### BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Requests for approval of electric utilities' long-term energy emergency plans, filed pursuant to Rule 25-6.0185, F.A.C. DOCKET NO. 030400-EM ORDER NO. PSC-03-0770-PAA-EM ISSUED: June 27, 2003

The following Commissioners participated in the disposition of this matter:

### LILA A. JABER, Chairman J. TERRY DEASON BRAULIO L. BAEZ RUDOLPH "RUDY" BRADLEY CHARLES M. DAVIDSON

### NOTICE OF PROPOSED AGENCY ACTION ORDER APPROVING LONG-TERM ENERGY EMERGENCY PLANS

BY THE COMMISSION:

NOTICE is hereby given by the Florida Public Service Commission that the action discussed herein is preliminary in nature and will become final unless a person whose interests are substantially affected files a petition for a formal proceeding, pursuant to Rule 25-22.029, Florida Administrative Code.

Rule 25-6.0185, Florida Administrative Code, requires electric utilities that own or control electric generation facilities to file a long-term energy emergency plan and periodic updates with the Commission and the Florida Reliability Coordinating Council (FRCC). It was not until the rule was amended in 1998 that the plans were required to be submitted to the Commission for approval. The initial submission date was January 31, 1999. Subsequent to that date, the utilities were required to review their plans every three calendar years and either submit a revised plan for Commission approval or provide a letter indicating the adequacy of the existing plan. This is the first time that these long-term energy emergency plans have been brought to us for approval.

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FPSC-COMMISSION CLERK

On February 28, 2003, a request was sent out to the utilities governed by this rule for current copies of their long-term energy emergency plans. The following utilities submitted plans: Florida Power & Light Company, Tampa Electric Company, Progress Energy Florida, Inc., Gulf Power Company, Utilities Commission of New Smyrna Beach, City of Lakeland, Seminole Electric Cooperative, City of Tallahassee, Florida Municipal Power Agency, Reedy Creek Improvement District, Gainesville Regional Utilities, Orlando Utilities Commission, and JEA. A copy of the plans in their entirety is contained in Attachment A to this Order. We have jurisdiction to address these plans pursuant to Sections 366.04 and 366.05, Florida Statutes.

Each plan was carefully reviewed for compliance with Rule 25-6.0185, Florida Administrative Code. This rule requires all longterm energy emergency plans to contain: (1) a description of specific actions to be taken by the utility upon the Governor's declaration of a fuel supply emergency; (2) a description of the interchange of energy and the physical sharing of fuel stocks or fuel deliveries; (3) a description of priorities for customer interruptions; and, (4) objective criteria for notifying the Chairman of the FRCC Reliability Assessment Group (RAG) of the existence of a long-term emergency. Below is a summary of how each section of the rule was addressed by the plans.

### Identification of Specific Actions

Upon the declaration of a fuel emergency, all utility plans contained steps for notification both internal, via their chain of command, and external, via communication to customers through direct contact, public service announcements, or the media. Generally, the order of actions is as follows: (1) reduce power usage at utility-owned facilities, (2) public appeals to conserve energy, (3) optimization of fuels, (4) direct customer appeals, (5) voltage reductions to conserve fuels, (6) implement load management, (7) relaxation of environmental constraints, and (8) implementing load shedding procedures for firm load. Each of these chronological actions have triggers.

### Interchange of Energy and the Sharing of Fuels

All utilities monitor and forecast energy supplies for generation as well as load reserves on a constant basis. The plans specify the actions to be taken when the energy supply falls below a specific threshold, or in the event of the Governor's declaration of an emergency. The utility plans generally addressed this requirement by taking the following actions (where applicable): ceasing exports, obtaining power from affiliates or other utilities, and purchasing fuel from other utilities.

### Priorities for Customer Interruptions

Utility plans addressed priorities for customer interruption by listing action levels, beginning with appeals for voluntary consumption reductions by both residential and commercial customers. Next were required outages accomplished through load management procedures and load-shedding procedures. Finally, if required, the utilities would curtail firm load as necessary. These actions were outlined in the plans or the plans referenced procedures which contained details. At all stages provisions were made to ensure customer notification. Special provisions were included to assure firm power to customers on life support and for essential services such as fire and police services, hospitals, national defense, water, sanitation and communication services, cold storage facilities, and public and commercial transportation.

#### Notification of the FRCC

All utilities addressed the notification of the FRCC as a step in their plans with some utilities listing the person assigned to this function.

#### Conclusion

After a thorough review of the utilities' long-term energy emergency plans, we find that the plans meet the established requirements set out in Rule 25-6.0185, Florida Administrative Code, and we hereby approve the long-term energy emergency plans contained in Attachment A.

Rule 25-6.0185(2), Florida Administrative Code, requires each utility subject to the rule to notify the Commission in writing every three calendar years that the utility has reviewed its fuel emergency plan. As a result, each affected utility shall file the next compliance letter or plan update no later than January 31, 2006, and every three calendar years thereafter.

Based on the foregoing, it is

ORDERED by the Florida Public Service Commission that the long-term energy emergency plans contained in Attachment A to this Order are hereby approved. It is further

ORDERED that Attachment A to this Order is incorporated herein by reference. It is further

ORDERED that each utility subject to Rule 25-6.0185, Florida Administrative Code, shall file the next compliance letter or plan update no later than January 31, 2006. It is further

ORDERED that the provisions of this Order, issued as proposed agency action, shall become final and effective upon the issuance of a Consummating Order unless an appropriate petition, in the form provided by Rule 28-106.201, Florida Administrative Code, is received by the Director, Division of the Commission Clerk and Administrative Services, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850, by the close of business on the date set forth in the "Notice of Further Proceedings" attached hereto. It is further

ORDERED that in the event this Order becomes final, this docket shall be closed.

By ORDER of the Florida Public Service Commission this <u>27th</u> day of <u>June</u>, <u>2003</u>.

BLANCA S. BAYÓ, Director Division of the Commission Clerk and Administrative Services

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By: Kay Jup

Kay Flynn, Chief Bureau of Records and Hearing Services

(SEAL)

SOME (OR ALL) ATTACHMENT PAGES ARE NOT ON ELECTRONIC DOCUMENT.

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### NOTICE OF FURTHER PROCEEDINGS OR JUDICIAL REVIEW

The Florida Public Service Commission is required by Section 120.569(1), Florida Statutes, to notify parties of any administrative hearing that is available under Section 120.57, Florida Statutes, as well as the procedures and time limits that apply. This notice should not be construed to mean all requests for an administrative hearing will be granted or result in the relief sought.

Mediation may be available on a case-by-case basis. If mediation is conducted, it does not affect a substantially interested person's right to a hearing.

The action proposed herein is preliminary in nature. Any person whose substantial interests are affected by the action proposed by this order may file a petition for a formal proceeding, in the form provided by Rule 28-106.201, Florida Administrative Code. This petition must be received by the Director, Division of the Commission Clerk and Administrative Services, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850, by the close of business on July 18, 2003.

In the absence of such a petition, this order shall become final and effective upon the issuance of a Consummating Order.

Any objection or protest filed in this/these docket(s) before the issuance date of this order is considered abandoned unless it satisfies the foregoing conditions and is renewed within the specified protest period.

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### ATTACHMENT A

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Progress Energy Florida, Inc
Gulf Power Company
City of New Smyrna Beach, Florida
Lakeland Electric
Seminole Electric Cooperative
City of Tallahassee
Florida Municipal Power Agency
Reedy Creek Improvement District
Gainesville Regional Utilities
Orlando Utilities Commission
JEA

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Attachment A

# **FPL EMERGENCY PLAN**

### FOR

# CAPACITY SHORTAGES,

### SEVERE STORMS,

### AND

# LONG TERM FUEL SHORTAGES

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### FPL EMERGENCY PLAN FOR CAPACITY SHORTAGES, TRANSMISSION LIMITATIONS AND SEVERE STORMS

### 1.0 GENERAL INFORMATION

### 1.1 Purpose and Scope

The purpose of this plan is to document the policies and summarize the procedures used by FPL in responding to a power capacity shortage or severe storm which impacts or threatens to impact significant numbers of customers. Power capacity shortages may be caused by unusually hot or cold weather, short-term fuel supply shortages, transmission disruptions, or power plant outages. Severe storm conditions include any named storm, cyclone or hurricane, which causes widespread service interruption to FPL customers. Section 4 of the plan covers long term fuel supply shortages which are anticipated to be protracted in nature such as might occur due to wars, disruptions in supplies by strikes, damage to refineries, or embargoes.

### 1.2 Overview

This plan identifies emergency conditions and delineates the responsibilities and duties of the FPL Emergency Response Organization. The plan is divided into three sections: 1) Capacity Shortages, 2) Severe Storms, and 3) Long Term Fuel Supply Shortages. This plan is a synopsis of FPL's overall emergency processes. Detailed procedures and standards on accounting, safe work practices etc are contained in the references cited in section 1.5 of this manual

The plan describes the following basic topics:

- A. The organization for identifying, assessing and responding to emergency conditions
- B. Criteria for Identification and classification of an emergency condition
- C. Notification and mobilization of FPL emergency response personnel. Notification of local and state emergency management agencies. Notification of major commercial and industrial customers
- D. Emergency response actions by FPL, governmental agencies and the public including development of information for the media and the public for use both prior to and during an emergency
- E. Facilities, communications equipment and computer systems used in emergency response
- F. Maintaining a state of emergency preparedness

### 1.3 Concepts of Emergency Operation

When operating reserves are nearly exhausted and there is imminent possibility of curtailment of firm load, or when a hurricane or severe tropical storm threatens, an appraisal of the situation is made by designated personnel and action taken in accordance with this plan. FPL Emergency Organization personnel are notified and mobilized to manage operations, to communicate with the public and appropriate governmental agencies and to restore normal service when the emergency is over. These response actions are carried out to maintain system integrity and to minimize the impact on the customers to the degree possible.

### 1.4 Plan Revisions

The Vice President of Transmission Operations and Planning shall have overall responsibility for plan revisions. The Emergency Response sections for capacity shortage severe storms, and long term fuel supply emergency shall be updated as needed or in accordance with FPSC requirements. Revision to this plan will be based primarily on the critiques of the annual system drills and feedback from FPL departments

### 1.5 Supporting plans and procedure

The major plans and/or procedures which support this corporate plan are listed below.

- 1. Distribution Storm Restoration Procedures
- 2. Power Generation Business Unit plans for cold weather and hurricanes
- 3. Nuclear Energy Division plans for cold weather and hurricanes
- 4. Florida Reliability Coordinating Council Emergency Contingency Plan
- 5. Corporate Procedure SM 26000
- 6. Florida Peacetime Emergency Plan
- 7. FPSC Florida Electrical Emergency Contingency Plan --- Generating Capacity Shortage Fuel Shortage Element
- 8. Corporate Communications Emergency Procedures Vol I
- 9. FPL News Media Procedures
- 10. Residential & General Business Customer Service procedures
- 11. FPL Emergency Load Management Manual
- 12. U.S. Dept. of Energy Power System Emergency Reporting Procedure

2.0 CAPACITY SHORTAGES

### 2.1 Conditions

Capacity shortage conditions are those in which the supply of power to firm customers could be in jeopardy due to either generation capacity shortages and/or transmission limitations. It is expected that generation capacity shortfalls would be due to extreme weather conditions, either extreme cold or heat. However, they could also be the result of higher than projected demand for energy during periods when generating units are normally unavailable due to scheduled maintenance. Routine use of demand side management programs such as FPL's On Call program during scheduled usage periods is not considered a capacity shortage. Use of these programs may proceed the activation of other stages of the capacity plan. Activation of the On Call or the Commercial Industrial Load Control programs(CILC) outside of published hours, in a SCRAM mode or for extended hours may initiate activation of parts of the capacity plan.

Transmission limitations are the result of unplanned circumstances. These would include the loss of critical transmission lines, circuit breakers, autotransformers, and generating units.

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 due to automatic under frequency relay operation would also not cause the implementation of the plan unless it is anticipated that the outage will extend over several hours.

### 2.2 Categories

All of the categories below are based on a statewide assessment of capacity performed through the Florida Reliability Coordinating Council (FRCC). FPL also has internal levels to trigger actions and preparation on the distribution system due to extreme temperatures.

### 2.2.1 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 to a state of readiness. It automatically kicks off utility tracking activities, and it initiates inter-utility and inter-agency communication.

The Capacity Advisory is triggered by either (1) a forecast of extreme temperatures around the state, or (2) a public conservation appeal by an individual utility. 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.

Location	Winter	<u>Summer</u>
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Jacksonville	Below 21 F	Above 98 F
Gainesville	Below 21 F	Above 98 F
Tallahassee	Below 20 F	Above 98 F
Miami	Below 40 F	Above 92 F
Orlando	Below 30 F	Above 95 F
St. Petersburg	Below 32 F	Above 95 F
Tampa	Below 31 F	Above 93 F
	Jacksonville Gainesville Tallahassee Miami Orlando St. Petersburg Tampa	Jacksonville Below 21 F Gainesville Below 21 F Tallahassee Below 20 F Miami Below 40 F Orlando Below 30 F St. Petersburg Below 32 F Tampa Below 31 F

An Capacity 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.

### 2.2.2 GENERATING CAPACITY ALERT

The second stage of the plan is a 'Generating Capacity Alert.' It is based on a reserve margin - the difference between available statewide resources and the amount of peak electric demand projected for that day. When the reserves fall below the size of the largest generating unit in the state (currently a little more than 900 MW), a Capacity Alert is called.

The reason for this trigger is that when reserves fall below this level, loss of that size unit to an unexpected mechanical failure could lead to blackouts somewhere since insufficient backup is available. The Capacity Alert starts actions to increase reserves. For example, available emergency supply options would be explored. Additionally, utilities can reduce electric demand through load management programs. These programs give utility dispatchers control over certain appliances and electrically-powered 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 1500 MW of load management is available statewide. Utilities also can ask consumers to implement voluntary conservation measures.

A generating CAPACITY ALERT is declared when (I) the "Capacity Assessment" of the state operating margin is such that the loss of the largest generating unit would necessitate interruption of firm load in Florida or (ii) imminent loss of transmission capacity would necessitate interruption of firm load in Florida.

### 2.2.3 GENERATING CAPACITY EMERGENCY

A 'Generating Capacity Emergency' occurs when firm load is lost or, in other words, blackouts occur or are inevitable somewhere 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 experience 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 within established

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safe limits, and issuing appeals to consumers for emergency cutbacks of electricity use and voluntary conservation.

At this stage of the shortage plan, actions and information are coordinated among utilities, emergency agencies, the Governor, the Florida Public Service Commission, 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.

A Generating CAPACITY EMERGENCY is declared when <u>conditions exist</u> such that <u>FPL</u> or any other utility in the state has inadequate generating capacity, or transmission capacity, including purchased power, to supply <u>firm</u> load obligations.

### 2.2.4 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. It 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.

**RESTORATION** is categorized as being in a state where generating capacity, or transmission capacity, including purchased power is capable of meeting the demand of FPL firm load customers and service is being restored to customers whose service had been interrupted.

A summary of these categories and associated response by FPL personnel is shown in figure 1 on the next page.

