Safety Planning Information for Neighbors of Millstone Power Station

SPANISH TRANSLATED GUIDEBOOKS AND SPECIAL NEEDS SURVEYS ARE AVAILABLE BY CALLING (800) 397-8876, or by contacting your Community’s Emergency Management Office.

PARA OBTENER LA VERSION ESPANOLA DE ESTA GUIA O LA ADJUNTA ENCUESTA PARA NECESIDADES ESPECIALES, llame (800) 397-8876, o contacte su Oficina de Manejo de Emergencias local.
Use this checklist to prepare in advance for any emergency situations:

- If you have special needs and need assistance, complete and return the confidential emergency “Special Needs” registration form mailed to you, or contact your community’s Emergency Management Director’s office (see “Additional Information” on page 29).
- Review this booklet carefully and keep it handy.
- Make sure everyone in your household knows what to do in an emergency, especially children.
- Keep important papers in a safe and handy place.
- Make sure your vehicle is ready to use, have an extra set of car keys and keep emergency supplies in your vehicle:
  - Flashlight and batteries
  - First aid kit
  - Safety flares
  - Fire extinguisher
  - Road maps
- Develop an emergency supply kit, including:
  - A three-day supply of water (1 gallon/person per day).
  - Battery-powered radio, cell phone, extra batteries.
  - Food for at least 3 days – canned/sealed packaged foods and juices that do not require refrigeration or cooking. Foods for infants and elderly.
  - Non-electric can opener, cooking tools and fuel, paper plates and plastic utensils.
  - Toiletries.
  - Blanket/sleeping bag, pillows for each member of the family, a change of season-appropriate clothing.
  - Prescription and non-prescription medications your family needs.
  - Baby and children’s items (diapers, toys and books).
- Develop a plan for your pets before there is an emergency. Include medications, veterinary records, a sturdy leash and carriers. (See “What About Pets?” on page 14 for a pet emergency supply kit.)
What Is A Nuclear Power Plant Emergency?

A nuclear power plant emergency could result in the release of radioactive material. Normally, this radioactive material is contained within the plant by a number of protective barriers and systems. In the unlikely event that protective barriers or systems fail to work properly, radioactive material in the form of gases or small particles could escape from the plant into the air. This could result in people being exposed to radiation and receiving a radiation dose.

How Will You Know That An Emergency Exists?

If there is a problem at Millstone that requires people to take action, public safety officials would sound emergency sirens. These sirens are located throughout the approximate 10-mile Emergency Planning Zone (EPZ) see map of “Emergency Planning Zones 10 Miles” on page 8. **Sirens are not a signal to evacuate. They are a signal to turn on your radio or television and tune into an Emergency Alert System (EAS) station near you.** (See “The Emergency Alert System (EAS)” on page 6 for a listing of EAS stations.)

These sirens are maintained and routinely tested throughout the year by Millstone Power Station. Many communities also routinely test their sirens and use them as part of their own fire and disaster warning systems.

Sirens are used to alert the public of major emergencies, including natural disasters and technological emergencies.

- A steady tone for three minutes (that may be repeated) signals a natural or commercial disaster; such as severe weather, chemical spills, floods, or a nuclear plant emergency.

- A public address loudspeaker can transmit announcements over a limited distance from the community’s emergency operations center.

- In the event that a siren fails to activate, procedures call for “back-up route alerting.” This is the warning of populated areas by mobile public address (PA) systems.

What Should You Do In A Nuclear Power Plant Emergency?

If you hear a steady siren tone for three minutes or more, turn on your radio or television and tune in to a local Emergency Alert System (EAS) station for information. Stay calm, and remember that a nuclear power plant emergency would most likely take hours to develop into a situation that could affect public health and safety. State and local officials are required to notify the public within approximately 15 minutes of an event that may require the public to take protective actions. You will be kept informed by local and State officials as long as the emergency is in effect.

**The sirens are not signals to evacuate;** they are intended to alert you to tune in to an EAS station for more information or instructions. Follow all instructions provided in the EAS messages. You may be instructed to:

- Just remain alert and ready to respond, if necessary (your area may not be directly affected by the emergency).

- Stay indoors and take shelter.

- Evacuate to a host community reception center (see “EPZ Towns And Host Communities” on page 11).

