2018

Important Safety Information for Neighbors



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St. Lucie Nuclear Power Plant

This guide contains important emergency planning information for people located within 10-miles of the St. Lucie Nuclear Plant. It was developed by emergency management officials and provides basic information about what to do in the event of a nuclear emergency.

Español: (772) 462-8100











ABOUT ST. LUCIE NUCLEAR PLANT

Facts about St. Lucie:

The St. Lucie Nuclear Plant is a two-unit nuclear power plant operated by the Florida Power and Light Company, a subsidiary of NextEra Energy, Inc. It is located near Port St. Lucie, Fla., on Hutchinson Island just off the east coast of the state. (See area map on page 4)

The plant contains two pressurized light water reactors and is capable of producing up to 2,000 megawatts of electricity – enough to supply the annual power needs of more than one million homes.

Benefits of the St. Lucie Nuclear Plant:

- Nuclear power plants produce no greenhouse gases, or emissions associated with acid rain or urban smog;
- » Nuclear energy is clean, reliable, and affordable;
- » The plant provides hundreds of high-quality jobs for local residents;
- » It is a leader in environmental stewardship in the region; and
- » It is an economic engine for the entire state.

St. Lucie Nuclear Plant's Commitment to Safety

The St. Lucie Nuclear Plant has an outstanding record of safe operations. It is designed to withstand earthquakes and other natural events stronger than ever recorded in the region. It is elevated 20 feet above sea level to protect against flooding and extreme storm surges.

In addition, many layers of security protect the plant. The Nuclear Regulatory Commission, federal and local law enforcement, as well as FPL's own expert security team, are always on alert to ensure that plant facilities are protected and secure. The site also added many redundant safety systems and equipment following the Fukushima incident in Japan.

State and local officials, together with FPL, have prepared a detailed emergency plan to protect people who live, work, visit or go to school within 10 miles of the plant. The plan is tested by evaluated exercises and inspections. Conducting emergency drills improves the overall readiness of local authorities and enhances their ability to respond to emergencies.

As part of our commitment to safety, we test our emergency response system signals regularly. Siren tests are conducted by local emergency management officials on the first Thursday of March, June, September and December, and last two minutes or less.

How Nuclear Power Plants Work

Nuclear power plants are similar to oil, gas or coal-fired generating units in that they create steam to turn the blades of a turbine to generate electricity. Instead of burning conventional fuels, nuclear plants use uranium fuel in a process called "nuclear fission," to generate the heat to create the steam.

The uranium fuel inside the reactor is radioactive, and is carefully contained and constantly monitored. The fuel is encased in half-inch long ceramic pellets which are stacked end-to-end inside long metal tubes. The tubes are part of a fuel assembly that is immersed in water in the reactor core. The core is housed inside a nine-inch thick steel pressure vessel, which is in turn inside a containment building made of concrete more than three feet thick, laced with steel rods and lined with a steel wall.

Exposure to large amounts of radiation can be harmful to human health. However, given the nuclear industry's strong commitment to safety, such exposures are extremely rare and unlikely.

Numerous monitoring devices placed in and around the **St. Lucie Nuclear Power Plant** can detect even minute amounts of radiation levels. If there were any increase in radiation amounts above naturally occurring background levels, the monitoring equipment would alert plant operators, who in turn would notify state and county officials. (See page 3)

What is Radiation?

Radiation is energy that is given off as a particle or wave and radioactive elements are naturally occurring in small amounts throughout our environment. In the United States natural sources account for 82 percent of the radiation we are exposed to each year. Additional radiation comes from exposure to man-made sources such as X-rays, color televisions, computer monitors and smoke detectors. Less than one percent of the radiation to which people are exposed comes from nuclear power plants.



Source: National Council of Radiation Protection Measures



In an Emergency

- » In an emergency at the St. Lucie Nuclear Power Plant, everyone within a 10-mile radius (the "emergency planning zone") of the plant will be immediately notified of the nature of the emergency, and what if any action they should take. (See page 4 for the emergency planning zone)
- » If an emergency requires you to take any action, sirens would sound throughout the entire 10-mile emergency planning zone.
- » Emergency management officials will issue "emergency alerts" via radio and television transmission signals as well as mobile and digital emergency alert networks. (See page 9 for radio and television channels)
- » Hearing a siren or receiving an emergency alert does not necessarily mean to evacuate the area.
- » Siren tests are conducted by local emergency management officials on the first Thursday of March, June, September and December. In rare circumstances, sirens may also occasionally be triggered by lightning or electrical storms.
- » Tune in to local radio or television stations, stay up to date with digital alerts, or follow breaking developments on the Internet, until the emergency is over.
- » Local fire, police and emergency officials also may patrol affected areas within the emergency planning zone to broadcast information via loudspeakers and/or go door-to-door to ensure residents are aware of the situation.
- » Officials may use boats, loudspeakers, colored smoke and/or flares to alert those on waterways and in recreational areas.