CATEGOR SHORTAGES AND TRANSMISSION LIMITATIONS

[	POWER SUPPLY CATEGORY CRITERIA		FPL KEY ACTIONS
	CAPACITY ADVISORY	TROMECAST OF EXTREME TEMPEMUTURE CONSTITION OR GENERATION AGAILABILITY LISINGRIGHS	BURCLARE ADVISORY AND ACTUATE INNERGENCY PLAY     CONSIDER STATING UNERGENCY PACELYING     CONSIDER STATING UNERGENCY PACELYING     NOTIFY STATE WARDING POINT (SWIP) & FLORIDA PUBLIC SERVICES COMMILION     NOTIFY STATE WARDING POINT (SWIP) & FLORIDA PUBLIC SERVICES COMMILION     NOTIFY STATE WARDING POINT (SWIP) & FLORIDA PUBLIC SERVICES COMMILION     NOTIFY STATE WARDING POINT (SWIP) & FLORIDA PUBLIC SERVICES COMMILION     NOTIFY STATE WARDING APPECTED COUNTES     PERFORM CHECKES OF BERINGENCY PACILITIES AND ECONOMICS     NOTIFY THE FLORIDA PUBLIC INCLUMENT, AN ADVINCE AND ECONOMICS     NOTIFY THE FLORIDA INCLUMENT, AN ADVINCE AND ECONOMICS     NOTIFY THE FLORIDA INCLUMENT ADVINCEMENT
	CAPACITY ALERT	THE STRIEMEDE OPERATION MANGEN VILL NOT COVER THE LOBS OF THE LARGEST GENERATION UNIT OR MANDAINT LOSS OF THANSANSSION CAPACITY WILL CAUSE INVERSION TON OF MICH LOAD	DECLARE ALSERT AND ACTINGT IMPROVING YPLAN     ACTINGTE EMERGINGY PLAN     ACTINGTE EMERGINGY PACHLITIES AND INCIDILEE STREP AS APPROPRIATE     MOTEY KEY FPL PERSONNEL     MOTEY STREE MURNING POINT (SWP) & PLONDA PLINLIC SERVICE COMMENDIN     MOTEY STREE MURNING POINT (SWP) & PLONDA PLINLIC SERVICE COMMENDIN     MOTEY STREE MURNING POINT (SWP) & PLONDA PLINLIC SERVICE COMMENDIN     MOTEY STREE MURNING POINT (SWP) & PLONDA PLINLIC SERVICE COMMENDIN     MOTEY STREE MURLIMILITY     COMMENTER RESULTION OF MON-RESENTIAL PPL LOAD     MOTEY THE AMERICAN POINT (STREE FOR VOLLATION OF MON-RESENTION     MOTEY THE AMERICAN POINT (STREE FOR VOLLATION OF MON-RESENTION     MOTEY THE AMERICAN POINT (STREE FOR VOLLATION OF MON-RESENTION     MOTEY THE AMERICAN POINT (STREE FOR VOLLATION OF MON-RESENTION     MOTEY THE MURNING COLINCE.     COMMENTER WEINTS     COMMENT WITH THE AMERICAN POINT (STREE FOR VOLLATION OF MON-RESENTION)
	GAPACITY EMERGENCY	READERCHARTE CAPACITY TO SERVE FINIE	OBCLARE PERSONNEY AND NOTIFY STOTE WANNERS FOUNT & PPSC     ACTIVITY AND PULLY STORY EMERGENCY FACILITIES     NOTIFY JULY INTERPOLINES     NOTIFY JULY INTERPOLINES     NOTIFY APECIFIED COLLITIONS     NOTIFY APECIFIED COLLITIONS     NOTIFY APECIFIED COLLITIONS     SCHEDULE AND INFLEMENT VIENDER RODITION     ISSUE PRESS RELEASE, COMMUNICATE TO MEDIA, APPEAL FOR PUBLIC     ASSETTANCE     MOTIFY THE FLORED ARELIANELTY COORDINATING COLINCE,
	RESTORATION	Generation Capacity is adjourned Pirm Load Neduction is memo Trigoniated and Load is grave Restored	BECLARE RECOVERY CONDITION AND NOTIFY STATE WARRING POINT     NOTEY KEY FPL PERSONNEL     NOTEY APECTED COUNTER     NOTEY THE R.CREDA RELARDLY COORDINATING COUNCIL     SYMLLATE LESSONS LEAVED (PRELIMINARY CEDENCETING)     DOCUMENT EVENTS AND MAKE RECOMMED REPORTS TO DETENDE ACENCIES

NOTE: FOR RAND LOSS OF CANACITY, IMMEMBIT OR ACTUAL, THE DIAGNOUS OF THE STRUCTON AND DECLARATION OF THE CONDITION MUST BE READ BY THE SYSTEM OPERATOR THE ACTIONS TO BE TRANSPIRED ON THE EXPECTED DUARTION AND SEVERITY.

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FIGURE 2-3

### 2.3 Organization Responsibilities

The broad organizational structure for a capacity emergency is shown in fig. 2-1. Principal notification and communication links for identification and declaration of conditions are shown in fig. 2-2. Declaration of the system condition is normally made by the Transmission Operations and Planning Department following authorization by the Emergency Control Officer(see Process Chart 1 in Appendix A). For rapid loss of capacity, imminent or actual, the diagnosis of the situation and declaration of the condition must be made by FPL System Operator under the Rapid Activation process(Chart 2 in Appendix A). The actions to be taken will depend on the expected duration and severity and will be communicated to the Emergency Control Officer as soon as practicable.

Sections 2.4 through 2.7 show the responsibilities, duties and actions to be taken by the various organizational departments at different stages of a capacity shortage. These tables show broad areas of responsibility and assignments may be delegated or reassigned as necessary to perform the work. Additional actions between the stages are highlighted in **bold**.

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NOTE: THE INTENT OF THIS CHART IS TO DISPLAY THE EMERGENCY NOTIFICATION FLOW PROCESS, INDIVIDUALS NOTIFIED MAY VARY PENDING ON THE TYPE OF SYSTEM CONDITION.

Fig. 2.2

2.4 --- Advisory Accountabilites

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# CAPACITY SHORTAGE ADVISORY RESPONSE DUTIES



Affairs Rep of advisory. Initial contacts with state emergency officials to be coordinated with Regulatory Affairs

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### 2.4 --- Advisory Accountabilites

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# CAPACITY SHORTAGE ADVISORY RESPONSE DUTIES

General Office Command Center Manager	Director of Material - Fuel Management	Emergency Telecommunication & Computer Manager	Nuclear Energy Division and Power Generation Business Unit
<ul> <li>Ensure room is operationally ready</li> <li>Supply service for GOCC personnel</li> <li>Ensure others are instructed to open and close operations in the GOCC</li> </ul>	<ul> <li>Ensure the fuel oil inventories at the fossil power plants, as well as fuel oils, natural gas and coal supply conditions are monitored</li> <li>Advise System Operations and Fossil Generation Operations of potential trouble areas</li> <li>Takes, appropriate actions to potential trouble areas</li> </ul>	<ul> <li>Ensure that the Computer Operations center, during periods of emergency, give priority to critical systems and maintain augmented staffing in the computer center</li> <li>Ensure that FPL's internal communications network is constrained and give priority to</li> </ul>	<ul> <li>Prepare and review procedures for maximizing output and energy conservation</li> </ul>
	<ul> <li>Takes appropriate actions to re- supply the power plants as necessary</li> </ul>	operational and give phomy to any restoration of equipment that affects the internal network	

 Ensure that computers, telephones and information systems in GOCC are operational

2.4 - Advisory Accountabilities

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# CAPACITY SHORTAGE ADVISORY RESPONSE DUTIES



other emergency services organizations, as appropriate

20

### 2.5 - Alert Accountabilities

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#### Emergency Trans. Oper & Emergency Regulatory **Emergency External Affairs Emergency Control Officer** Affairs Manager Planning Manager Manager Notify key FPL emergency Notify FPSC and maintain Ensure smooth flow of Notify FRCC State Capacity . organization members contact as necessary Emergency Coordinator and accurate/timely information **Emergency Control Officer** to state, local and county Direct staffing of the GOCC as Notify the State Division of officials Emergency Management appropriate Ensure PGBU and Nuclear . through the duty officer at the Inform External Affairs Division are notified of the . State Warning Point in Consider the issuance of Managers and systen condition public appeals for voluntary Tallahassee Governmental Commercial conservation Communicate the dispatch Industrial Managers in . Ensure that the process for potentially affected areas of steps taken to the **Emergency Control Officer** obtaining a governor's order the alert. Initial contacts is initiated with local & county officials and recommend any to be made by External additional steps as Affairs Manager in warranted cooperation with Governmental Commercial Notify Co-generators and Industrial Managers. (If Independent Power Producers and Inform them more than 8 counties affected, the Florida Division of payment provisions of the GOC3 tarlf of Emergency Management will notify the affected county emergency management agency) . Inform State Governmental Affairs Rep of alert. Notity appropriate state representatives, senators and members of the governor's staff after consultation with 14

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# CAPACITY SHORTAGE ALERT RESPONSE DUTIES

June 8, 2001

2.5 - Alen Accountabilities

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# CAPACITY SHORTAGE ALERT RESPONSE DUTIES

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Emergency Corporate Communications Manager	Emergency Distribution Manager	Emergency Customer Service & Load Management Manager	Trans. Oper. & Planning General Office Coordinator
<ul> <li>Ensure Corporate Communications personnel are contacted and assigned duties necessary to maintain a coordinated public information effort.</li> <li>In conjunction with the Emergency Control Officer, call for and oversee activation of public appeals/conservation messages, as warranted</li> <li>All news releases/statements to the media will be written by the staff and approved in conjunction with the Emergency Control Officer.</li> <li>Ensure statements are distributed to:</li> <li>FPL executives, key FPL field contacts and other employees.</li> <li>Media relations staff and area media flaisons for handling callouts/inquines from news media and contact county emergency management offices.</li> <li>The FRCC and other utilities, as appropriate.</li> <li>Officials in the FPSC, state Dept. of Community Affairs and other emergency province</li> </ul>	<ul> <li>Provide technical and logistical support to the Distribution Region Directors and Distribution Area Managers for problems involving the distribution system as warranted</li> </ul>	<ul> <li>Notify Customer Care/Sales Marketing response teams</li> <li>Put the Customer Care Centers on stand by</li> <li>Establish contacts with Customer Coordinators</li> <li>Coordinate calls to customers with special circumstances (LSME), and record of each call</li> <li>Notify the major commercial and industrial customers</li> </ul>	<ul> <li>Issue notification of staffing requirements for the center at the direction of the Emergency Control Officer</li> <li>Consider Issuing request for reduction of non-essential FPL load</li> </ul>
organizations, as appropriate			

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in the GOCC

### 2.5 — Alert Accountabilities

June 8, 2001

#### Nuclear Energy Division and Emergency Director of General Office Command Telecommunication & Power Generation Material - Fuel Management Center Manager Computer Manager **Business Unit** Ensure that the Computer Prepare and review Ensure room is operationally Ensure the fuel oil inventories at ٠ the fossil power plants, as well Operations center, during procedures for maximizing ready as fuel oils, natural gas and coal periods of emergency, give output and energy priority to critical systems and supply conditions are monitored conservation Supply service for GOCC maintain augmented staffing in personnel the computer center Advise System Operations and Ensure others are instructed Fossil Generation Operations of to open and close operations

### CAPACITY SHORTAGE ALERT RESPONSE DUTIES

potential trouble areas
Takes appropriate actions to resupply the power plants as

necessary

- Ensure that FPL's internal communications network is operational and give priority to any restoration of equipment that affects the internal network
- Ensure that computers, telephones and information systems in GOCC are operational

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### 2.6 --- Emergency Accountabilites

June 8, 2001

# CAPACITY SHORTAGE EMERGENCY RESPONSE DUTIES

Emergency Trans. Oper &	Emergency Control Officer	Emergency Regulatory	Emergency External Aff
Planning Manager		Affairs Manager	Manager
<ul> <li>Notify FRCC State Capacity Emergency Coordinator and Emergency Control Officer</li> <li>Ensure PGBU, Nuclear Division and Fuel Management are notified of the system condition</li> <li>Direct the emergency dispatch of company generation</li> <li>Communicate authorized load reduction measures to the System Operator</li> <li>Monitor the effectiveness of the authorized actions</li> <li>Communicate the effectiveness of the dispatch/load reduction steps to the Emergency Control Officer and recommend additional steps as warranted</li> </ul>	<ul> <li>Notify key FPL emergency organization members</li> <li>Direct staffing of the GOCC as appropriate</li> <li>Authorize the issuance of public appeals for voluntary conservation</li> </ul>	<ul> <li>Notify FPSC and maintain contact as necessary</li> <li>Notify the State Division of Emergency Management through the duty officer at the State Warning Point in Tallahassee</li> <li>Assure that a Governor's executive order is obteined by the FPSC if necessary</li> </ul>	<ul> <li>Ensure smooth flow of accurate/timely informatio to state, local and county officials</li> <li>Inform External Affairs Managers and Governmental Commercie Industrial Managers in potentially affected areas of the emergency. Initial contacts with local &amp; count officials to be made by External Affairs Managers in cooperation with Governmental Commercia Industrial Managers.</li> <li>Inform State Governmenta Affairs Rep of emergency.</li> <li>Notify appropriate state representatives, senators and members of the governor's staff after consultation with Reg.Affairs</li> </ul>

 With assistance from the Gov C/I Org. provide info. convey requests for assistance and secure cooperation from City, County and State

### 2.6 — Emergency Accountabilities

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June 8, 2001

## CAPACITY SHORTAGE EMERGENCY RESPONSE DUTIES

Emergency Corporate Communications Manager

- Ensure Corporate Communications personnel are contacted and assigned duties necessary to maintain a coordinated public information effort.
- In conjunction with the Emergency Control Officer, call for and oversee activation of public appeals/conservation messages, as warranted
- Maintain communications with spokepersons from other utilities and state agencies in the event of a statewide emergency that requires a coordinated communications plan
- Ensure statements are distributed to:
- FPL executives, key FPL field contacts and other employees.
- Media relations staff and area media liaisons for handling callouts/inquines from news media and contact county emergency management offices.
- The FRCC and other utilities, as appropriate.
- Officials in the FPSC, state Dept. of Community Affairs and other emergency services organizations, as appropriate

Emergency Distribution Manager

- Communicate with Areas
- Assess status of the distribution system
- Determine any needed actions
- Advise Areas of needed actions
- Advise Emergency Control Officer of any condition which need attention
- Monitor all load shifting activities
- Determine any equipment adjustment received and advise Emergency Control Officer and Areas
- Assign Distribution Response Team members to GOCC duties

Emergency Customer Service & Load Management Manager

- Maintain communication with the Customer Care Centers
- Assign Customer Care/Sales & Marketing response team members to GOCC duties
- Maintain contacts with Customer Coordinators
- Notify the major commercial and indutrial customers

Trans. Oper. & Planning General Office Coordinator

- Issue notification of staffing requirements for the center at the direction of the Emergency Control Officer
- Issue request for reduction of nonessential FPL load
- Communicate with the Emergency Trans. Operations & Planning Manager
- Advise the Emergency Control Officer and other key managers at the GOCC of the System status

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### 2.6 --- Emergency Accountabilities

June 8, 2001

### **CAPACITY SHORTAGE EMERGENCY RESPONSE DUTIES**

General Office Command Center Manager	Director of Material - Fuel Management	Emergency Telecommunication & Computer Manager	Nuclear Energy Division and Power Generation Business Unit
<ul> <li>Ensure room is operationally ready</li> <li>Supply service for GOCC personnel</li> </ul>	<ul> <li>Ensure the fuel oil inventories at the fossil power plants, as well as fuel oils, natural gas and coal supply conditions are monitored</li> </ul>	<ul> <li>Ensure that the Computer Operations center, during periods of emergency, give priority to critical systems and maintain augmented staffing in</li> </ul>	<ul> <li>Prepare and review procedures for maximizing output and energy conservation</li> </ul>
Ensure others are instructed to open and close operations in the GOCC	<ul> <li>Advise System Operations and Fossil Generation Operations of potential trouble areas</li> <li>Takes appropriate actions to re- supply the power plants as necessary</li> </ul>	<ul> <li>Ensure that FPL's internal communications network is operational and give priority to any restoration of equipment that affects the internal</li> </ul>	

network

Ensure that computers,

telephones and information systems in GOCC are operational

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### 2.6 — Emergency Accountabilities

June 8, 2001

# CAPACITY SHORTAGE EMERGENCY RESPONSE DUTIES

Customer Care Response Team

Distribution Response Team

- Establish contact with Customer Care Center personnel to secure lines of communication
- Monitor and record system load and provide periodic reports to Customer Care Centers
- Communicate with the Distribution Response Team in order to address needs as they are identified
- Initiate call to and receive calls from Customer Care Centers on customer service issues and needs related to the emergency

- Establish contact with Area managers to secure lines of communications
- Monitor system load and provide reports to Areas
- Communicate with the Customer Care Response Team in order to address needs as they are identified
- Analyze system response and status
- Monitor load reduction (ELM) activities and communicate with the Areas on activities
- Assess equipment status and advise management of alternative strategies

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of the bulk power supply and all other reports required by

reporting organizations such

as FRCC, SERC and NERC

### 2.7 - Restoration Accountabilities

June 8, 2001

### CAPACITY SHORTAGE RESTORATION RESPONSE DUTIES



- Inform State Governmental Affairs Rep of the restoration.
- Notify appropriate state representatives, senators and members of the governor's staff after consultation with Reg.Affairs and in cooperation with State Governmental Affairs.
- With assistance from the Gov C/I Org. provide info, convey requests for assistance and secure cooperation from City,

### 2.7 - Restoration Accountabilites

# CAPACITY SHORTAGE RESTORATION RESPONSE DUTIES

Emergency Corporate Communications Manager

- In conjunction with the Emergency Control Officer, call for and oversee activation of public messages requesting specific actions of the public to aid in restoration
- Ensure statements are distributed to:
- FPL executives, key FPL field contacts and other employees. Media relations staff and area media liaisons for handling callouts/inquiries from news media and contact county emergency management offices.
- 3. The FRCC and other utilities, as appropriate.
- Officials in the FPSC, state Dept. of Community Affairs and other emergency services organizations, as appropriate

Emergency Distribution Manager

Communicate with Areas

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- Assess status of the distribution system
- Determine any needed actions
- Advise Areas of needed actions
- Advise Emergency Control Officer of any condition which need attention
- Monitor all load shifting activities
- Determine any equipment adjustment received and advise Emergency Control Officer and Areas
- Assess long term effect of the event on the system

Emergency Customer Service & Load Management Manager

- Maintain communication with the Customer Care Centers
- Assign Customer Care/Sales
   & Marketing response team members to GOCC duties
- Maintain contacts with Customer Coordinators
- Notify the major commercial and indutrial customers
- Coordinate call to customers with special circumstances, and the preparation of a record of each of these calls