Check with your neighbors to ensure they are aware of the emergency. Do not use the telephone unless it is absolutely necessary. Telephone lines are needed by local officials to respond to the emergency. Please do not call local authorities unless you need special assistance. **Call 911 if you have a medical emergency.**

**Remember, if you hear a steady siren tone for three minutes or more, tune in to the Emergency Alert System (EAS) on radio or television.**
The Emergency Alert System (EAS)

The Emergency Alert System (EAS) has been established in cooperation with the Division of Emergency Management and Homeland Security (DEMHS) and the broadcasters of this State. The EAS allows local and State officials to interrupt radio and television programming with emergency information and instructions. In the event of an emergency, you should tune in to your local EAS radio or TV station.

Primary EAS Radio Stations

- WTIC – 1080 AM & 96.5 FM (Hartford)
- WDRC – 1360 AM & 102.9 FM (Hartford)
- WCTY – 97.7 FM (Norwich)

Other EAS Radio Stations

- WXLM–980 AM
- WLIS–1420 AM
- WNLC–98.7 FM
- WIHS–104.9 FM
- WWRX–107.7 FM

- WMRD–1150 AM
- WNPR–89.1 FM
- WKNL–100.9 FM
- WQGN–105.5 FM
- WMOS–102.3 FM

- WICH–1310 AM
- WPKT–90.5 FM
- WMOS–102.3 FM
- WBMW–106.5 FM

EAS TV Stations

- WFSB – Channel 3
- WTNH – Channel 8
- WHTP – Channel 26

- WVIT – Channel 30
- WTIC – Channel 61

Additional Sources of Emergency Information

On September 1, 2009, Connecticut became the first state in the nation to have a statewide emergency notification system (ENS). CT Alert ENS allows state and local officials to help protect lives and property by providing critical information to residents during emergencies and dangerous situations. CT Alert ENS is managed by the CT Department of Emergency Services and Public Protection.

CT Alert ENS has two main components:

- The system allows authorized users to quickly send out an emergency alert to residents in any affected geographic area within the state. Depending on the emergency, the alert may be sent to an entire town, part of a town, a group of towns, or a large area of the state.

- The system also allows public safety agencies to send messages to emergency response personnel.

CT Alert ENS uses the state’s Enhanced 9-1-1 (E9-1-1) database for location-based notifications to the public for life-threatening emergencies. But the E9-1-1 database includes only traditional wireline telephone numbers in the state (the “land line” phone you may have in your home). If you want the system to send alerts to other communication devices that you use, go to the CT Alert ENS web site at www.ct.gov/ctalert/site/default.asp. You can add mobile phones, Voice Over Internet Protocol (VOIP) landlines, wireless personal digital assistants, such as BlackBerry®, e-mail, text messaging, and/or instant messaging to be included to receive alerts from CT Alert ENS. You can also choose the order in which you receive the emergency notification by specifying your contact path order for multiple communication devices. The system will cycle through your communication devices until the message is delivered and/or confirmed on one of them.

Please sign up today!

2-1-1 Infoline - During times of emergency or disaster the United Way of Connecticut’s 2-1-1 informational service serves as the State information hotline. The hotline is accessed toll-free from anywhere in Connecticut by simply dialing 2-1-1. It operates 24 hours a day, 365 days a year. Multilingual call specialists and TDD access are available.

Individuals with Voice Over Internet Protocol (VOIP) services can access 2-1-1 by dialing 1-800-203-1234. Rotary phone users should dial 1-800-505-2000 for assistance.
If You Are Directed To Shelter in Place

Shelter in place may be recommended during a nuclear power station event. Shelter in place means going indoors and remaining indoors until the emergency is over. Such action will reduce an individual’s exposure to radiation resulting from a radioactive release of short duration.

Use this checklist if you are directed to shelter in place:

- If driving, close windows/vents and turn off air conditioner or heater.
- Go home or to a public building.
- Keep family and pets indoors.
- Close all windows and doors.
- Turn off all devices that draw outside air.
- Extinguish stove/fireplace fires and close flues when possible.
- Avoid using telephones, including cell phones, to prevent overloading the system and interfering with emergency use.
- Remain indoors until officially notified that the emergency is over.
- Do not evacuate unless told to do so.
- Continue to monitor your local Emergency Alert System (EAS) radio/TV station (see “The Emergency Alert System” on page 6).