Alerts and Warnings

There are four types of events at nuclear power plants. You should familiarize yourself with each of these terms:



An **Unusual Event** is a minor incident such as severe weather. Because of strict regulations, a number of events must be classified and reported as "unusual events" even though they pose no threat or danger to the public. *No public action is required.*



An **Alert** is a minor incident that affects, or could potentially affect, reactor safety. There is the possibility of a small, limited release of radioactive material, but there is no danger posed to the public. *No public action is required.*



A **Site Area Emergency** is a more serious incident such as: a major leak from the reactor coolant system; or an incident in which radioactive releases are possible or are occurring but will not affect the areas beyond the plant property. Sirens should sound, alerting the *public to tune to local radio or television stations for official information.*



A **General Emergency** is the most severe emergency classification. Radioactive releases that could affect the areas beyond the plant property are possible or are occurring and/or a major security event has occurred at the plan. Sirens would sound, alerting the *public to tune to local radio or television stations for official information.* (See page 9)

What You Should Do

- » If you hear a siren or receive an emergency alert, tune to local radio or television stations or check the Internet for more information. Hearing a siren does not mean to evacuate. Get more information before deciding what to do. (See page 9)
- » If there is an emergency, please check with family, friends and neighbors in the area to ensure they are aware of the situation and can take action if needed.
- » Residents within the 10-mile emergency planning zone should familiarize themselves with the area map, evacuation routes, and emergency reception center location information in this brochure. (See page 7)
- » If your children are in school, familiarize yourself with the school's emergency response plan. <u>Do not go to the</u> <u>school</u>. If instructed to relocate, students will be relocated to emergency reception centers beyond the 10-mile emergency planning zone. You can pick up your children at those locations. (See page 7)
- » If you have a family member in a nursing home or hospital **Do not try**

to pick them up. These facilities also have their own emergency evacuation procedures. You should check with them to familiarize yourself with these procedures.

- » Make transportation arrangements in advance and pre-register people with special needs. Contact local emergency management officials to let them know of any special needs you may have. (See page 9)
- Familiarize yourself with Sheltering in Place and Evacuation Information. (See page 6)

Did You Know?

One uranium pellet, which is about the size of a pencil eraser, is equal to 1 ton of coal or 149 gallons of oil.

Source: Nuclear Energy Institute

Power Plant 10-Mile Radius and Evacuation Areas





Sheltering in Place and Evacuation Information

If you are directed to shelter in place, you should:

- » Bring children and pets indoors immediately.
- » Close and lock all outside doors and windows. Locking may provide a tighter seal.
- » Continue using air conditioning systems unless they draw air from outside the home. Most central air conditioning systems recirculate the air inside the house.
- » Close the fireplace or woodstove damper.
- » Move to an interior room of the home.
- » Listen to the radio or television, or check the Internet for updated information and instructions.

If you are directed to evacuate, you should:

- » Secure your home, and leave pets inside with plenty of food and water. Animals will not be allowed in emergency shelters.
- » Secure any livestock, and leave plenty of water and food for them, enough to last several days.
- » Take this brochure, clothes for a few days, toiletries, medicines, baby needs, a sleeping bag or blankets and a pillow for each person, and a photo ID with address (such as a passport or driver's license).
- » Follow the evacuation routes provided in this booklet, and identify the nearest emergency reception center outside the emergency planning zone. Law enforcement officers will be stationed along the way to assist and direct you.
- » In the event of an evacuation, emergency public transportation will be provided to those who have no other means of transportation. Contact your local emergency management agency to pre-register.



