



Emergency Planning for the Byron Area

Important Safety Information For Your Community 2017/2018

This brochure provides information on the Byron Generating Station and actions you may be asked to take in the unlikely event of an incident at the station. Please read the entire brochure. Discuss this information with members of your family, and then keep the brochure in a convenient place for future use. The brochures are updated and distributed annually.

What to Do in an Emergency

Monitor and Prepare

Monitor the radio and TV for emergency information and follow emergency instructions. People should prepare for possible evacuation (e.g.; reunite with family members, assemble emergency kits, provide for pet needs, keep off of the road as much as possible).

Keep Phone Lines Open

Please do not make unnecessary phone calls. Leaving phone lines open for emergency workers will help everyone involved. If you require assistance, call the emergency phone numbers broadcast on the radio.

Shelter-in-Place

Go indoors and stay there. Close all doors and windows and shut off any systems that draw in outside air, such as furnaces, fireplaces and air conditioners. Keep listening to the radio for updates. Keep pets inside and shelter farm animals. If traveling in a vehicle, close windows and vents.

If Instructed to Evacuate

In an evacuation, people in the affected area will be asked to go to local reception centers listed within this brochure. After this, they can stay at specified shelters or with friends or relatives outside the evacuation zone.

Please do not try to pick up children or others at schools, hospitals, nursing homes or overnight campgrounds. These facilities will be following their own special emergency plans, and you would most likely miss connections. If evacuated, students, hospital patients and nursing home residents will be accompanied to relocation centers where their needs will be addressed. To find out where people are being moved, stay tuned to the radio.

Plan for three days away from home, locking up and turning appliances off as you would for a weekend vacation. Pack all necessary items (See "Emergency Supplies"). Evacuate everyone in your home, following directions given on the radio. These routes will have been selected as the safest ways out of the affected area.

Law enforcement agencies will maintain security in evacuated areas and provide traffic control.

Persons should only evacuate when instructed to do so. Shadow Evacuation or evacuation of individuals not within the declared evacuation area could impede evacuation traffic flow.

If You Have Livestock

When advised to do so, remove all livestock from pasture, shelter if possible, and provide them with stored feed and protected water. If instructed to Shelter-in-Place and/or evacuation is recommended, efforts to care for livestock should be discontinued in the affected areas and the Shelter-in-Place and/or evacuation recommendation should be followed.

NOTE: If you or someone you know might not respond to warning sirens or radio broadcasts due to impaired hearing OR are transit-dependent, please use the attached reply card to notify local authorities now.

NOTE: If time permits and safe to do so, the public is encouraged to alert neighbors, by means other than the telephone, to ensure they also heard and understand the warning signals. Persons with disabilities or transit-dependent, if safe to do so, should obtain a ride from a relative, friend, or neighbor.

NOTE: For those who have not filled out the reply card but who require special assistance, including transportation, stay tuned to the radio for the telephone number provided in the radio message. Call the provided number to report your assistance needs. If the line is busy, be patient and keep trying. Arrangements will be made for you.

How to Prepare for an Emergency

You never know when you might have to leave your home on short notice. A nuclear incident is only one possibility. Floods, fires, chemical spills or severe illness could occur at any time. Preparing now will help you respond more quickly in any emergency.

Emergency Kit

Keep an emergency kit – portable radio, flashlight, extra batteries, extra car keys, first aid kit and other items – in a special place that the whole family can easily locate. Include this booklet in your emergency kit with your location marked on the map. Write a list of the items you would want to take if you had to leave home quickly and post the list in a convenient spot. Be sure to keep a supply of all the items on your list. Gather any important documents that you might need in an emergency and keep them together in a safe place that you can access quickly and easily.

Transportation

Maintain your vehicle in good running order and keep the gas tank at least half full at all times. If you will need transportation in an emergency, use the attached reply card to notify local authorities now.

Pets

Shelter for evacuated pets will be available. You will receive pet sheltering information when you arrive at the Reception and Congregate Care Center for your area. Service animals will be allowed in the Reception and Congregate Care Center.

Emergency Supplies

- General first aid kit and any special medication
- Cash, credit, or ATM cards
- Important documents
- Change of clothing
- Personal health products
(toothbrush, eye care, sanitary products, etc.)
- Baby formula, diapers, car seat, toys
- Special dietary foods
- Pet related supplies

People with Functional/ Transportation Needs

The information gathered by this survey is CONFIDENTIAL. Those with impaired sight, hearing or mobility may have difficulty responding to an emergency.

If you, or someone you know who lives in the circled area on the map would need special or transportation assistance in an emergency, please notify area authorities today. Simply fill out and mail the attached reply card. The card is postage-paid, so you don't even need a stamp.

