

**Eric Fryson**

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**From:** Karen Culpepper [Karen.Culpepper@fmpa.com]  
**Sent:** Thursday, January 26, 2012 2:02 PM  
**To:** Filings@psc.state.fl.us  
**Subject:** Electronic Filing: Dkt. 110316-EM  
**Attachments:** 2012 capacity and fuels emergency plans cover letter.docx; FMPA CAPACITY AND FUEL EMERGENCY PLAN 1-20-2012.docx; FMPA CAPACITY AND FUEL EMERGENCY PLAN FINAL 1-20-2012.docx

Ms. Cole,

Attached for filing in PSC Dkt. 110316-EM is FMPA's Capacity and Fuel Emergency Plan and a cover letter from Joseph McKinney. The final version of the plan contains 14 pages, and the redline version contains 21 pages; both are in Word format.

Please call me at (850) 297-2011 or email if you have any questions.

Thank you for your assistance.

*(See attached file: 2012 capacity and fuels emergency plans cover letter.docx)(See attached file: FMPA CAPACITY AND FUEL EMERGENCY PLAN 1-20-2012.docx)(See attached file: FMPA CAPACITY AND FUEL EMERGENCY PLAN FINAL 1-20-2012.docx)*

*Karen Culpepper*

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DOCUMENT NUMBER-DATE  
 00533 JAN 26 2012  
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1/26/2012



Florida Municipal Power Agency

Joe McKinney

Operations and Short-Term Planning Manager

January 26, 2012

Office of Commission Clerk  
Florida Public Service Commission  
2540 Shumard Oak Boulevard  
Betty Easley Conference Center, Room 10  
Tallahassee, FL 32399-0850

**Re: Docket 110316-EM**

Attached are revised capacity emergency and fuel emergency plans for the Florida Municipal Power Agency. Information required for electronic filing follows.

Person responsible for electronic filing:

Joseph R. McKinney  
8553 Commodity Circle  
Orlando, FL 32819  
407-355-7767  
joe.mckinney@fmpa.com

Docket 110316  
Request for approval of electric utilities' long-term energy emergency plans, filed pursuant to Rule 25-6.0185, F.A.C.

Filed on behalf of the Florida Municipal Power Agency (FMPA)

This document consists of 21 pages in a type and strike format.

The emergency plans are FMPA's plans for responding to potential and actual capacity emergencies and fuel emergencies. The document has been reformatted and updated with current contact information and generation resource information.

Sincerely,

/s/ Joseph R. McKinney

Joseph R. McKinney  
Operations and Short Term Planning Manager  
Florida Municipal Power Agency

DOCUMENT NUMBER - DATE

00533 JAN 26 2012

FPSC-COMMISSION CLERK

## **FMPA CAPACITY AND FUEL EMERGENCY PLANS**

The Florida Municipal Power Agency (FMPA) is a non-profit joint action agency made of 30 municipalities in Florida. The FMPA All-Requirements Project (ARP) is the wholesale supplier of electricity to the City of Bushnell, City of Clewiston, City of Fort Meade, Fort Pierce Utilities Authority, City of Green Cove Springs, Town of Havana, Keys Energy Services (Utility Board of the City of Key West), Beaches Energy Services (City of Jacksonville Beach), Kissimmee Utility Authority (KUA), Lake Worth Utilities, City of Leesburg, City of Newberry, City of Ocala and City of Starke. FMPA is a member of the Florida Municipal Power Pool Balancing Authority (FMPP BA).

The FMPA Capacity Emergency Plan is designed to address the timely notification of ARP project participants of Generating Capacity Advisory, Generating Capacity Alert, Generating Capacity Emergency or System Load Restoration so they can notify their own emergency and public information personnel, customers, news media, local government personnel, municipal emergency agencies, fire, police and the Public Service Commission.

The Fuel Emergency Plan details how FMPA anticipates handling different fuel emergencies for the FMPA fleet while serving the electrical needs of the ARP participants. FMPA utilizes a variety of resources in its portfolio to supply the energy requirements of the ARP participants including purchases from other utilities, FMPA owned generation and generation leased from ARP participants. For jointly owned generation where FMPA owns a minority share, the majority Owner/Operator is responsible for the fuel supply. The FMPA fleet consists of generating resources that are located at Keys Energy Service, KUA, Lake Worth Utilities, the Treasure Coast Energy Center (TCEC) in Fort Pierce, and the Oleander No. 5 unit in Cocoa.

### **FMPA Capacity Emergency Plan**

The purpose of this plan is to coordinate the actions of the individual ARP participants with the Florida Reliability Coordinating Council (FRCC) generating capacity shortage plan when responding to generating capacity shortages in the State of Florida.

A generating capacity shortage exists when any one of the electric utilities in the State of Florida has, or is forecast to have, inadequate generating capability, including purchased power, to supply its firm load obligations.

The Florida Reliability Coordinating Council (FRCC) definitions of a Generating Capacity Advisory, Generating Capacity Alert, Generating Capacity Emergency and System Load Restoration are located in Appendix B.

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00533 JAN 26 02

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The Florida Municipal Power Pool Balancing Authority (FMPP BA) will be notified of a Generating Capacity Advisory, Alert, Emergency or System Load Restoration by the State Capacity Emergency Coordinator via the state messaging system. FMPP BA System Operators will notify the All-Requirement Project Member Cities of the Generating Capacity Advisory, Alert, Emergency or System Load Restoration.

### **GENERATING CAPACITY ADVISORY**

A Generating Capacity Advisory anticipates conditions which may affect operations and is primarily for informational purposes. Due to the geographical and electrical configuration of Florida, the state has been divided into two areas. Area 1 (North Florida) includes Green Cove Springs, Havana, Jacksonville Beach, Newberry and Starke. Area 2 (Central and South Florida) includes Bushnell, Clewiston, Fort Meade, Fort Pierce, Key West, Kissimmee, Lake Worth, Leesburg and Ocala. An advisory will be issued when: (1) temperature projections for up to three (3) days in advance of the current date exceed temperature criteria in a prescribed number of cities; (2) one or more utilities in an area are issuing or planning to issue public appeals for conservation, (3) notification by an individual utility that their generation fuel supplies may be impacted and may decrease below a level adequate to provide for continuous, uninterrupted service to its firm customers, or (4) the fuel supplies and deliveries, on a statewide basis may be impacted by weather, natural gas production disruptions, natural gas pipeline delivery disruptions, or any other fuel infrastructure impacts within the FRCC. An advisory issued for conditions (3) or (4) will be issued as:

#### ***Generating Capacity Advisory / Short-Term Generation Fuel Availability Concern***

An advisory does not indicate an imminent threat of an alert or an emergency, and minimal action would normally be required by utilities or governmental agencies. An advisory declared on the basis of forecasted temperatures will not be rescinded even if the temperature forecast changes.

The State Capacity Emergency Coordinator will, via the state messaging system, notify the FMPP BA that an advisory has been declared. The FMPP BA System Operators will immediately notify the ARP participants listed in Appendix A by email.

The FMPP BA System Operator will provide participants with the reason a Generating Capacity Advisory is being declared:

1. Temperature projections for up to three (3) days in advance of the current date exceed temperature criteria in a prescribed number of cities.
2. One or more utilities in an area are issuing or planning to issue public appeals for conservation.

3. Notification by an individual utility that their generation fuel supplies may be impacted and may decrease below a level adequate to provide for continuous, uninterrupted service to its firm customers.
4. The fuel supplies and deliveries, on a statewide basis may be impacted by weather, natural gas production disruptions, natural gas pipeline delivery disruptions, or any other fuel infrastructure impacts within the FRCC.