Emergency Reception Center Information

- » Residents who are directed to evacuate should proceed to the nearest emergency reception center outside the 10-mile emergency planning zone.
- » The emergency reception centers are designed to provide adequate food, shelter and communications.
- » You will be reunited with, or receive information about, relatives who may have been independently evacuated from the emergency planning zone.
- » If conditions warrant, the health department will make potassium iodide tablets available at the emergency reception centers. Postassium iodide has been shown to counteract the effects of radiation exposure. For more information about potassium iodide, contact your county health department. (See page 8)

St. Lucie County residents:

- » St. Lucie County school children requiring relocation will be transported to the St. Lucie County Fairgrounds, 15601 West Midway Road, Ft. Pierce. (Take I-95 to Okeechobee Road exit; go west 8.1 miles). Local radio and television stations will announce when parents may pick up their children. School personnel will supervise and care for children until parents can pick them up. (See page 9)
- » Residents living north of Prima Vista/St. Lucie West Boulevard will be directed to emergency reception centers in Indian River County and Brevard County. (See page 9)
- » People living south of Prima Vista/St. Lucie West Boulevard will be directed to emergency reception centers in Palm Beach County. (See page 9)
- » Turn to local media outlets for more information. (See page 9)

Palm Beach County Emergency Reception Centers:

John Prince Park 2520 Lake Worth Road, Lake Worth

Okeeheelee Park

7715 Forest Hill Blvd, West Palm Beach

Brevard County Emergency Reception Center:

Valkaria Rest Stop

Mile marker 168.1 Northbound Interstate 95.

Martin County residents:

- » Martin County school children requiring evacuation will be transported to the Martin County High School, 2801 S. Kanner Highway, Stuart (east of Florida Turnpike and I-95), or to the alternate emergency reception center at South Fork High School, 10205 SW Pratt Whitney Rd., Hobe Sound (west of Florida Turnpike and I-95). Local radio and television stations will announce when and where parents may pick up their children. School personnel will supervise and care for the children until parents can pick them up.
- » Martin County residents who live north of Roosevelt Bridge and all residents of Hutchinson Island will be directed to emergency reception centers in Palm Beach County.
- » Turn to local media outlets for more information.

Indian River Emergency Reception Center:

9450 County Road 512, Sebastian, FL 32958

Specific emergency reception center location information will be posted on the respective county emergency management <u>website</u>. (See page 9)



Emergency Contact Information

St. Lucie County Department of Public Safety (772) 462-8100 stlucieco.gov/eoc

St. Lucie County Health Department (772) 462-3800 **stlucie.floridahealth.gov**

Martin County Fire Rescue, Division of Emergency Management (772) 287-1652 martin.fl.us

Martin County Health Department (772) 221-4000 martin.floridahealth.gov

Florida Emergency Information Line (800) 342-3557 floridadisaster.org Plant website stlucienuclear.com

Host Counties information:

Brevard (321-637-6670) brevardfl.gov/emergencymanagement/ home

Indian River 772-567-2154 irces.com/em/

Palm Beach 772-567-2154 http://discover.pbcgov.org/ publicsafety/dem/Pages/default.aspx

Mobile and Digital Alerts

Sign up to receive mobile and digital emergency alerts by visiting the websites below:

St. Lucie County Emergency Notification

stlucieco.gov/eoc (Click on Alert St Lucie Banner or go to stlucieco.gov/alert) Special Needs Online Registration form: specialneedsonline.stlucieco.gov

Martin County Emergency Management

martin.fl.us (Type Code Red into search bar)

State of Florida's Division of Emergency Management

floridadisaster.org/EMTOOLS/Warning/ index.htm

Up-to-date information will be posted on the St. Lucie Nuclear Power Plant's website here: StLucieNuclear.com

Radio and Television Stations

AM RADIO	FM RADIO
WJNX – 1330	WQCS - 88.9*
WIRA - 1400	WAVW - 92.7
WSTU - 1450*	WGYL - 93.7
WPSL - 1590*	WZZR – 94.3
	WILD - 95.5
TELEVISION	WOSN - 97.1
WPTV – CH 5	
WPFC – CH 12	WKGR - 98.7
	WHLG - 101.3
WPBF - CH 25	WOOL = 103.7
WTVX – CH 34	
WTCN – CH 15*	WFLM – 104.5

* Emergency Alert System ("EAS") station ** Please consult your area cable listing

for these channels

Para recibir una copia de este folleto en español llame al (772) 462-8100





P.O. Box 029100, Miami, FL 33102

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