This information is updated annually. Please return this survey even if you have previously responded. If you prefer you may contact your local Emergency Management Agency directly. Area authorities are listed elsewhere in this brochure.

Please check yes or no for the following questions:

Fold Here

- 1** Do you have a hearing impairment that would make it difficult to hear outdoor warning sirens or other emergency notifications? Yes No
 - 2** Do you have a medical or physical condition that would make it difficult to evacuate in an emergency? Yes No
 - 3** Are you without any personal means of transportation, such as a car or truck, to evacuate in an emergency? Yes No
- Number of people in household _____
- 4** Would you need medical attention outside your home? Yes No

Name

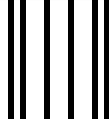
Address

City & Township

Telephone Number

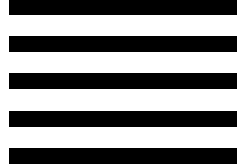
Please provide your address, city and township, and telephone number.

2017/2018



NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL
FIRST-CLASS MAIL PERMIT NO. 1480 SPRINGFIELD, IL

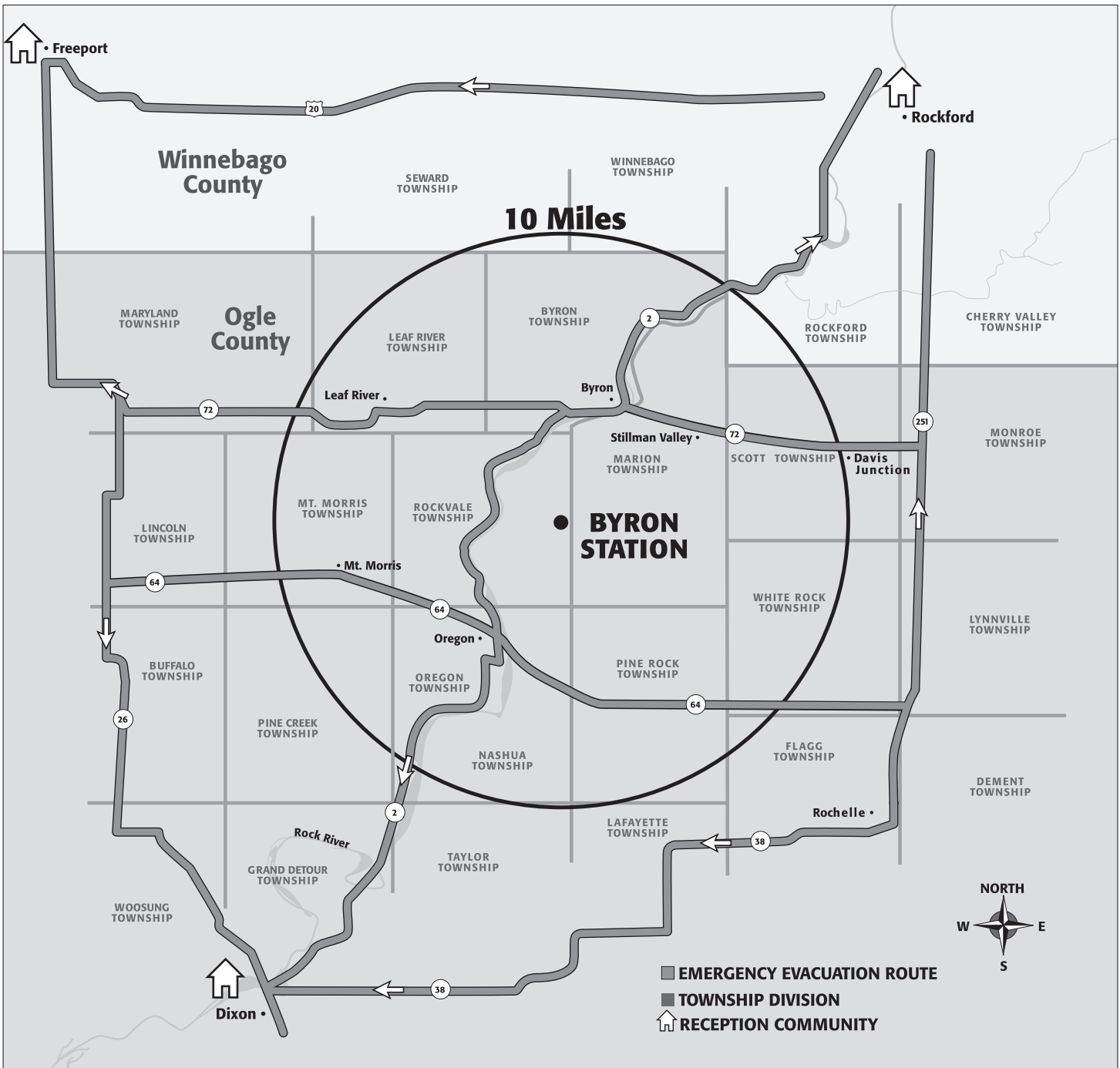


POSTAGE WILL BE PAID BY ADDRESSEE

BUREAU OF OPERATIONS - REP SECTION
ILLINOIS EMERGENCY MANAGEMENT AGENCY
2200 S DIRKSEN PARKWAY
SPRINGFIELD IL 62703-9907



Please TAPE closed here. DO NOT STAPLE.