Trans. Oper. & Planning General Office Coordinator

- Communicate with the Emergency Trans, Operations & Planning Manager
- Advise the Emergency Control Officer and other key managers at the GOCC of the System status

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### 2.7 — Restoration Accountabilites

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### CAPACITY SHORTAGE RESTORATION RESPONSE DUTIES

General Office Command Center Manager	Customer Care Response Team	Distribution Response Team
<ul> <li>Monitor all systems in the GOCC</li> </ul>	Maintain contact with Customer     Care Center personnel	<ul> <li>Maintain contact with Area Managers</li> </ul>
<ul> <li>Take action as needed to restore functionality to required systems if failure</li> </ul>	<ul> <li>Monitor and record system load and provide periodic reports to Customer Care Centers</li> </ul>	<ul> <li>Monitor system load and provide reports to areas</li> </ul>
occurs	<ul> <li>Communicate with the Distribution Response Team in order to address needs as they are identified</li> </ul>	<ul> <li>Communicate with the Customer Care Response Team in order to address needs as they are identified</li> </ul>
	Initiate calls to and receive calls	<ul> <li>Analyze system response and status</li> </ul>

from Customer Care Centers on costumer care issues and needs

related to the emergency

- Monitor load restoration activities and communicate with the Areas on the activities
- Assess equipment status and advise management of alternative strategies

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### 2.8 Coordination with Governmental and Outside Agencies

### 2.8.1 Florida Division of Emergency Management (FDEM)

During system conditions, which warrant notifying the FDEM under this plan, the FDEM will: maintain contact with the FRCC and FPL throughout the event. (Contact with FPL will be through the Emergency Regulatory Affair Manager (ERAM).)

notify county emergency management agencies of changing conditions if more than eight counties are affected

### 2.8.2 Florida Public Service Commission (FPSC)

The FPSC will:

maintain communications with electric utilities and Florida Division of Emergency Management as appropriate

2.8.3 Governor's Energy Office (GEO)

### The GEO will:

maintain contact with the Florida Division of Emergency Management and other parties as appropriate

### 2.8.4 County Emergency Management Agencies

If the system conditions warrant notifying the FDEM under the plan and affect eight or less Florida counties, those counties will:

maintain the communications with FPL through the External Affairs Organization. (if more than eight counties are affected see section 2.8.1) coordinate with their respective local public service agencies such as police, fire, hospitals and schools in accordance with their emergency plans

### 2.8.5 Florida Reliability Coordinating Council (FRCC)

During system conditions, which warrant notifying the FRCC under this plan, the FRCC State Capacity Emergency Coordinator (SCEC) will:

become the central communication link between the utilities communicate with the FRCC Technical Advisory Group Chairman who will be the central contact for the FRCC with the Florida Division of Emergency Management and the Florida Public Service Commission.

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### 2.9 Emergency Load Management (ELM)

### 2.9.1 General Description of ELM Process

The Emergency Load Management (ELM) programs are designed to reduce system load under emergency or capacity shortfall conditions in order to maintain the match between load and generation. ELM programs are divided into two groups, manual and automatic, as follows:

### ELM Programs

- A. Manual (Dispatcher Action Required)
- 1. Feeder voltage reduction
- 2. Tripping of feeder breakers/feeder rotation
- 3. Continuous interruption of appliances (SCRAM)
- B. Automatic
- 1. Fast-Acting Load Shedding (FALS)
- 2. Underfrequency Load Shedding

Some basic information regarding the ELM programs is given in the following table and listed in order of increasing severity of the system condition they are intended to address:

PROGRAM	DESCRIPTION	CONDITION	LOAD RELEASED
Voltage reduction	Lowering of feeder voluge up to 2.5% by biasing	Rate of load increase exceeds system capabilities	Approx. 200 MW max. based on Projected system peak
SCRAM	Complete interruption of all appliances for participants in the Residential/Small Commercial Industrial Load Control Program	Capacity shortfall	Approx. 1000 MW depending on system Load level.
Tripping of feeders/ feeder rotation	Load reduction by opening feeder breakers via supervisory control (affected feeders would be scheduled off of approximately 15 minutes. The actual number of feeder breakers opened at one time, duration of the outage and frequency of outages will depend on the duration and magnitude of the shortfall).	Capacity shortfal]	Up to 6,000 MW based on projected system peak
FALS	Computer-controlled load reduction by tripping of transmission breakers when a set of predetermined conditions is met	Certain specified contingencies (loss of transmission or generation) in which underfrequency tripping will not occur	About 800 MW depending on system load level
Underfrequency Load Shedding	Automatic tripping of transmission and/or feeder breakers at specified underfrequency levels	Sudden, unexpected loss of major transmission or generation	71.97% of system load based on Fla. Reliability Coordinating Council requirements

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### June 8, 2001

### 2.9.2 Customer Prioritization

Definitions of priority customers and their ranking for emergency load management are given below. The 17 priority customer types identified below are listed in overall priority order from highest (Critical FPL Facilities) to lowest (Irrigation Pumps and Processing Plants). Based on local conditions, a particular customer's ranking may move within a group. (For example, prioritizing a Bridge above a Radio/TV customer.)

**TYPE I-** Critical FPL Facilities - Facilities determined by the Distribution Planning & Reliability Department or Transmission Operations and Planning Operation which are considered to be critical to FPL operations during capacity shortfalls or other system emergency conditions. For example: Trouble Office, Fuel Pumping Stations.

TYPE II- Military Bases - Military bases vital to national defense as specified by military authorities.

### TYPE ill- Direct Effect on Public Health, Safety, or Welfare.

- a. Hospitals major surgical and critical care hospitals.
- b. Airports major airports with scheduled commercial flights.
- c. Navigational Aids key air and sea beacons/transmitters as specified by the FAA or military authorities.
- d. Police and Fire Stations critical police and fire facilities.
- e. Essential Governmental Facilities critical facilities including emergency preparedness centers and 911 emergency centers. Specifically includes National Weather Service facility in Coral Gables.

### TYPE IV- Indirect Effect on Public Health, Safety, or Welfare.

- a. Telephone Facilities critical facilities as specified by telephone company authorities which if interrupted result in widespread loss of telephone service.
- b. Water Facilities treatment plants and wellfields that cannot tolerate interruptions in excess of 30 minutes.
- c. Sewage Facilities treatment plants and major lift stations which cannot tolerate interruptions in excess of 30 minutes.
- d. Radio/TV major TV studios and radio and TV transmitting facilities.
- e. Newspapers large daily newspapers.
- f. Bridges Electrically-operated drawbridges on single-route public accesses to islands or on key traffic thoroughtares.
- g. Transportation Miami Metrorail, the New River tunnel in Fort Lauderdale, and other similar major public transportation facilities.
- h. Public Arenas large stadiums or other facilities where many people may be congregated.

TYPE V- Serious Economic Impact

- a. Major Commercial/Industrial Facilities customers who may experience a significant monetary loss as a result of an interruption.
- b. Irrigation Pumps and Processing Plants irrigation facilities for cold-sensitive food crops and

June 8, 2001 processing plants for such crops.(Intended for winter load season only.)

#### Notes:

1. FPL will attempt to notify customers participating in the Life-Sustaining Medical Equipment Program (LSME) prior to expected system emergency conditions in which manual tripping of feeders is anticipated. Application of the above definitions to determine specific priority customers is left to the Customer Service Area Managers

2. In deciding if particular customers should or should not be counted as priority, customer contacts are made as necessary to determine the critical nature of loads. This may be necessary for the following customer types: Military Bases, Navigational Aids, Police and Fire Stations, Essential Governmental Facilities, Telephone Facilities and Major Commercial/Industrial Facilities.

3. In addition to (2) and (3) above, FPL has a data base of priority customers for use in making customer contacts prior to an anticipated system emergency.

During EMERGENCY conditions company facilities that can do so will transfer load to emergency generators. All company facilities will turn off unnecessary lights consistent with safe operating and security practices and will reduce air conditioning and other load to the extent possible.

#### 2.10 Public Information

Public Information consists of both "preparatory" Emergency Information, Emergency Media Information programs, and internal distribution of publicly disseminated information.

#### 2.10.1 Emergency Public Information

Preparatory emergency public information programs consist of pre-scripted public appeal messages that have been pre-positioned with radio, television and newspaper outlets in FPL's service territory. In conjunction with the ECO, the EMERGENCY COMMUMICATIONS MANAGER(ECM) would authorize and activate callouts by authorized FPL representatives requesting use of the appropriate Public Service Announcement (PSA). Compliance with FPL's request to broadcast the message would be voluntary on the part of the media contacted.

Public appeal messages for capacity shortfall situations (hot and cold weather, and sudden loss of generation) cover voluntary safety and conservation appeals, as well as information on what to do to facilitate safe and timely power restoration following a blackout. Prompt activation of these messages, with support from the media, can help customers prepare for an emergency and may help prevent an emergency from escalating.

Emergency media information programs consist of timely and consistent news statements for release to radio, television and newspaper outlets in FPL's service territory. These statements are drafted by the EMERGENCY COMMUMICATIONS MANAGER(ECM)'s staff, as needed and as information on the emergency becomes available, and authorized for release by the EMERGENCY COMMUMICATIONS MANAGER(ECM) in conjunction with the ECO.

In the case of a potentially widespread and sustained capacity shortfall emergency, FPL could request activation of the Emergency Broadcast System (EBS) by the State Division of Emergency Management.
Additionally, the EMERGENCY COMMUNICATIONS MANAGER(ECM) and staff are prepared to mobilize for media news briefings, provide interviews and otherwise assist with media requests for visual aids, photography and video, as appropriate.

#### 2.10.2 Internal Communications

Notification of potential capacity shortage situations or the status of current capacity situation is critical to many to personnel within the FPL organization especially to those responsible for communications with customers. The methods by which capacity status information is communicated within the organization are described below. It is the responsibility of the individual parties needing this information to obtain access to these programs and understand the information contained therein. Information is provided to employees so that they may take appropriate actions and if appropriate respond to questions. In general inquiries on to the exact nature of the problem should be refered either to the customer care centers or if from the media to Corporate Communications.

FPL-INTANEWS ---- FPL internal television broadcasts covering events happening within FPL. In the event of the activation of demand side management or the activation of the GOCC, Corporate Communications can advise the general FPL workforce of the capacity situation and the activation of the various demand side management or other load curtailment programs through the INTANEWS program.

FPL Internal Web Communications --- The status of activation of FPL's On-Call program is available on FPL's Internal Web network. A map showing which appliances are activated and in which areas can be accessed on the Web under Power Systems/Transmission Substation/Transmission Planning/Data Viewers & Monitoring/Load Management Status

Capacity Assessment Report ----- A morning capacity assessment report is issues through Lotus notes each morning by Customer Service. This report contains the expected peak megawatt demand for the day, the expected generation capacity for the day, and the expected generation reserves. It also shows what generating units are off line or limited. If a high morning peak or cold weather is expected a status report for the next morning will be issued on the afternoon of the prior day.

Transmission Operations and Planning Capacity Status Report ----- In the event of a capacity alert a capacity status report is posted and updated on a regular basis on the  $P\bar{\nu}$  Bulletin Board. This report shows the current system forecasted peak, the current generation capacity available, the amount of capacity available from FPL's demand side management programs, and a forecasted time at which the various capacity conditions will be reached. This report shows whether the GOCC will be open and at what time, if FPL's internal conservation measures are to be activated and at what time, and other status data.

#### 2.11 Training, Exercises, and Drills

Capacity shortage emergency plan training will include a review of all procedures, customer restoration plans and communications systems. Training shall be conducted during the Fall and Spring of each year by all personnel involved in the execution of this plan. The capacity shortage emergency plan shall have a system drill or exercise at the conclusion of the annual training session in the Fall. A critique of this exercise shall be sent to the Vice President of Transmission Operations and Planning within two weeks of the exercise.

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## 3.0 SEVERE STORM

A severe storm for the purposes of this plan is any named storm, tropical storm, tropical cyclone, or hurricane which invades the FPL service territory or passes close enough to that territory to cause widespread service interruptions to our customers.

## 3.1 Conditions

Tropical storms/hurricanes are listed by an indexing category system based on the circular wind speed and central pressure. The following is a summary of the storm categorization:

Central Pressure Category	(Inche <b>s</b> )	Wind Speed (MPH)	Stor <b>m</b> Surge (FT)	Damag <b>e</b>
0*		3 <b>5-73</b>	1-3	Minim <b>al</b>
1**	28. <b>94</b>	74-95	4-5	Minimal
2**	28.5 - 28.91	96-110	6-8	Moderate
3**	27.91 - 28.47	111-110	9-12	Extensive
4**	27.17 - 27.88	131-155	13-18	Extensive
5**	27.16 or less	156+	18.1+	Catastrophic

Tropical Storm or wave

\*\* Hurricane

This indexing system establishes a means by which forecasters can easily communicate to the public the severity of the storm as it approaches. As the category increases we expect the severity of the wind and damage to the electric facilities to also increase.

<u>Category 0 and 1</u> - Expect damage primarily to shrubbery, trees, foliage and unanchored mobile homes. The transmission/distribution system will suffer only minimal damage and scattered service interruptions.

<u>Category 2</u> - Expect considerable damage to shrubbery and foliage; some trees blown down. Major damage to exposed mobile homes, damage to poorly constructed signs, some damage to roofing materials, windows and doors. Evacuation of some shoreline residences and low lying islands. The transmission/distribution system will suffer minimal damage primarily due to blown over trees and signs, service interruptions will be scattered.

<u>Category 3</u> - Expect the foliage to be torn from trees; large trees blown over; all poorly constructed signs blown down; window, door and roof damage; some damage to small buildings; mobile homes destroyed. Coastal areas will be evacuated. The transmission/distribution system will suffer moderate damage and we will experience wide spread customer interruptions, which will be restorable relatively short period of time.

<u>Category 4</u> - Expect trees blown over; all signs down; extensive damage to windows, doors and roofs; complete root failure on some residences; flat terrain of 10' elevation or less flooded as far as six miles inland. The transmission/distribution system will experience widespread damage with some damage to poles, crossarms and conductors; underground system in the flood plane will be out of service until the flood waters recede and may encounter widespread water damage.

Category 5 - Expect trees blown over; roof damage; signs blown over; extensive window damage; some complete



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building failure; storm surge of 18+ feet; major damage to lower floors of all structures less than 15 feet above sea level within 500 yards of the shore; evacuation of low lying residential areas within 5-10 miles of shoreline. Restoration will be dependent on the severity of the storm.

## 3.2 Criteria for Action

As a storm approaches the mainland the Vice Presidents responsible for Power Systems, Corporate Communications and Customer Service and Marketing and their staffs will exchange information about the storm's progress and review precautionary measures including activation of the pre-positioned public safety information messages. If the course and severity of an imminent hurricane appear fairly well established, preliminary marshaling of additional manpower and materials may be authorized at some point out of the storm's path, but close enough to permit short travel and utilization of these resources. Preparations for receiving, accommodating, and assigning work crews and personnel from other areas must be completed by the appropriate managers and superintendents in advance and specific locations established for checking in.

If one area (or more) is included in the Weather Bureau's "Hurricane Warning", an emergency is declared and this plan is activated. Area Work Bases headquarters go into full storm status and are fully manned as soon as the storm passes.

#### **Definitions**

Tropical Storm Watch — Issued when a tropical storm in which the maximum sustained surface winds ranges from 39-73mph is expected in a specified coastal area within 36 hours

Tropical Storm Warning- Issued when a tropical storm is expected in a specified coastal area within 24 hours

Hurricane Watch - Issued when hurricane conditions pose a possible threat to a specified coastal area within 36 hours

Hurricane Warning - Issued when winds of 74mph or higher are expected in a specified coastal area within 24 hours

# 3.3 Emergency Organization for Severe Storms

The storm organizational structure and lines of authority and communications are shown on figures 3-1a - 3-1c. The extent that specific parts of the structure are activated depends on the nature of the storm and the extent of the forecasted damage. Specific responsibilities, duties and actions to be taken by the various organizational departments within FPL are shown in the following figure. These figures show broad areas of responsibility and assignments may be delegated or reassigned as necessary to perform the work

# 3.4 Organization and Communicatons Processes

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#### Severe Storm Organization



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#### **Restoration Responsibilities**

#### FIGURE 3-5a

#### RESTORATION RESPONSIBILITIES

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#### A. RESPONSIBILITY FOR SETTING RESTORATION PRIORITIES

1. Overall

- Emergency Control Officer
- -Emergency Manager Operations Engineering
- Transmission/Substation
  Distribution Emergency Distribution Manager •
- B. RESPONSIBILITY FOR FPL CREW MOVEMENT
  - 1. Overall

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b.