If you must go outside, cover your mouth and nose with a moist cloth to help prevent breathing in radioactive particles. Move quickly and limit outdoor exposure time to as little as possible.

Food already in your home is safe to eat, although food grown locally may have to be tested by State monitors before it is consumed.

Children in schools will be cared for through the school’s emergency procedures. Do not attempt to pick them up unless advised to do so.
If You Are Directed To Evacuate To A Host Community

Use this checklist:

- Gather together those household members who are present.
- Pack the following items, as necessary (see “Readiness Preparation Checklist” on page 1 for a complete list of items to have in an emergency kit):
  - Clothing, money, credit cards, checkbook
  - Prescription medicine or special medical equipment
  - Potassium Iodide (KI) tablets
  - Blankets, pillows, soap, towels, toiletries
  - Diapers, bottles, milk/baby formula, toys
  - Identification and important personal papers
  - Portable radio, flashlight, batteries
- Close and lock all windows and doors.
- Turn off devices that draw outside air.
- Turn off lights and electrical appliances (except refrigerator and freezer).
- Continue to listen to a local Emergency Alert System (EAS) radio station in your vehicle (see “The Emergency Alert System” on page 6).
- Leave food and water for pets, or have alternate plans for their care. Except for service animals, pets cannot be brought into Reception Centers or Red Cross shelters (see “What About Pets?” on page 14 for more information on planning for your pets).
- See if your neighbors need a ride and carpool with them, if possible.
- Do not use your telephone. Keep phone lines open for emergency personnel.
- Go to your assigned host community reception center (see “EPZ Towns And Host Communities” on page 11). Follow evacuation routes described in page 17 of this book or refer to pages 2-3 of your AT&T’s Yellow Pages or as directed by news advisories.

EPZ Towns And Host Communities

For Communities Located Within 10 Miles of Millstone Power Station

<table>
<thead>
<tr>
<th>Town</th>
<th>Host Community</th>
<th>Reception Center</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Lyme</td>
<td>New Haven</td>
<td>Southern Connecticut State University</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Moore Field House, 125 Wintergreen Ave, New Haven, CT</td>
</tr>
<tr>
<td></td>
<td></td>
<td>06515</td>
</tr>
<tr>
<td>Groton City</td>
<td>Norwich</td>
<td>Norwich Technical High School</td>
</tr>
<tr>
<td>&amp; Groton Town</td>
<td></td>
<td>7 Mahan Drive</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Norwich, CT 06360</td>
</tr>
<tr>
<td>Ledyard</td>
<td>UCONN/Storrs</td>
<td>UCONN Field House</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2111 Hillside Road</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Storrs, CT 06269</td>
</tr>
<tr>
<td>Lyme &amp; Old Lyme</td>
<td>New Haven</td>
<td>Southern Connecticut State University</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Moore Field House, 125 Wintergreen Ave, New Haven, CT</td>
</tr>
<tr>
<td></td>
<td></td>
<td>06515</td>
</tr>
<tr>
<td>Montville</td>
<td>East Hartford</td>
<td>East Hartford High School</td>
</tr>
<tr>
<td></td>
<td></td>
<td>869 Forbes Street</td>
</tr>
<tr>
<td></td>
<td></td>
<td>East Hartford, CT 06118</td>
</tr>
<tr>
<td>New London</td>
<td>Windham</td>
<td>Windham High School</td>
</tr>
<tr>
<td></td>
<td></td>
<td>355 High Street</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Willimantic, CT 06226</td>
</tr>
<tr>
<td>Waterford</td>
<td>East Hartford</td>
<td>East Hartford High School</td>
</tr>
<tr>
<td></td>
<td></td>
<td>869 Forbes Street</td>
</tr>
<tr>
<td></td>
<td></td>
<td>East Hartford, CT 06118</td>
</tr>
<tr>
<td>Fishers Island, NY</td>
<td>Windham</td>
<td>Windham High School</td>
</tr>
<tr>
<td></td>
<td></td>
<td>355 High Street</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Willimantic, CT 06226</td>
</tr>
</tbody>
</table>

Only a portion of Ledyard, Lyme and Montville are located in the 10-mile emergency planning zone. The areas within the EPZ are:

1. Ledyard EPZ – All areas south of Hurlbutt Road, Whalehead Road and Sandy Hollow Road to Route 117.
2. Lyme EPZ – All areas east of Route 156 and south of Beaver Brook Road.
3. Montville EPZ – All areas south of Grassy Hill Road, Chesterfield Road, Route 163 and Depot Road to Waterford and East Lyme town lines including those areas between Glendale Road and Chapel Hill Road in Oakdale Heights.
Why Go To A Host Community?

