ammonia are poisonous and can be harmful if inhaled, swallowed, or even absorbed through the skin. Flammable liquids and gases can explode. Chemicals may combine with other materials and explode or may produce poisonous fumes or gases if they are not handled properly.

Officials may find it necessary to keep people away from the accident and control traffic on area roads. Because gases, fumes, or smoke are carried by the wind, it may be necessary to protect people in the downwind direction. Officials may call for evacuation of downwind areas or sheltering inside a building and limiting the ways outside air can get in.

In any situation involving hazardous materials:

- Stay away from the scene of the incident.
- Be careful not to touch or walk through any spilled material.
- Avoid breathing fumes, smoke or vapors, even if they do not have an odor.
- As in all emergencies, follow the instructions of local officials, and listen to Emergency Alert System announcements for the latest information.

## Weather Emergencies

**O**swego County can be affected by a wide variety of weather emergencies. Knowing what can occur and how to protect yourself before the emergency happens is your best protection.

### Winter storms

Winter in Oswego County can mean difficult driving conditions, reduced visibility, severe cold, ice storms, heavy snow storms, and storms with strong wind. Most deaths are due to traffic accidents on icy roads, heart attacks while shoveling snow, or hypothermia.

- If you're caught outside in a winter storm, find shelter, try to stay dry, and cover all exposed parts of the body.
- If you're stranded on the road, stay in your vehicle. Run the motor about 10 minutes each hour, and open the window a crack for fresh air and to avoid carbon monoxide poisoning.
- If you're stranded in a building, stay inside. Use fire safeguards and proper ventilation when using wood stoves or fire places. Close off unneeded rooms. Wear layers of loose-fitting, lightweight, warm clothing and peel them off to avoid overheating.

### Severe thunderstorms

Despite their small size, all thunderstorms are dangerous. Lightning kills more people each year than tornadoes. Heavy rain can lead to flash flooding. Other dangers are strong winds, hail, and tornadoes.

Thunderstorms are likely to occur in the spring and summer months and during the afternoon and evening hours, but they can take place year-round at any time. When caught in a thunderstorm:

- If you hear thunder, go to safe shelter immediately!
- Move to a sturdy building or car.
- Avoid using the telephone or electrical appliances.
- If tornadoes are threatened, move to an underground shelter or inside room. Stay away from windows. If outside, lie flat in a ditch or depression.

### Floods and flash floods

Floods are the most common and widespread of all natural hazards. Some develop over several days, but flash floods can result in a few minutes. Most deaths



are due to flash floods, and often occur at night and when people become trapped in automobiles. If flooding or flash flooding is forecast, take these actions to protect yourself:

- Learn the safest route from your home or business to high, safe ground.
- Bring outside possessions inside or tie them down securely.
- If advised to evacuate, do so immediately.
- When traveling, follow recommended routes. Never attempt to drive through fast-moving flood water.
- Develop a plan that your family would follow in a disaster. Include meeting places and contact numbers.
- Put together a disaster supplies kit that includes essential items like a battery powered radio and flashlight, extra fresh batteries, non-perishable food, water, first aid kit, and other necessities. Emergency supplies should last a week.
- Post emergency numbers by each telephone.
- Install smoke detectors on each level of your home and make sure they're working.
- In an emergency, stay calm. Avoid using the telephone unless it is absolutely necessary. Stay away from affected areas. Don't pass rumors. Follow the instructions of local officials.
- Stay tuned to local media. Local television and radio stations and National Weather Service tone-alert weather radios will carry information on what is expected and what you should do. The Emergency Alert System may be used for official announcements by local governments. See page 5 for EAS listing.

For more information on weather emergencies, call the Oswego County Emergency Management Office at 1-800-962-2792.

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# *Radiation from nature and man*

*To help you understand radiation and its effects, here is a report by Roger Linnemann, M.D., Clinical Associate Professor of Radiology at the University of Pennsylvania School of Medicine and President of Radiation Management Corporation.*

## **Introduction To Radiation**

By Roger Linnemann, M.D.

**R**adiation has been a natural part of the environment since the beginning of time. We have constantly been exposed to radiation in the form of cosmic rays from the sun. In addition, radioactive elements, like radium and uranium, are scattered in small quantities throughout the world, creating an environment on earth that has always been radioactive: our soil, the wood and brick that we use to build our homes, the food we eat, the water we drink, and even the air we breathe contain materials that are naturally radioactive.

Natural radiation comes from a small percentage of atoms making up our world that contain extra energy. When they release that energy to stabilize themselves, it's in the form of tiny particles or rays that we call ionizing radiation. Through most of our history, we were unaware of this natural event that was taking place around us billions of times a second. But in the century since radiation was discovered, it has become one of the most widely studied and best understood processes in all of nature.

Radiation is easily detected and measured by instruments that can find even a few radioactive atoms among billions of non-radioactive ones. This means that we can know quite precisely the amounts of radiation that we are exposed to from nature and other sources like medical and dental X-rays.

A standard measurement of radiation effects is called the "rem." Since most exposures result in only small fractions of a rem, they are often described in terms of "millirem"—or one-thousandth of a rem.

## **Your Exposure Levels**

How many millirem are you now receiving? It depends on several factors—your diet, the building materials of your home and workplace, the amount of medical X-rays you receive, even the elevation of your home, because at higher altitudes you receive more cosmic rays.

According to a report by the National Council on Radiation Protection (NCRP), the average annual exposure to individuals in the United States population from natural and man-made sources of radiation is about 360 millirem a year, or about one millirem per day.

A typical American each year receives about 200 millirem to the lining of the lung from radon gases in the soil and air; 100 millirem from other radioactivity in the air we breathe, the water and food we consume, and the soil and building materials of our homes and offices.

In addition, the average American receives about 50 millirem per year from radiation procedures in medicine and dentistry. A typical chest X-ray, for example, delivers about six millirem; a GI series about 245 millirem; and a Computerized Automated Tomography (CAT) scan about 1,500 millirem. From consumer products (airport X-rays, televisions, smoke detectors), the average American receives 10 millirem per year.

Some people receive more radiation. If you lived in Denver, for example, you would receive about 25 millirem more than if you lived at sea-level because the higher elevation would expose you to additional cosmic rays. If you make trips by airplane, you receive one to two additional millirem for each 2,500 miles you travel because of the higher altitudes at which planes fly.

If you live within 50 miles of a nuclear power plant, the additional average annual exposure is less than 0.01 millirem. This is 100 times less than a person receives each year by watching the television.

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## Radiation And Nuclear Plants

The normal operation of a nuclear power plant is a minor factor in radiation exposure. Even the people who live nearest the plant receive at most only one to two millirem a year. This is even less than the radiation exposure from cosmic rays during one coast-to-coast airplane flight.

If a nuclear plant under normal operation represents such a minor radiation exposure, what about radiation released as a result of a reactor accident? With more than 100 nuclear-powered commercial electric plants operating around the country, there has never been an accident that has exposed a member of the public even to the level of a year's natural radiation. At Three Mile Island in 1979, the containment building was able to prevent a major release of radiation, as it is designed and built to do, even during a complicated accident. Radiation and health experts from the Environmental Protection Agency and other federal agencies calculated that the maximum amount of radiation that anyone theoretically could have received, even standing unsheltered in the highest radiation area outside the plant property for 10 days, was 70 millirem. They reported that the average exposure for the population within five miles of the plant was only about one millirem.