Recommended participant action:

- a) Notify utility emergency personnel, if appropriate.
- b) Notify local emergency agencies, if appropriate.
- c) Prepare a Generating Capacity Advisory announcement for the news media.
- d) Implement utility public awareness programs.

The individual ARP participants shall notify the FMPP BA System Operators and the State Capacity Emergency Coordinator if they are issuing or planning to issue public appeals for conservation.

### **GENERATING CAPACITY ALERT**

A Generating Capacity Alert will be issued when: (1) the FRCC operating margin is such that the loss of the largest generating unit will necessitate interruption of firm load in Florida; (2) the fuel supplies of an individual utility have decreased below a level adequate to provide for continuous, uninterrupted service to its firm customers, or (3) the fuel supplies and deliveries on a statewide basis have decreased and may be below a level adequate to provide for continuous, uninterrupted service to firm customers. An alert issued for conditions (2) or (3) will be issued as a:

#### ***Generating Capacity Alert / Short-Term Generation Fuel Shortage***

The issuance of a Generating Capacity Alert does not indicate an imminent threat of a Generating Capacity Emergency and is used to increase situational awareness and heighten the coordination and response efforts between and among utilities and the appropriate governmental agencies of a potential generating capacity shortage.

The State Capacity Emergency Coordinator will, via the state messaging system, notify the FMPP BA that an alert has been declared. The FMPP BA System Operators will immediately notify the ARP participants listed in Appendix A by email.

FMPP BA System Operators will provide the ARP participants with the reason a Generating Capacity Alert is being declared:

1. The FRCC operating margin is such that the loss of the largest generating unit will necessitate interruption of firm load in Florida.

2. The fuel supplies of an individual utility have decreased below a level adequate to provide for continuous, uninterrupted service to its firm customers.
3. The fuel supplies and deliveries on a statewide basis have decreased and may be below a level adequate to provide for continuous, uninterrupted service to firm customers.

Recommended participant action:

- a) Notify utility emergency personnel, if appropriate.
- b) Notify local emergency agencies, if appropriate.
- c) Prepare a Generating Capacity Alert announcement for the news media.
- d) Implement utility public awareness programs.
- e) Implement Load Management/Interruptible Service.
- f) Implement procedures to reduce utility and city use of power.

### **GENERATING CAPACITY EMERGENCY**

A Generating Capacity Emergency will be declared when (1) one of the electric utilities in the FRCC Region has inadequate generating capacity, including purchased power, to supply its firm load obligations, or (2) the fuel supplies and deliveries on a statewide basis have decreased to a level that is not adequate to provide for continuous, uninterrupted service to firm customers. The loss of firm load in a localized area due to a transmission or distribution outage, temporary problem or isolated event may be reported but would not cause the implementation of the plan. The loss of firm load in a localized area due to automatic underfrequency relay operation would not cause the implementation of the plan unless it is anticipated that the outage will extend over several hours. The declaration of a Generating Capacity Emergency for condition (2) above will be declared as a:

#### ***Generating Capacity Emergency / Short-Term Generation Fuel Shortage***

A Generating Capacity Emergency declaration indicates an immediate or imminent threat to the reliability of the overall FRCC bulk power system. The declaration of a Generating Capacity Emergency will specify a time period and date that denotes the emergency period. If an emergency has been declared more than one day in advance based on forecasted data that will not be rescinded unless the revised data indicates that the operating margin and availability of generation fuel is sufficient to be “out of” an alert phase as well.

The State Capacity Emergency Coordinator will, via the state messaging system, notify the FMPP BA that a Generating Capacity Emergency has been issued. The FMPP BA System Operators will immediately notify the ARP participants listed in Appendix A by email.

FMPP BA System Operators shall monitor the capability of FMPP generating resources and the FMPP ARP participants load. FMPP shall be notified by the FMPP BA System Operators if FMPP generating resources are not sufficient to serve the ARP load and emergency purchases may not be available.

When a Generating Capacity Emergency has been issued or FMPP generating resources are not sufficient to serve the FMPP load and emergency purchases may not be available, FMPP BA System Operators will immediately contact one of the FMPP personnel listed in Appendix A.

FMPP BA System Operators will provide participants with the reason a Generating Capacity Emergency is being declared:

1. One of the electric utilities in the FRCC Region has inadequate generating capacity, including purchased power, to supply its firm load obligations.
2. The fuel supplies and deliveries on a statewide basis have decreased to a level that is not adequate to provide for continuous, uninterrupted service to firm customers.

Recommended participant action:

- a) Notify utility emergency personnel, if appropriate.
- b) Notify local emergency agencies, if appropriate.
- c) Prepare a Generating Capacity Emergency announcement for the news media.
- d) Implement utility public awareness programs.
- e) Implement Load Management/Interruptible Service.
- f) Implement procedures to reduce utility and city use of power.
- g) Implement voltage reduction if available.
- h) **Shed firm load as directed by the FMPP.**

FMPP BA System Operators shall notify the State Capacity Emergency Coordinator if it has directed any ARP participants to implement firm load reductions.

## **SYSTEM LOAD RESTORATION**

System Load Restoration is complete when firm load reduction has been terminated and power supply is adequate.

The State Capacity Emergency Coordinator will, via the state messaging system, notify the FMPP BA that all firm loads have been restored. The FMPP BA System Operators will immediately notify the ARP participants listed in Appendix A by email.

Recommended participant action:

- a) Notify utility emergency personnel, if appropriate.
- b) Notify local emergency agencies, if appropriate.
- c) Prepare a System Load Restoration announcement for the news media.
- d) Implement utility public awareness programs.

## **NOTIFICATION TO DEPARTMENT OF ENERGY (DOE)**

FMPA shall notify the DOE Emergency Operations Center (Telephone (202) 586-8100, Fax (202) 586-8485) if the ARP participant(s) requests meet any of the conditions outlined in Form EIA-417.

Also, FMPA shall notify the DOE Emergency Operations Center (Telephone (202) 586-8100, Fax (202) 586-8485) for any issuance of a public appeal by ARP participant(s) to reduce the use of electricity due to a Generating Capacity Advisory, Generating Capacity Alert, or Generating Capacity Emergency.

FMPA will complete the United States Department of Energy, Office of Energy Emergency Operations, and Power System Emergency Report Form EIA-417.

## **REVIEW CAPACITY EMERGENCY PLAN**

This plan will be reviewed once a year by the Operations and Short Term Planning Manager at FMPA.