Each community in the Millstone Emergency Planning Zone (EPZ) has been assigned a host community that is at least 15 miles from the nuclear plant site. To find your host community, refer to “EPZ Towns And Host Communities” on page 11. The driving route you would follow is on page 17 of this book, in the yellow pages of your local telephone directory, and will be provided through the media in an emergency. If you have been advised to evacuate please follow directions carefully.

Host communities are staffed with individuals trained and prepared to provide evacuees with assistance. The host community’s reception center offers a place where evacuees can register upon arrival. This allows separated families to reunite. If there is a radiation release evacuees and their vehicles will be monitored for contamination and be decontaminated as necessary. Potassium Iodide (KI) tablets are available at all host community reception centers. Temporary Red Cross shelter, food and medical attention will be available at assigned locations.

What If You Have Special Needs?

Anyone who has special needs, such as vision or hearing impairment, or special transportation needs, may require notification or assistance from local officials in an emergency. If you, or someone you know, have special needs, please register promptly with your community’s Emergency Management Office. Each year a confidential emergency “Special Needs” registration form is mailed to each household within a 10-mile radius of Millstone. When completed and mailed back, this information is given to your community’s Emergency Management Office. Even if you mailed in a survey last year, please do so again in order to keep your Emergency Management Office’s records up-to-date.

What If Your Children Are In School Or Child Care?

Communities within 10 miles of Millstone Power Station have plans in place to provide for the safety of school populations. The Superintendent may decide to conduct an early dismissal or to make preparations for a precautionary transfer of students to a pre-designated location. Schools calling for early dismissal will follow the same procedures as they do for snow days.

Families will be notified of the precautionary transfer of students and where they may pick up their children. Parents are asked not to arrive at schools before being notified in order to avoid delays. Children will be accounted for and supervised at all times. School authorities will ensure that students are released only to authorized persons. School nurses will bring student health alert information and prescribed medications. Classes that are away from school on field trips are contacted and directed to go to a host community.

Licensed child care centers, group child care homes and family child care homes are required to develop emergency response plans. Child care providers have been encouraged to work with their local public safety officials in developing these plans. Plans include procedures for sheltering, relocating, evacuating children and staff, and reuniting families.

Before an emergency occurs become familiar with your school or child care provider’s emergency plans. Make sure you provide them with your up-to-date emergency contact information and make a family plan.
Emergency Information

**What About Pets?**

Long before an emergency occurs, individuals should consider what they would do with their pets should they need to evacuate. If you are directed to evacuate, you may want to take your pets with you. However, due to public health and safety issues only service animals that assist people with disabilities will be allowed into host community reception centers. Shelters generally do not accept pets (except service animals), therefore, you must plan ahead to make sure your pets have a safe place to stay. Pet owners are encouraged to make a list of places that would accept their pets in an emergency, such as boarding kennels, or with friends or family outside the affected area.

Have a pet disaster kit ready. Your pet's kit should include food, water and medicine for three days; medical and veterinary records; pet carrier, toys, blanket or bed; litter box and litter; ID tags attached to your pet; leash; and current photos of you with your pet.

*For more information on disaster preparedness for your pets or livestock, visit FEMA’s web site http://www.ready.gov/caring-animals*

**Information For Farmers**

If you have livestock or agricultural products, please call 1-800-397-8876 for a copy of the brochure "Radiological Emergency Information for Connecticut's Agricultural Community."

**How Will You Know The Emergency Has Ended?**

Federal, State, local and Millstone Power Station officials will work closely together for the duration of the event. If radiation is released, State and Federal officials will use monitored radiation levels to determine when it is safe to return home. Public officials will inform you of this information and any additional instructions through the news media. Stay tuned to your radio or television.