## Radiation Guidelines

Two organizations of prominent scientific experts on radiation and health—the International Commission

on Radiological Protection and the National Council on Radiation Protection Measurements—were established in the 1920's to recommend public health and safety standards for radiation exposure. After more than 80 years of experience and research in the use of radiation and the evaluation of its effect on humans and animals, they recommend that the exposure to workers in the industry be limited to a maximum of 5,000 millirems a year. For members of the public, the recommendation is a maximum of 500 millirem above natural and medical exposure. We know that radiation can be hazardous at much higher levels. At the levels of these standards, however, if there is any health effect it is so small that we cannot detect it. The NCRP considers exposures of one millirem per year a negligible risk level.

Scientists have been studying radiation for nearly a century, and all evidence of harmful health effects is based on exposures that are hundreds of times higher than the level that we receive from nature. Because of the care taken by the scientific and medical community, the average adult's exposure to medical and dental X-rays has been kept to the level of natural background radiation, and exposure from other man-made sources, like consumer products and nuclear power plants, has been kept to small fractions of radiation levels in nature.

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## Typical Radiation Sources

(Source: 1996 NUREG/BR-0239; BIER V,1990)

The following are typical sources of annual radiation exposures to most Americans:

Source	Millirem
<i>Cosmic rays from the sun</i>	<i>28</i>
<i>Natural radioactivity in water, food and air</i>	<i>40</i>
<i>Denver, Colorado</i>	<i>64</i>
<i>Radon gas</i>	<i>200</i>
<i>Medical and dental X-rays</i>	<i>54</i>
<i>Consumer products (smoke detectors, TV's etc.)</i>	<i>10</i>
<i>Fallout from nuclear weapons testing</i>	<i>1</i>
<i>Nuclear power plant routine operation</i>	<i>less than 1</i>
<i>Occupational exposure limits</i>	<i>500</i>

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## *Stay prepared*

**F**ederal, state, county, local agencies and the operators of the Nine Mile Point One and Two and FitzPatrick nuclear power plants place paramount importance on the protection of the public health and safety.

If a chemical or radiological release were to occur, the emergency plans developed cooperatively by these organizations are designed to keep any effects to a minimum. The plans are regularly updated, and at least once a year you will receive information about your role in emergency planning.

### **Thank you for your cooperation.**

For further information about emergency planning, radiation, nuclear power or the plants at Nine Mile Point, contact:

**Oswego County  
Emergency Management Office**  
Director  
200 North Second Street  
Fulton, New York 13069  
1-800-962-2792\*

**New York State  
Emergency Management Office**  
Public Information Officer  
Building No. 22—Suite 101  
1220 Washington Avenue  
Albany, New York 12226-2251  
1 (518) 485-6011

**Niagara Mohawk Power Corporation**  
Nuclear Communications and Public Affairs  
P.O. Box 81  
Lycoming, New York 13093  
349-7601

**Entergy Nuclear Northeast**  
James A. FitzPatrick Nuclear Power Plant  
P.O. Box 110  
Lycoming, New York 13093  
342-3840

*\*Do not use this number during an emergency. During an emergency, the news media will provide you with a telephone number you may call to verify conflicting reports.*

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## *Facts about Nine Mile Point and FitzPatrick plants*

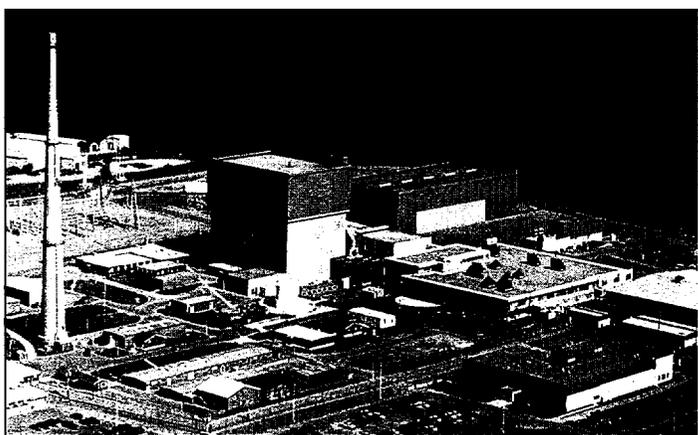
**N**uclear energy has been providing electricity to residents of New York State since 1962, when one of the nation's first nuclear electric power plants began operation. The three plants at Nine Mile Point provide a significant part of the power needed by upstate New Yorkers for jobs, schools and hospitals, communications and for use in homes.

By using nuclear fuel, the Nine Mile Point One and Two and FitzPatrick plants make unnecessary the burning of more than 15 million barrels of imported oil each year. By substituting nuclear energy for imported oil, the three plants save consumers hundred of millions of dollars a year in electric rates.

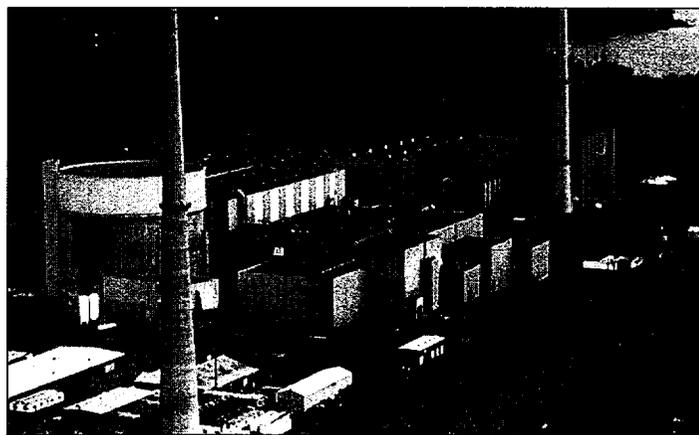
Over the years, the operation of the power plants at the Nine Mile Point site have not caused an injury to a member of the public. The health and safety record has been equally impressive for the other nuclear plants operating around the United States.

The reason for this record is that scientists and engineers in the United States have recognized the potential hazard of nuclear plants—the accidental release of radioactive materials—and designed the plants to prevent a large release from happening.

If you would like additional information on how the plants operate, please write to:



**Entergy Nuclear Northeast**  
James A. FitzPatrick Nuclear Power Plant  
P.O. Box 110  
Lycoming, New York 13093  
342-3840



**Niagara Mohawk Power Corporation**  
The Energy Center  
P.O. Box 81  
Lycoming, New York 13093  
342-4117

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# *Emergency Planning Zone, ERPAs, and evacuation notes*

The maps on the following pages provide a handy reference for important emergency planning information.

## **They contain:**

- Maps of the Emergency Planning Zone, Emergency Response Planning Areas, and bus pick-up points along the evacuation routes.
- A summary of emergency response information
- The location of the Reception Center.

## **What should you do now?**

- Have members of your family read this booklet, and discuss it with them to be sure everyone understands it.
- Mail the enclosed card if you need special attention during an emergency because of a physical disability, advanced age, or other special considerations. Also send in the card if you know of others in your neighborhood who would need such attention.
- Be ready for all types of emergencies. Keep on hand a portable radio with extra batteries, a flashlight, first aid kit, medicines needed by your family, a list of important papers, and other items you would need to take with you in case of evacuation. Keep on hand water stored in plastic jugs or other closed containers, and non-perishable food that requires no refrigeration or cooking.
- **Keep this planning booklet handy for easy reference in an emergency.**

**My Emergency Response Planning Area is:** ERPA

**In the event of an evacuation, my Evacuation Route is:** \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_



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## Your notification

**S**irens and tone alert weather radios have been installed to alert you of any emergency situation that would require you to take action. The sirens emit steady, loud, high-pitched signals. The tone alert radios are special radios provided to individuals who may be out of siren range.

If you hear the sirens for an extended period of time—about three minutes—or if you hear a message on your tone alert radio, it means one thing: You should turn on your AM/FM radio or television to an Emergency Alert System (EAS).