The Operations and Short Term Planning Manage at FMPA will issue revisions of the plan to the following:

- All-Requirements Project participants (ARP)
- Florida Reliability Coordinating Council (FRCC)
- Florida Public Service Commission (FPSC)
- Florida Municipal Power Pool (FMPP)



**Appendix A**

**FMPA Personnel Contact List**

Name	Office	Dispatch	Home	Cell Phone
Joe McKinney	(407) 355-7767	NA	(352) 867-7179	(407) 947-5038
Juan Bailey	(407) 355-7767	NA	(407) 366-4023	(407)257-1775
Tom Reedy	(407) 355-7767	NA	(407) 654-8976	(407) 256-6655

**All-Requirements Contact List**

	Office	Dispatch	Email	Cell Phone
<b>City of Bushnell</b> Bruce Hickle	(352) 793-8012	Contact Bruce Hickle	bhickle@cityofbushnellfl.com	(352) 303-1090
<b>City of Clewiston</b> Kevin McCarthy	(863) 983-1454	Contact Kevin McCarthy	kevin.mccarthy@clewiston-fl.gov	(863) 228-0360
<b>City of Fort Meade</b> Fred Hilliard	(863) 285-1100 Ext. 232	Contact Fred Hilliard	fhilliard@cityoffortmeade.com	(863) 226-8350
<b>Fort Pierce Utilities Authority</b> Tom Richards	(772) 466-1600 Ext. 3400	(772) 461-5875 *	tom@fpu.com dispatch-esc@fpu.com cvanegas@fpu.com efl@fpu.com banderson@fpu.com	(772) 528-0075
<b>Green Cove Springs</b> Greg Griffin	(904) 529-2249	(904) 529-2229	ggriffin@greencovesprings.com ckeene@greencovesprings.com	(904) 298-4342
<b>Town of Havana</b> Howard McKinnon	(850) 539-2820	Contact Paul Bert @ (850) 556-3285	hmgr@mchsi.com	(850) 524-2268
<b>Jacksonville Beach</b> Roy Trotter	(904) 247-6259	(904) 247-6171 * (904) 247-6204	rtrotter@beachesenergy.com jcallander@beachesenergy.com kstewart@beachesenergy.com	(904) 226-3859
<b>Keys Energy</b> Fred Culpepper	(305) 295-1062	(305) 295-1059 *	Fred.Culpepper@KeysEnergy.com controlroomcoordinators@keysenergy.com	305-393-2272

<b>Kissimmee Utility Authority</b> Greg Woessner	(407) 933-7777 Ext 61210	(407) 847-7893 * (407) 847-7627	<u>GWOESSNE@kua.com</u> <u>trans@kua.com</u>	(321) 624-0901
<b>Lake Worth Utilities</b> Walt Gill	(561) 586-1706	(561) 586-1704 *	<u>wgill@LakeWorth.org</u> <u>lwsysop@lakeworth.org</u>	561-351-0231
<b>City of Leesburg</b> Paul Kalv	(352) 728-9834	(352) 728-9830 *	<u>Paul.Kalv@leesburgflorida.gov</u> <u>Phil.Janik@leesburgflorida.gov</u>	(352) 516-2052
<b>City of Newberry</b> Blaine Suggs	(352) 472-2161	Contact Blaine Suggs	<u>blaine.suggs@ci.newberry.fl.us</u>	(352) 258-4486
<b>City of Ocala</b> Matt Brower	(352) 351-6600	(352) 351-6609 *	<u>mbrower@ocalafl.org</u> <u>ocalascc@ocalafl.org</u>	352-572-0339
<b>City of Starke</b> Ricky Thompson	(904) 964-2011	Contact Ricky Thompson	<u>rthompson@cityofstarke.org</u>	(352) 494-3288

\* **Note:** The dispatch offices of these cities are operated 24/7

## **Appendix B**

### **FRCC Generating Capacity Advisory**

A "Generating Capacity Advisory" is similar to a hurricane watch. It is intended to give early warning of potential electricity shortfalls and bring utilities, emergency management officials, the governor and the Florida Public Service Commission (FPSC) to a state of readiness.

The advisory is primarily for information purposes. It automatically kicks off utility tracking activities, and it initiates inter-utility and inter-agency communication. While advisories do not usually require public action, general information about the potential problem can be distributed to consumers to forewarn them of adverse conditions if necessary.

The advisory is triggered by either (1) a forecast of extreme temperatures around the state or (2) a public conservation appeal by an individual utility, or (3) disruption of the gas pipeline(s) serving the FRCC Region that may threaten to adversely affect the generation capacity in the FRCC Region. Due to the geographical and electrical configuration of Florida, the state has been divided into two areas. Area 1 includes Gainesville, Tallahassee and Jacksonville (North Florida). Area 2 includes Orlando, Tampa, St. Petersburg and Miami (Central and South Florida).

Temperature thresholds have been set for each of these cities and when a predetermined number of cities exceed their temperature triggers, an advisory is declared for that area. The temperatures are important since severe weather (hot or cold) can be accompanied by significant increases in electric demand.

An advisory also is declared when any individual utility plans to or calls for voluntary conservation from its customers. At times the problem may be local and may not require or allow statewide assistance. Even in this circumstance, the advisory sensitizes all utilities to the problem and heightens awareness in case the event escalates into a potential statewide problem.

### **FRCC Generating Capacity Alert**

The second stage of the plan is a "Generating Capacity Alert." It is based on a reserve margin which is defined as the difference between available statewide resources and the amount of peak electric demand projected for that day. An alert will be called when (1) the reserves fall below the size of the largest generating unit in the state (currently approximately 900 MW), or, (2) disruption of the gas pipeline(s) serving the FRCC Region will adversely affect the generation capacity in the FRCC Region.

The reason for the reserve trigger is when reserves fall below the 900 MW level, loss of a large unit due to an *unexpected mechanical failure* could lead to blackouts since sufficient backup capacity is not available.

The alert initiates actions that are intended to increase reserves. For example, available emergency supply options would be explored. Additionally, utilities could reduce electric demand through load management programs. These programs give utility dispatchers control over certain appliances and electrical equipment according to pre-arranged customer agreements. Through remote control equipment and installation of special switches on appliances (such as electric water heaters, air conditioning/heating systems and pool pumps), the dispatcher can cycle appliances on and off as needed during a peak demand period. Close to 1,500 MW of load management is available statewide. Utilities can also ask consumers to implement voluntary conservation measures.

Some utilities have industrial or commercial customers on interruptible service. Under this agreement, the customer gets lower priced energy in exchange for the utility's right to *interrupt their electricity on short notice* to lower electric demand. The difference between load management and interruptible service is that the first selectively cycles specific appliances on and off for short periods of time, while the second cuts off service to the industrial load entirely.

Typically, industrial customers on interruptible service have backup power (either they own small generators or are co-generators) and are able to supply their own electric needs for these periods. A little more than 1100 MW of interruptible load is available statewide.

### **FRCC Generating Capacity Emergency**

A "Generating Capacity Emergency" occurs when firm load is lost or blackouts occur *or are inevitable in Florida*. Rolling blackouts manually activated by utilities are a last resort to avoid system overload and possible equipment damage. Without them, the electric system could undergo an automatic shutdown that would result in more widespread and longer blackouts. By the time rolling blackouts are used, utilities would have exhausted every available means to balance supply and demand.

Prior to rolling blackouts, actions include bringing all generating units to full capability, starting all units that are available, purchasing energy from outside the state, reducing non-essential electric use at utility facilities, using load management, curtailing interruptible customers, reducing voltage levels to within established safe limits, and issuing appeals to consumers for emergency reduction of electricity use and voluntary conservation.

At this stage of the emergency plan, actions and information are coordinated among utilities, emergency agencies, the governor, the FPSC, and the media. Frequent status reports are provided to agencies and the media. The Division of Emergency

Management would consider using the Emergency Broadcast System (EBS) to inform citizens of events and to direct them to available shelters if conditions warranted.

Recognizing the consequences of a loss of electricity, individual utility emergency plans include provisions for special facilities critical to the safety and welfare of citizens such as hospitals, fire and police departments, mass transit, communication services, water supply and sanitation facilities, and national defense installations. Every effort is made to maintain power to these facilities, but utilities recommend that emergency facilities or anyone with critical equipment should install emergency or portable generating equipment.