**Planning Beyond 10 Miles Of Millstone Power Station**

If an accident were to occur at Millstone, the area within 50 miles of the station would be assessed to determine if there has been any impact on the environment. If there is any impact, the public in the affected area would be notified. If any actions are necessary, the public would be informed of such actions to be taken. A portion of Connecticut also falls within 50 miles of Indian Point Power Station in Buchanan, New York. The Connecticut Radiological Emergency Response Plan (RERP) has procedures in place for emergencies that extend beyond 10 miles for Millstone and Indian Point. This includes assessing food and drinking water for contamination and determining the need for additional public protective actions.
What Is KI?

Potassium iodide, also known as KI, is a form of iodine. KI is an over-the-counter drug that can protect your thyroid gland when there is a chance you might be exposed to a harmful amount of radioactive iodine. Taking KI saturates the thyroid with harmless iodine and prevents radioactive iodine from being absorbed.

The thyroid gland uses iodine to make hormones that control your body’s metabolism. Radioactive iodine can harm your thyroid gland and can increase your risk of developing thyroid cancer years after exposure.

In the event that a radioactive release occurs or is imminent, State officials will notify the public via public alert sirens and television and radio broadcasts. State officials will provide emergency instructions to the public. This may include sheltering indoors, evacuating the area, and ingesting KI if it is warranted. KI is a supplement to the primary protective actions of evacuation and/or sheltering and should only be taken upon direction of State officials.

Not every radiation emergency will result in the release of radioactive iodine. You will be told via your local television and radio stations when to take KI. KI does NOT protect against other radioactive materials that might be released during a nuclear power station emergency.

For most individuals, taking KI is safe; however, adverse reactions are possible in persons having existing thyroid conditions and those with an allergy to iodine. Consult your physician if you have concerns about the safety of KI for you and your family.

People who live and work within a ten-mile area around Millstone Power Station can obtain KI at the following locations:

<table>
<thead>
<tr>
<th>Location</th>
<th>KI Distribution Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Lyme</td>
<td>Town Hall: M – F 8:30 AM – 4 PM</td>
</tr>
<tr>
<td></td>
<td>Phone: (860) 739-6931 Ext. 110</td>
</tr>
<tr>
<td>Groton City</td>
<td>Groton Municipal Building City Clerk’s Office: Tu &amp; Th 10 AM – 4 PM</td>
</tr>
<tr>
<td></td>
<td>Phone: (860) 446-4102</td>
</tr>
<tr>
<td>Groton Town</td>
<td>Town Hall Town Clerk’s Office: M – F 8:30 AM – 4:30 PM</td>
</tr>
<tr>
<td></td>
<td>Groton Town PD, 68 Groton Long Point Rd.: 24 hours a day</td>
</tr>
<tr>
<td></td>
<td>Phone: (860) 445-2000</td>
</tr>
<tr>
<td>Ledyard</td>
<td>Ledyard VNA Town Hall: M-F 9 AM – 4 PM</td>
</tr>
<tr>
<td></td>
<td>Phone: (860) 464-8464</td>
</tr>
<tr>
<td>Lyme</td>
<td>Town Hall Town Clerk’s Office: M – F 9 AM – 4 PM</td>
</tr>
<tr>
<td></td>
<td>Phone: (860) 434-7733</td>
</tr>
<tr>
<td>Montville</td>
<td>Office of the Fire Marshal Town Hall – Emergency Management Office: M – F 8 AM – 4 PM</td>
</tr>
<tr>
<td></td>
<td>Phone: (860) 848-1417</td>
</tr>
<tr>
<td>New London</td>
<td>Fire Headquarters on Bank St.: M – F 8 AM – 5 PM</td>
</tr>
<tr>
<td></td>
<td>North Station FD on Broad St.</td>
</tr>
<tr>
<td></td>
<td>South Station FD on Lower Blvd.</td>
</tr>
<tr>
<td></td>
<td>Phone: (860) 447-5291</td>
</tr>
<tr>
<td>Old Lyme</td>
<td>Town Hall: M – F 9 AM – 4 PM</td>
</tr>
<tr>
<td></td>
<td>Phone: (860) 434-1605 Ext. 212</td>
</tr>
<tr>
<td>Waterford</td>
<td>Waterford Town Hall: Tu, W, Th 12 – 4 PM</td>
</tr>
<tr>
<td></td>
<td>Phone: (860) 442-9585</td>
</tr>
</tbody>
</table>

Please note: During an emergency, KI will only be available at your host community reception center (see page 19).
What Is Radiation?