Emergency messages will be broadcast on:

WSYR-AM	570 kHz	Syracuse
WHEN-AM	620 kHz	Liverpool
WYYY-FM	94.5 MHz	Syracuse
WBBS-FM	104.7 MHz	Syracuse
WWHT-FM	107.9 MHz	Liverpool
WSTM-TV	Channel 3	Syracuse

EAS messages are also expected to be broadcast on the following stations:

WZZZ - AM	1300 kHz	Fulton
WNYO - FM	88.9 MHz	SUNY Oswego
WRVO - FM	89.9 MHz	Oswego
WSCP - AM	1070 kHz	Pulaski
WSCP - FM	101.7 MHz	Pulaski
WTVH - TV	Channel 5	Syracuse
WIXT - TV	Channel 9	East Syracuse
WNYS - TV	Channel 43	Syracuse
WSYT - TV	Channel 68	Syracuse

You should stay tuned to these stations and follow their directions carefully until they announce that the emergency has ended.

Emergency Alert System messages will originate with state and county officials. You should take only the actions advised by these officials and broadcast on the EAS stations.

For visitors or those not familiar with the area, information on what to do in an emergency has been posted in parks and other public places.

Boaters and people fishing on the Oswego River and Lake Ontario will be notified either by U.S. Coast Guard or by the Oswego County Sheriff's Department.

## Your actions

In order to give you the greatest degree of protection, instructions for your actions will be given by county or state officials based on careful considerations of all the factors. Instructions will refer to the Emergency Response Planning Areas (ERPAs) shown on the map on page A-1. Please be certain of the number assigned to your area because instructions could differ from one area to another. Turn to pages 6 and 7 for information on what to do if you are asked to stay indoors or to leave the area.

## Children in school

Special arrangements have been made for children in school. Do not drive to school to pick up your children. They will be released in time to come home before you leave, or they will be bussed directly from their school to the reception center at the New York State Fairgrounds. Specifics for those schools by county officials in response to the emergency will be made available to local media.

Schools in the Emergency Planning Zone include:

### **Mexico:**

- Mexico Academy and Central Schools
- Oswego County BOCES
- Day care and nursery schools in Mexico

### **Oswego:**

- Oswego City Schools
- Oswego Academy Alternate Education Program
- Parochial Schools in Oswego
- Oswego County BOCES
- Oswego Community Christian Schools
- Day care and nursery schools in Oswego, Minetto, and Scriba.

## Special assistance

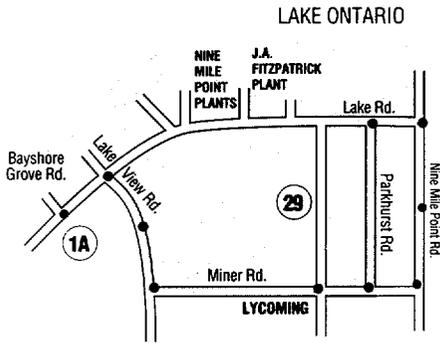
The advance registration card, attached to the back cover of the booklet, will be used to make arrangements for special assistance. If you have not sent in this card and require special assistance, call: **1-800-962-2792.\***

\*Do not use this number during an emergency. During an emergency, the news media will provide you with a telephone number you may call to verify conflicting reports.

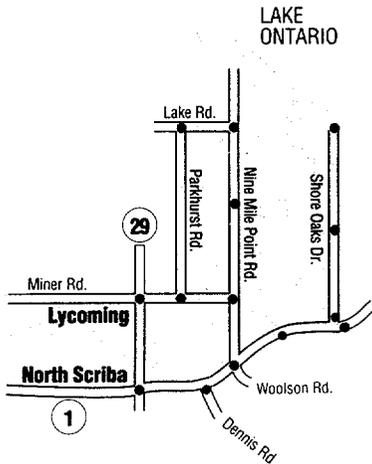
# Your bus pickup point

If you do not have any means of transportation, you can ride one of the evacuation buses to the Reception Center at the New York State Fairgrounds. Bus pickup points are indicated by dots on the following maps. You should walk to the nearest bus pickup point shown on the map of your Emergency Response Planning Area (ERPA).

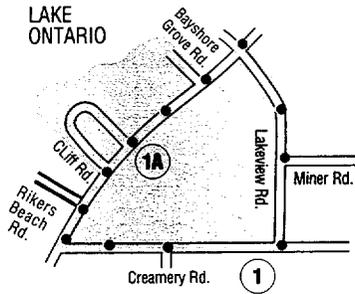
## ERPA 1



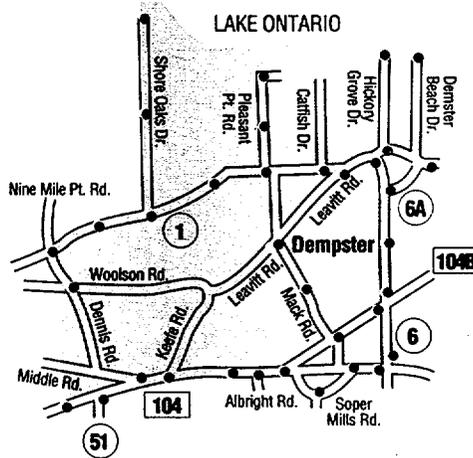
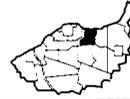
## ERPA 2



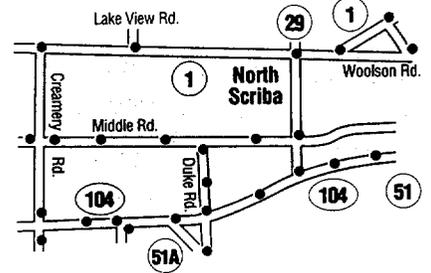
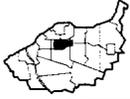
## ERPA 3



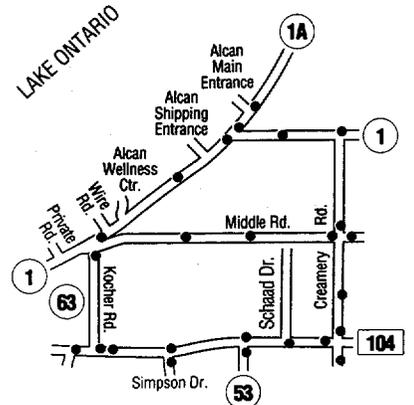
## ERPA 4



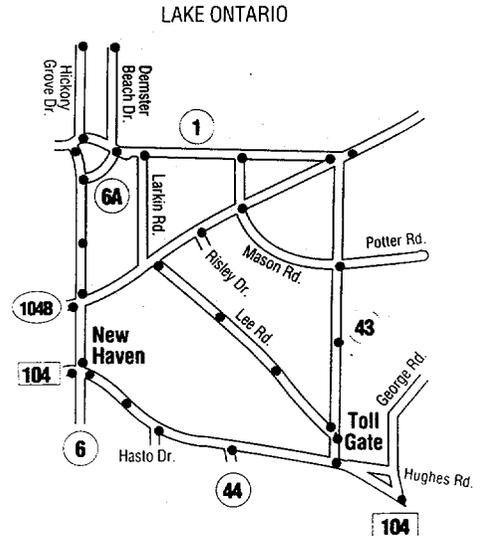
## ERPA 5



## ERPA 6

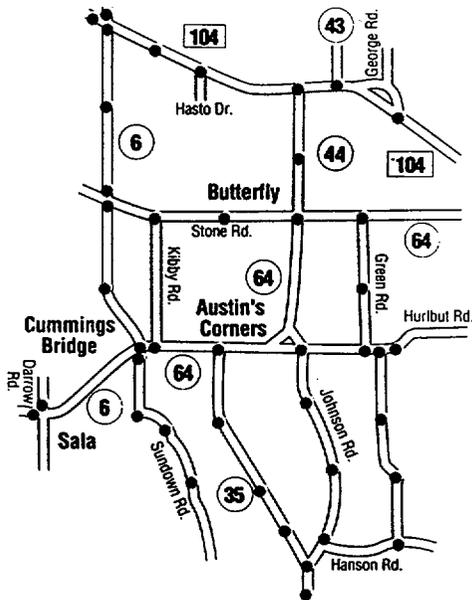
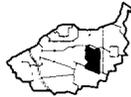