The Nuclear Regulatory Commission requires specific plans for protecting the public within an approximate 10-mile radius of any nuclear power plant. Know your location on the map and mark it. Some primary evacuation routes are listed below. **In an emergency, follow the directions given on the radio, even if different from those shown below.** Broadcasted directions will be based on actual road and weather conditions and wind direction — helping to ensure your safety as you leave the evacuation area.

Evacuation Routes/Reception Communities

Dixon

- Illinois 2 south
- Illinois 38 west
- Illinois 26 south

Rockford

- Illinois 2 north
- Illinois 251 north

Freeport

- Illinois 72 west to Illinois 26 north
- US 20 west

Nuclear Power and Public Safety

Emergency Planning for the Byron Area

Special plans have already been developed to protect the public in the event of a nuclear incident in your area. These plans give specific attention to people who – like you – live, work or visit within 10 miles of a nuclear power plant. Procedures are in place to help protect you and other members of the public in the unlikely event of a nuclear emergency. If necessary, area officials would declare an emergency and take measures to ensure public safety.

This brochure addresses procedures for the Byron area. Please read and keep this material for future reference. Although it specifically addresses a potential nuclear incident, much of the information is useful in any major emergency.

Warning Sirens

Communities across the United States may use outdoor warning sirens for many purposes. Sirens are not exclusive to nuclear power facilities. Sirens may be used to warn the public of many hazards, including fires, flooding, and other events that warrant public notifications. If you hear a siren, you should tune to one of the Emergency Alert System (EAS) stations listed in this brochure for official information.

The sirens generate a loud, continuous pitch for at least three minutes. In Illinois, sirens are tested on the first Tuesday of each month at 10:00 a.m.

Emergency Broadcasts.

Authorities relay emergency information and instructions to the public over local radio and TV stations, including the radio stations listed in this brochure. In an emergency, these stations are your best source of accurate news.

Shelter-in-Place or Evacuation

Officials might recommend that people either take shelter indoors or evacuate an area. It is critically important that you follow the recommended course of action. Staying home when instructed to evacuate or driving around when urged to stay indoors could expose you to danger unnecessarily.

Potassium Iodide (KI)

Potassium Iodide (KI) is a nonprescription drug that may prevent the thyroid from absorbing radioactive iodine. KI is one type of protective action that may be recommended during a nuclear incident. KI should only be taken at the direction of the appropriate state and local authorities. Consult your physician if you have concerns about the safety of KI for your child or yourself. KI is effective in blocking the absorption of radioactive iodine only. Since it does not block the absorption of any other radioactive material, evacuation or sheltering in place may be the most effective and preferred protective actions.

Information on the Illinois KI distribution program can be found at www.illinois.gov/ready.

Classification of Accidents

There are four accident classifications used to describe nuclear emergencies. We contact Federal, state and local authorities in each of the following situations:

UNUSUAL EVENT — Events are in progress or have occurred which indicate a potential degradation of the level of safety of the plant or indicate a security threat to facility protection. No releases of radioactive material requiring off-site response or monitoring are expected unless further degradation of safety system occurs.

ALERT — Events are in progress or have occurred which involve an actual or potential substantial degradation of the level of safety of the plant or a security event that involves probable life threatening risk to site personnel or damage to site equipment because of intentional malicious dedicated efforts of a hostile act. Any releases are expected to be limited to small fractions of the Environmental Protection Agency (EPA) Protective Action Guideline exposure levels.

SITE AREA EMERGENCY — Events are in progress or have occurred which involve actual or likely major failures of plant functions needed for protection of the public or security events that result in intentional damage or malicious acts: (1) toward site personnel or equipment that could lead to the likely failure of or; (2) prevents effective access to equipment needed for the protection of the public. Any releases are not expected to result in exposure levels which exceed EPA Protective Action Guideline exposure levels beyond the site boundary.

GENERAL EMERGENCY — Events are in progress or have occurred which involve actual or imminent substantial core degradation or melting with potential for loss of containment integrity or security events that result in an actual loss of physical control of the facility. Releases can be reasonably expected to exceed EPA Protective Action Guideline exposure levels off-site for more than the immediate site area.