- Emergency Distribution Manager (or designee) •
- 2. Transmission Substation 4. Distribution
- Transmission Storm Coordinator
- Substation Storm Coordinator •
- -Emergency Distribution Manager (or designee)

#### C. RESPONSIBILITY FOR CONTRACTOR ASSIGNMENTS

- 1. Contractors on site
  - Transmission Storm Coordinator Transmission
  - Substation Storm Coordinator Substation
- 2. Additional contractors
  - 8. Emergency Distribution Manager (or designee) Transmission .
  - Emergency Distribution Manager (or designee) Substation Ь. . Emergency Distribution Manager (or designee) -
  - Distribution Ċ.

#### D. RESPONSIBILITY FOR REQUESTING OUTSIDE ASSISTANCE

- 1. Transmission Operations -Emergency Distribution Manager (or designee)
- 2. Distribution Emergency Distribution Manager (or designee) -

#### E. RESPONSIBILITY FOR FOOD, HOUSING, ETC FOR OUTSIDE ASSISTANCE

- Distribution Logistical Coordinator -1. Transmission Operations
- 2. Distribution Distribution Logistical Coordinator •



## Storm Information Flow

FIGURE 3-5b

#### STORM INFORMATION / COORDINATION FLOW DIAGRAM



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#### Storm Data Exchange 3.5 FPL Emergency Response

# STORM COORDINATION

PSCC ----- GOCC/DDC

- a. Transmission/Substation Availability (SCADA backup)
- b. Extent of Transmission/Substation damage
- c. Substation Restoration Schedule (especially extended outages)
- d. Transmission Restoration Schedule

PSCC/DWB ----- GOCC

- a. Request for special air patrols
- b. Request for specific crew assistance
  - 1. Number and makeup (personnel and equipment) of crews required
  - Reporting location, data, and time required
  - 3. Person to contact, address, and telephone number
  - 4. Type of work to be performed
  - 5. Estimate of duration of restoration
- c. Request for additional materials/equipment
- GOCC ----- PSCC
  - a. Priority Substations/Customers
  - b. Distribution Restoration Schedule & Priorities
- GOCC ----> PSCC/DWB
  - a. Response to request for special air patrol
- GOCC ----- POC
  - a. Requests for crew assistance
  - b. Requests for edditional materials/supplies
  - c. Requests for logistics support

#### PDC ----- PSCC/DWB

- a. Response to requests for crew assistance 1 - Who, E.T.A., Equipment
- b. Response for requests for additional materials/equipment
- c Response for requests for logistic support
- GOCC ----- DWB
  - 9. Power Delivery restoration schedules for Transmission Lines and Substations

#### DWB ----- GOCC

- a. Need for specific substation restoration priority
- b. Extent of Distribution Damage
- c Estimated number of customers affected
- d. Restoration schedule
- . Requests for Transmission Operations Crews or Equipment

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PSCC - Lejune Flegler Center DWB - Distribution Work Base GOCC - General Office Command

PDC - Physical Distribution Center

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## 3.5.1 General

It is the responsibility of the Power Systems Organization to focus manpower and materials as soon as possible following the passage of the hurricane. Rapid restoration of transmission lines, substations, and usable portions of feeders is essential in minimizing the interruption time. This requires a state of readiness achieved by planning and training. Coordination between the areas and General Office staff is necessary to assure adequate flow of materials and additional manpower where needed.

The General Office departmental staffs will arrange for and mobilize backup support in the following major areas:

- 1. Crew Teams
- 2. Non-Company crews from contractors and other utility companies
- 3. Materials, supplies and vehicles

Responsibilities for key aspects of the restoration effort are specified in figure 3.5a

In order to provide continuous updated information to Management and news media a General Office Command Center will be maintained. Personnel from Power Systems, Customer Service, Information Management, Corporate Communications and Generation Business Units will be on duty in the Command Center throughout the restoration process. Initial damage and status reports will be made to this location by the affected areas, followed by regular progress reports of the restoration of service. Information submitted will be made available to the Management of the Company, Corporate Communications, and appropriate governmental agencies.

The emergency storm procedure will be enacted and followed (SM Procedure 26000).

## 3.5.2 Reports

As soon as possible following a severe storm, a general assessment of damage should be made by the Power Systems(Distribution and Transmission Groups) Business Unit and reported by the fastest available means to the General Office Command Center. This should not be a detailed survey but rather a judgment based on observations by managers and known reports from the area Operations Departments. (Areas on the fringe of the storm that are not materially damaged should promptly notify the Storm Restoration Coordinator for their area). Information describing the area status should include:

- FIRST•Has storm organization been fully activated?STORM•Number and names of substations andREPORTtransmission lines known to be out of service.
  - General extent of damage including number of feeders out.
  - Are additional crews or area storm teams likely to be needed?

If not known at the time of the initial call, the following additional information must be supplied as soon as possible:

- FOLLOW-UP Estimated number of customers out of service
  - Names of substations out of operation
  - Number of feeders out

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- Number and type of crews working
- Number of additional crews or area storm teams needed.
- Number of transmission lines out of service

Because of the "need to know" of changing conditions and results of early restoration work, follow-up reports should be made about every three hours during the first day of service restoration. These reports should also include any data that is received from storm areas on STATUS REPORT Form S-29 as the storm areas become organized and produce field reports.

Beginning the second day, regular reports are to be made between 7:00 - 7:30 a.m. and 3:00-3:30 p.m. Information to be supplied in these regular reports will be area summaries of the twice-daily data reported on STATUS REPORT Form S-29. When summarized S-29 report data is received from an area, General Office Command Center personnel will record the information and summarize for all the reporting areas. A copy of the information will be filed in the "EVENT LOG" maintained at the G.O.C.C.

Any major recurring outage, such as loss of substation, or significant events, are to be promptly reported to the General Office Command Center. Communication links and information flow are shown in figure 3-5b & 3-5c.

#### 3.5.3 Crew Assignments

Following the initial determination of the extent of damages the Emergency Distribution Manager must be contacted. The requesting Area and the Power Systems Command Center will provide the EDM with the following information:

- 1. Number and makeup (personnel and equipment) of additional crews required.
- 2. Reporting location, date, and time required.
- 3. Person to contact, address, and telephone number.
- 4. Type of work to be performed.
- 5. Estimate of duration of restoration.

The Director of Transmission Operations or his designee(s) will determine whether additional Transmission or Substation crews will be supplied from other areas of the company, from outside the company, or both.

The EDM will determine whether additional distribution crews will be supplied from other Areas of the Company, from outside the Company, or both. All crews from other electric utilities will be requested only by the EDM or his designee. All additional crews or equipment from T&D line contractors and companies renting line equipment will be contacted only by the EDM or his designee.

All regular tree trimming crews in an Area will be contacted by Area personnel. For use in another Area, tree crew movement will be coordinated by the EDM or his designee. Other tree crews will be contacted only by the EDM.

The Area Logistics Coordinators shall arrange for food and housing to accommodate all FPL crew re-assignments and foreign crew assistance.

The EDM will advise Inventory Services of the anticipated number and assignment of non-company crews as well

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as allocation of all crews so that materials and mobile storerooms can be made up.

## 3.5.3.1 FPL Crew Re-assignments

When it has been determined that FPL distribution crews will be moved to another area, the EDM will contact the Distribution Area Manager and request that crews of the needed size and type be sent to a specified location. The Area will provide crews or "crew teams" as required.

When it has been determined that FPL Transmission or Substation crews will be moved to another area, the Director of Transmission/Station Operations or his designee(s) will contact the Area Superintendents and request that crews of the needed size and type be sent to a specified location. The Area will provide the crews or "crew teams" as required. If it has been deemed necessary by the EDM to move crews from the Transmission Systems Business Unit to the Distribution Business unit, or vice versa, the EDM will contact the or his designee to arrange such a re-assignment. All FPL crew movements will be tracked by the Storm Personnel Information System (S.P.I.S.).

## 3.5.3.2 Foreign Crews.

When it has been determined that outside assistance will be needed:

### The EDMs will:

keep management informed of who is providing assistance

maintain a record of all foreign crews on the system, the time they were requested and by whom, and the time they arrived

continually evaluate the restoration progress and coordinate the reassignment of foreign crews as necessary keep a log of information and activities so that a replacement can continue with maximum efficiency at the conclusion of an emergency situation send the EDM the copies of the foreign crews Job Papers. The Job Papers will be matched to the billing invoice, approved and processed to Accounting for payment authorize the release of foreign crews

Transmission/Station Operations will record:

foreign personnel their equipment makeup names and job classifications of the crew personnel Service Centers each crew is assigned the time and date each crew is released

# 3.6 State and County Actions

See section 2.5.

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# 3.7 Public Information

Public Information consists of both "preparatory" Emergency Public Information, Emergency Media Information programs, and internal distribution of publicly disseminated information.

## 3.7.1 Emergency Public Information

Preparatory emergency public information programs consist of pre-recorded "public safety" messages that have been pre-positioned with radio stations in FPL's service territory. In conjunction with the ECO, the EMERGENCY COMMUMICATIONS MANAGER(ECM) would authorize and activate callouts by authorized FPL representatives requesting use of the appropriate Public Service Announcement (PSA). Compliance with FPL's request for use of storm messages is pre-arranged by contract as a form of paid advertising.

Storm/hurricane messages cover voluntary pre-storm preparation and safety appeals, as well as information on how to facilitate safe and timely power restoration following a storm. Prompt activation of these messages, with support from the media, can help customers prepare for an emergency and may help prevent accidents.

## 3.7.2 Emergency Media Information

Emergency media information programs consist of timely and consistent news statements for release to radio, television and newspaper outlets in FPL's service territory. These statements are drafted by the EMERGENCY COMMUMICATIONS MANAGER(ECM)'s staff, as needed and as information on the emergency becomes available, and authorized for release by the EMERGENCY COMMUMICATIONS MANAGER(ECM) in conjunction with the ECO.

Additionally, the EMERGENCY COMMUMICATIONS MANAGER(ECM) and staff are prepared to mobilize for media news briefings, provide interviews and otherwise assist with media requests for visual aids, photography and video, as appropriate.

3.7.3 Emergency Internal Information

The EMERGENCY COMMUNICATIONS MANAGER(ECM) is responsible for ensuring that information developed for public dissemination is distributed internally to management and employees of the utility.

The same emergency public information will be shared with state and local emergency management groups and other utilities or industry organizations, as appropriate.

# 3.8 Training, Exercises and Drills

Storm Restoration training will be conducted annually. All personnel assigned to Area Work Bases will be notified to attend the required training sessions. This training shall be conducted to enable all involved to understand and carry out their duties as indicated in the storm procedures

SM26000. The storm restoration plan shall have a dry run as outlined in the storm procedures SM26000. The dry run shall take place in the Spring of each year prior to the commencement of the official hurricane season.

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# 4.0 LONG TERM FUEL SUPPLY SHORTAGE

### 4.1 Purpose

The purpose of this Plan is to establish the organizational structure and corresponding responsibilities for anticipating, assessing, and responding to long-term energy emergencies occasioned by a fuel supply shortage.

### 4.2 Definition

An energy emergency exists when an electric utility has inadequate energy generating capability by reason of a fuel supply shortage, and is thereby prevented from operating at required levels to supply its energy obligations. An energy emergency differs from a short-term capacity emergency in that energy requirements cannot be met over an extended period of time. The period of advanced warning and expected duration of an energy emergency is generally measured in terms of weeks or months as opposed to minutes or hours for a short-term capacity deficiency.

### 4.3 Overview

The Plan is designed to address the organization, communication, environmental, legal, political, technical, and economic concerns which may arise during a long-term energy emergency. To address these issues, the Plan has been divided into three basic elements:

- 1. Fuel Supply Advisory
- 2. Fuel Supply Alert
- 3. Fuel Supply Emergency

Each basic element relates to a number of sub-elements which, when coupled, form the integrated plan. Following is a description of the basic elements and sub-elements of the plan which may be implemented during a fuel supply shortage.

This plan provides general guidelines and structure but is not intended to be rigid. Implementation of the plan will be consistent with the severity of the situation.

### 4.4 Fuel Supply Advisory

The Fuel Supply & Operations Department is responsible for fossil fuel supply and transportation, scheduling fuel deliveries, managing fuel inventories, and projecting fuel advisory

### 4.4.1 Designation

If in the judgement of the Manager of Fuel Supply & Operations there is a threat to the continued availability of any fossil fuel used in the FPL system he will notify the Vice President of Transmission Operations and Planning who in turn may initiate a Fuel Supply Advisory. The

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initiation of a Fuel Advisory will trigger the actions indicated below.

## 4.4.2 Response

Upon initiation of the Advisory, the Vice President, Transmission Operations and Planning will notify the President of FPL. The President of FPL or in his absence, the Vice President of Power Generation Business will, if conditions warrant, appoint an Energy Emergency Executive.

## Energy Emergency Executive

The Energy Emergency Executive will have primary responsibility for implementing the fuel shortage plan strategies and coordination of the activities of the various business units. He will report and update the President of FPL and Operating Committee on the fuel supply status and the progress and affects of the fuel supply shortage plan strategies. He is responsible for notifying the Group Executives of the fuel supply advisory and activating in whole or in part the Energy Emergency Organization as described in this plan.

## Group Executives

The Group Executives will review and if necessary modify their elements of the Plan and notify the Energy Emergency Executive as to the readiness of their functional groups to implement the Plan should a Fuel Supply Alert be initiated.

The Energy Supply Group shall meet and discuss actions to resolve or forestall the impact of the fuel supply shortage.

# 4.5 Fuel Supply Alert

#### 4.5.1 Designation

If at any time, despite actions taken under the direction of the Vice President, Power Generation:

Fuel inventories are projected to fall below seventy-five percent of the target level during a forward three-month period and projected fuel receipts will fall below expected usage such that FPL's ability to supply its energy obligations will be impaired within the next <u>forty-five</u> days. In such a condition, the General Manager, Fuel Supply and Operations, will notify the Vice President Transmission Operations and Planning who will initiate a Fuel Supply Alert which will, in turn, trigger the actions indicated below.

# 4.5.2 Response

Upon the initiation of an Alert, the Energy Emergency Executive will direct the Group Executives to implement all Fuel Supply Alert actions, monitor the fuel supply situation, and inform the President of FPL.

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#### 4.6 Fuel Supply Emergency

#### 4.6.1 Designation

If at any time following the designation of a Fuel Supply Alert and despite actions taken under the direction of the Vice President Transmisson Operations and Planning

Fuel inventories reach or actually fall below seventy-five percent of the target level and projected fuel receipts will fall below expected usage such that FPL's ability to supply its energy obligations will be impaired within the next thirty days and thereafter for an extended period. In such a condition, the General Manager, Fuel Supply And Operations, will so notify the Vice President, Transmission Operations and Planning and the Vice President, Power Generation. Upon advice from the Vice President, Power Systems, the Vice President Power Generation will initiate a Fuel Supply Emergency which will trigger the actions indicated below.

#### 4.6.2 Response

Upon initiation of a Fuel Supply Emergency the Energy Emergency Executive will direct the Group Executives to initiate all Energy Emergency actions. He will monitor the fuel supply situation and inform the President of Florida Power & Light and/or the President, Power Generation Division of the status and affects of the fuel supply shortage plan strategies.

Group Executives will direct the department representatives in their groups to implement the respective departments' Fuel Supply Emergency actions.

## 4.7 Energy Emergency Organization

The President of Florida Power & Light has overall responsibility for FPL's strategy to mitigate the effects of a fuel supply shortage.

The Vice President of Power Generation is responsible for advising the President of Florida Power & Light regarding the strategy.

The Energy Emergency Executive is responsible for directing the development and implementation of FPL's strategy through the Energy Emergency Organization, and maintaining coordination and information flow among the Energy Emergency Groups.

The responsibilities of the Energy Emergency Executive in conjunction with the Group Executives include:

- Review forecasts of fuel price and availability; inventory level, estimated power demand, availability of power purchases, and the expected impact of a fuel supply shortage on FPL's ability to serve its load.

- Provide a mechanism for making day-to-day policy recommendations.
- Develop action plans for eliminating or mitigating the impact of the supply shortage to the extent possible.

To implement the various actions required under each step in the Energy Emergency Plan six key functional areas have been identified. The activities of each functional area is assigned to a Group Executive.

Exhibit 1 presents an overview of the Energy Emergency Organization and the make-up of each functional group. The activities of the department representative(s) to the group will be supported by the responsible Executive for that department. The Energy Emergency Organization will, at such time as is deemed appropriate by The Energy Emergency Executive, operate from the Energy Emergency Coordination Center which will be located in FPL's Juno Beach Office.

### 4.7.1 Energy Emergency Organization

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## 4.8 Group Objectives and Accountabilites

The objectives and the individual accountabilities of the six key functional areas of the Long Term Energy Supply Organization are described below.

# 4.8.1 Energy Supply Group

### 4.8.1.1 Objective

The primary objectives of the Energy Supply Group will be to:

a) Obtain acceptable fuels for electric generation in FPL's system under the fuel shortage conditions;

b) Maximize the use of sources of energy that are not affected by the fuel supply shortage and;

c) Keep other groups in FPL's Energy Emergency Organization informed regarding the availability and cost of fuel used in the generation of electricity during fuel shortage conditions.