## ERPA 7

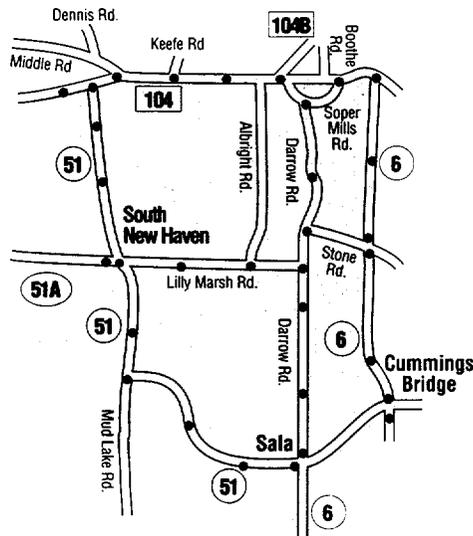


# Your bus pickup point

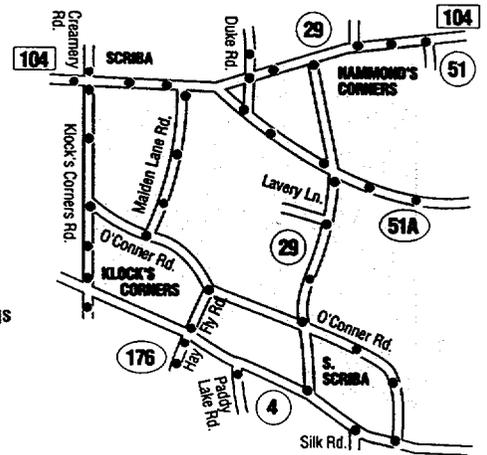
## ERPA 8



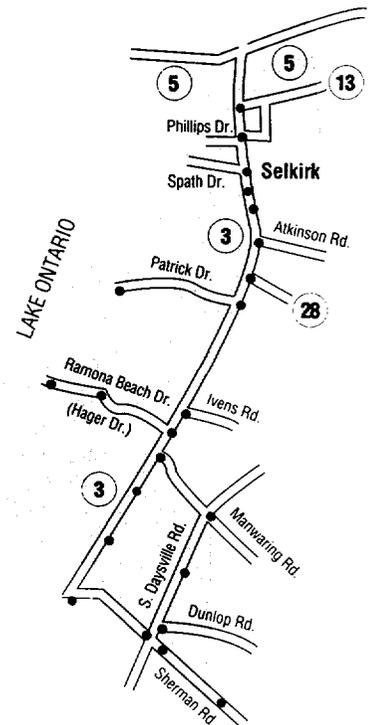
## ERPA 9



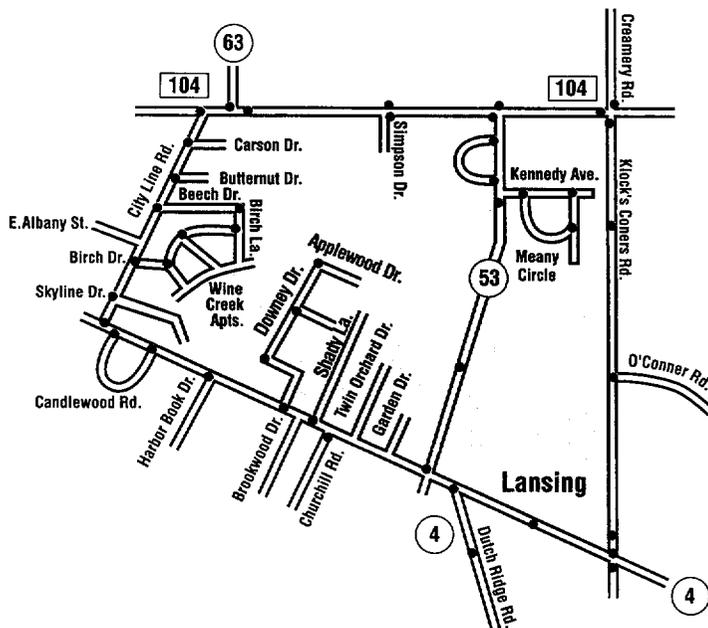
## ERPA 10



## ERPA 14



## ERPA 11

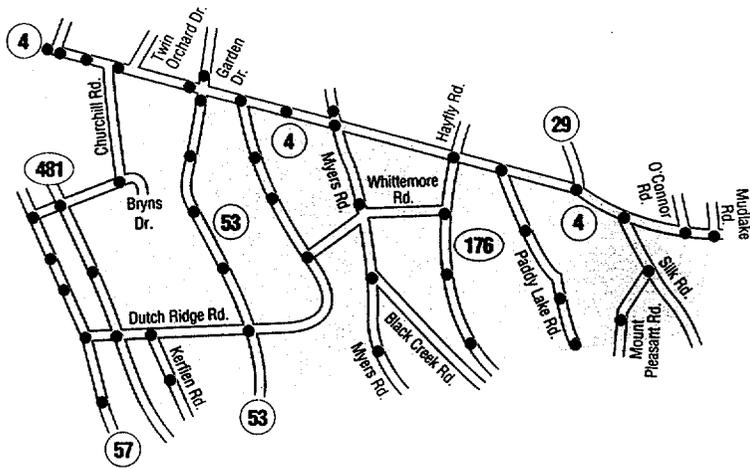




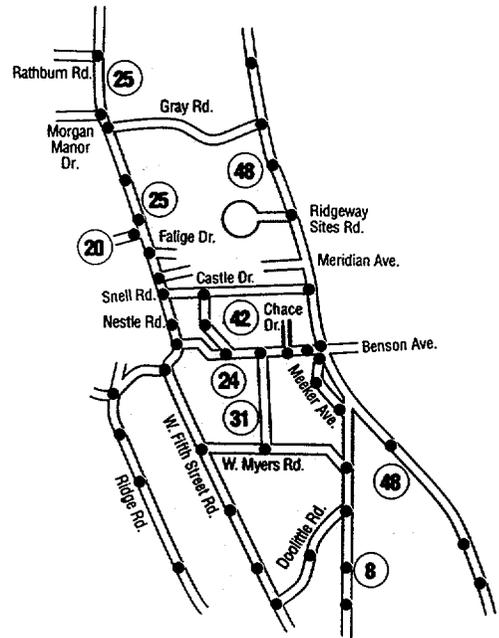


# Your bus pickup point

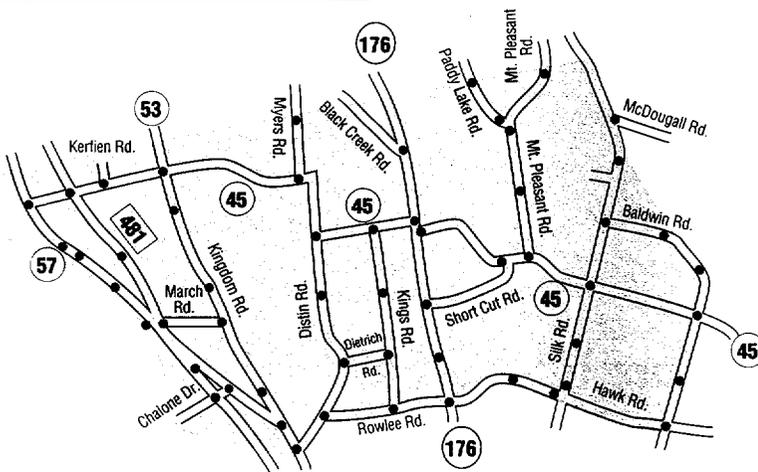
## ERPA 19



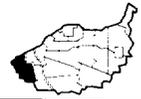
## ERPA 21



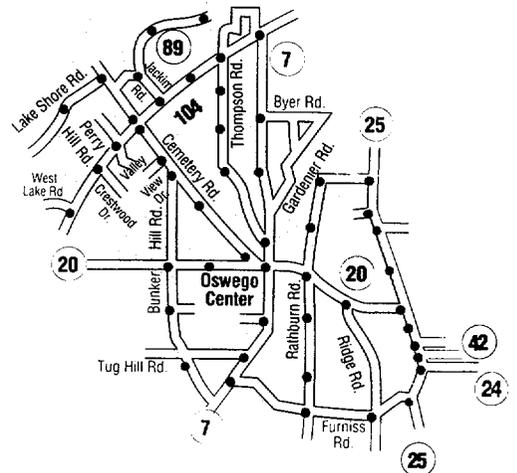
## ERPA 20



## ERPA 22



LAKE ONTARIO



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## *Your Reception Center*

The Reception Center for your area is the New York State Fairgrounds in Syracuse. The Reception Center will be operated by county and state health and social services personnel.

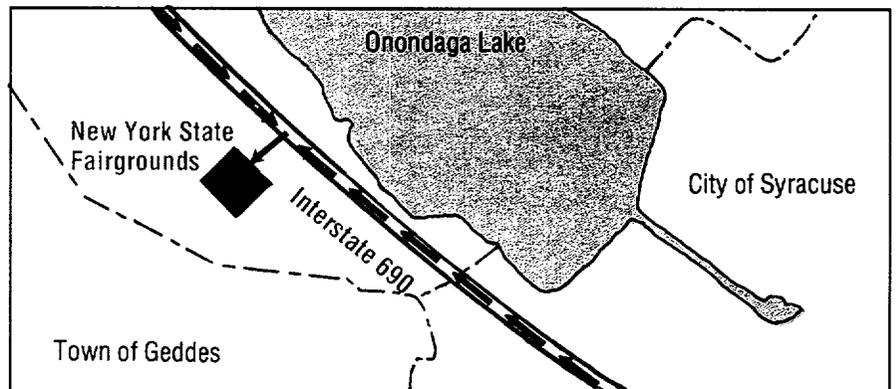
If you are advised to leave the area, please follow the directions given on the Emergency Alert System (EAS) stations. You and your family may be advised to go directly to the Reception Center for registration and/or radiation monitoring.

The location of the Reception Center is shown at the right. There, you would be assigned to a nearby temporary relocation shelter operated by the American Red Cross, if you cannot stay at the home of a friend or relative outside the 10-mile emergency planning zone. The relocation shelters will be professionally staffed and will offer food, medical care and communications facilities. No firearms or alcoholic beverages will be allowed.

If it becomes necessary to evacuate children directly from school, they will be bused to the Reception Center at the New York State Fairgrounds. All of the evacuation buses provided for those who require transportation will also go to this Reception Center.

## *Emergency Reception Center location*

New York State Fairgrounds, Syracuse, accessible from Route I-81 South to Hiawatha Blvd. Exit to 690W; Route 481 South to I-81 South to Hiawatha Blvd. Exit to 690W; Route 48 South to 690 East



**For More Information  
Call the Oswego County Emergency  
Management Office at:**

**1-800-962-2792**

**Do not use this number during an  
emergency. During an emergency, the  
news media will provide you with a  
telephone number which you may call  
to verify conflicting reports.**

**To People with Disabilities:**

In the event of a natural or man-made disaster, some residents may need special attention because of their physical impairments or transportation problems. Please fill out and mail the following card. *(Please print)*

Name \_\_\_\_\_ Age \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_  
City, Village, Town NY Zip Code

Description of Residence \_\_\_\_\_  
(Example-white house, 5th on left)

Telephone \_\_\_\_\_

Name and phone number of closest relative or person who should be contacted in case of an emergency:

Name Telephone

1. Are you deaf or hearing impaired?  Yes  No

2. Are you blind or sight impaired?  Yes  No

3. Do you need transportation?  Yes  No