Radiation is energy emitted in tiny waves or particles. You can't see radiation. You can't hear or taste radiation. For these reasons people sometimes think radiation is mysterious or frightening. However, you probably know more about radiation than you realize. Heat, light and radio waves are a kind of radiation. Rocks, trees, and even people have some radioactive atoms.

Radiation sometimes produces charged particles in material it strikes. Charged particles are known as ions. Ionizing radiation can produce charged particles in all matter. The most common types of ionizing radiation are alpha, beta and gamma.

- **Alpha Radiation** is the least penetrating type. It can be stopped with a sheet of paper.

- **Beta Radiation** is emitted from the nucleus of an atom during fission. Beta radiation consists of electrons that can be stopped by thin cardboard.

- **Gamma Radiation** is electro-magnetic waves emitted from the nucleus of an atom and is essentially the same as an X-ray. It can be stopped by heavy shielding such as concrete or lead.

The harm that can come from radiation depends on several things, some of which you can control.
Radiation risk depends on:

- The kind of rays and particles that strike you
- The length of time you are exposed
- The parts of your body exposed
- The amount of radioactive material that enters your body through eating or breathing
- Age – radiation does more harm to young children because the cells in their bodies are growing much faster than the cells of older children and adults.

**Radiation Protection**

Although you cannot see or smell radiation, it can be detected, accurately and easily, with the aid of instruments designed for that purpose. Trained technicians using these instruments monitor radiation in and around the nuclear power station. Should a nuclear incident occur, this monitoring will be increased to obtain accurate information for all areas that might be affected. State officials will evaluate this information and advise what actions should be taken.

**Where Does Radiation Come From?**

**Characteristics of Natural Radioactivity**

- The earth’s crust and soil contains small amounts of naturally occurring radioactive materials which decay into other radioactive atoms such as radon.
- The radon moves through soil, where it is generated, and then moves into the air.
- Radon is a natural part of the earth’s atmosphere.
- The amount of radon in the earth’s crust and soil varies with geographic location and soil type.

**Effective Dose Equivalent to Persons in the U.S. from Various Radiation Sources**

<table>
<thead>
<tr>
<th>Source</th>
<th>MREM Per Year Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Man-Made</td>
<td></td>
</tr>
<tr>
<td>Medical</td>
<td></td>
</tr>
<tr>
<td>- Diagnostic X-Rays</td>
<td>33.0</td>
</tr>
<tr>
<td>- Other Medical</td>
<td>267.0</td>
</tr>
<tr>
<td>Consumer Products</td>
<td>13.0</td>
</tr>
<tr>
<td>Occupational</td>
<td>0.5</td>
</tr>
<tr>
<td>- Nuclear Power</td>
<td>0.1</td>
</tr>
<tr>
<td>- Miscellaneous</td>
<td>0.3</td>
</tr>
<tr>
<td>- Radon &amp; thoron</td>
<td>228.0</td>
</tr>
<tr>
<td>Natural Background</td>
<td>331.0</td>
</tr>
<tr>
<td>Industrial (&lt;0.1%)</td>
<td></td>
</tr>
<tr>
<td>Occupational (&lt;0.1%)</td>
<td></td>
</tr>
<tr>
<td>Conventional radiography</td>
<td></td>
</tr>
<tr>
<td>- Computed tomography</td>
<td>(24%)</td>
</tr>
<tr>
<td>- Nuclear Medicine (medical)</td>
<td>(12%)</td>
</tr>
<tr>
<td>- Interventional fluoroscopy</td>
<td>(7%)</td>
</tr>
<tr>
<td>- Conventional radiography/fluoroscopy</td>
<td>(5%)</td>
</tr>
</tbody>
</table>

MREM Per Year Total 311.0

Total man-made and natural sources MREM Per Year 625.0


Reprinted with permission of the National Council on Radiation Protection and Measurements, http://NCRPpublications.org
Millstone Power Station has comprehensive safety, construction, maintenance and inspection programs to prevent emergencies from occurring.

As with the reactor coolant system, the backup safety systems are frequently tested, inspected and maintained to prevent failure. However, if they fail, backup barriers in the plant would prevent, or at least significantly postpone, the release of radioactivity to the environment.

