

Utilities Commission

City of New Smyrna Beach, Florida



Emergency Response Plan

**Electric Operations Department
System Operations Department**

October 2008

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GENERAL PLAN FOR EMERGENCY

When an emergency (civil disaster, hurricane, windstorm, flood, or other disturbance which may require outside assistance), is expected to arise or exists on the system, the Director of Electric Operations will declare the plan in effect (**Phase I**). The Director of Electric Operations will notify the Superintendent of Electric Transmission & Distribution (T&D)/Fleet Maintenance, giving all possible details known at that time, and all necessary personnel will be placed on alert for emergency duty. The Superintendent will place appropriate personnel under his supervision on alert or standby, depending upon the nature of the emergency.

The instructions contained herein are divided into two sections; a section being assigned to each responsibility. It is essential, however, for everyone in a supervisory capacity to familiarize himself with the entire manual so that he will have a complete understanding of the duties and responsibilities of the various sections, in order that all may cooperate to the fullest extent.

Damages to substations will be assigned to the Superintendent of Substation & Relay. Damages to buildings, transmission and distribution facilities and grounds will be assigned to the Superintendent of T & D.

After conducting a damage survey of the electric system, if it is determined that fallen trees and limbs have caused severe damage to the overhead electric system, a contractor will be engaged under contract at that time for additional assistance in clearing and removing trees, in order to restore service. In addition, the Utilities Commission may utilize Meter Readers (Finance Department) for the removal of brush and debris in order to expedite the restoration of electric service to the Utilities Commission's customers.

The Electric Operations Department will be in close coordination with the Civil Defense unit in this area, which will also expedite matters for clearing of large trees blocking roadways, etc.

Communications, telephone: Should the need arise due to an emergency, after determination of the extent of the damages and estimated duration, a request to the Finance Department for assistance will be made, to cover the switchboard on a twenty-four

hour basis, in order to handle the calls in the affected area(s). In addition, all phones at the Operations Center will be used for handling emergency calls, enabling the Electric Operations Department to rotate shifts.

The IT Department will be contacted for maintaining service for telephone repair and additional phones, if needed, during the emergency period. Personnel will coordinate communication repairs with the appropriate contact person and telephone company.

The Director of System Operations & Generation will assist in the coordination of communication problems with the SCADA system and associated remote terminal units (RTU's).

MAJOR EMERGENCY PLAN

This portion of the manual involves plans and procedures to be followed in the event of a major emergency, and is prepared to provide key personnel with as much information as is practical for their general direction in case of a major emergency or capacity shortage.

As in the past, when any emergency has disrupted service to customers, the established lines of authority and responsibility will be followed as closely as possible.

When a major emergency exists, the first functions of the T & D Division will be to assess the damages, then clear all hazards resulting from the damage to the respective system. The second function will be to restore and maintain service to vital community services and installations in the following order:

1. Transmission lines and substations;
2. Electric Operations Center;
3. Lift stations and treatment plants;
4. Water pumping plants and stations;
5. Red Cross shelters;
6. Hospitals, law enforcement centers, and nursing homes;
7. Communications centers;
8. Food centers and storage facilities; and
9. FAA Navigational facilities.

and other institutions whose functions are essential to the health and welfare of the community.

The third function will be to restore service, and return the system back to normal operation to all, as quickly as possible, and to put into effect the Mutual Aid Agreements.

OPERATING EMERGENCIES

Based on the requirements of NERC standard EOP-001-0, Requirement 5, several items must be considered in an emergency plan to help ensure the reliability of the Bulk Electric System. This Emergency Response Plan is intended primarily for the continued operation or restoration of the Utilities Commission internal electric distribution system. Therefore, those elements are contained in a separate document, ***NSB-EOP-009-0 – Emergency Response Plan – Operating Emergencies.***

CAPACITY AND ENERGY EMERGENCIES

This Emergency Response Plan is intended primarily for the continued operation or restoration of the Utilities Commission internal electric distribution system. Therefore, this section is contained in a separate document, ***NSB-EOP-010-0 – Emergency Response Plan – Capacity and Energy Emergencies.***