4. If so, can you ride with a relative, neighbor or friend?  Yes  No

5. Can you get from your house to a bus stop unassisted?  Yes  No

Describe Disability(ies)  
\_\_\_\_\_  
\_\_\_\_\_

Do you use:

Cane(s)  Crutches

Guide Dog  Walker

Wheelchair  Other

Do you have any special equipment which is required for your care?  Yes  No

(Example: respirator, oxygen, hospital bed)

Please send additional cards for other disabled persons in my household.  Yes  No

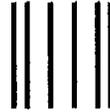
*Note: This information is kept at the Oswego County Emergency Management office only to be used in the event of an emergency or disaster.*

**Oswego County Emergency Management Office**  
200 North Second Street  
Fulton, New York 13069

PRESORTED STANDARD  
U.S. POSTAGE PAID  
SYRACUSE, N.Y.  
PERMIT NO. 3893

————— **Important Information** —————  
————— **Please Read and Save This Booklet** —————

**For More Information Call The Oswego County  
Emergency Management Office At:  
1-800-962-2792  
Do not use this number during an emergency.**



NO POSTAGE  
NECESSARY  
IF MAILED IN  
THE UNITED  
STATES

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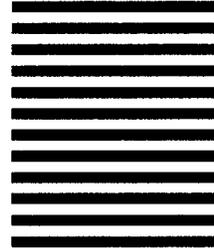
**BUSINESS REPLY MAIL**

FIRST CLASS PERMIT NO. 132 Fulton, NY 13069

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POSTAGE WILL BE PAID BY ADDRESSEE

Oswego County Emergency Management Office  
200 North Second Street  
Fulton, New York 13069



EMERGENCY PLAN IMPLEMENTING PROCEDURES/VOLUME 2  
UPDATE LIST

CONTROLLED COPY # 

Date of Issue: April 27, 2001

Procedure Number	Procedure Title	Revision Number	Date of Last Review	Use of Procedure
N/A	TABLE OF CONTENTS	REV. 19	02/98	N/A
IAP-1	EMERGENCY PLAN IMPLEMENTATION CHECKLIST	REV. 24	02/01	Continuous
IAP-2	CLASSIFICATION OF EMERGENCY CONDITIONS	REV. 20	12/98	Continuous
EAP-1.1	OFFSITE NOTIFICATIONS	REV. 44	01/01	Informational
EAP-2	PERSONNEL INJURY	REV. 24	01/01	Informational
EAP-3	FIRE	REV. 21	08/00	Informational
EAP-4	DOSE ASSESSMENT CALCULATIONS	REV. 29	12/98	Reference
EAP-4.1	RELEASE RATE DETERMINATION	REV. 12	12/00	Reference
EAP-5.1	DELETED (02/94)			
EAP-5.2	DELETED (04/91)			
EAP-5.3	ONSITE/OFFSITE DOWNWIND SURVEYS AND ENVIRONMENTAL MONITORING	REV. 7	07/00	Informational
EAP-6	IN-PLANT EMERGENCY SURVEY/ENTRY	REV. 15	02/98	Informational
EAP-7.1	DELETED (02/94)			
EAP-7.2	DELETED (02/94)			
EAP-8	PERSONNEL ACCOUNTABILITY	REV. 51	04/01	Reference
EAP-9	SEARCH AND RESCUE OPERATIONS	REV. 9	02/98	Informational
EAP-10	PROTECTED AREA EVACUATION	REV. 14	02/98	Informational
EAP-11	SITE EVACUATION	REV. 15	02/98	Informational
EAP-12	DOSE ESTIMATED FROM AN ACCIDENTAL RELEASE OF RADIOACTIVE MATERIAL TO LAKE ONTARIO	REV. 10	08/99	Reference
EAP-13	DAMAGE CONTROL	REV. 13	12/98	Informational
EAP-14.1	TECHNICAL SUPPORT CENTER ACTIVATION	REV. 21	08/00	Informational
EAP-14.2	EMERGENCY OPERATIONS FACILITY ACTIVATION	REV. 19	07/00	Informational
EAP-14.5	OPERATIONAL SUPPORT CENTER ACTIVATION AND OPERATION	REV. 14	03/00	Informational