Millstone is designed with three primary physical barriers:

- **Fuel rod cladding**
- **Reactor vessel and coolant system**
- **Containment structure**

The first barrier is the fuel rods that contain the uranium fuel pellets. The fuel rods are metal cylinders, known as cladding, and are made of a high-quality metal alloy with an extremely high melting point. Under normal conditions, the cladding keeps almost all of the radioactivity produced within the fuel pellets.

The reactor coolant system acts as a second barrier. The system includes the reactor vessel, made of high quality steel that is 3 to 9 inches thick, as well as all piping and equipment through which the reactor coolant travels.

If both of these barriers fail, a containment structure surrounds the entire reactor coolant system. This building is made of a 1/4 inch steel liner surrounded by reinforced concrete that is 2.5 to 4.5 feet thick. The containment is designed to withstand the internal forces that could be generated by a severe emergency. It is also built to withstand external forces such as those caused by a tornado, a hurricane, an earthquake, or even the impact of a commercial jet.

Additional safety features include a quality assurance program, trained licensed operators, monitoring systems, redundant safety systems, Federal and industry inspections, and an on-site and off-site emergency response program.
Who Could Be Affected In A Nuclear Emergency?

It is very unlikely that everyone in Millstone’s Emergency Planning Zone would be affected in a nuclear emergency. The precautions to take would depend on where you live, the amount of radioactivity being released from the plant, and wind speed and direction.

For example, if a relatively large amount of radioactive material were released into a slow wind, people located immediately downwind from the plant might be directed to evacuate, if road and weather conditions permit. On the other hand, rapidly shifting winds could quickly disperse radioactive material that would affect a larger area, but in less concentrated amounts.

People located in this larger area might be directed to take shelter. State authorities would consider levels of radiation exposure, wind patterns, and overall weather conditions when directing the public whether to take shelter or evacuate. Many lower types of nuclear incidents would not require the public to take any actions.

Farmers, livestock owners, food processors and fruit and vegetable growers would be provided with appropriate emergency instructions as necessary. The booklet entitled “Radiological Emergency Information for Connecticut’s Agricultural Community” has been distributed to individual Connecticut agricultural suppliers within a 50-mile radius of Millstone.

Nuclear Emergency Classifications

The U.S. Nuclear Regulatory Commission (NRC) is the Federal agency responsible for the regulation and inspection of nuclear power stations to ensure safety. The NRC classifies nuclear power plant emergencies into four categories of increasing severity based on plant conditions. Millstone Power Station operators are responsible for classifying an event and notifying State and local authorities within 15 minutes. State and local governments decide on public protective actions and notify the public to initiate these actions within approximately 15 minutes of the decision.

Notification of Unusual Event

This category is the lowest classification level and is used for a minor event where something out of the ordinary has occurred. There is no danger to the public. No radioactive release of any significance is expected and no protective actions are required. Emergency personnel are not required to respond.

Alert

This category is the next classification level and is used for an event which may involve a small radioactive release or the potential for a release. Emergency personnel are alerted to be ready to respond if the situation becomes more serious.

State and local emergency operation centers may be activated at this level and the State Emergency Alert System (EAS) is placed on standby. There is no danger to the public and no protective actions are required.

Site Area Emergency

This category is the second highest classification level and is used for an emergency involving an actual or potential failure of plant safety systems. A moderate radioactive release out to the site boundary is possible.

State and local emergency operations centers will be activated and the sirens within the approximately 10-Mile Emergency Planning Zone will be sounded as a warning to tune in to an Emergency Alert System (EAS) radio or television station for information.

Public protective actions are not required unless emergency officials determine that the emergency could become more serious.

General Emergency

This category is the highest classification level and is used for a serious emergency involving the failure of plant safety systems, the possibility of reactor core damage or a loss of the integrity of the containment structure. A large radioactive release is possible.
It is important to know that an incident at a nuclear power plant could change over a period of hours or days. Plant operators and government officials would be in constant communication with each other. Changes to classification levels are dependent on changes to the situation. The public would be informed of any changes in the incident.