FUEL SHORTAGE EMERGENCY

This Emergency Response Plan is intended primarily for the continued operation or restoration of the Utilities Commission internal electric distribution system. Therefore, this section is contained in a separate document, ***NSB-EOP-011-0 – Emergency Response Plan – Fuel Shortage Emergencies.***

ELECTRIC TRANSMISSION & DISTRIBUTION EMERGENCY PROCEDURES

When the occurrence of a major emergency involving a hurricane, tornado alert, flooding or capacity shortage is imminent (**Phase II**), the Superintendent of T&D/Fleet Maintenance or his designee will:

1. Alert the Director of Electric Operations of the imminent emergency.
2. Alert members of his staff to be available on a standby basis.
3. Take such action as necessary to secure and place electric transmission, substation and distribution facilities, and materials and equipment in those areas in a state of readiness.

Upon declaration of an emergency, the Superintendent or his designee shall:

1. Be responsible for the restoration of service and rehabilitation of the electric transmission, substation and distribution facilities.
2. Coordinate the supply of materials and equipment with the Warehouse Manager.
3. Coordinate with the Director of System Operations & Generation or his designee for available contractors and utilization of Utilities Commission personnel and vehicles assigned to his division.
4. Conduct a damage survey of the electric system.
5. Determine priorities on damage repairs.
6. Organize and direct the repair and rehabilitation of electric facilities damaged in this emergency.
7. Evaluate and report to the Director of Electric Operations the progress made in restoration of service.
8. Coordinate with the Director of System Operations & Generation, for reduction of voltage, rolling blackouts, if needed, and returning the electric system to normal operating conditions.

SYSTEM OPERATIONS & GENERATION DEPARTMENT EMERGENCY PROCEDURES

Emergency procedures will be put into action when the Director of Electric Operations declares an emergency.

The System Operations System Control Coordinator on duty will switch from the normal one man, eight hour rotating schedule to a twelve hour on, twelve hour off schedule, with two Coordinators per shift. These procedures will continue for the duration of the declared emergency or capacity shortage.

The System Operations & Generation Dept. will have the responsibility for monitoring both current and forecast projected weather conditions issued by the National Weather Services and other sources.

The Directors of Electric Operations and System Operations & Generation, as well as the Superintendent of T&D/Fleet Maintenance will be notified of any prediction of impending severe weather.

During severe weather emergencies, all weather reports will be coordinated by the System Operations Control Center.

GENERATION DIVISION EMERGENCY PROCEDURES

Swoope Plant Phones: **423-7125 (Maintenance Barn); and 423-7149 (Plant Operator)**

Smith Street Plant Phone: **423-7171**

Field St. Generation Site: **409-4728**

Upon alert by the Director of Electric Operations or his designee that a major emergency involving hurricanes, tornadoes, flooding or capacity shortage is imminent, the Director of System Operations & Generation or his designee will:

1. Take such action as necessary to secure and place buildings, structures, power plant facilities, and materials and equipment in those areas in readiness.
2. Coordinate, assign and allocate materials, personnel and equipment that are, or may be placed under his supervision in a manner that will most effectively reduce the disaster.
3. Advise the Director of Electric Operations or his designee of the capability of all generating units, and inform him as soon as possible of any anticipated change. Status reports are to be given at least once every 12 hours.
4. Coordinate with Purchasing for any food or material needs.
5. Coordinate with the Director of Electric Operations to establish any requirements beyond the capability of plant personnel.