EMERGENCY PLAN IMPLEMENTING PROCEDURES/VOLUME 2  
UPDATE LIST

Date of Issue: April 27, 2001

Procedure Number	Procedure Title	Revision Number	Date of Last Review	Use of Procedure
EAP-14.6	HABITABILITY OF THE EMERGENCY FACILITIES	REV. 14	10/98	Informational
EAP-15	EMERGENCY RADIATION EXPOSURE CRITERIA AND CONTROL	REV. 10	02/00	Informational
EAP-16	PUBLIC INFORMATION PROCEDURE	REV. 6	02/98	Informational
EAP-17	EMERGENCY ORGANIZATION STAFFING	REV. 94	04/01	Informational
EAP-18	DELETED (12/93)			
EAP-19	EMERGENCY USE OF POTASSIUM IODINE (KI)	REV. 21	04/01	Informational
EAP-20	POST ACCIDENT SAMPLE, OFFSITE SHIPMENT AND ANALYSIS	REV. 8	02/98	Reference
EAP-21	DELETED (12/85)			
EAP-22	DELETED (02/98)			
EAP-23	EMERGENCY ACCESS CONTROL	REV. 10	02/98	Informational
EAP-24	EOF VEHICLE AND PERSONNEL DECONTAMINATION	REV. 8	02/98	Informational
EAP-25	DELETED (02/94)			

ENTERGY NUCLEAR NORTHEAST  
JAMES A. FITZPATRICK NUCLEAR POWER PLANT  
EMERGENCY PLAN IMPLEMENTING PROCEDURE

EMERGENCY USE OF POTASSIUM IODINE (KI) \*  
EAP-19  
REVISION 21

REVIEWED BY: PLANT OPERATING REVIEW COMMITTEE  
MEETING NO. \_\_\_\_\_ N/A \_\_\_\_\_

DATE: \_\_\_\_\_ N/A \_\_\_\_\_

APPROVED BY: *[Signature]*  
RESPONSIBLE PROCEDURE OWNER

DATE: 4/24/2001

EFFECTIVE DATE: April 27, 2001

FIRST ISSUE

FULL REVISION

LIMITED REVISION

*****	*****
* INFORMATIONAL USE *	* * TSR *
*****	*****
* ADMINISTRATIVE *	
*****	
	CONTROLLED COPY # <u>351</u>

PERIODIC REVIEW DUE DATE: April 2006

REVISION SUMMARY SHEET

REV. NO.

- 21
  - The company name on the coversheet has been changed due to a recent sale of.
  - In Section 1.0, the reference to New York Power Authority employees has been changed to James A. Fitzpatrick employees due to the sale.
  - References to NYPA in Sections 4.1.2 and 4.2.3 have been changed to JAF.
  - In Section 4.2.4 the references to "The Authority's" were changed to "the site's".
  - Updated attachment 2 - added/omitted personnel with an allergy to KI.
- 20
  - Updated attachment 2 - added/omitted personnel with an allergy to KI.
- 19
  - Attachment 2, page 9, was updated to add a new person.

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## 1.0 PURPOSE

The purpose of this procedure is to provide instructions for the use of thyroid blocking Potassium Iodide (KI), for James A. FitzPatrick employees only. (The purpose of using Potassium Iodide (KI) is to saturate the thyroid gland with stable iodine so the radioactive iodine will be "blocked". Studies indicate that iodine has approximately a six hour half time of uptake, so the stable KI can be given up to several hours after exposure to radioiodine and it will still have some thyroid blocking effect. Preferably, KI should be given prior to exposure to radioiodine. The National Council on Radiation Protection and Measurements (NCRP) in Report No. 55 recommends that "individuals who have had an accidental occupational exposure to radioiodine, regardless of the route of exposure, should immediately be given Potassium Iodide and this administration should be continued for 7 to 14 days.)

## 2.0 REFERENCES

### 2.1 Performance References

- 2.1.1 EAP-1.1, OFFSITE NOTIFICATIONS\*
- 2.1.2 EAP-4, DOSE ASSESSMENT CALCULATIONS\*
- 2.1.3 EAP-5.3, ONSITE/OFFSITE DOWNWIND SURVEYS AND ENVIRONMENTAL MONITORING\*
- 2.1.4 EAP-6, IN-PLANT EMERGENCY SURVEY/ENTRY\*
- 2.1.5 RTP-74, MS-2 MINI SCALER OPERATION AND CALIBRATION\*
- 2.1.6 RP-RESP-502, RADeCO H-809V1 HIGH VOLUME AIR SAMPLER OPERATION AND CALIBRATION\*
- 2.1.7 AM-03.04, RADIOIODINE CARTRIDGE ANALYSIS USING GAMMA SPECTROSCOPY

### 2.2 Developmental References

- 2.2.1 National Council on Radiation Protection and Measurements Report No. 55. PROTECTION OF THE THYROID GLAND IN THE EVENT OF RELEASES OF RADIOIODINE.

- 2.2.2 Manufacturer's (Wallace Laboratories) Recommendations on Use of Thyro-Block Tablets.
- 2.2.3 EAP-4, DOSE ASSESSMENT CALCULATIONS\*
- 2.2.4 EAP-5.3, ONSITE/OFFSITE DOWNWIND SURVEYS AND ENVIRONMENTAL MONITORING\*
- 2.2.5 EAP-6, IN-PLANT EMERGENCY SURVEY/ENTRY\*
- 2.2.6 RTP-74, MS-2 MINI SCALER OPERATION AND CALIBRATION\*
- 2.2.7 RP-RESP-502, RADeCO H-809V1 HIGH VOLUME AIR SAMPLER OPERATION AND CALIBRATION\*
- 2.2.8 AM-03.04, RADIOIODINE CARTRIDGE ANALYSIS USING GAMMA SPECTROSCOPY
- 2.2.9 EPA-400-R-92-001, MANUAL OF PROTECTIVE ACTION GUIDES AND PROTECTIVE ACTIONS FOR NUCLEAR INCIDENTS

### 3.0 INITIATING EVENTS

- 3.1 Conditions indicate abnormal radiological conditions in the plant or environs.

### 4.0 PROCEDURE

The Emergency Director is the only individual authorized to implement this procedure.

#### 4.1 Emergency Director or Designee Shall:

- 4.1.1 Request the Radiological Support Coordinator (RSC) to determine the potential thyroid Committed Dose Equivalent (CDE) to JAF emergency workers.

- 4.1.2 If the RSC determines that the potential for thyroid dose exists, request that isotopic monitoring be conducted. If the isotopic monitoring results indicate potential, estimated, or actual thyroid CDE less than 25 rem, continue monitoring. If the isotopic monitoring results indicate potential, estimated or actual thyroid CDE of 25 rem or greater, administer KI for voluntary use to those JAF emergency workers likely to receive the radiological dose. The RSC shall refer to Attachment 2 of this procedure prior to administering KI for voluntary use by JAF personnel. Attachment 2 is a memo which lists JAF employees with known allergies to potassium iodide.