Although the state emergency plan is set up to give consumers advance warnings, there can be circumstances (such as the sudden loss of the transmission lines that connect Florida to the rest of the U.S., or the loss of multiple generating units) where blackouts could occur suddenly without the opportunity to issue warnings.

When the power goes out during rolling blackouts, consumers should immediately turn off major appliances and the heating or air conditioning systems. Once power is restored, appliances can be returned to use gradually as needed. This prevents a sudden power drain as electricity is restored and avoids the possibility of overloads that could interrupt power on a local electrical supply circuit.

A Generating Capacity Emergency exists when any one of the electric utilities in the State of Florida has inadequate generating capability, including purchased power, to supply its firm load obligations. The loss of firm load due to a transmission or distribution outage, temporary problem or isolated event may be reported, but would not cause the implementation of the plan since conservation may not have an impact.

The loss of firm load due to automatic under-frequency relay operation would not cause the implementation of the plan unless it is anticipated that the outages will extend over several hours.

### **FRCC System Load Restoration**

"System Load Restoration" is the last phase of the plan and is instituted when rolling blackouts have been terminated and power supply is adequate. This is the recovery stage and concerted efforts are made to provide frequent system status reports. Messages to consumers would focus on the timing and location of facility repairs, appropriate safety information and consumer self-help instructions.

## **FMPA Fuel Emergency Plan**

There are two types of fuel that can be used in these generating units: natural gas and fuel oil. The unit identification, the capacity in megawatts and available fuel type(s) for each unit is listed in Appendix C. FMPA is developing this plan to address constraints on either of these fuels types.

This plan will be enacted as a result of the Florida Reliability Coordinating Council (FRCC) declaring a FRCC Generating Capacity Alert/Short-Term Generation Fuel Shortage.

### **Natural Gas Emergency Plan**

When the natural gas pipeline is severely constrained, Florida Gas Transmission, Inc. (FGT) is required to notify the Florida Gas Utility (FGU), as the agent for FMPA, of the constraint and inform FGU of the amount of natural gas entitlement capacity and/or scheduled gas deliveries available. Immediately upon notification of any constraint, FGU will notify FMPA of anticipated available gas volumes available for FMPA generating units. FMPA along with FGU will implement its plan to reduce its natural gas flow to FMPA units as follows:

FMPA will notify the Florida Municipal Power Pool and request a modified commitment or redispatch that will consider the following:

1. Any available purchase power shall be utilized to the extent appropriate, taking into account applicable relevant factors. All non-firm sales will be terminated.
2. If additional natural gas reduction is required, all applicable dual fuel units at Cane Island, Hansel, Lake Worth Utility (LWU), TCEC and Oleander Number 5 shall start switching to the appropriate fuel oil.
3. If further natural gas reductions are required, oil fired generation units shall be dispatched using fuel oil. The energy provided by these units will allow other FMPA gas fired generation output to be reduced up to the total MWs generated by these units.
4. If additional natural gas reductions are required, FMPA will request authorization from the Florida Department of Environmental Protection (FDEP) to allow fuel oil dispatched fired generating units to exceed their emission permit restrictions. This will allow further reductions of FMPA gas fired generation output to be reduced.
5. If all the above options have been utilized and FMPA is still using too much natural gas, FMPA shall call on other utilities for emergency power. If emergency power is available, FMPA shall purchase the necessary

amount of emergency power and further reduce the output of its natural gas fired units by the amount of megawatts purchased.

If, after completion of all of the above steps, FMPA has not sufficiently reduced its natural gas consumption, FMPA shall declare an emergency and implement its Capacity Emergency Plan to shed load.

### **Fuel Oil Emergency Plan**

Fuel oil is stored at all the generating sites referenced above. In general, for generation that can utilize natural gas, enough fuel oil is on site to run a unit at a 50 percent capacity factor for approximately five (5) days. If additional fuel oil shipments are required and delayed due to unforeseen circumstance, FMPA has several days to implement additional steps to mitigate possible impacts. During that period, FMPA will analyze the situation, (considering reliability and cost factors), and take appropriate corrective actions. FMPA will utilize all reasonable fuel alternatives and aggressively seek power purchases to prevent any power supply interruption.

Under any fuel emergency, FMPA plans to work with all Florida utilities to prevent power interruption to any customer. If fuel alternatives and purchase power alternatives are not available, FMPA will implement its Capacity Emergency Plan to prepare for the possibility of shedding load.

**APPENDIX C**

<b>Operating Utility</b>	<b>Unit</b>	<b>Summer Capacity</b>	<b>Winter Capacity</b>	<b>Primary Fuel</b>	<b>Alternate Fuel</b>
Ft. Pierce	TCEC	315 MW	315 MW	Natural Gas	Oil
Key West	Key West Ct #1	17 MW	18 MW	Oil	None
	Key West Ct #2, #3, #4	75 MW	77 MW	Oil	None
	Medium Speed Diesels #1, #2	16 MW	18 MW	Oil	None
Lake Worth	T. G. Smith S-5 (Heat Recovery Unit)	12 MW	13 MW	None	None
	T. G. Smith S-3	26 MW	26 MW	Natural Gas	Oil
	T. G. Smith GT 2	18 MW	20 MW	Natural Gas	Oil
	T. G. Smith GT 1	30 MW	30 MW	Oil	None
	T. G. Smith MUs	10 MW	10 MW	Oil	None
KUA	Hansel CC	45 MW	48 MW	Natural Gas	Oil
	Cane Island CT #1	30 MW	38 MW	Natural Gas	Oil
	Cane Island CC #2	112 MW	120 MW	Natural Gas	Oil
	Cane Island CC #3	250 MW	257 MW	Natural Gas	Oil
	Cane Island CC #4	300 MW	300 MW	Natural Gas	None
Southern Co.	Oleander #5	160 MW	160 MW	Natural Gas	Oil

**Revision History**

<b>Version</b>	<b>Authority</b>	<b>Action</b>	<b>Date</b>
2009	Joe McKinney	Revision	2/2/2009
2012	Joe McKinney	Revision	1/20/2012



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## **FMPA ARP CAPACITY AND FUEL EMERGENCY PLANS**

### **PURPOSE**

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The purpose of this plan is to notify the individual All-Requirements Project participant's (Appendix A) with the Florida Reliability Coordinating Council (FRCC) plan when responding to generating capacity shortages in the State of Florida. The Florida Municipal Power Agency (FMPA) is a non-profit joint action agency made of 30 municipalities in Florida. – The FMPA All-Requirements Project (ARP) is the wholesale supplier of electricity to the City of Bushnell, City of Clewiston, City of Fort Meade, Fort Pierce Utilities Authority, City of Green Cove Springs, Town of Havana, Keys Energy Services (Utility Board of the City of Key West), Beaches Energy Services (City of Jacksonville Beach), Kissimmee Utility Authority (KUA), Lake Worth Utilities, City of Leesburg, City of Newberry, City of Ocala and City of Starke. FMPA is a member of the Florida Municipal Power Pool Balancing Authority (FMPP BA).

The FMPA Capacity Emergency Plan is designed to address the timely notification of ARP project participants of Generating Capacity Advisory, Generating Capacity Alert, Generating Capacity Emergency or System Load Restoration so they can notify their own emergency and public information personnel, customers, news media, local government personnel, municipal emergency agencies, fire, police and the Public Service Commission.