PHASE I Checks will be performed once per hurricane season, after notice of the first tropical storm with the possibility of approaching the Florida area. Other than notification of all personnel, Phase I will mainly involve going over the Preparedness Check List (as follows):

1. First Aid Supplies:
 - A. Inventory Swoope Plant, Smith St. Diesel Plant, and Field St. Generation site.
 - B. Correct any shortage.
2. Fuel Supplies:
 - A. Swoope Plant supply of #2 oil.
 - B. Smith St. Plant supply of #2 oil.
 - C. Field St. Plant supply of #2 oil.
 - D. Water Reclamation Facility & L.S. 60 supply of #2 oil.
 - E. Water Treatment Plant & South Beach Pumping Station supply of #2 oil.
 - F. Order fuel, if needed.
 - G. Fill gas tanks of all Generation vehicles.
3. Walking Tour By Management:
 - A. Swoope Plant - check for any needed maintenance to secure plant (windows, roof, loose objects on plant grounds).
 - B. Smith St. Plant - check for any needed maintenance to secure plant (windows, roof, loose objects on plant grounds).
 - C. Field St. Plant - check for any needed maintenance to secure plant (windows, roof, loose objects on plant grounds).
 - D. Make list of all conditions found and determine action, if necessary.
4. Sand Bags:
 - A. Check supply of sound, empty sand bags.
 - B. Correct any shortage of bags.

During the course of the hurricane season, should a tropical storm approach close enough for the weather service to issue a Hurricane Watch for the New Smyrna Beach area, then Phase II will be initiated.

PHASE II Hurricane Preparedness Check List:

1. All personnel to be alerted and placed on standby basis, available for assignments as needed.
2. Swoope Plant, Smith Street Plant, and Field St. Plant - remove any loose objects on outside structures and grounds surrounding plants.
3. Any warnings for abnormally high tide or possible flood will institute the filling of sandbags, which will be moved to block the area around Swoope #3 and Swoope #4 generator pits. Disconnect the generator breakers on Swoope #3 and Swoope #4 units.
4. Install portable gasoline pump in the Swoope Plant to remove any water from the generator pits, to be discharged outside the building.

Should Hurricane Warnings be issued by the Weather Service for the New Smyrna Beach area, then we will proceed with Phase III.

PHASE III Hurricane or Capacity Shortage Preparedness Check List:

1. Two shift (personnel) operation will begin.
 - A. The Swoope Plant will employ one Generation Maintenance Mechanic and any available back-up personnel to be used for operation and maintenance, and as required for any assignments deemed necessary.
 - B. The Smith Street Plant will employ one Generation Maintenance Mechanic and any available back-up personnel to be used for operation and maintenance, and as required for any assignments deemed necessary.
 - C. The Field Street Plant will be manned as needed based on conditions.
2. If there is either insufficient load, or no secure lines to feed power out of the Swoope Plant, the units will be shut down.
3. Should there be a threat of high water at the Swoope Plant:
 - A. The spare motors in the heated storage area of the warehouse will be moved to a storage shelf at a higher elevation. Preparations will be made to remove or elevate motors and equipment in the plant.
 - B. A partial list of the equipment and motors that would be threatened by high water in the plant, and the order of priority, is as follows:
 - (1) Main circuit breakers cannot be moved, and all power to these units must be turned off when water reaches 6 in. depth on ground floor.
 - (2) The house air compressor motor, at 1 ft. 3 in.
 - (3) Bottom row of station batteries, at 2 ft. 2 in.
4. If there is a threat of high water at the Smith Street Plant:
 - A. Sandbag all floor level openings.
 - B. Install emergency gasoline operated pump (borrowed from the Water Department), to keep generator pits dry.
 - C. Consider age and condition of under-floor wiring from diesel plant distribution breakers, and remove all power if water starts filling pits.
 - D. If there is uncontrollable high water in the plant, disconnect the station

batteries.

- E. The peaking diesels are elevated sufficiently to be the last thing threatened by high water. In the event of such unusual high water, the station batteries should be disconnected and elevated.
- 5. If there appears to be a surplus of personnel, they will be made available to T&D or Water and Pollution Control, if needed, until there is a requirement for additional personnel in the Generation Division.

When the storm has passed, and no emergencies still exist, then begin Phase IV.