Employees with known allergies shall not use KI. All employees shall be made aware of possible side effects before they decide to use KI.

**4.2 Radiological Support Coordinator or Designee Shall:**

- 4.2.1 Monitor the radiological conditions in the emergency facilities or any work areas containing personnel. This shall be done in accordance with the following procedures: EAP-6, EAP-4, EAP-5.3, RP-RESP-502, RTP-74 and AM-03.04.
- 4.2.2 Determine the potential thyroid CDE from the radioisotope I-131 for all risk personnel.
- 4.2.3 If the monitoring determines that the potential for thyroid dose exists, request that isotopic monitoring be conducted. If the isotopic monitoring results indicate potential, estimated, or actual thyroid CDE less than 25 rem, continue monitoring. If the isotopic monitoring results indicate potential, estimated or actual thyroid CDE of 25 rem or greater, recommend to the Emergency Director (ED) administration of KI for voluntary use to those JAF emergency workers likely to receive the radiological dose. Refer to Attachment 2 for the list of JAF employees with known allergies to KI. Attachment 3 provides guidance on levels of I-131 concentration and stay times that may result in a 25 rem thyroid CDE. These I-131 concentrations and stay times establish the threshold level for use of KI. The

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conversion factors used in deriving the concentrations are listed in Attachment 3.

- 4.2.4 If instructed to administer Potassium Iodide (KI) by the Emergency Director to the risk personnel, administer in a dosage of 130 mg (one tablet) orally, initially, followed by 130 mg once daily. Administration of KI should not be for less than 3 days and usually not for more than 10 days. The site's designated physician or medical consultant may change this total dose requirement based on monitoring measurements, exposure potentials, etc. (The site's designated medical consultant's phone number is included in EAP-1.1.)
- 4.2.5 Potassium Iodide (KI) should be administered no later than three hours after exposure.
- 4.2.6 Potassium Iodide (KI) is located in the plant and Emergency Operations Facility emergency kits.
- 4.2.7 Consideration should be given to issuance of Potassium Iodide (KI) to technicians performing field survey work if potential thyroid CDE exceeds previously established parameters.

#### 4.3 Warning and Side Effects

##### 4.3.1 Warning

Potassium Iodide should not be used by people allergic to iodide. Keep out of the reach of children. In case of overdose or allergic reaction, contact a physician or the public health authority.

##### 4.3.2 Side Effects

A. Usually, side effects of Potassium Iodide happen when people take higher doses for a long time. You should be careful not to take more than the recommended dose or take it for longer than you are told. Side effects are unlikely because of the low dose and the short time KI will be taken.

- B. Possible side effects include skin rashes, swelling of the salivary glands, and "iodism" (metallic taste, burning mouth and throat, sore teeth and gums, symptoms of a head cold, and sometimes stomach upset and diarrhea).
- C. A few people have an allergic reaction with more serious symptoms. These could be fever and joint pains, or swelling of parts of the face and body and at times severe shortness of breath requiring immediate medical attention.
- D. Taking iodide may rarely cause over-activity of the thyroid gland, under-activity of the thyroid gland, or enlargement of the thyroid gland (goiter).

#### 5.0 ATTACHMENTS

1. PATIENT PACKAGE INSERT FOR "THYRO-BLOCK" POTASSIUM IODIDE
2. MEMO RE: POTASSIUM IODIDE ALLERGY
3. STAY TIME VS I-131 CONCENTRATIONS RESULTING IN 25 REM CDE THYROID

## ATTACHMENT 1

Page 1 of 1

PATIENT PACKAGE INSERT FOR THYRO-BLOCK POTASSIUM IODINE

Patient Package Insert For

**THYRO-BLOCK®**  
TABLETS  
(POTASSIUM IODIDE TABLETS, USP)  
(pronounced *pot-ASS-ee-um EYE-oh-dyed*)  
(abbreviated KI)

TAKE POTASSIUM IODIDE ONLY WHEN PUBLIC HEALTH OFFICIALS TELL YOU IN A RADIATION EMERGENCY. RADIOACTIVE IODINE COULD BE RELEASED INTO THE AIR. POTASSIUM IODIDE (A FORM OF IODINE) CAN HELP PROTECT YOU.

IF YOU ARE TOLD TO TAKE THIS MEDICINE, TAKE IT ONE TIME EVERY 24 HOURS. DO NOT TAKE IT MORE OFTEN. MORE WILL NOT HELP YOU AND MAY INCREASE THE RISK OF SIDE EFFECTS. *DO NOT TAKE THIS DRUG IF YOU KNOW YOU ARE ALLERGIC TO IODIDE.* (SEE SIDE EFFECTS BELOW.)

**INDICATIONS**

THYROID BLOCKING IN A RADIATION EMERGENCY ONLY.

**DIRECTIONS FOR USE**

Use only as directed by State or local public health authorities in the event of a radiation emergency.

**DOSE**

Tablets: **ADULTS AND CHILDREN 1 YEAR OF AGE OR OLDER:** One (1) tablet once a day. Crush for small children.  
**BABIES UNDER 1 YEAR OF AGE:** One-half (1/2) tablet once a day. Crush first.

Take for 10 days unless directed otherwise by State or local public health authorities.

Store at controlled room temperature between 15° and 30°C (59° to 86°F). Keep container tightly closed and protect from light.

**WARNING**

*Potassium iodide should not be used by people allergic to iodide.* Keep out of the reach of children. In case of overdose or allergic reaction, contact a physician or the public health authority.

**DESCRIPTION**

Each white, round, scored, monogrammed THYRO-BLOCK® TABLET contains 130 mg of potassium iodide. Other ingredients: magnesium stearate, microcrystalline cellulose, silica gel, and sodium thiosulfate.

**HOW POTASSIUM IODIDE WORKS**

Certain forms of iodine help your thyroid gland work right. Most people get the iodine they need from foods, like iodized salt or fish. The thyroid can store or hold only a certain amount of iodine.

In a radiation emergency, radioactive iodine may be released in the air. This material may be breathed or swallowed. It may enter the thyroid gland and damage it. The damage would probably not show itself for years. Children are most likely to have thyroid damage.

If you take potassium iodide, it will fill up your thyroid gland. This reduces the chance that harmful radioactive iodine will enter the thyroid gland.

**WHO SHOULD NOT TAKE POTASSIUM IODIDE**

The only people who should not take potassium iodide are people who know they are allergic to iodide. You may take potassium iodide even if you are taking medicines for a thyroid problem (for example, a thyroid hormone or antithyroid drug). Pregnant and nursing women and babies and children may also take this drug.

**HOW AND WHEN TO TAKE POTASSIUM IODIDE**

Potassium iodide should be taken as soon as possible after public health officials tell you. You should take one dose every 24 hours. More will not help you because the thyroid can hold only a limited amount of iodine. Larger doses will increase the risk of side effects. You will probably be told not to take the drug for more than 10 days.

**SIDE EFFECTS**

Usually, side effects of potassium iodide happen when people take higher doses for a long time. You should be careful not to take more than the recommended dose or take it for longer than you are told. Side effects are unlikely because of the low dose and the short time you will be taking the drug.

Possible side effects include skin rashes, swelling of the salivary glands, and iodism (metallic taste, burning mouth and throat, sore teeth and gums, symptoms of a head cold, and sometimes stomach upset and diarrhea).

A few people have an allergic reaction with more serious symptoms. These could be fever and joint pains, or swelling of parts of the face and body and at times severe shortness of breath requiring immediate medical attention.