The Fuel Emergency Plan details how FMPA anticipates handling different fuel emergencies for the FMPA fleet while serving the electrical needs of the ARP participants. FMPA utilizes a variety of resources in its portfolio to supply the energy requirements of the ARP participants including purchases from other utilities, FMPA owned generation and generation leased from ARP participants. For jointly owned generation where FMPA owns a minority share, the majority Owner/Operator is responsible for the fuel supply. The FMPA fleet consists of generating resources that are located at Keys Energy Service, KUA, Lake Worth Utilities, the Treasure Coast Energy Center (TCEC) in Fort. Pierce, and the Oleander No. #5 unit in Cocoa.

## **FMPA Capacity Emergency Plan**

The purpose of this plan is to coordinate the actions of the individual ARP participant's with the Florida Reliability Coordinating Council (FRCC) generating capacity shortage plan when responding to generating capacity shortages in the State of Florida.

A generating capacity shortage exists when any one of the electric utilities in the State of Florida has, or is forecast to have, inadequate generating capability, including purchased power, to supply its firm load obligations.

The Florida Reliability Coordinating Council (FRCC) definitions of a Generating Capacity Advisory, Generating Capacity Alert, Generating Capacity Emergency and System Load Restoration are located in Appendix B.

~~The ALL-REQUIREMENTS PROJECT CAPACITY EMERGENCY PLAN is designed to address the timely notification of ARP project participants of Generating Capacity Advisory, Generating Capacity Alert, Generating Capacity Emergency or System Load Restoration so they can notify their own emergency and public information personnel, customers, news media, local government personnel, municipal emergency agencies, fire, police and the Public Service Commission.~~

The Florida Municipal Power Pool Balancing Authority (FMPP BA) will be notified of a Generating Capacity Advisory, Alert, Emergency or System Load Restoration by the State Capacity Emergency Coordinator via the State messaging system. FMPP BA System Operators will notify the All-Requirement Project Member Cities of the Generating Capacity Advisory, Alert, Emergency or System Load Restoration.

## **GENERATING CAPACITY ADVISORY**

A Generating Capacity Advisory anticipates conditions which may affect operations and is primarily for informational purposes. Due to the geographical and electrical configuration of Florida, the State has been divided into two areas. Area 1 (North Florida) includes Green Cove Springs, Havana, Jacksonville Beach, Newberry and Starke. Area 2 (Central and South Florida) includes Bushnell, Clewiston, Fort Meade, Fort Pierce, Key West, Kissimmee, Lake Worth, Leesburg and Ocala. An Advisory will be issued when: (1) temperature projections for up to three (3) days in advance of the current date exceed temperature criteria in a prescribed number of cities; (2) one or more utilities in an area are issuing or planning to issue public appeals for conservation, (3) notification by an individual utility that their generation fuel supplies may be impacted and may decrease below a level adequate to provide for continuous, uninterrupted service to its firm customers, or (4) the fuel supplies and deliveries, on a state-wide statewide basis may be impacted by weather, natural gas production disruptions, natural gas pipeline delivery disruptions, or any other

fuel infrastructure impacts within the FRCC. An Advisory issued for conditions (3) or (4) will be issued as:

***Generating Capacity Advisory /  
Short-Term Generation Fuel Availability Concern***

An Advisory does not indicate an imminent threat of an Alert or an Emergency, and minimal action would normally be required by utilities or governmental agencies. An Advisory declared on the basis of forecasted temperatures will not be rescinded even if the temperature forecast changes.

The State Capacity Emergency Coordinator will, via the State messaging system, notify the FMPP BA that an Advisory has been declared. The FMPP BA System Operators will immediately email ~~notify the ARP participants listed of the All-Requirements Project Contacts in Appendix A by email. (Area 1; Green Cove Springs, Havana, Jacksonville Beach, Newberry and Starke. Area 2; Bushnell, Clewiston, Fort Meade, Fort Pierce, Key West, Kissimmee, Lake Worth, Leesburg and Ocala).~~

~~The individual All Requirement Projects participant shall notify the FMPP BA System Operators and the State Capacity Emergency Coordinator if they are issuing or planning to issue public appeals for conservation.~~

~~The FMPP BA System Operator will provide participants with the reason a Generating Capacity Advisory is being declared:~~

1. Temperature projections for up to three (3) days in advance of the current date exceed temperature criteria in a prescribed number of cities.
2. One or more utilities in an area are issuing or planning to issue public appeals for conservation.
3. Notification by an individual utility that their generation fuel supplies may be impacted and may decrease below a level adequate to provide for continuous, uninterrupted service to its firm customers.
4. The fuel supplies and deliveries, on a ~~state-wide~~statewide basis may be impacted by weather, natural gas production disruptions, natural gas pipeline delivery disruptions, or any other fuel infrastructure impacts within the FRCC.

~~Recommended participant action:~~

- a) Notify utility emergency personnel, if appropriate.
- b) Notify local emergency agencies, if appropriate.
- c) Prepare a Generating Capacity Advisory announcement for the news media.
- d) Implement utility public awareness programs.

The individual ARP participants shall notify the FMPP BA System Operators and the State Capacity Emergency Coordinator if they are issuing or planning to issue public appeals for conservation.

### **GENERATING CAPACITY ALERT**

A Generating Capacity Alert will be issued when: (1) the FRCC operating margin is such that the loss of the largest generating unit will necessitate interruption of firm load in Florida; (2) the fuel supplies of an individual utility have decreased below a level adequate to provide for continuous, uninterrupted service to its firm customers, or (3) the fuel supplies and deliveries on a ~~state-wide~~ statewide basis have decreased and may be below a level adequate to provide for continuous, uninterrupted service to firm customers. An Alert issued for conditions (2) or (3) will be issued as a:

#### ***Generating Capacity Alert / Short-Term Generation Fuel Shortage***

The issuance of a Generating Capacity Alert does not indicate an imminent threat of a Generating Capacity Emergency and is used to increase situational awareness and heighten the coordination and response efforts between and among utilities and the appropriate governmental agencies of a potential generating capacity shortage.

The State Capacity Emergency Coordinator will, via the State messaging system, notify the FMPP BA that an Alert has been declared. ~~When a Generating Capacity Alert has been issued, The FMPP BA System Operators will immediately contact notify the All-Requirements ARP participants' by email listed in Appendix A by email. (Area 1; Green Cove Springs, Havana, Jacksonville Beach, Newberry and Starke. Area 2; Bushnell, Clewiston, Fort Meade, Fort Pierce, Key West, Kissimmee, Lake Worth, Leesburg and Ocala).~~

FMPP BA System Operators will provide the ARP participants with the reason a Generating Capacity Alert is being declared:

1. The FRCC operating margin is such that the loss of the largest generating unit will necessitate interruption of firm load in Florida.
2. The fuel supplies of an individual utility have decreased below a level adequate to provide for continuous, uninterrupted service to its firm customers.
3. The fuel supplies and deliveries on a ~~state-wide~~ statewide basis have decreased and may be below a level adequate to provide for continuous, uninterrupted service to firm customers.

Recommended participant action:

- a) Notify Utility emergency personnel, if appropriate.
- b) Notify local emergency agencies, if appropriate.
- c) Prepare a Generating Capacity Alert announcement for the news media.
- d) Implement utility public awareness programs.
- e) Implement Load Management/Interruptible Service.
- f) Implement procedures to reduce utility and city use of power.