### 4.8.1.2 Accountabilities

Specific accountabilities reside with the various Energy Supply Group members as outlined below:

### a) Vice President – Transmission Operations and Planning

Initiates Fuel Supply Advisory and Alert

Advises V.P - Power Generation regarding initiation of Fuel Supply Emergency

Directs implementation of appropriate action plans by the various participants in the Energy Supply Group.

# b) V.P. of Energy Marketing & Trading

Develops and implements Action Plan to maximize availability of energy supply from interchange suppliers, co-generation and small power producers and sale-for-resale power purchaser during the fuel shortage period.

Assures that all interchange suppliers, co-generation and small power producers and sale-for resale power purchases are informed of FPL's efforts and objectives regarding the long-term Energy Emergency Plan.

Coordinates interchange supplier, co-generation and small power producer and sale-for-resale power purchaser activities to assure cooperation with long-term Emergency Plan objectives and

concurrence with the terms and conditions of the underlying contractual provisions.

Administers natural gas emergency procedures.

# c) General Manager of Fuel Supply & Operations

Advises the Vice President – Power Systems, regarding the initiation of Fuel Supply Advisory; Fuel Supply Alert and Fuel Supply Emergency;

Monitor, forecasts and reports fuel availability, price and inventory level conditions to Energy Emergency Organization;

Develops and implements Action Plan to obtain acceptable fuels for electric generation in FPL's system during the fuel shortage period; and

Administers fuel exchange procedures.

# d) Vice President of FPL Power Generation Operations

Develops and implements Action Plan to review and, if appropriate, revise the plant outage schedule;

Develops and implements Action Plan to operationally broaden the range of fuel specifications for fuel used in the generation of electricity;

Develops and implements Action Plan to maximized efficiency of fuel utilization in fossil plants with fuels available to FPL during the fuel shortage period.

# e) President of Nuclear Division

Develops and implements Action Plan to review and , if appropriate, revise the fossil power plant outage schedule;

Develops and implements Action Plan to maximized electric generation from the nuclear units.

# f) Manager, System Dispatch

Develops and implements emergency dispatch procedures;

Evaluates approved power plant outage schedule and advises Power Generation and Nuclear Division regarding the need to revise it;

Advised FPL and FRCC of projected power shortages.

# g) Director of Resource Planning

Provides fuel use and fuel expense projections under various scenarios.



## 4.8.2 Financial Situation Group

#### 4.8.2.1 Objective

The primary objectives of the Finance Situation Group will be to:

- Prepare the Financial Situation Report.
- Implement cash conservation measures that are deemed necessary.
- File required reports with the Securities and Exchange Commission (SEC) as needed.
- Provide information to FPL Group Investor Relations so they can inform present and potential investors, security analysis, and stock exchanges as needed.
- Work with Corporate Communications to issue financial disclosure press releases.

#### 4.8.2.2 Accountabilites

Specific accountabilities reside with the various Finance Situation Group members as outlined below:

#### a) Treasurer

Advises Senior Vice President and Chief Financial Officer regarding the initiation of the Finance Department Emergency Plan as contained in the Finance Situation Report.

Provides information to FPL Group Investor Relations so they can inform present and potential investors, security and analysts and stock exchanges as needed. Files required reports with the Securities and Exchange Commission as needed.

Works with Corporate Communications to issue financial disclosure press release as needed and review relapses and proposed statements that may have financial disclosure implications.

Directs implementation of appropriate action plans by the various participants in the Finance Situation Group.

## b) Manager – Budgets

Monitors, forecasts and reports operating and capital expenditures to the Finance Situation Group.

Assigns priority ratings, as appropriate, to capital and operating expenditure for use by the Finance Situation Group in implementing cash conservation countermeasures.

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## c) Director of Cash Mgt/Forecasting and Analysis

Monitors, forecasts and reports to the Finance Situation Group the efforts of various contingency scenarios on the economy (U.S. and Florida), FPL customers, FPL energy sales and net energy for load.

## d) Director of Resource Planning

With input from other key departments as necessary, develops and reports production forecasts for various contingency scenarios to the Finance Situation Group.

## 4.8.2.3 Financial Situation Report

The Financial Situation Report (the Report) is a multi-purpose report for use prior to, and during, a potential financial crisis. The purpose of the Report is to state the effect of various contingency scenarios on FPL's earning, cash flow and projected capital availability, and to provide information which may be necessary for financial disclosure purposes.

4.8.3 Corporate Issues Group

## 4.8.3.1 Objective

The Corporate Issues Group's primary objective is to inform and secure support for the FPL long-term Energy Emergency Plan from various local, state and federal governmental agencies and elected officials. The responsibilities assigned to this group include:

External communications coordination with Corporate Communications (message consistency, content and audience);

Contacts with appropriate governmental agencies and elected officials to ensure that these agencies and officials understand the seriousness of the supply problems, the various alternatives which have been investigated, and the necessity for the successful operation of the Plan;

Obtaining the necessary Emergency orders and variances to enable FPL to use fuels available during the fuel shortage period;

Recovery of FPL's costs incurred in implementing the Plan.

## 4.8.3.2 Accountabilites

Specific accountabilities reside with the various Corporate Issue Group members as follows:

## a) Vice President, Governmental Affairs

Maintain liaison with federal and state public official, including legislators and appropriate agencies.

June 8, 2001 Coordinate with Environmental Services in the effort to obtain needed variances and orders;

## b) Director, Environmental Services

Interact with environmental agencies as required to obtain emergency orders and variances

Coordinate with Governmental Affairs to obtain emergency authorizations.

Provide environmental impact and regulatory status information to the Energy Emergency Team.

# c) Vice President, External Affairs

Maintain liaison with local authorities, including county and city administrative bodies and county emergency response agencies.

Coordinate local external communications with other activities of the Task force to ensure consistency with actions taken at the state and federal level such as emergency orders and variances.

## d) Director of Rates & Tariff Administration/Director of Regulatory Affairs

Maintain liaison with FPSC and keep Commissioners and Staff informed regarding FPL's Energy Emergency Plan.

Prepare documentation necessary for FPL to recover costs incurred in the implementation of the Plan.

#### 4.8.4 FPL Internal Use Group

The function and responsibility of the FPL Energy Use Group is to implement FPL's Internal Energy Use Reduction Plan, as shown below.

The FPL Energy Use Reduction Plan consists of four basic parts: 1) Power Plant Energy Use Reduction 2) FPL Facilities Energy Use Reduction 3) Vehicle Fuel Supply Shortage and 4) FPL Employee Energy Use. Each of these parts will be implemented in phases that are consistent with other elements of FPL's long-term Energy Emergency Plan. Each part contains actions to address each stage of a fuel supply shortage; specifically, Fuel Supply Advisory actions, Fuel Supply Alert actions, and Fuel Supply Emergency actions.

#### 4.8.4.2 Power Plant Energy Reduction

Assure that all non-essential uses of energy at Power Plant sites is conserved or curtailed as necessary.

#### 4.8.4.3 FPL Facilities Energy Reduction

Assure energy conservation or curtailment of consumption is implemented at all FPL location as appropriate.

Implementation and enforcement of conservation or curtailment at specific facilities will be the responsibility of local management with the exception of the General Office and Juno Beach building which will be assigned to Administrative Services, and the Regional Customer Service Centers that will be the responsibility of the General Manager.

## 4.8.4.4 State and Federal Collateral Plans

#### a) Director - Regulatory Affairs

Assures FPL compliance with corresponding emergency plans promulgated by Federal and State agencies.

#### 4.8.4.5 Employee Conservation Measures

## b) Director Human Resources

The Director of Human Resource Centers of Expertise along with the Director of Fleet Services shall be responsible for coordinating employeee conservation measures. His accountabilities shall include:

Ensures participation in conservation or curtailment activities by FPL employees.

June 8, 2001 Ensures appropriate fuel-conserving practices and measures are implemented for FPL vehicles and employee-owned vehicles used on FPL business. This includes includes:

Fleet Vehicles Pool Vehicles Contract Cars

Facilitates use of employee car pools and alternate means of transportation in getting employees to and from work while conserving fuel

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## c) Director - Fleet Service

The Director of Fleet Services accountabilities are:

Implements prioritization of fuel deliveries.

Ensures that alternative sources of vehicle fuels are obtained.

Priority distribution

External sourcing

Allocations

Notifies FPL Energy Use Group corporate officer of pending vehicle fuel shortage situation any time an FPL supplier is unable to make a vehicle fuel delivery.

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## 4.8.5 Customer Use Group

4.8.5.1 Objective

Coordinate customer energy reduction efforts with district and division offices;

Implement the New Customer Additions Restriction Plan; and

Implement the Electricity Allocation Plan

#### 4.8.5.2 Accountabilities

#### a) Vice President – Customer Service, Sales & Marketing

Ensures implementation of all components of customer Energy Use Reduction Plan.

Assures that all appropriate information related to customer energy reductions is transmitted to and from the regional customer service centers.

Coordinates with the director of Transmission Operations and Planning and others as necessary to ensure that all aspects of the emergency load management plan are properly communicated and enforcedCoordinates with the director of Transmission Operations and Planning and others as necessary to ensure that all aspects of the emergency load management plan are properly communicated and enforced.

#### b) Vice President of Tranmission Operations and Planning

Oversee the preparation and distribution of the Emergency Load Shedding Manual

Ensures implementation of feeder rotation and other DSM programs.

## c) Director of Distribution Operations Support

Assures that all new customer addition restrictions are properly communicated and enforced.

#### 4.8.6 Corporate Communications Group

#### 4.8.6.1 Objective

The primary objective under a energy emergency of Corporate Communications is to provide timely information concerning the fuel supply shortage and conservation to the media and to FPL employees. This is to enhance the effectiveness of measures taken as part of the Energy Emergency Plan, and to ensure that the information is consistent with that provided to investors, governmental agencies and FPL's customer.

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## 4.8.6.2 Accountabilities

## a) The Vice President, Corporate Communications

Coordinates the release of timely information concerning the fuel supply shortage and conservation to the media

Develops and implements the Energy Emergency Communications Plan;

Maintains liaison with the FRCC Public Information Committee;

Ensures that employees are informed as to the nature of the fuel supply shortage, conservation and curtailment actions recommended for employees and their families, and appropriate information for dissemination to friends and neighbors.

# 5.0 EMERGENCY FACILITES AND EQUIPMENT

## 5.1 Communications Equipment

## 5.1.1 FPL Intelligent Tandem Network (ITN) Phone System

Telephones in most FPL locations may access the Intelligent Tandem Network (ITN) telephone system. Through the ITN and its associated "Uniform Dialing Plan," other company office locations may be directly dialed, WATS lines may be accessed, and local telephone calls may be placed. This system uses a combination of telephone company lines and FPL lines depending upon office location.

#### 5.1.2 Cellular and Satellite Phone System

This system is to be the first line of backup communications in case the FPL ITN phone system were to fail and is also capable of providing access to the FPL computer system or for facsimile transmissions. All FPL managers, plants and facilities have listed cellular phones for normal business purposes.

Following a hurricane it is possible that cellular towers or other equipment will be damaged. Satellite phones have been installed at all FPL power plants including nuclear sites, at the system control center, at the GOCC, and provided to each of the Station Managers.

#### List of critical phone numbers including Satallite phones are available through the Distribution Current Storm Navigator Notes ICON.

#### 5.1.3 FPL FM Radio System

The Company radio system consists of fixed base FM radio equipment in the System Control Center, Dispatch Centers, service centers, power plants and the General Office Command Center. In addition, numercus mobile units are installed in company automobiles, trucks, and mobile service vehicles.

In the event of interruption of electric service to the base radio stations, emergency power can be supplied to the equipment. The General Office Command Center radio is typically able to communicate with the LeJeune-Flagler office, South Florida Dispatch, and the Juno office. The other areas are accessed through a relay of radio communications. The FM radio system is the next level of communications backup after the ITN phone system and the cellular phone system.

# 5.1.4 Emergency Broadcast System

The Florida Emergency Broadcast System (EBS) is organized into three networks that can activate (1) statewide; (2) any of 12 "operational areas"; or (3) individual counties. Spanish language stations are included in the south Florida region. Tallahassee is the "State Warning Point" (SWP) and is responsible for activating (1) or (2). The EBS system would ensure timely

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June 8, 2001 notification of the public since the entire system could be activated within 30 minutes. Based on information FPL provides, an emergency could be declared and EBS activation requested.

## 5.1.5 FPL Computer Systems-SCADA, CIS, E-MAIL, TCMS

## 5.1.5.1 Supervisory Control and Data Acquisition (SCADA)

The SCADA system is a series of programs, which runs in the System Control Center. In brief, SCADA provides communications with and control of the power system equipment in the field to the dispatchers responsible for reliable delivery of power to the customers.

The data acquisition portion of SCADA collects information from each substation. This information consists of breaker/switch position (open/closed), station voltages, line flows (MW, MVAR, AMP), generator outputs (MW, MVAR) and where available transformer loads (MW, MVAR) and tap positions. In addition to collecting this information, SCADA also checks it for abnormalities. An abnormal position or out of range value is alarmed to the dispatcher. Different types of alarms can be prioritized to make the most efficient use of the dispatchers attention and initial response.

The supervisory control portion of SCADA enables the dispatcher in the control center to operate circuit breakers or change transformer tap positions in the substations. Control of different substations can be organized such that each area dispatcher has responsibility for a subset of all substations in their area. This allows a dispatcher to concentrate on a smaller number of substations and prevents confusion of which dispatcher is handling which problem.

The SCADA system provides a series of summary displays, which provide the dispatcher with the most critical information at a glance. These summaries are organized according to the assignments of station responsibility of each dispatcher. The alarm summary provides a chronological list of current alarms, where they occurred and what happened. The abnormal summary provides a list of devices that are in an abnormal state or position. The Tag summary is a list of devices that have been "tagged" as part of an equipment clearance. The SCADA system prints out all the alarms and events so that there is a permanent record of their occurrence.

5.1.5.2 Customer Information System (CIS)

CIS is FPL's Customer Information System, the on-line computer system that allows every customer service representative and every customer accounting representative to access the account records of every customer.

This mainframe-based system is used extensively by employees in customer service locations. Telephone representatives and front counter representatives access this system many times each day to answer customer inquiries, change names or mailing addresses, or maintain customer accounts in many other ways. CIS is the primary repository for all information related to individual customers: name, street address, mailing address, telephone number, account history, and current account status.

CIS has the ability to be used as a quick communication device. Using a command called "FACT," certain General Office staff groups can send messages to all CIS users. A FACT message can be as routine as a notice of an accounting change, to as urgent as a storm warning. The message will be presented to CIS users within seconds of it being sent.

#### 5.1.5.3 Electronic Mail (Lotus Notes)

Lotus Notes is an on-line electronic mail system whereby anyone with network access (and authorization) can send messages electronically to any other E-Mail user. The message is received instantly at the receiver's location and can be read from the screen or printed on a local or network printer. E-Mail has the ability to provide information to many FPL locations quickly. Pre-determined distribution lists can be installed E-Mail, from which messages, emergency or routine, can be sent.

Lotus Notes may be used during conditions outlined in this plan as a data gathering and information-disseminating tool, provided other more

important systems such as TCMS are not affected. Critical storm information and status updates are contained within the Distribution Storm ICONS including substion map coordinates, critical phone lists, procedures, SRR summaries, and general storm data.

#### 5.1.5.4 Trouble Call Management System (TCMS)

One of the most important types of calls that FPL receives from customers is the "trouble call". Such calls occur when something goes wrong: customers have no electricity; lights are flickering; wires are sparking in the trees; wires are down across the road, etc.

FPL uses an on-line computer system called TCMS (Trouble Call Management System) to aid in handling such calls. This system allows customer service representatives to take and enter trouble call data. TCMS conveys the relevant data so that it is available to the dispatch center nearest the customers. TCMS sorts the trouble calls according to priority, and collects them geographically to look for duplications and diagnose possible transformer or lateral problems. The Distribution dispatcher then has the best information possible to dispatch appropriate field personnel.

TCMS also provides the ability for the dispatcher to update the trouble calls; these updates are available to the customer service representatives who can then give up-to-the-minute information regarding trouble conditions to inquiring customers.

#### 5.1.6 Instanews

This is a video "text" network supervised by Corporate Communications for employee communications. The system transmits and distributes written news summaries via phone lines and fiber optics to TV monitors located at 32 FPL sites throughout the service area.

## 5.1.7 Radio Paging System

Telephones in the FPL Intelligent Tandem Network (ITN) are interconnected to the Radio Paging System. This system is capable of reaching beepers in much of FPL's territory. Beepers are regularly assigned to key personnel in the Emergency Organization and additional beepers can be quickly assigned if required.

# 5.1.8 Service Restoration Reporting System (SRR)

On line system to report on ground patrol efforts, material requirements, and workload information when the extent of damage does not make it practical to utilize TCMS. This system organizes information about distribution facilities from each substation out within each restoration manager's geographical area. Material, equipment and restoration personnel by crew type can be more effectively assigned.

The system is remotely deployable to the damaged areas, even if there is not network connection available.