Taking iodide may rarely cause overactivity of the thyroid gland, underactivity of the thyroid gland, or enlargement of the thyroid gland (goiter).

**WHAT TO DO IF SIDE EFFECTS OCCUR**

If the side effects are severe or if you have an allergic reaction, stop taking potassium iodide. Then, if possible, call a doctor or public health authority for instructions.

**HOW SUPPLIED**

THYRO-BLOCK® TABLETS (Potassium Iodide Tablets, USP) are white, round tablets, one side scored, other side debossed 472 WALLACE, each containing 130 mg potassium iodide. Available in bottles of 14 tablets (NDC 0037-0472-20).

**WALLACE LABORATORIES**  
Division of  
CARTER-WALLACE, INC.  
Cranbury, New Jersey 08512

IN-0472-03

Rev 5/94

ATTACHMENT 2

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MEMO RE: POTASSIUM IODINE ALLERGY



Interoffice  
Correspondence

March 2, 2001  
JSECOHN-01-013

MEMORANDUM TO: NICHOLAS AVRAKOTOS  
FROM: PAMELA D. STELL, RN  
SUBJECT: POTASSIUM IODIDE ALLERGY

The following is an updated listing of individuals allergic to Potassium Iodide.

1. Dominick Alscheimer
2. Robert F. Barnes
3. Joseph P. Colloca
4. Anthony J. DeSarro
5. Helen C. Feyh
6. Eric C. Gould
7. William P. MacDonald
8. Thomas R. Moskalyk
9. James D. Ratigan
10. Peter M. Reynolds
11. Paul W. Roman
12. Anne L. Stark
13. Pamela D. Stell
14. Paul S. Troia
15. Michael Warchol

*Pamela D. Stell RN OHN-A*  
PAMELA D. STELL, RN, OHN-A  
OCCUPATIONAL HEALTH NURSE ADMINISTRATOR

PDS:gmm

Cc: K. Szeluga  
J. Haley  
D. Caltabiano

## ATTACHMENT 3

Page 1 of 1

STAY TIME VS I-131 CONCENTRATION RESULTING IN 25 REM CDE THYROID

Given: DCF for I-131 =  $1.3E6$  rem per  $\mu\text{CiAc}m^3\text{Ah}$

DCF is in terms of committed dose equivalent (CDE) from  
EPA-400-R-92-100

In developing DCF, the adult lung class that resulted in  
the most restrictive value was selected.

The DCF is for dose due to inhalation only.

No credit is taken for radioactive decay.

<u>Stay Time (hrs)</u>	<u>I-131 Concentration <math>\mu\text{Ci}/\text{cm}^3</math></u>
8	2.44E-6
7	2.79E-6
6	3.25E-6
5	3.90E-6
4	4.88E-6
3	6.50E-6
2	9.75E-6
1	1.95E-5
0.75	2.60E-5
0.5	3.90E-5
0.25	7.80E-5

EMERGENCY PLAN IMPLEMENTING PROCEDURES/VOLUME 3  
UPDATE LIST

CONTROLLED COPY # 

Date of Issue: April 27, 2001

Procedure Number	Procedure Title	Revision Number	Date of Last Review	Use of Procedure
N/A	TABLE OF CONTENTS	REV. 23	12/98	N/A
EAP-26	PLANT DATA ACQUISITION SYSTEM ACCESS	REV. 11	02/98	Informational
EAP-27	ESTIMATION OF POPULATION DOSE WITHIN 10 MILE EMERGENCY PLANNING ZONE	REV. 9	02/98	Informational
EAP-28	EMERGENCY RESPONSE DATA SYSTEM (ERDS) ACTIVATION	REV. 6	07/00	Reference
EAP-29	EOF VENTILATION ISOLATION DURING AN EMERGENCY	REV. 5	02/98	Informational
EAP-30	EMERGENCY TERMINATION AND TRANSITION TO RECOVERY*	REV. 0	12/98	Informational
EAP-31	RECOVERY MANAGER*	REV. 0	12/98	Informational
EAP-32	RECOVERY SUPPORT GROUP*	REV. 5	01/01	Informational
EAP-33	DEVELOPMENT OF A RECOVERY ACTION PLAN*	REV. 0	12/98	Informational
EAP-34	ACCEPTANCE OF ENVIRONMENTAL SAMPLES AT THE EOF/EL DURING AN EMERGENCY	REV. 3	02/98	Informational
EAP-35	EOF TLD ISSUANCE DURING AN EMERGENCY	REV. 6	02/98	Informational
EAP-36	ENVIRONMENTAL LABORATORY USE DURING AN EMERGENCY	REV. 4	02/98	Informational
EAP-37	SECURITY OF THE EOF AND EL DURING DRILLS, EXERCISES AND ACTUAL EVENTS	REV. 5	02/98	Informational
EAP-39	DELETED (02/95)			
EAP-40	DELETED (02/98)			
EAP-41	DELETED (12/85)			
EAP-42	OBTAINING METEOROLOGICAL DATA	REV. 15	01/01	Informational
EAP-43	EMERGENCY FACILITIES LONG TERM STAFFING	REV. 52	04/01	Informational
EAP-44	CORE DAMAGE ESTIMATION	REV. 4	02/98	Informational
EAP-45	EMERGENCY RESPONSE DATA SYSTEM (ERDS CONFIGURATION CONTROL PROGRAM)	REV. 6	07/00	Informational
SAP-1	MAINTAINING EMERGENCY PREPAREDNESS	REV. 15	02/00	Informational
SAP-2	EMERGENCY EQUIPMENT INVENTORY	REV. 32	01/01	Reference
SAP-3	EMERGENCY COMMUNICATIONS TESTING	REV. 69	07/00	Reference

**EMERGENCY PLAN IMPLEMENTING PROCEDURES/VOLUME 3  
UPDATE LIST**

Date of Issue: April 27, 2001

<b>Procedure Number</b>	<b>Procedure Title</b>	<b>Revision Number</b>	<b>Date of Last Review</b>	<b>Use of Procedure</b>
SAP-4	NYS/OSWEGO COUNTY EMERGENCY PREPAREDNESS PHOTO IDENTIFICATION CARDS	REV. 8	03/00	Informational
SAP-5	DELETED (3/98)			
SAP-6	DRILL/EXERCISE CONDUCT	REV. 16	01/01	Informational
SAP-7	MONTHLY SURVEILLANCE PROCEDURE FOR ON-CALL EMPLOYEES	REV. 35	11/00	Informational
SAP-8	PROMPT NOTIFICATION SYSTEM FAILURE/SIREN SYSTEM FALSE ACTIVATION	REV. 11	01/01	Informational
SAP-9	DELETED (02/94)			
SAP-10	METEOROLOGICAL MONITORING SYSTEM SURVEILLANCE	REV. 9	07/00	Informational
SAP-11	EOF DOCUMENT CONTROL	REV. 10	08/00	Informational
SAP-13	EOF SECURITY AND FIRE ALARM SYSTEMS DURING NORMAL OPERATIONS	REV. 3	03/98	Informational
SAP-14	DELETED (02/95)			
SAP-15	DELETED (11/92)			
SAP-16	UTILIZING EPIC IDT TERMINALS FROM DESTINY SYSTEM	REV. 3	02/98	Informational
SAP-17	EMERGENCY RESPONSE DATA SYSTEM (ERDS) QUARTERLY TESTING	REV. 7	07/00	Continuous
SAP-19	SEVERE WEATHER	REV. 4	01/01	Informational
SAP-20	EMERGENCY PLAN ASSIGNMENTS	REV. 19	01/01	Informational
SAP-21	DELETED (04/01)			
SAP-22	EMERGENCY PLANNING PROGRAM SELF ASSESSMENT	REV. 1	10/98	Informational