### **GENERATING CAPACITY EMERGENCY**

A Generating Capacity Emergency will be declared when (1) one of the electric utilities in the FRCC Region has inadequate generating capacity, including purchased power, to supply its firm load obligations, or (2) the fuel supplies and deliveries on a ~~state-wide~~ statewide basis have decreased to a level that is not adequate to provide for continuous, uninterrupted service to firm customers. The loss of firm load in a localized area due to a transmission or distribution outage, temporary problem or isolated event may be reported but would not cause the implementation of the plan. The loss of firm load in a localized area due to automatic underfrequency relay operation would not cause the implementation of the plan unless it is anticipated that the outage will extend over several hours. The declaration of a Generating Capacity Emergency for condition (2) above will be declared as a:

#### ***Generating Capacity Emergency / Short-Term Generation Fuel Shortage***

A Generating Capacity Emergency declaration indicates an immediate or imminent threat to the reliability of the overall FRCC bulk power system. The declaration of a Generating Capacity Emergency will specify a time period and date that denotes the emergency period. If an emergency has been declared more than one day in advance based on forecasted data that will not be rescinded unless the revised data indicates that the operating margin and availability of generation fuel is sufficient to be "out of" an Alert phase as well.

The State Capacity Emergency Coordinator will, via the State messaging system, notify the FMPP BA that an Generating Capacity Emergency has been issued. The FMPP BA System Operators will immediately notify the ARP participants listed in Appendix A by email. ~~of the All-Requirements Project by email.~~

FMPP BA System Operators shall monitor the capability of FMPP generating resources and the ~~FMPAP All-Requirements~~ ARP participants load. FMPA shall be notified by the FMPP BA System Operators if FMPA generating resources are not

sufficient to serve the FMPA-ARP load and emergency purchases may not be available.

~~FMPP BA System Operators shall notify the State Capacity Emergency Coordinator if it has directed any All Requirements participants to implement firm load reductions.~~

When a Generating Capacity Emergency has been issued or FMPP generating resources are not sufficient to serve the FMPP load and emergency purchases may not be available, FMPP BA System Operators will immediately contact one of the FMPA personnel listed in Appendix A.

~~FMPP BA System Operators will immediately contact All Requirements by email as listed in Appendix A (Area 1; Green Cove Springs, Havana, Jacksonville Beach, Newberry and Starke; Area 2; Bushnell, Clewiston, Fort Meade, Fort Pierce, Key West, Kissimmee, Lake Worth, Leesburg and Ocala).~~

FMPP BA System Operators will provide participants with the reason a Generating Capacity Emergency is being declared:

1. One of the electric utilities in the FRCC Region has inadequate generating capacity, including purchased power, to supply its firm load obligations.
2. The fuel supplies and deliveries on a ~~state-wide~~ statewide basis have decreased to a level that is not adequate to provide for continuous, uninterrupted service to firm customers.

Recommended participant action:

- a) Notify utility emergency personnel, if appropriate.
- b) Notify local emergency agencies, if appropriate.
- c) Prepare a Generating Capacity Emergency announcement for the news media.
- d) Implement utility public awareness programs.
- e) Implement Load Management/Interruptible Service.
- f) Implement procedures to reduce utility and city use of power.
- g) Implement voltage reduction if available.
- h) **Shed firm load as directed by the FMPP.**

FMPP BA System Operators shall notify the State Capacity Emergency Coordinator if it has directed any ARP participants to implement firm load reductions.

## **SYSTEM LOAD RESTORATION**

System Load Restoration is complete when firm load reduction has been terminated and power supply is adequate.

The State Capacity Emergency Coordinator will, via the Sstate messaging system, notify the FMPP BA that all firm loads have been restored. The FMPP BA System Operators will immediately notify the ARP participants listed in Appendix A by email. ~~of the All Requirements Project.~~

~~When a System Load Restoration has been issued, FMPP BA System Operators will immediately contact the All Requirements participants' by email as listed in Appendix A.~~

Recommended participant action:

- a) Notify utility emergency personnel, if appropriate.
- b) Notify local emergency agencies, if appropriate.
- c) Prepare a System Load Restoration announcement for the news media.
- d) Implement utility public awareness programs.

## **NOTIFICATION TO DEPARTMENT OF ENERGY (DOE)**

FMPA shall notify the DOE Emergency Operations Center (Telephone (202) 586-8100, Fax (202) 586-8485) if the ~~All Requirements~~ ARP pParticipant(s) requests meet any of the conditions outlined in Form EIA-417.

~~Also~~In addition, FMPA shall notify the DOE Emergency Operations Center (Telephone (202) 586-8100, Fax (202) 586-8485) for any issuance of a public appeal by ~~All Requirements project~~ ARP participant(s) to reduce the use of electricity due to a Generating Capacity Advisory, Generating Capacity Alert, or Generating Capacity Emergency.

FMPA will complete the United States Department of Energy, Office of Energy Emergency Operations, and Power System Emergency Report Form EIA-417.

## **REVIEW CAPACITY EMERGENCY PLAN**

~~This plan and attached messages will be reviewed once a year by the Operations and Short Term Planning Manager at FMPA.~~

~~The Operations and Short Term Planning Manage Energy Supply and Fuels Manager at FMPA will issue revisions of the plan to the following:~~

- ~~All Requirements Project participants- (ARP)~~
- ~~Florida Reliability Coordinating Council- (FRCC)~~



- Florida Public Service Commission (FPSC)
- Florida Municipal Power Pool (FMPP)

**Appendix A**

**FMPA Personnel Contact List**

<b>Name</b>	<b>Office</b>	<b>Dispatch</b>	<b>Home</b>	<b>Cell Phone</b>
Joe McKinney	(407) 355-7767	NA	(352) 867-7179	(407) 947-5038
Juan Bailey	(407) 355-7767	NA	(407) 366-4023	(407) 257-1775
Tom Reedy	(407) 355-7767	NA	(407) 654-8976	(407) 256-6655

**All-Requirements Contact List**

	<b>Office</b>	<b>Dispatch</b>	<b>Email/FAX</b>	<b>Cell Phone</b>
<b>City of Bushnell</b> Bruce Hickle	(352) 793-8012	Contact Bruce Hickle	bhickle@cityofbushnellfl.com	(352) 303-1090
<b>City of Clewiston</b> Kevin McCarthy	(863) 983-1454	Contact Kevin McCarthy	kevin.mccarthy@clewiston-fl.gov	(863) 228-0360
<b>City of Fort Meade</b> Fred Hilliard	(863) 285-1100 Ext. 232	Contact Fred Hilliard	fhilliard@cityofortmeade.com	(863) 226-8350
<b>Fort Pierce Utilities Authority</b> Tom Richards	(772) 466-1600 Ext. 3400	(772) 461-5875 *	tom@fpua.com dispatch-esc@fpua.com cvanegas@fpua.com efl@fpua.com banderson@fpua.com	(772) 528-0075
<b>Green Cove Springs</b> Greg Griffin	(904) 529-2249	(904) 529-2229	ggriffin@greencovesprings.com ckeene@greencovesprings.com	(904) 298-4342
<b>Town of Havana</b> Howard McKinnon	(850) 539-2820	Contact Paul Bert @ (850) 556-3285	hmgr@mchsi.com	(850) 524-2268
<b>Jacksonville Beach</b> Roy Trotter	(904) 247-6259	(904) 247-6171 * (904) 247-6204	rtrotter@beachenergy.com jcallander@bea	(904) 226-3859