PHASE IV Clean up and inspection check list:

1. Walking tour by management and maintenance of all generation plant and property.
 - A. List all damages, and make plans for repairs and/or replacements.
2. Inspection of oil storage, to determine if there has been water contamination.
 - A. Remove water from fuel.
3. Repeat Phase I check list, to be prepared for possible turnaround of departing storm.

EMERGENCY PHONE NUMBERS:

Volusia County Civil Defense (Emergency Management).....254-1500

New Smyrna Beach Police Department424-2220

New Smyrna Beach Fire Department.....424-2162

New Smyrna Beach Public Works424-2209

**CAPACITY SHORTAGE EMERGENCY
Stage 1 - Advisory - General**

VOLUNTARY PUBLIC SERVICE ANNOUNCEMENT

Due to extreme seasonal temperatures, a higher than usual demand for electricity is anticipated during the next several days. The Utilities Commission is reminding electric customers that the wise use of electricity will help your electric utility deal with this demand, and lessen the possibility of electric power shortages.

There are several simple measures you can take to help reduce your electricity consumption:

1. Keep your thermostat at a constant setting.
2. Turn off unnecessary lighting, both inside and out.
3. Turn off pool pumps and sprinkler system pumps.

Your electric utility thanks you for your cooperation. For more information on ways you can save electricity, call us at 427-1361. Presented as a public service by the Utilities Commission, City of New Smyrna Beach.

CAPACITY SHORTAGE EMERGENCY
Stage 1 - Advisory - Cold Weather

VOLUNTARY PUBLIC SERVICE ANNOUNCEMENT

Due to extreme cold weather, a higher than usual demand for electricity is anticipated during the next several days. The Utilities Commission is reminding electric customers that the wise use of electricity will help your electric utility deal with this demand, and lessen the possibility of electric power shortages.

There are several simple measures you can take to help reduce your electricity consumption:

1. Keep your thermostat at a constant setting, and if health permits, lower your thermostat to 65 degrees.
2. Keep curtains and blinds closed to reduce heat loss.
3. Turn off unnecessary lighting, both inside and outside.

Your electric utility thanks you for your cooperation. For more information on ways you can save electricity, call us at 427-1361. Presented as a public service by the Utilities Commission, City of New Smyrna Beach.

CAPACITY SHORTAGE EMERGENCY

Stage 1 - Advisory - Hot Weather

VOLUNTARY PUBLIC SERVICE ANNOUNCEMENT

Due to extreme high temperatures, a higher than usual demand for electricity is anticipated during the next several days. The Utilities Commission is reminding electric customers that the wise use of electricity will help your electric utility deal with this demand, and lessen the possibility of electric power shortages.

There are several simple measures you can take to help reduce your electricity consumption:

1. Keep your thermostat at a constant setting, and if health permits, raise your thermostat to 80 degrees.
2. Keep curtains and blinds closed during the hottest part of the afternoon.
3. Turn off unnecessary lighting, both inside and outside.
4. Turn off pool pumps and sprinkler system pumps whenever possible.

Your electric utility thanks you for your cooperation. For more information on ways you can save electricity, call us at 427-1361. Presented as a public service by the Utilities Commission, City of New Smyrna Beach.

CAPACITY SHORTAGE EMERGENCY
Stage 2 - Alert - General Weather Related

VOLUNTARY PUBLIC SERVICE ANNOUNCEMENT

The following Public Service Announcement is presented by the Utilities Commission, City of New Smyrna Beach.

Due to severe weather conditions and an unusually high demand for electricity throughout the state, New Smyrna Beach's utility customers are asked to reduce their consumption of electricity to minimize the need for rolling blackouts.

Customers should (lower/raise) thermostat settings and shut off all unnecessary appliances, especially items such as pool pumps and sprinkler system pumps. Additionally, turn off all unnecessary lighting and minimize cooking.

To prepare for the possibility of rolling blackouts, customers should have emergency supplies on hand, such as flashlights, candles, battery-operated radio, extra batteries and bottled water. Customers on electric-operated life support systems should check their energy back-up systems.