**Additional Information**

For additional information on local emergency preparedness, or to obtain KI, contact your community emergency management officials:

- **East Lyme**  (860) 739-4434  
- **Montville**  (860) 848-1417
- **Groton City**  (860) 445-2451  
- **New London**  (860) 447-5269
- **Groton Town**  (860) 445-2000  
- **Old Lyme**  (860) 434-1605, X212
- **Ledyard**  860-464-8464  
- **Waterford**  (860) 442-9585
- **Lyme**  (860) 434-7733  
- **Fishers Island, NY**  (631) 765-2600

Emergency information is on pages 2 and 3 of the yellow pages of the following directories:

- **AT&T Telephone Southeastern Directory** – Serving East Lyme, Groton, Ledyard, Montville, Mystic, New London, Niantic, Waterford
- **AT&T Telephone Shoreline Directory** – Serving Lyme, Old Lyme
- **AT&T Telephone Mystic Directory** – Serving Groton, Ledyard and Mystic

**In Conclusion**

The State of Connecticut and Millstone Power Station’s first priority is the health and safety of all Connecticut residents and visitors. The State and local governments and Millstone are committed to providing communities surrounding the nuclear facility with the most accurate, timely, and detailed information possible concerning plant safety and emergency preparedness.

The emergency plans for nuclear plants are tested and evaluated every year by the NRC for on-site actions, and every other year by the Federal Emergency Management Agency (FEMA) for off-site actions. Both the NRC and FEMA have approved the emergency plans. Extensive testing of emergency plans and upgrades to emergency preparedness based on lessons learned from drills and exercises helps maintain a continual state of readiness. This demonstrates coordination among State officials, local officials, and Millstone Power Station to ensure an integrated and effective response to any emergency.

---

**For extra copies of this guidebook or for further information please contact:**

*Department of Emergency Services & Public Protection*

*Division of Emergency Management & Homeland Security*

*Radiological Emergency Preparedness Unit*

*25 Sigourney Street, 6th Floor, Hartford, CT 06106*

860-256-0801 or 1-800-397-8876
<table>
<thead>
<tr>
<th>Web Sites</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>If you have access to a computer, the following web sites provide more information on emergency planning and preparedness information for individuals, families, and businesses:</td>
<td></td>
</tr>
<tr>
<td>Ready</td>
<td></td>
</tr>
<tr>
<td><a href="http://www.ready.gov">www.ready.gov</a></td>
<td></td>
</tr>
<tr>
<td>American Red Cross</td>
<td></td>
</tr>
<tr>
<td><a href="http://www.redcross.org">www.redcross.org</a></td>
<td></td>
</tr>
<tr>
<td>Federal Emergency Management Agency</td>
<td></td>
</tr>
<tr>
<td><a href="http://www.fema.gov">www.fema.gov</a></td>
<td></td>
</tr>
<tr>
<td>The Humane Society of The United States</td>
<td></td>
</tr>
<tr>
<td><a href="http://www.hsus.org">www.hsus.org</a></td>
<td></td>
</tr>
<tr>
<td>CT Department of Energy and Environmental Protection</td>
<td></td>
</tr>
<tr>
<td><a href="http://www.ct.gov/deep">www.ct.gov/deep</a></td>
<td></td>
</tr>
<tr>
<td>CT Department of Emergency Services and Public Protection</td>
<td></td>
</tr>
<tr>
<td><a href="http://www.ct.gov/despp">www.ct.gov/despp</a></td>
<td></td>
</tr>
<tr>
<td>CT Division of Emergency Management and Homeland Security</td>
<td></td>
</tr>
<tr>
<td><a href="http://www.ct.gov/demhs">www.ct.gov/demhs</a></td>
<td></td>
</tr>
<tr>
<td>CT Department of Public Health</td>
<td></td>
</tr>
<tr>
<td><a href="http://www.ct.gov/dph">www.ct.gov/dph</a></td>
<td></td>
</tr>
<tr>
<td>Dominion Resources</td>
<td></td>
</tr>
<tr>
<td><a href="http://www.dom.com">www.dom.com</a></td>
<td></td>
</tr>
<tr>
<td>Nuclear Regulatory Commission</td>
<td></td>
</tr>
<tr>
<td><a href="http://www.nrc.gov">www.nrc.gov</a></td>
<td></td>
</tr>
<tr>
<td>Nuclear Energy Institute</td>
<td></td>
</tr>
<tr>
<td><a href="http://www.nei.org">www.nei.org</a></td>
<td></td>
</tr>
</tbody>
</table>