<b>Keys Energy</b> Fred Culpepper	(305) 295-1062	(305) 295-1059 *	<a href="mailto:kstewart@beachenergy.com">kstewart@beachenergy.com</a> <a href="mailto:Fred.Culpepper@KeysEnergy.com">Fred.Culpepper@KeysEnergy.com</a> <a href="mailto:controlroomcoordinators@keysenergy.com">controlroomcoordinators@keysenergy.com</a>	305-393-2272
<b>Kissimmee Utility Authority</b> Greg Woessner	(407) 933-7777 Ext 61210	(407) 847-7893 * (407) 847-7627	<a href="mailto:GWOESSNE@kua.com">GWOESSNE@kua.com</a> <a href="mailto:trans@kua.com">trans@kua.com</a>	(321) 624-0901
<b>Lake Worth Utilities</b> Walt Gill	(561) 586-1706	(561) 586-1704 *	<a href="mailto:wgill@LakeWorth.org">wgill@LakeWorth.org</a> <a href="mailto:lwsysop@lakeworth.org">lwsysop@lakeworth.org</a>	561-351-0231
<b>City of Leesburg</b> Paul Kalv	(352) 728-9834	(352) 728-9830 *	<a href="mailto:Paul.Kalv@leesburgflorida.gov">Paul.Kalv@leesburgflorida.gov</a> <a href="mailto:Phil.Janik@leesburgflorida.gov">Phil.Janik@leesburgflorida.gov</a>	(352) 516-2052
<b>City of Newberry</b> Blaine Suggs	(352) 472-2161	Contact Blaine Suggs	<a href="mailto:blaine.suggs@ci.newberry.fl.us">blaine.suggs@ci.newberry.fl.us</a>	(352) 258-4486
<b>City of Ocala</b> Matt Brower	(352) 351-6600	(352) 351-6609 *	<a href="mailto:mbrower@ocalafl.org">mbrower@ocalafl.org</a> <a href="mailto:ocalascc@ocalafl.org">ocalascc@ocalafl.org</a>	352-572-0339
<b>City of Starke</b> Ricky Thompson	(904) 964-2011	Contact Ricky Thompson	<a href="mailto:rthompson@cityofstarke.org">rthompson@cityofstarke.org</a>	(352) 494-3288

\* **Note:** The dispatch offices of these cities are operated 24/7

## **Appendix B**

### **FRCC Generating Capacity Advisory**

A "Generating Capacity Advisory" is similar to a hurricane watch. It is intended to give early warning of potential electricity shortfalls and bring utilities, emergency management officials, the Governor and the Florida Public Service Commission (FPSC) to a state of readiness.

The Advisory is primarily for information purposes. It automatically kicks off utility tracking activities, and it initiates inter-utility and inter-agency communication. While advisories do not usually require public action, general information about the potential problem can be distributed to consumers to forewarn them of adverse conditions if necessary.

The Advisory is triggered by either (1) a forecast of extreme temperatures around the State or (2) a public conservation appeal by an individual utility, or (3) disruption of the gas pipeline(s) serving the FRCC Region that may threaten to adversely affect the generation capacity in the FRCC Region. Due to the geographical and electrical configuration of Florida, the State has been divided into two areas. Area 1 includes Gainesville, Tallahassee and Jacksonville (North Florida). Area 2 includes Orlando, Tampa, St. Petersburg and Miami (Central and South Florida).

Temperature thresholds have been set for each of these cities and when a predetermined number of cities exceed their temperature triggers, an Advisory is declared for that area. The temperatures are important since severe weather (hot or cold) can be accompanied by significant increases in electric demand.

An Advisory also is declared when any individual utility plans to or calls for voluntary conservation from its customers. At times the problem may be local and may not require or allow statewide assistance. Even in this circumstance, the Advisory sensitizes all utilities to the problem and heightens awareness in case the event escalates into a potential statewide problem.

### **FRCC Generating Capacity Alert**

The second stage of the plan is a "Generating Capacity Alert." It is based on a reserve margin which is defined as the difference between available statewide resources and the amount of peak electric demand projected for that day. An alert will be called when (1) the reserves fall below the size of the largest generating unit in the State (currently approximately 900 MW), or, (2) disruption of the gas pipeline(s) serving the FRCC Region will adversely affect the generation capacity in the FRCC Region.

The reason for the reserve trigger is when reserves fall below the 900 MW level, loss of a large unit due to an unexpected mechanical failure could lead to blackouts since sufficient backup capacity is not available.

The Alert initiates actions that are intended to increase reserves. For example, available emergency supply options would be explored. Additionally, utilities could reduce electric demand through load management programs. These programs give utility dispatchers control over certain appliances and electrical equipment according to pre-arranged customer agreements. Through remote control equipment and installation of special switches on appliances (such as electric water heaters, air conditioning/heating systems and pool pumps), the dispatcher can cycle appliances on and off as needed during a peak demand period. Close to 1,500 MW of load management is available statewide. Utilities can also ask consumers to implement voluntary conservation measures.

Some utilities have industrial or commercial customers on interruptible service. Under this agreement, the customer gets lower priced energy in exchange for the utility's right to interrupt their electricity on short notice to lower electric demand. The difference between load management and interruptible service is that the first selectively cycles specific appliances on and off for short periods of time, while the second cuts off service to the industrial load entirely.

Typically, industrial customers on interruptible service have backup power (either they own small generators or are co-generators) and are able to supply their own electric needs for these periods. A little more than 1100 MW of interruptible load is available statewide.

### **FRCC Generating Capacity Emergency**

A "Generating Capacity Emergency" occurs when firm load is lost or blackouts occur or are inevitable in Florida. Rolling blackouts manually activated by utilities are a last resort to avoid system overload and possible equipment damage. Without them, the

electric system could undergo an automatic shutdown that would result in more widespread and longer blackouts. By the time rolling blackouts are used, utilities would have exhausted every available means to balance supply and demand.

Prior to rolling blackouts, actions include bringing all generating units to full capability, starting all units that are available, purchasing energy from outside the State, reducing non-essential electric use at utility facilities, using load management, curtailing interruptible customers, reducing voltage levels to within established safe limits, and issuing appeals to consumers for emergency reduction of electricity use and voluntary conservation.

At this stage of the emergency plan, actions and information are coordinated among utilities, emergency agencies, the Governor, the ~~Florida Public Service Commission~~ FPSC, and the media. Frequent status reports are provided to agencies and the media. The Division of Emergency Management would consider using the Emergency Broadcast System (EBS) to inform citizens of events and to direct them to available shelters if conditions warranted.

Recognizing the consequences of a loss of electricity, individual utility emergency plans include provisions for special facilities critical to the safety and welfare of citizens such as hospitals, fire and police departments, mass transit, communication services, water supply and sanitation facilities, and national defense installations. Every effort is made to maintain power to these facilities, but utilities recommend that emergency facilities or anyone with critical equipment should install emergency or portable generating equipment.

Although the State emergency plan is set up to give consumers advance warnings, there can be circumstances (such as the sudden loss of the transmission lines that connect Florida to the rest of the U.S., or the loss of multiple generating units) where blackouts could occur suddenly without the opportunity to issue warnings.

When the power goes out during rolling blackouts, consumers should immediately turn off major appliances and the heating or air conditioning systems. Once power is restored, appliances can be returned to use gradually as needed. This prevents a sudden power drain as electricity is restored and avoids the possibility of overloads that could interrupt power on a local electrical supply circuit.

A Generating Capacity Emergency exists when any one of the electric utilities in the State of Florida has inadequate generating capability, including purchased power, to supply its firm load obligations. The loss of firm load due to a transmission or distribution outage, temporary problem or isolated event may be reported, but would not cause the implementation of the plan since conservation may not have an impact.

The loss of firm load due to automatic under-frequency relay operation would not cause the implementation of the plan unless it is anticipated that the outages will extend over several hours.