The cooperation of all customers is sincerely appreciated.

CAPACITY SHORTAGE EMERGENCY
Stage 2 - Alert - Sudden Power Loss

VOLUNTARY PUBLIC SERVICE ANNOUNCEMENT

The following public service announcement is presented by the Utilities Commission, City of New Smyrna Beach.

Due to the loss of electric generating units and the high demand for electricity throughout the state, Florida citizens are being asked to conserve electricity. New Smyrna Beach's utility customers are asked to reduce electricity consumption to help minimize the possibility of rolling blackouts in our area.

Customers should (lower/raise) thermostat settings and shut off unnecessary appliances, especially items such as pool pumps and sprinkler system pumps. Additionally, turn off all unnecessary lighting, and minimize cooking.

To prepare for the possibility of rolling blackouts, customers should have emergency supplies on hand, such as flashlights, candles, battery operated radios, extra batteries, and bottled water. Customers on electric-operated life support systems should check their energy back-up systems.

The cooperation of all customers is sincerely appreciated.

CAPACITY SHORTAGE EMERGENCY
Stage 3 - Emergency - General Weather Related

VOLUNTARY PUBLIC SERVICE ANNOUNCEMENT

The following public service announcement is presented by the Utilities Commission, City of New Smyrna Beach.

Florida's electric utilities are currently experiencing rotating electric power blackouts due to a weather-related demand for electric power that exceeds available supplies. Rolling blackouts in the New Smyrna Beach service area are expected to last for 60 - minute intervals.

Florida citizens are asked to help curtail electricity usage to help minimize the duration of the rolling blackouts.

1. If your electricity is on, discontinue all non-essential use to conserve electricity.
2. If your power goes out, be sure to turn off all major electric appliances. This will help to prevent power surges when power is restored, and will keep our electric system from becoming overloaded.
3. When power is restored, turn appliances back on gradually, on an as-needed basis.
4. Because local utility phone lines are overloaded, please leave local telephone lines open for emergency calls **only**.
5. If yours is the only home or business in your neighborhood experiencing an extended power outage, contact the Utilities Commission at 427-1366.
6. Please stay tuned for further announcements.

CAPACITY SHORTAGE EMERGENCY
Stage 3 - Emergency - Sudden Power Loss

VOLUNTARY PUBLIC SERVICE ANNOUNCEMENT

The following public service announcement is presented by the Utilities Commission, City of New Smyrna Beach.

Florida's electric utilities are currently experiencing significant interruptions in the state's power supply system, and are rotating electric power blackouts to help deal with this situation. Customers in the New Smyrna Beach service area are currently experiencing rotating blackouts, which are expected to last for 60 - minute intervals.

Florida citizens are asked to help curtail electricity usage to help minimize the duration of the rolling blackouts.

1. If your electricity is on, discontinue all non-essential use to conserve electricity.
2. If your power goes out, be sure to turn off all major electric appliances. This will help to prevent power surges when power is restored, and will keep our electric system from becoming overloaded.
3. When power is restored, turn appliances back on gradually, on an as-needed basis.
4. Because local utility phone lines are overloaded, please leave local telephone lines open for emergency calls **only**.
5. If yours is the only home or business in your neighborhood experiencing an extended power outage, contact the Utilities Commission at 427-1366.
6. Please stay tuned for further announcements.

CAPACITY SHORTAGE EMERGENCY

Stage 4 - Restoration - Weather-Related or Sudden Power Loss

PUBLIC SERVICE ANNOUNCEMENT

The Utilities Commission, City of New Smyrna Beach, has announced that the widespread electric power emergency our area has been experiencing has ended. Electric service has been restored, and rolling blackouts are no longer in effect.

Smaller, localized outages and power line repairs are being handled by utility crews. If your home or business is still experiencing a blackout, please call the Utilities Commission at 427-1366.

Thank you for your cooperation during this emergency.