## 5.2 SYSTEM CONTROL CENTER (SCC)

The central component of FPL's Energy Control Systems is the System Control Center (SCC). The SCC consists of mainframes and minicomputers used for processing large scientific programs, data communications, power system accounting and control of the power system. Each computer has a redundant computer and an automatic throwover to maintain a high degree of reliability.

Data from all the plants, interconnections with other power systems, and transmission substations are transmitted to the SCC via dedicated telephone lines. Because of FPL's large use of energy purchases, the SCC also collects data from noighboring power systems via computer links to their control centers. The SCC can thereby provide for the initial accounting of energy purchases and sales since it collects all the power system measurements and controls all the scheduled/intended energy transactions. Personal computers connected to the SCC then collects all of this data for further processing and billing.

The SCC also has computer links to the Load Management computer system. This allows the System Operator to control the residential load control and its effects on the power system. Another data link will be added in the future to connect the SCC to the corporate computer system. The power system measurements collected and used by the SCC on a real time basis will be made available to other departments throughout the company.

The most basic function of the SCC is Supervisory Control and Data Acquisition (SCADA). (Refer to Section 5.1.5.1) The SCC also performs Automatic Generator Control (AGC) for all of FPL's (non-nuclear) generators. The AGC program maintains a constant balance between the energy demanded by the customers and the energy supplied, either through FPL generation or

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purchased from other utilities. This balance is maintained by sending control signals to the generators to either increase or decrease their output. This control also maintains the system frequency at 60 Hz. Another major function of the SCC is to evaluate the security of the power system as conditions

change and provide this evaluation as an aid to the dispatchers who are controlling the system. These security programs periodically collect a complete set of measurements from SCADA and then perform a series of contingency analyses. Potential problems are presented to the dispatcher so that he can be prepared to take action if necessary.

## **5.3** Power Systems Command Center (PSCC)

The PSCC overlooks the System Control Center in the LeJeune-Flagler Office (LFO). The command center is equipped with telephones and a computer console to monitor the system conditions.

The Manager of Operations Engineering is responsible for the operations of the PSCC.

## 5.4 Physical Distribution Center(PDC)

The Physical Distribution Center is responsible for all logistical support in providing material, tools and equipment to support the restoration efforts. They are also responsible for coordination of the logistics efforts (food, housing, ice, water, etc.) to support initial FPL crew movements and the processing of external manpower from other utilities and other contractors. They maintain the Storm Personnel Information System (SPIS) database for all employees & external forces used in the restoration efforts.

This group is located in the Physical Distribution Center in West Palm Beach, Florida.

# 5.5 General Office Command Center (GOCC)

The GOCC is located in the General Office building (Room 5000) in Miami. The facility will be staffed during hurricane response, other severe weather condition with significant customer outages, and if a capacity alert or emergency is declared.

The GOCC facility is intended to insure accurate and timely communications between business units. It also provides the capability for each business unit's field forces to have a single point of contact to provide updates and receive the most accurate information available.

### 5.5.1 Facilites Description

The GOCC is a large room which is configured for communication operation. The room is organized to accommodate the emergency organization and provides tables and phones for the ECO and emergency staff managers and their representatives. Directly in front of the ECO are status boards, transmission substation maps and TV screens to record system load and conditions.

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The Customer Service/ Sales & Marketing Response Team (CSSMRT) which is responsible for all customer service issues during the event and the Distribution Response Team (DRT) which is responsible for crew movements (FPL and foreign crews), emergency restoration and coordination of all distribution operations issues, are also located in the GOCC room.

Additionally, following a severe storm the GOCC may be manned by representatives from several additional FPL departments such as the Nuclear Division, Regulatory Affairs, Aviation, Inventory Services, Automotive, Telecommunications, etc at the discretion of the ECO

## 5.5.2 Telephone, Radio And Other Equipment

The GOCC is equipped with a phone system consisting of assigned blocks of phone numbers. The ECO and emergency staff managers have a block of numbers which roll over or are answerable by the other staff managers. The CSRT members have a similar block of numbers which are assigned to the individual areas for calls to report their damage and problems. These phones roll over and are answerable by any of the team. Likewise the DRT members have a block of numbers which are designated for specific events or problems/needs. There are cellular phones available in case of FPL ITN phone system failure as well as fixed base FM radio equipment for use in the event of total phone system failure. The general location of phones can be seen in figures 5-5a & 5-5b. Also available in the GOCC are four fax machines, three computer terminals tied into the FPL computer systems, personal computers which are used for manpower analysis, a SCADA terminal to assess system status and two TV sets; one set up on cable and the Instanews network and the other on an independent antenna in case the cable is lost. Weather data is also readily available via fax or printer.

#### 5.5.3 Staffing

Staffing will be determined by the ECO and will depend on the nature and severity of the emergency. The general staffing may include any of the following list of Emergency Management Personnel or their designee but not necessarily all of these at any one time.

Emergency Corporate Communications Manager (ECCM) Emergency Distribution Manager 1 & 2 (EDM 1 & 2) Emergency Residential & General Business Manager (ERGBM) Emergency Commercial & Industrial Manager (ECIM) Tranmission Operations and Planning General Office Coordinator (PSGOC) G.O. Communications Center Supervisor Customer Service Personnel (2-4) Distribution Personnel (5)

## 5.6 Emergency News Center(ENC)

The Emergency News Center(ENC) is located in room 2626 of the General Office, can be activated if needed in an emergency. It is used as a central location for gathering and distributing emergency information to the news media and to employees. Media inquiries, the distribution of

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news releases, press kits and other information is coordinated from this area. Personnel in the ENC are also responsible for coordinating the set up of the auditorium for news briefings and coordinating the scheduling of those briefings.

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# Appendix A

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# **Capacity Shortfall Process**



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## Capacity Shortfall Terms & Definitions

## TLR - TRANSMISSION LOAD RELIEF

A North American Electric Reliability Council (NERC) regional procedure to reduce loading on key transmission facilities to prevent overloads, voltage collapse, or stability problems from occurring either in real time or that would result from the "next contingency" event on the bulk transmission system.

#### POWER PLANT OPERATING MODES

- 1. On-Control Continuous Capability The first level of operations which uses Automatic Generation Control (AGC) to economically regulate the system's generation to meet load demands. This level is normal power plant operations.
- OCC OFF CONTROL CONTINUOUS The second level of operations which requires that plants operate OFF System Control. This level of operations allows the power plant operator to fine tune the generating facility for maximum sustained power output, normally greater than normal ON Control capability. The plant can operate at this level efficiently for a prolonged period of time.
- 3. PEAK Capability The third and final level of power plant operations. This level allows the power plant operator to further increase the power output of the generating facility at a cost in unit efficiency. The plant can only run for a limited time at this level of operation.

#### DSM - DEMAND SIDE MANAGEMENT

A collection of systems and programs which are administered by the utility to achieve reductions in energy demand. Examples of these programs are the On-Call Load Management System, the Commercial/Industrial Load Control Program, and Curtailable Load.

#### LMS - LOAD MANAGEMENT SYSTEM

This refers to the Residential Load Management "On Call" system. The system is operated by the Generation Coordinator at the System Control Center and has the effect of reducing the overall system load demand. The system controls customer appliances such as water heaters and pool pumps, air conditioner appliances in the summer and heating appliances in the winter. The system is broken down into several areas corresponding to FPL service areas as follows:

- 1. Southern Area Miami / Dade County
- 2. Southeast Area Broward County
- 3. Eastern Area From Palm Beach north to St. Lucie Counties
- 4. Western Area all counties on the west coast from Naples through Bradenton
- 5. North Area FPL territory north of St. Lucie County to the state line

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The system is also broken down by mode of operation. Under normal operations customers choosing the "Cycle" option will have their Air Conditioning and/or Heating appliances cycled OFF & ON for periods of 15 minutes each for up to 3 hours. Customers choosing the "Shed" option will have their appliances turned off with no cycling for up to 3 hours. The control of the Water Heaters and Pool Pumps has no cycling option, and will result in customer appliances being turned off a period of up to 4 hours.

#### LMS-SCRAM

The other mode of operation for the On Call Load Management System is the SCRAM mode. This mode is used only in emergencies and has no contractual time limits. The FPL System Operator will use this mode as a last resort in Capacity Emergencies or in response to a system emergency. During this mode of operation all appliances in the area of control will be turned off until restored by the System Operator.

#### CILC - COMMERCIAL / INDUSTRIAL LOAD CONTROL

The objective of the CILC Program is to reduce the current and future growth of coincident peak demand and energy consumption by controlling customer loads during capacity shortages and system emergencies.

The CILC Program is available to Commercial or Industrial customers with demands of 200 kw or greater that allow FPL to control at least 200 kW of their load. Participants in this program contract for a firm demand level of use which they agree not to exceed during a load control period. Participants must also allow FPL to directly control their selected electrical switch gear or to transfer the load to their stand-by emergency generator. Control of the customer's load is accomplished through FPL's Load Management System by use of control circuits connected directly to the customer's switching equipment.

The customer receives service under a lower rate in return for allowing FPL to control its load.

FPL provides the customers with advance notification of upcoming load control events via an FPL provided printer/alarm device that is installed at the customer's premise. The pre-notification is typically given 1 hour prior to the start of a load control event. On rare emergency conditions, the minimum pre-notification is 15 minutes. The following is the series of messages that are sent to the CiLC printer/alarms when the CILC system is activated:

Initial message: typically 1 hour prior to the start time of the load control event- customers receive free form message explaining the reason for the upcoming load control event and alerting them of the event start/end times.

**Pre-notification:** 15 minutes prior to the start of the load control event-customers receive pre canned message alerting them that "15 minutes to load control period".

Notification: at the start of the load control event, the customers receive pre canned message alerting them that "load control period is underway".

*Pre-notification:* 15 minutes prior to the termination time of the load control event-customers receive pre canned message alerting them that "15 minutes to end of load control period".

Notification: at the end of the load control event, the customers receive pre canned message alerting them that "load control period is concluded".

The CILC-1 rate is currently closed to new participants. A similar rate offering, Commercial Industrial

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Demand Reduction Rider (CDR), is available to interested customers.

## CURTAILABLE LOAD

The objective of the Curtailable Program is to reduce peak demand and energy consumption by requesting customers to reduce their loads during capacity shortages and system emergencies.

The Curtailable Program is available to Commercial or Industrial customers whose measured or contracted monthly billing demand equals or exceeds 500 kW and agree to curtail this demand by at least 200 kW when requested by FPL. Participants in this program contract for a firm demand level of use which they agree not to exceed during the period in which curtailment is being requested. Participants must manually reduce their own loads by turning off selected switch gear or manually transfer the load to their stand-by emergency generator. Control of the customer's load is strictly at the customer's discretion.

The customer receives a monthly credit in the amount of \$1.70 per kW for any kW curtailed above their contracted firm demand.

FPL typically provides the customer with advance notification of upcoming curtailable events via telephone. It is the FPL's Account Managers or their designee's responsibility to contact the customer and inform them of the upcoming event, including the start and end time of the curtailment period. The advance notice is typically given 1 hour prior to the start of the curtailment. The following is the typical process that is followed to activate curtailment:

TOP- Power Supply System Operator determines the need to request curtailment.

TOP- Power Supply System Operator informs PDM-Product Development & Management of the need to request curtailment.

PDM-Product Development & Management informs Account Managers or designees of the need to curtailment.

TOP-Power Supply issues POET Page notifying FPL staff of the need to request curtailment .

Account Manager or designee contacts external customer and requests them to curtail for a specified period of time.

External Customer prepares for curtailment and turns off selected leads during the curtailment period specified by the Account Manager.

The Curtailable Rate is currently available to interested Commercial or Industrial customers.

#### **FLM - EMERGENCY LOAD MANAGEMENT**

The Emergency Load Management program provides methods of load curtailment in the event of system emergencies. The ELM program contains the Feeder Rotation program as well as the Voltage Reduction program.

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#### FEEDER ROTATION (Manual Trip)

A method of reducing system load by manually shedding pre-defined distribution feeders. The program is divided into 4 Levels with 15 Groups of feeders in each level. Each Group contains several feeders distributed among the five FPL service areas. The total load per feeder rotation group is 100 MW or 25,000 customers on average. In the event of a system emergency, the FPL System Operator may choose to shed a determined amount of load off the system via manually tripping specific groups/levels in the ELM program. Each Feeder Rotation will be restored in 15 minutes with an additional number of groups being shed if system conditions persist.

#### VOLTAGE REDUCTION

Voltage Reduction is a method of reducing System Load by manually reducing distribution feeder voltages by 2.5%. This program is also executed by the FPL System Operator at the System Control Center.

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## TAMPA ELECTRIC COMPANY

# LONG TERM ENERGY EMERGENCY PLAN

# FOR

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# FUEL SUPPLY SHORTAGE

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## ATTACHMENTS

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ATTACHMENT I -- EMERGENCY PLAN SUMMARY ATTACHMENT II -- ENVIRONMENTAL PETITION FORM

#### TAMPA ELECTRIC COMPANY LONG TERM ENERGY EMERGENCY PLAN FOR FUEL SUPPLY SHORTAGE

## I. INTRODUCTION

The uncertainty in fuel supply (oil, coal and natural gas) is beyond the control of prudent planning and has the potential for fuel shortages for both Tampa Electric Company (TEC) and the entire state. This could result in a long-term electrical energy deficiency that would adversely affect all customers. Therefore, this "Tampa Electric Company Long Term Energy Emergency Plan For Fuel Supply Shortage" (Plan) was developed which will enable TEC to best cope with the energy shortage and thereby, protect the health, safety and welfare of its customers during the period of deficiency.

#### II. PURPOSE

The purpose of this Plan is to establish a systematic and effective means of anticipating, assessing and responding, in an appropriate and coordinated manner, to a long-term energy emergency caused by a fuel supply shortage.

#### III. DEFINITIONS

A long term energy emergency exists when utility fuel supplies are decreasing or are anticipated to decrease below a level adequate to provide for continuous service at required levels as established by customer's normal energy needs. An energy emergency differs from a short-term capacity emergency in that energy requirements cannot be met over an extended period. The period of advance warning and expected duration of an energy emergency is usually measured in terms of weeks or months, as opposed to hours or minutes for a short-term capacity deficiency. This plan addresses contingencies for 10, 15, 25, 35, and 50-day fuel shortages.

#### IV. AUTHORITY

## A. EMERGENCY DECLARATION

Activity

- Regularly monitor fuel inventories and system load and publish weekly fuel inventory projections.
- Alert the Vice President, Energy Supply Trading & Services, any time fuel supplies appear to be in jeopardy due to availability of and/or quality constraints and it is probable

Person Responsible Director, Wholesale Marketing & Fuels

Director, Wholesale Marketing & Fuels

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<u>Activity</u> that Inventory levels will drop below desirable levels.				
If an energy emergency needs to be declared, this Officer will notify the TEC President to announce the declaration.				
After an energy emergency is declared, or at the direction of the Vice President, Energy Supply Trading & Services the following procedure will be followed in determining the fuel supply situation and inventory plan.				
a.	Monitor and prepare short-term forecast of system load.			
b.	Monitor and forecast fuel inventories (including reasonable delays or delivery problems).			
c.	Using the above data, run the "Commit" Program and provide the amount of each type of fuel			

the amount of each type of fuel expected to be used to the Fuels Department. The estimated fuel consumption should be established on a daily basis for the first 30 days and then on a weekly basis for up to 75 days.

d. Using the output of b and c above, prepare and distribute a daily or weekly report on the overall fuel supply situation. Person Responsible

Director, Energy Control Center

Director, Wholesale Marketing & Fuels

> Director, Asset Management

Director, Wholesale Marketing & Fuels

## <u>Activity</u>

Declare an energy emergency when 4. necessary and notify the Chairman of the Florida Reliability Coordinating Council ("FRCC"), Director of Reliability of the existence of a longterm energy emergency on the TEC system. Also, declare when to move to each step in the plan and declare when the energy emergency is over. Implement all or any part of this Plan in cooperation with the FRCC. Implement the Fuel Supply Shortage Element of the Florida Electrical **Emergency Contingency Plan upon** the declaration of an Emergency Alert by the Florida Public Service Commission or upon the declaration of any Energy Emergency by the Governor of the State of Florida.

#### Person Responsible

TEC President or by delegation to:

Vice President, Energy Supply Trading & Services

> Vice President, Energy Delivery

#### **B.** ENERGY EMERGENCY COORDINATOR

	Activity	Person Responsible
1.	After the energy emergency is declared, the Energy Emergency Coordinator is required to coordinate all activities involved in implementing the Energy Emergency Plan.	Director, Energy Control Center Alternate: Emergency Manager, Energy Delivery

#### C. IMPLEMENTATION PLAN

The individuals below will assist the Energy Emergency Coordinator and be responsible for implementing the part of the plan listed by their title.