### **FRCC System Load Restoration**

"System Load Restoration" is the last phase of the plan and is instituted when rolling blackouts have been terminated and power supply is adequate. This is the recovery stage and concerted efforts are made to provide frequent system status reports. Messages to consumers would focus on the timing and location of facility repairs, appropriate safety information and consumer self-help instructions.

## **FMPA Fuel Emergency Plan**

~~The Florida Municipal Power Agency (FMPA) is a non-profit joint action agency made of 30 municipalities in Florida. The FMPA All-Requirements Project (ARP) is the wholesale supplier of electricity to the City of Bushnell, City of Clewiston, City of Fort Meade, Fort Pierce Utilities Authority, City of Green Cove Springs, Town of Havana, Keys Energy Services (Utility Board of the City of Key West), Beaches Energy Services (City of Jacksonville Beach), Kissimmee Utility Authority, Lake Worth Utilities, City of Leesburg, City of Newberry, City of Ocala, City of Starke, and City of Vero Beach. FMPA utilizes a variety of resources in its portfolio to supply the energy requirements of the ARP cities including purchases from other utilities, FMPA-owned generation and generation FMPA leases from ARP generating cities. TheFor jointly owned generation where FMPA owns a minority share, the majority Owner/Operator is responsible for the fuel supply. -generating resources that FMPA controls are those located at Key West, KUA, Lake Worth, Vero Beach, the Treasure Coast Energy Center (TCEC) in Ft. Pierce, and the Oleander #5 unit in Cocoa. The unit identification, the capacity in megawatts and available fuel type(s) for each unit is listed in Attachment A. For jointly owned generation where FMPA owns a minority share, the majority Owner/Operator is responsible for the fuel supply.~~

~~This plan will be enacted as a result of the Florida Reliability Coordinating Council (FRCC) declaring a FRCC Generating Capacity Alert/Short-Term Generation Fuel Shortage.~~

~~This Fuel Emergency Plan details how FMPA anticipates handling different fuel emergencies for the FMPA fleet while serving the electrical needs of the ARP municipalities.—There are two types of fuel that can be used in these generating units: natural gas and fuel oil. The unit identification, the capacity in megawatts and available fuel type(s) for each unit is listed in Appendix C. -FMPA is developing this plan to address constraints on either of these fuels types. -~~

~~This plan will be enacted as a result of the Florida Reliability Coordinating Council (FRCC) declaring a FRCC Generating Capacity Alert/Short-Term Generation Fuel Shortage.~~

## **Natural Gas Emergency Plan**

~~When the natural gas pipeline is severely constrained, Florida Gas Transmission, Inc. (FGT) is required to notify the Florida Gas Utility (FGU), as the agent for FMPA, of the constraint and inform FGU of the amount of natural gas entitlement capacity and/or scheduled gas deliveries available. Immediately upon notification of any constraint, FGU will notify FMPA of anticipated available gas volumes available for~~



FMPA generating units. FMPA along with FGU will implement its plan to reduce its natural gas flow to FMPA units as follows:

FMPA will notify the Florida Municipal Power Pool and request a modified commitment or redispatch that will consider the following:

1. Any available purchase power shall be utilized to the extent appropriate, taking into account applicable relevant factors.- All non-firm sales will be terminated.
2. If additional natural gas reduction is required, all applicable dual fuel units at Cane Island, Hansel, Lake Worth Utility (LWU), TCEC, and Oleander #Number 5 shall start switching to the appropriate fuel oil.
3. If further natural gas reductions are required, oil fired generation units shall be dispatched using fuel oil. The energy provided by these units will allow other FMPA gas fired generation output to be reduced up to the total MWs generated by these units.
- 3.
4. If additional natural gas reductions are required, FMPA will request authorization from the Florida Department of Environmental Protection (FDEP) to allow fuel oil dispatched fired generating units to exceed their emission permit restrictions. This will allow further reductions of FMPA gas fired generation output to be reduced.
5. If all the above options have been utilized and FMPA is still using too much natural gas, FMPA shall call on other utilities for emergency power. If emergency power is available, FMPA shall purchase the necessary amount of emergency power and further reduce the output of its natural gas fired units by the amount of megawatts purchased.

If, after completion of all of the above steps, FMPA has not sufficiently reduced its natural gas consumption, FMPA shall declare an emergency and implement its Capacity Emergency Plan to shed load.

### **Fuel Oil Emergency Plan**

Fuel oil is stored at all the generating sites referenced above. In general, for generation that can utilize natural gas, enough fuel oil is on site to run a unit at a 50% percent capacity factor for approximately five (5) days. If additional fuel oil shipments are required and delayed due to unforeseen circumstance, FMPA has several days to implement additional steps to mitigate possible impacts. During that period, FMPA will analyze the situation, (considering reliability and cost factors), and

take appropriate corrective actions. FMPA will utilize all reasonable fuel alternatives and aggressively seek power purchases to prevent any power supply interruption.

Under any fuel emergency, FMPA plans to work with all Florida utilities to prevent power interruption to any customer. If fuel alternatives and purchase power alternatives are not available, FMPA will implement its Capacity Emergency Plan to prepare for the possibility of shedding load. ~~The Capacity Emergency Plan provides for notification to the State of Florida and FRCC and details the method that will be used in the event that load curtailment becomes necessary.~~

**ATTACHMENT A APPENDIX C**

Operating Utility	Unit	Summer Capacity	Winter Capacity	Primary Fuel	Alternate Fuel
Vero Beach	Vero #1	11MW	12 MW	Natural Gas	None
	Vero #2 (Heat Recovery unit)	14 MW	21 MW	None	None
	Vero #3	28 MW	30 MW	Natural Gas	Oil
	Vero #4	48 MW	50 MW	Natural Gas	Oil
	Vero #5	31 MW	31 MW	Natural Gas	Oil
Ft. Pierce	TCEC	315 MW	315 MW	Natural Gas	Oil
Key West	Key West Ct #1	17 MW	18 MW	Oil	None
	Key West Ct #2, #3, #4	75 MW	77 MW	Oil	None
	Medium Speed Diesels #1, #2	16 MW	18 MW	Oil	None
	High-Speed Diesels #1, #2, #3	5 MW	5 MW	Oil	None
Lake Worth	T. G. Smith S-5 (Heat Recovery Unit)	12 MW	13 MW	None	None
	T. G. Smith S-3	26 MW	26 MW	Natural Gas	Oil
	T. G. Smith GT 2	18 MW	20 MW	Natural Gas	Oil
	T. G. Smith GT 1	30 MW	30 MW	Oil	None
	T. G. Smith MUs	10 MW	10 MW	Oil	None
KUA	Hansel CC	45 MW	48 MW	Natural Gas	Oil
	Cane Island CT #1	30 MW	38 MW	Natural Gas	Oil
	Cane Island CC #2	112 MW	120 MW	Natural Gas	Oil
	Cane Island CC #3 Cane Island CC #4	250 MW 300 MW	257 MW 300 MW	Natural Gas Natural Gas	Oil Oil
	Cane Island CC #4	300 MW	300 MW	Natural Gas	None
Southern Co.	Oleander #5	160 MW	160 MW	Natural Gas	Oil

~~\* Due to the Florida Department of Environmental Protection constraints, oil will only be used if there is no natural gas available.~~

**Revision History**

<b>Version</b>	<b>Authority</b>	<b>Action</b>	<b>Date</b>
n 2009	Joe McKinney	Revision	2/2/2009
2012	<del>Juan Bailey</del> Joe McKinney	Revision	1/2012/201 2