HURRICANE SAFETY RULES

Hurricane advisories will help save your life... but you must help. Follow these safety rules during hurricane emergencies:

1. Enter each hurricane season prepared. Every June through November, recheck your supply of boards, tools, batteries, nonperishable foods, and other equipment you will need when a hurricane strikes.
2. When you hear the first tropical cyclone advisory, listen for future messages; this will prepare you for a hurricane emergency well in advance of the issuance of watches and warnings.
3. When your area is covered by a hurricane watch, continue normal activities, but stay tuned to radio or television for all NOAA National Weather Service advisories. Remember: a hurricane watch means possible danger; if the danger materializes, a hurricane **warning** will be issued. Meanwhile, keep alert. Ignore rumors.
4. When a hurricane warning is received: Plan your time before the storm arrives, and avoid the last minute hurry, which might leave you marooned or unprepared. Keep clam until the emergency has ended. Leave low-lying areas that may be swept by high tides or storm waves.
5. Moor your boat securely before the storm arrives, or evacuate it to a designated safe area. When your boat is moored, leave it; and don't return once the wind and waves are high.
6. Board up windows, or protect them with storm shutters or tape. Danger to small windows is mainly from wind-driven debris. Larger windows may be broken by wind pressure.
7. Secure outdoor objects that might be blown away or uprooted. Garbage cans, garden tools, toys, signs, porch furniture, potted plants, and a number of otherwise harmless items can become missiles of destruction in hurricane winds. Anchor them down, or store them inside before the storm strikes.
8. Store drinking water in clean bathtubs, jugs, bottles and cooking utensils; the municipal water supply may be contaminated by flooding, or damaged by

hurricane floods.

9. Check battery-powered equipment. Your radio may be your only link with the world outside the hurricane.
10. Emergency cooking facilities, lights and flashlights will be essential if utilities are interrupted.
11. Keep your car fueled. Service stations may be inoperable for several days after the storm strikes, due to flooding or interrupted electric power.
12. Stay at home, if it is sturdy and on high ground, unless advised otherwise by local authorities. If it is not, move to a designated shelter, and stay there until the storm is over. Monitor television or radio reports for any mandatory or recommended evacuation orders.
13. Remain indoors during the hurricane. Travel is extremely dangerous when winds and tides are whipping the area.
14. Monitor the storm's position through NOAA National Weather Service Advisories.

AVOID THE EYE OF THE HURRICANE

If the calm storm center passes directly overhead, there will be a lull in the wind, lasting from a few minutes to half an hour or more. Stay in a safe place unless emergency repairs are absolutely necessary. Remember, at the other side of the eye, the winds rise very rapidly to hurricane force, and come from the opposite direction.

When the hurricane has passed:

1. Seek necessary medical care at Red Cross disaster stations or hospitals.
2. Stay out of disaster areas. Unless you are qualified to help, your presence might hamper first aid and rescue work.
3. Drive carefully along debris-filled streets. Roads may be undermined, and may collapse under the weight of a car.
4. Slides along cuts are also a hazard.
5. Avoid loose or dangling wires, and report them immediately to the **Electric**

Department (427-1366), or the nearest law enforcement officer.

6. Report broken sewer or water mains to the **Water Department (427-1368)**.
7. Prevent fires. Lowered water pressure may make fire fighting difficult.
8. Check refrigerated food for spoilage if power has been off during the storm.

Remember that hurricanes moving inland can cause severe flooding. Stay away from the beach, river banks and streams. NOAA National Weather Service advisors will keep you informed on flood stages.

EMERGENCY EQUIPMENT
(INSERT LIST OF CUSTOMERS ON LIFE SUPPORT SYSTEMS)

HOME PHONES

(INSERT LIST OF EMPLOYEE HOME PHONE NUMBERS/ADDRESSES)

PHONE LIST
(INSERT MONTHLY UC PHONE LIST)

RADIO NUMBERS
(INSERT LIST OF EMPLOYEE RADIO NUMBERS)