1.	<u>Activity</u> Expedite fuel procurement	
1A	Expedite water borne coal transportation	

Person Responsible Director, Wholesale Marketing & Fuels

Vice President, Energy Trading & Services

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	Activity	Person Responsible
2.	Communicate with TEC employees	Director, Corporate Communication
3.	Communicate with media and public	TEC Public Information Officer
4.	Communicate with Governmental organizations	Vice President, Governmental Affairs and Vice President, Regulatory Affairs
5.	Purchase power and control sales	Director, Wholesale Marketing & Fuels Director, Business Marketing and Sales
6.	Obtain approval to waive/modify environmental restrictions	Vice President, Energy Supply Trading & Services
7.	Facilitate the TEC energy use curtailment	TEC Emergency Manager
7A	Curtail TEC energy use	Vice President, Technology and Support Services Vice President, Energy Supply Operations Vice President, Energy Delivery
8.	Promote load conservation (voluntary and mandatory)	Director, Energy & Market Planning Director, Business Marketing and Sales
9.	Utilize load control	Director, Energy Control Center
10.	Curtail customer load	Director, Energy Control Center
11.	Modify system operations	Director, Energy Control Center

Also see Attachment I, "Long-Term Energy Emergency Plan Summary"

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## V. EMERGENCY PLAN

When a long-term energy emergency is declared, the following steps and actions may be taken so as to minimize the effect of the fuel shortage upon customers.

#### A. STEP A

After the Energy Emergency has been declared and the total fuel inventory has decreased to 50 days and a continued downward trend is anticipated, the following measures should be implemented and continued for the duration of the emergency.

- 1. Expedite Fuel Procurement:
  - a. Oil Request TEC suppliers to locate and acquire any oil of the proper quality to meet both environmental and operational constraints.
  - b. Coal Attempt to purchase available coal from any sources that meet both environmental and operational constraints.
  - c. Natural Gas Procure additional gas supply from TEC suppliers and/or other utilities in the state. Request additional transportation from upstream pipelines and other pipeline customers if needed.
  - d. Continue inventory tracking, forecasting, and reporting.
- 1A. Expedite waterborne coal transportation:

Establish priorities with transportation companies to ensure prompt delivery of TEC coal in adequate quantities. Also, when required, assist the transportation companies in obtaining ample supplies of diesel fuel and other petroleum products to operate tugboats in transporting coal to TEC.

- 2. Communicate with TEC Employees:
  - a. Issue newsletter bulletin that explains why the fuel shortage has occurred, provides an overview of the Emergency Plan and communicates details of Step A.
  - b. Provide updates as needed via GroupWise and/or Intranet to employees.
- 3. Communicate with Public and Media

- a. Issue news release to the news media. It will explain why the fuel shortage has occurred, communicate actions TEC is taking to deal with the problem, and will provide specific conservation information to customers,
- b. Provide daily briefings to media on status of emergency.
- c. Promote load conservation by the public via advertisements that will provide customers with specific information on how to conserve electricity.
- 4. Communicate with Governmental Organizations:
  - a. Notify appropriate agencies.
- 5. Wholesale Power Sales and Purchases:
  - a. Discontinue non-firm sales.
  - b. Contact firm wholesale customers and request voluntary 5% load reduction.
- 6. Waive/Modify Environmental Restrictions:

Start procedures to obtain approval of the Florida Governor and the President of the United States to suspend/modify the State Implementation Plan (SIP) requirements of the Clean Air Act (CAA) so as to be able to burn available fuels that may not meet the environmental constraints. See Attachment II, "Environmental Petition Form".

7. Curtail TEC Energy Use:

Curtail all non-essential uses of electrical energy at all utility owned facilities. This should reduce TEC energy usage by at least 10% at all offices and operation centers. Monitor usage of energy weekly.

- 8. Promote Load Conservation:
  - a. Voluntary:
    - (1) Increase efforts to educate customers in the efficient use of electrical equipment and supplies.

- (2) Inform customers through advertising programs of specific ways to conserve electric energy.
- (3) Request all customers to reduce their energy usage by at least 5%. Provide examples of how this can be achieved.
- b. Mandatory No action required.
- 9. Utilize Load Control:

Utilize direct load control to reduce system demand on peak periods and optimize the use of TEC's base load generating units by increasing off times of air conditioning and heating to 2 to 4 hours per day. Water heating will be off 4 to 6 hours per day.

- 10. Curtail Customer Load No action required.
- 11. Modify System Operations:
  - a. Maintain 75% of the Operating Margin as nonspinning reserve.
  - b. Review the maintenance schedule to optimize use of obtainable fuels.

#### B. STEP B

If the total fuel supply has decreased to 35 days and a continued downward trend is anticipated, the following additional measures should be implemented.

- 1. Expedite Fuel Procurement:
  - a. Oil Suppliers of oil should be solicited by telephone to determine types of oil available for purchase as well as quantity and delivery time. Maximize on site inventory.
  - b. Coal Purchase any coal that is available and can be burned in the TEC power plants.
  - c. Natural Gas Procure additional gas supply from TEC suppliers and/or other utilities in the state. Request additional transportation from upstream pipelines and other pipeline customers if needed.

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- d. Develop plans for any physical transfers of fuel that would be practical.
- e. Continue inventory tracking, forecasting and reporting.
- 1A. Expedite waterborne coal transportation:
  - a. Review priorities to assure prompt delivery.
- 2. Communicate with TEC Employees:
  - a. Issue updated GroupWise and Intranet announcements to employees.
- 3. Communicate with Public and Media:
  - a. Issue updated news statement.
  - b. Continue advertisements telling customers how to conserve electricity.
- 4. Communicate with Governmental Organizations:
  - a. Request legal authority from the proper governmental organization for the actions to be taken in steps 6 -11.
  - b. Update appropriate governmental agencies.
- 5. Wholesale Power Sales and Purchases:
  - a. Contact cogenerators, utilities and power marketers and arrange non-emergency power purchases.
  - b. Identify and reserve available electric transmission service(s).
  - c. Contact all firm wholesale customers and request voluntary 15% load reduction.
- Waive/Modify Environmental Restrictions No new action required.
- 7. Curtail TEC Energy Use:
  - a. Reduce energy use by at least 20% at all offices and operation centers.
  - b. Discontinue the use of lunchroom kitchens, turn off

25% of exterior lights, turn off hot water heaters.

- c. Reset and lock air conditioning thermostats and heating thermostats to 80° and 65°, respectively.
- 8. Promote Load Conservation:
  - a. Voluntary:
    - (1) Request residential and commercial customers to cut back on essential usage and to adjust thermostat settings 5° down from normal during a heating season and 5° up from a normal setting during a cooling season.
    - (2) Request customers to temporarily discontinue use of indoor advertising devices, outdoor displays and flood lighting except that essential for safety and security.
    - (3) Request all customers to reduce their energy usage by at least 15%. Provide specific examples of how this can be achieved.
  - b. Mandatory:
    - (1) Ban all nighttime sporting activities. Close all lighted parks, tennis courts, golf courses, etc. Also, eliminate nonessential outdoor flood lighting and restrict the use of outdoor advertising lighting.
- 9. Utilize Load Control:
  - a. Increase off times of controlled space heating and air conditioners to 6 hours per day. Water heaters will be off 8 to 10 hours per day.
- 10. Curtail Customer Load No action required.
- 11. Modify System Operations:
  - a. Modify unit dispatch load units with obtainable fuels (other than No. 2 oil) first, and then load units that burn the fuel in short supply.
  - b. Where possible, cycle units fueled by short supply

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fuel off line and still allow the same demand and energy output.

#### C. STEP C

When the total fuel supply has decreased to 25 days and a continued downward trend is anticipated, the following additional measures should be implemented:

- 1. Expedite Fuel Procurement:
  - a. Oil Locate and purchase any oil available that would satisfactorily burn in TEC power plants.
  - b. Coal Locate and purchase any usable coal.
  - c. Natural gas Procure additional gas supply from TEC suppliers and/or other utilities in the state. Request additional transportation from upstream pipelines and other pipeline customers if needed.
  - d. Implement physical transfers of fuel that is necessary and practical.
  - e. Continue inventory tracking, forecasting and reporting.
- 1A. Expedite waterborne coal transportation:
  - a. Review priorities to assure prompt delivery.
- 2. Communicate with TEC Employees:
  - a. Issue updated GroupWise and Intranet announcement to employees.
- 3. Communicate with Public and Media:
  - a. Issue updated news statement.
  - b. Continue advertising conservation.
- 4. Communicate with Governmental Organizations:
  - a. Request legal authority from the proper governmental agency for the actions to be taken in steps 6-11.
  - b. Update governmental agencies.

- 5. Wholesale Power Sales and Purchases:
  - a. Purchase all available non-emergency power, reserve available electric transmission service(s).
  - b. Contact other utilities regarding potential emergency power purchases.
  - c. Contact all firm wholesale customers and request voluntary 30% load reduction.
  - d. Reduce firm sales to minimums based on individual contracts.
- 6. Waive/Modify Environmental Restrictions No new action required.
- 7. Curtail TEC Energy Use:
  - a. Discontinue the use of air conditioning units serving large areas with a small number of people (moving the people as necessary).
  - b. Turn off at least 50% of all exterior lights and discontinue the use of Atrium and TECO Hall facilities.
- 8. Promote Load Conservation:
  - a. Voluntary:
    - (1) Direct residential customers to further reduce energy consumption by stopping use of certain electrical services such as air conditioning, heating, hot water heaters, clothes dryers, dishwashers and other convenience devices and equipment.
    - (2) Conditioned offices and buildings other than critical services such as hospitals will be directed to lower thermostat settings to 65° during the heating season and raise thermostat settings to 80° during cooling season.
    - (3) Commercial establishments, institutional facilities, public and private schools, office buildings and industrial plants will be directed

> to further reduce their consumption which may require a reduction in their operating hours.

- (4) Encourage customer use of generation and alternate energy supplies.
- (5) Request all commercial and industrial customers to reduce their energy usage by at least 30%. Provide specific examples of how this can be achieved.
- b. Mandatory:
  - (1) In commercial establishments, ban all nonessential use of hot water.
  - (2) Elimination of window and display lighting.
  - (3) Ban all air conditioning and heating during nonuse hours and in unoccupied areas of commercial establishments.
- 9. Utilize Load Control:
  - a. Increase air conditioning and heating off time to 6 to 8 hours per day. Water heaters will be off 12 to 14 hours per day.
- 10. Curtail Customer Load No action required.
- 11. Modify System Operations:
  - a. implement emergency line ratings so as to increase import capability.
  - b. Lower system distribution voltage 2 to 4 percent where it is expedient to do so.

## D. STEP D

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When the total fuel supply has decreased to 15 days supply and a continued downward trend is anticipated, the following additional measures should be implemented.

- 1. Expedite Fuel Procurement:
  - a. Investigate all possible fuel sources in search of any usable fuel.

- b. Continue inventory tracking, forecasting and reporting.
- 2. Communicate with TEC Employees:
  - a. Issue GroupWise and Intranet announcement. Emphasize that most customers will experience rotating blackouts and why.
- 3. Communicate with Public and Media:
  - a. Issue updated news statement explaining that most customers will experience rotating blackouts and why.
- 4. Communicate with Governmental Organizations:
  - a. Request legal authority from the proper governmental agencies for the actions to be taken in steps 6-11.
  - b. Update appropriate governmental agencies. In particular, advise them of customer load curtailment and its impact on their activities.
- 5. Wholesale Power Sales and Purchases:
  - a. Purchase all available emergency and nonemergency power, reserve available electric transmission service(s) and tag transaction(s).
  - b. Request voluntary 50% load reduction from all firm wholesale customers.
  - c. Maintain firm sales minimums and notify firm wholesale customers of impending load curtailment.
- 6. Waive/Modify Environmental Restrictions No new action required.
- 7. Curtail TEC Energy Use:
  - a. Eliminate all but critical air conditioning and heating such as that for microwaves and computer facilities.
- 8. Promote Load Conservation:
  - a. Voluntary:
    - (1) Request all commercial and industrial customers to reduce their energy usage by at

least 50%. Provide specific examples of how this can be achieved.

- b. Mandatory:
  - (1) Reduce street and area lighting where possible.
  - (2) Discontinue service to interruptible customers.
- 9. Utilize Load Control:
  - a. Increase air conditioning and heating off periods to at least 8 to 10 hours per day. Water heaters will be off 16 to 18 hours per day.
- 10. Curtail Customer Load:

The implementation of this step will result in the interruption of electrical service to our customers on a rotating basis. The periods of interruption to electrical service will be rotated among the service areas so that no one area will be without electricity for an unduly long period of time.

Whenever possible during such emergencies, the Company will give priority for service to critical customers such as hospitals, vital parts of military installations and major airports, major TV stations, and water and sewer facilities where no emergency power source is available.

The TEC Load Curtailment Plan will be used in determining which circuits or loads should be curtailed for a Long Term Energy Emergency. Application of this Plan will be made by company personnel in the exercise of their judgment according to circumstances existing at the time of the emergency. The selection will be based upon giving minimal disruption of convenience and general social and economic well being of the TEC service area, considering practical implementation procedures and effectiveness as well as community and governmental response. These actions can result in some customer's service being interrupted more than others.

If the energy shortage is long enough and severe enough, it may become necessary to implement additional interruptions of service that result in moderate or even severe disruption to the community.

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## E. STEP E

When the total fuel supply has decreased to the area of 10 days and a continued downward trend is expected, the following additional measures should be implemented:

- 1. Expedite Fuel Procurement No new action required.
- 2. Communicate with TEC Employees:
  - a. Issue updated GroupWise and Intranet announcement.
- 3. Communicate with Public and Media:
  - a. Issue updated news statement.
- 4. Communicate with Governmental Organizations:
  - a. Update appropriate governmental agencies.
- 5. Wholesale Power Sales and Purchases.
  - a. Notify firm wholesale customers of their contribution to firm load curtailment. Firm wholesale customers will be notified of TEC's percentage of firm load curtailment and advised that their firm sales will be reduced by the same percentage.
  - b. Continue purchasing all available power, reserve available electric transmission service(s) and tag transaction(s).
- 6. Waive/Modify Environmental restrictions No new action required.
- 7. Curtail TEC Energy Use No new action required.
- 8. Promote Load Conservation No new action required.
- 9. Utilize Load Control No new action required.
- 10. Curtail Customer Load No new action required.
- 11. Modify System Operations:
  - a. Implement plans to ensure the orderly shut down of all units burning the fuel in short supply in the event the fuel is exhausted.

b. Implement plans to ensure power availability to all power plants and fuel handling facilities.

#### VI. DETAILED DEPARTMENT PLANS FOR EACH STEP OF EMERGENCY

#### A. FACILITY SERVICES

Upon declaration of a long-term energy emergency, the TEC Emergency Manager will work with Facility Services Department to implement the following:

1. Step A - Curtail all non-essential uses of electric energy at all utility owned facilities.

This should reduce TEC energy usage by at least 10% at all offices and operation centers. Some measures to be taken are:

a. Turn off all unnecessary lights i.e., work areas, conference rooms and hallways.

Each department head should inform their employees (meeting/memo) to conserve electricity. This is in addition to informational releases by Corporate Communications.

- b. Refrain from using any piece of equipment requiring electrical power that can be delayed for a long period of time.
- c. The Meter Reading Department will take weekly readings at all TEC facilities and provide information for monitoring to the Facility Service Department.
- d. The Facility Service Department will assist those departments not meeting their reduction goal by making additional recommendations.
- e. The Facility Service Department will provide the Energy Emergency Coordinator the results of the weekly monitoring.
- f. The Building Service Department will take such actions recommended by the Energy Emergency Coordinator.
- 2. Step B Reduce TEC energy usage 20% at all offices and operation centers. Some additional measures to achieve this are:

- a. Discontinue the use of breakroom kitchens i.e., stoves, microwaves and refrigerators.
- b. Turn off 25% of exterior lights. Each department head and/or building landlord will be responsible for doing this. The Facility Service Department will assist those departments who need help in achieving this goal.
- c. The Facility Service Department will turn off all hot water heaters.
- d. The Facility Service Department will reset and lock all air conditioning thermostats to 80° and 65°, respectively.
- 3. Step C
  - a. Turn off at least 50% of all exterior lights.
  - b. Cancel the use of the TECO Plaza Hall or Atrium.
  - c. Discontinue the use of air conditioning units servicing large areas with a small number of people. This may involve relocating personnel.
- 4. Step D Eliminate all air conditioning and heating except for critical systems such as microwave and computer facilities.