Emergency Alert System

The **Emergency Alert System** will provide you with official information in cases of tornadoes, floods, nuclear plant accidents or other emergencies. Turn on your radio or TV for official information and instructions.

Emergency Alert Stations

FM 102.3 WYOT

AM 1060, WRHL

What You Need to Know About Nuclear Power Plants and Radiation

How Do Nuclear Plants Work?

Power plants create electricity by running steam turbines, which are powered either by fossil fuels – coal, oil, natural gas – or by nuclear power. Nuclear technology produces energy by splitting uranium atoms in a process called fission. Fission generates heat that boils water for the steam that runs the turbines, which produce the electricity that we all use – making, for instance, toast for breakfast.

In a nuclear power plant, pea-sized uranium pellets are stacked inside long, thin fuel rods, which are grouped in “assemblies” inside a reactor “core.” The core is encased in a very thick steel capsule, and the entire reactor is further protected by an airtight steel and concrete building called a “containment.” This complex structure is designed to help ensure the safe utilization of nuclear power.

How Do We All Benefit From Nuclear Power?

Any fuel used to produce energy also produces waste. By-products of coal-burning include smoke, ashes and slag. Even with the latest technologies, it is impossible to prevent some of this waste from reaching the environment outside the power plant. Nuclear power generation, on the other hand, produces waste primarily in the form of spent fuel, which is not released into the environment. Besides helping to protect the environment, nuclear energy is also highly efficient, producing vastly more energy for its weight than coal or oil. We would have to burn more than 120 gallons of oil or up to a ton of coal to produce the same amount of energy as that found in a single pellet of uranium.

What Are the Real Risks of Nuclear Power?

Sometimes people are concerned a power plant reactor will “blow up,” but this is virtually impossible. The uranium contains only 3 to 4 percent fissionable material, and the fuel is further diluted to slow down the fission process. This low concentration can generate enough heat to boil water — but not enough to explode. In short, there is no way for a power plant reactor to produce a nuclear explosion.

Some people also think they, or the environment, may be accidentally exposed to nuclear radiation by living or being near a nuclear power plant. Although radioactivity can be dangerous, keep in mind a power plant reactor is designed to contain radiation, protecting the rest of the plant and the surrounding community. To ensure the greatest safety, however, any incident at a power plant that presents the slightest potential for a leak will be addressed with the utmost care.

First, special teams would gather detailed radiation readings at the plant and throughout surrounding areas. Depending on a number of factors, including the amount of radiation released and weather conditions that would affect movement of the radioactive “plume,” state officials will recommend a course of action. A significant incident might require people to stay indoors or to evacuate to temporary reception centers. In any event, you will be instructed in a safe course of action to protect yourself and your loved ones.

What Is Radiation?

Radiation is energy in the form of rays or particles. Some atoms – the ones we call radioactive – are unstable. As they go through a natural process called “decay” in which they change into a stable atom, they throw off rays or particles called radiation. Radiation is exactly the same, whether from nature, or medical or industrial activities.

Radiation is measured in millirems. On average, a person receives about 300 millirem of radiation annually from natural sources and another 300 millirem or so from X-rays and other medical procedures. It takes more than 35 times this much — over 20,000 millirem in a single day — to produce identifiable effects in the body. Federal regulations allow workers to receive up to 5,000 millirem of radiation in the course of a year’s work.

Exelon Generation, which operates nuclear power plants in Illinois, works in cooperation with area agencies to inform the public about emergency planning. This brochure addresses procedures for the Byron area. Please read and keep this material for future reference. Although it specifically addresses a potential nuclear incident, much of the information is useful in any emergency.

If you require additional brochures or information, now or at anytime during the year, visit the following website and scroll down to the fact sheet and emergency planning. An electronic version of the brochure can be found there. Feel free to print as many as you require

Exelon Generation



@exelonuclear

<http://www.exeloncorp.com/byron>



For More Information on Emergency Planning in Your Area, Please Contact:

Illinois Emergency Management Agency
2200 S. Dirksen Parkway
Springfield, Illinois 62703
(800) 782-7860
www.illinois.gov/ready

Ogle County Emergency Management Agency
202 S. First Street
Oregon, Illinois 61061
Office (815) 562-1001
24 Hour (815) 732-2136

Winnebago County Emergency Services and Disaster Agency
650 W. State Street
Rockford, IL 61102
(815) 319-6015

Wisconsin Emergency Management
2400 Wright Street
Madison, Wisconsin 53704
emergencymanagement.wi.gov

www.nrc.gov/about-nrc/radiation.html
www.nei.org
www.ready.gov
www.hps.org/publicinformation/RadTerms