#### B. BUSINESS MARKETING AND SALES

Upon declaration of a long-term energy emergency, the Business Marketing and Sales Department, with the cooperation of the Conservation and Load Management Department, will be responsible for the steps listed below. These goals will generally be achievable; however, consideration must be given to the general social and economic well being of the TEC service area, as well as community and governmental response. 1. Step A - Business Marketing and Sales account managers will contact all assigned commercial and industrial customers, including interruptible load customers, and advise them of the fuel shortage and the need to curtail their load by 5% until further notice. They will also be advised of the potential for further curtailment if the fuel supply continues to diminish. ŧ

- 2. Step B The Business Marketing and Sales account managers will contact all assigned commercial/industrial customers, including interruptible load customers, and advise them the fuel supply has diminished to a point which makes it necessary to request a further curtailment of 10% for a total of 15% of their load until further notice. Also, advise them of the specific conservation measures that should be taken as stated in Section VI. C.
- 3. Step C The Business Marketing and Sales account managers will contact all assigned commercial and industrial customers, including interruptible load customers, and advise them the fuel supply has diminished to a point which makes it necessary to request a further curtailment of 15% for a total of 30% of their load until further notice. Also, advise them of the specific conservation measures that should be taken as stated in Section VI. C.
- 4. Step D The Business Marketing and Sales account managers will contact all assigned commercial and industrial customers, including interruptible load customers, and advise them the fuel supply has diminished to a point which makes it necessary to request a further curtailment of 20% for a total of 50% of their load until further notice. Also, advise them of the specific conservation measures that should be taken as stated in Section VI.C.
- 5. Step E The Business Marketing and Sales account managers will contact all commercial and industrial customers (including interruptible load customers) and advise them of the continued need to maintain all load curtailment action until further notice.

Note: In all steps, the Business Marketing and Sales Department will:

a. Maintain communications with each interruptible load customer for the purpose of providing status reports

on the fuel shortage emergency and answering any questions.

b. Be responsible for communicating with each interruptible load customer upon restoring partial load to each customer. The restoration process will follow the same steps as curtailment, however, in reverse.

#### C. ENERGY MANAGEMENT SERVICES

Upon the declaration of a long-term energy emergency, the Energy Management Services Department, with the cooperation of the Business Marketing and Sales Department, will be responsible for the steps listed below. (These goals will generally be achievable; however, considerations must be given to the general social and economic well being of the TEC service area, as well as community and governmental response.

- 1. Step A Promote Load Conservation:
  - a. Voluntary Measures:
    - (1) Inform customers through advertising programs of specific ways to conserve electric energy.
    - (2) Educate customers in the efficient use of electrical equipment and appliances.
    - (3) Request all customers to curtail their load by 5%.
  - b. Mandatory Measures No action required.
- 2. Step B Promote Load Conservation:
  - a. Voluntary Measures:
    - (1) Announce to the public by newspaper, television and radio that an electric supply emergency exists and that the Company is requesting them to conserve electricity.
    - (2) Direct commercial customers to temporarily discontinue use of indoor advertising devices, outdoor displays and flood lighting except that which is essential for safety and security.

- (3) Request residential and commercial customers to do without all non-essential electrical services, cut back on essential usage and adjust thermostat setting 5° down from a normal setting during a heating season and 5° up from a normal setting during a cooling season.
- (4) Notify the public daily through news media as to the status of the Company's electric supply emergency and the extent to which the emergency plan is working.
- b. Mandatory Measures:
  - (1) Initiate a governmental ban on all nighttime sporting activities, including closure of all lighted parks, tennis courts, golf courses, etc.
  - (2) Eliminate non-essential outdoor flood lighting, and restrict the use of outdoor advertising lighting.
- 3. Step C Promote Load Conservation:
  - a. Voluntary Measures Residential:
    - (1) Announce to the public that the Company's electric energy emergency supply continues to worsen and that it is requesting its customers to control and cease use of certain electric energy consuming devices.
    - (2) Direct residential customers to further reduce energy consumption by eliminating use of nonessential electrical services, such as electric hot water heaters, clothes dryers, dishwashers, air conditioning, heating and other convenience devices and equipment.
    - (3) Notify customers daily through news media as to the status of the electric supply emergency and the extent to which the plan is working.
  - b. Voluntary Measures: Commercial:
    - (1) Direct conditioned offices and buildings other than critical services such as hospitals to lower

thermostat settings to 65° during the heating season and raise thermostat to 80° during the cooling season.

- (2) Direct commercial establishments, institutional facilities, public and private schools, office buildings and industrial plants to further reduce their consumption, which may require a reduction in their operating hours.
- (3) Encourage customer use of generation and alternate energy supplies.
- (4) Ask all commercial and industrial customers to curtail their load by 30%.
- c. Mandatory Measures: Residential No new action required.
- d. Mandatory Measures: Commercial:
  - (1) Eliminate window and display lighting.
  - (2) Ban air conditioning and heating during nonuse hours.
  - (3) Ban air conditioning and heating in unoccupied areas.
  - (4) Ban all non-essential hot water use. Exceptions: Medical facilities, educational facilities and food establishments.
- 4. Step D Promote Load Conservation:
  - a. Voluntary Measures: Residential
    - (1) Announce to the public that the electric supply continues to deteriorate and that the Company's rotating feeder disconnect plan, which will interrupt electrical service mainly to residential and small commercial customers for specified periods of time, will be implemented to achieve capacity and energy reduction as dictated by the electric supply emergency. This plan will allow for feeder disconnect as often as required to achieve desired results.

- b. Voluntary Measures: Commercial
  - (1) Encourage strict temperature control of HVAC systems.
  - (2) Ask all commercial and industrial customers to curtail their load by 50%.
- c. Mandatory Measures: Street and Area Lighting
  - (1) Reduce exterior TEC Street and Area Lighting Systems as practical within prudent guidelines.
- 5. Step E Residential/Commercial/Industrial Customer Action:
  - a. Voluntary Measures:
    - (1) Continue observance of previous four steps.
  - b. Mandatory Measures:
    - (1) Begin rotating blackouts.

#### D. ENVIRONMENTAL AFFAIRS

Upon the declaration of an energy emergency the Environmental Affairs Department will be responsible for the following actions in support of the Vice President Energy Supply Trading & Services:

 Step A -To obtain the most expeditious relief, so as to be able to burn available fuels having a higher content of sulfur, TEC must petition the Governor of Florida. Following an open public meeting on the action, a Hearing Officer issues a recommended order to the Governor which forms the basis for his decision on whether to petition the President of the United States for authority to suspend/modify the State Implementation Plan (SIP) requirements of the Clean Air Act (CAA). See Attachment II, "Environmental Petition Form".

At the public hearing, the following information will most likely be required by TEC:

- a. The nature and extent of the energy emergency;
- b. Current and projected unemployment impacts associated with the energy emergency;
- c. Current and projected loss of necessary energy supplies for residential use associated with the energy

emergency;

- d. Alternative strategies including conservation, alternative fuels and power wheeling for emergency and the consequences of these strategies on unemployment and on residential energy supply;
- e. Amount of energy savings expected to result from temporary suspension of portions of the implementation plan.
- f. To the extent possible, pollutant emission levels both before and after the proposed temporary suspension of portions of the implementation plan; and
- g. To the extent possible, preliminary assessment of the air quality and health effect impacts of the proposed temporary suspension of portions of the implementation plan.
- Provide copies of submitted petition to Florida Reliability Coordinating Council, Florida Public Service Commission, Florida Department of Environmental Protection (FDEP) Tallahassee, FDEP – Tampa, U.S. EPA – Region IV, and Environmental Protection Commission of Hillsborough County.

#### E. FIRM LOAD CURTAILMENT COORDINATOR

Upon declaration of a long term energy emergency the Firm Load Curtailment Coordinator will be responsible for the following:

- 1. During steps A, B and C Stay knowledgeable of actions taken and results obtained through these steps.
- 2. During Step D Interrupt electrical service to our customers on a rotating basis. The periods of interruption to electrical service will be rotated among the service areas so that no one area is without electricity for an unduly long period of time.

Whenever possible during such emergencies, the Company will give priority for service to critical customers such as hospitals, emergency shelters, vital parts of military installations and major airports, major TV stations, and water and sewer facilities where no emergency power source is available.

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> The TEC Load Curtailment Plan will be used in determining which circuits or loads should be curtailed for a Long Term Energy Emergency. Application of this Plan will be made by company operating personnel in the exercise of their judgment according to circumstances existing at the time of the emergency. The selection will be based upon giving minimal disruption of convenience and general social and economic well being of the TEC service area, considering practical implementation procedures and effectiveness as well as community and governmental response. These actions can result in some customers' service being interrupted more than others.

> If the energy shortage should be long enough and severe enough, it may become necessary to implement additional interruptions of service that can result in moderate or even severe disruption to the community.

> For more detailed information, refer to the TEC Load Curtailment Handbook.

## F. FUELS

Upon declaration of a long term energy emergency the Wholesale Marketing & Fuels Department will be responsible for the following:

- 1. Formulate emergency fuel procurement strategies, policies, and guidelines based upon analysis of internal and external variables impacting TEC's fuel operations and update them as emergency conditions change.
- 2. Monitor fuel market conditions and assess future trends. Report market information to management.
- 3. Assure a constant fuel supply to generation plants in accordance with environmental and performance standards as long as possible under the constraints caused by the fuel emergency.
- 4. Investigate alternate sources of supply, in accordance with the procurement arrangements set forth by the emergency strategy, to allow the company to respond to changes in regulation, operating requirements, or market conditions.

- 5. Manage existing fuel inventories in a way that assures the most efficient use of fuels under the constraints caused by the fuel emergency.
- 6. Provide fuel and transportation availability information for planning and control of operations under the fuel emergency conditions.
- 7. The actions taken by TEC (except for the Wholesale Marketing & Fuels Department) under the Long Term Energy Emergency Plan are primarily oriented toward causing demand side reductions in energy use and coordinating the exchange of available energy with other utilities through existing interchange agreements. However, the Wholesale Marketing & Fuels Department will investigate the feasibility of physical transfers of fuel. Then, if during the emergency, a physical transfer of fuel should become practical and necessary due to some physical limitation of the electrical system, the bilateral transfers will be accomplished through mutual agreement between the utilities involved. The principle upon which these transfers will be based is that the original owner or procurer of the fuel shall be made whole in terms of the cost, quantity, and quality of fuel transferred as soon after the emergency as practicable.
- 8. Develop information, reports, and testimony relating to TEC's emergency fuel procurement activities for management, customers, and governmental agencies.

#### G. GOVERNMENTAL / REGULATORY AFFAIRS

Upon the declaration of a long-term energy emergency, Governmental Affairs Department and Regulatory Affairs Departments will be responsible for the following actions:

- 1. Step A
  - a. Coordinate with the Vice President of Corporate Communications those messages communicated to TEC and with media and public prior to the release of such communications to provide public officials with sufficient advance time to prepare proper responses for public inquiry.
  - b. Assist Vice President, Energy Supply Trading & Services with governmental contact to waive/modify environmental restrictions.
  - c. Notify selected public officials of energy emergency. Relate message developed in subpart 1a above. Advise of TEC emergency plan and steps to be taken.
- 2. Step B
  - a. Contact appropriate city and county official, including but not limited to school officials, and Tampa Sports Authority to implement Step 7.b., Mandatory Load Conservation, to prohibit nighttime sporting activities and to close lighted parks, tennis courts, golf courses, etc.
  - b. Update public officials.
- 3. Step C
  - a. Contact local state and federal agencies to implement Step 7.b. curtailment of air conditioning and heating, non-essential use of hot water and elimination of window and display lighting.
  - b. Update public officials.
- 4. Step D
  - a. Contact city and county to reduce street and area lighting in Section 7.b.
  - b. Advise public officials of customer load curtailment in Section 9 and its potential impact on their activities.
- 5. Step E

a. Communicate all notices to governmental organizations.

# H. ENERGY DELIVERY TRANSMISSION ENGINEERING & OPERATIONS

Upon the declaration of a long-term energy emergency, the Energy Delivery Engineering and Construction Department will be responsible for the following:

- 1. Step A
  - a. No action required
- 2. Step B
  - a. Develop emergency line ratings for the lines requested by Grid Operations so as to allow maximum power transfer capability to TEC.

#### I. ENERGY SUPPLY OPERATIONS

Upon the declaration of a long-term energy emergency, the Energy Supply Operations Department will be responsible for the following actions:

- 1. Step A
  - a. Eliminate or reduce convenience lighting except where required for safe work conditions.
  - b. Eliminate unnecessary air conditioning of unoccupied areas.
  - c. Review plant operations to determine unnecessary uses of energy, eliminating or reducing uses where practical.
  - d. Identify areas where additional reductions can by made if worsening situations dictate.
- 2. Step B
  - a. With critical review of lighting and plant operations, continue elimination and reduction of unnecessary lighting and air conditioning.
  - b. Reset required air conditioning and heating
    - 27 103

thermostats to 80° and 65°, respectively.

- c. Discontinue use of lunchroom kitchens.
- d. Turn off water heaters.
- e. Turn off 25% of exterior lights.
- f. Discontinue lighting during daylight hours where possible.
- 3. Step C
  - a. Continued review of energy uses making reductions where possible.
  - b. Reduce all lighting, interior and exterior, to the minimum required for safety and business need.
  - c. Eliminate all non-essential air conditioning and heating load.
- 4. Step D
  - a. Low load situation should allow removing units from service resulting in a reduction in associated station service. An attempt should be made to accomplish as much reduction as possible.
  - b. Review plants for orderly shutdown of units.
- 5. Step E
  - a. Proceed with orderly shutdown of units as fuel supply is exhausted.

#### J. CORPORATE COMMUNICATIONS

Upon the declaration of a long-term energy emergency, the Corporate Communications Department will be responsible for the following actions:

- 1. Step A
  - a. Communicate with TEC employees.
    - (1) Issue Newsletter or GroupWise bulletin that explains why the fuel shortage has occurred,

provides an overview of the Emergency Plan and communicates details.

- (2) Provide updates and contact as needed via GroupWise and/or Intranet to employees.
- b. Communicate with public and news media.
  - (1) Issue news release to the media to explain why the fuel shortage has occurred, communicate actions TEC is taking to deal with the problem and provide specific conservation information to customers. This information will also be provided to Customer Inquiry representatives.
  - (2) Provide daily briefings to media on status of emergency.
  - (3) Promote load conservation by the public via advertisements that will provide customers with specific information on how to conserve electricity.

#### 2. Step B

- a. Communicate with TEC employees.
  - (1) Issue Newsletter or GroupWise bulletin that will update employees on actions taken to date.
  - (2) Continue with updated GroupWise and Intranet communications.
- b. Communicate with public and news media.
  - (1) Issue news statement about the continued downward trend in fuel supply. Statement will also explain Company actions to solve the problem and will communicate conservation information as outlined in this Step. This information will also be provided to Customer Inquiry representatives.
  - (2) Continue advertisements that provide customers with specific information on how to conserve electricity.

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- 3. Step C
  - a. Communicate with TEC employees.
    - (1) Issue Newsletter or GroupWise bulletin to communicate.
    - (2) Continue with updated GroupWise and Intranet communications.
  - b. Communicate with public and news media.
    - (1) Issue news statement about the continued downward trend in fuel supply, communicate conservation information and steps company is taking to solve the problem. This information will also be provided to Customer Inquiry representatives.
    - (2) Continue advertising that communicates conservation information.
- 4. Step D
  - a. Communicate with TEC employees.
    - (1) Issue Newsletter or GroupWise bulletin to communicate. Emphasize that most customers will experience rotating blackouts and why they will occur.
  - b. Communicate with public and news media.
    - (1) Issue news statement about the continued downward trend in fuel supply and need to conserve. As outlined in this Step, announce that most customers will experience rotating blackouts, why, they will occur, and what the company is doing to solve the problem. This information will also be provided to Customer Inquiry representatives.
    - (2) In addition to conservation information, advertising will also explain why rotating blackouts are occurring. Ads will describe that the outages are being distributed evenly among all customers, except for hospitals, fire and police, etc., after consideration of
disruption of convenience and general social and economic well-being of the community.

#### 5. Step E

- a. Communicate with TEC employees.
  - (1) Issue Newsletter or GroupWise bulletin to communicate.
- b. Communicate with public and news media.
  - (1) Issue news statement to explain the continued downward trend in fuel supply. Communicate company actions and the need for customer conservation. This information will also be provided to Customer Inquiry representatives.
  - (2) Continue advertising that explains why rotating blackouts are occurring. Continue conservation ads.

#### K. WHOLESALE MARKETING & FUELS

Upon declaration of a long-term energy emergency, Wholesale Marketing & Fuels will be responsible for the following actions:

1. Step A

- a. Cut all non-firm sales to wholesale customers.
- b. Contact all firm wholesale customers, request 5% voluntary load reduction.
- 2. Step B
  - a. Contact utilities and power marketers regarding firm and non-firm power purchases. Coordinate with Grid Operations and Asset Management concerning power purchase needs. Make appropriate power purchases from resources available in the wholesale market. Reserve available transmission service(s) to bring those purchase(s) into the TEC system, and tag the transaction(s).
  - b. Request all firm wholesale customers reduce their load by 15%.

- 3. Step C
  - a. Purchase all available non-emergency power. Coordinate purchases with Grid Operations and Asset Management. Reserve available transmission service(s) to bring those purchase(s) into the TEC system, and tag the transaction(s).
  - b. Reduce firm sales to minimums based on individual contracts.
  - c. Contact other utilities regarding potential emergency power purchases.
  - d. Request all firm wholesale customers voluntarily reduce their load by 30%.
- 4. Step D
  - a. Purchase all available emergency and nonemergency power. Coordinate purchases with Grid Operations and Asset Management. Reserve available transmission service(s) to bring those purchase(s) into the TEC system, and tag the transaction(s).
  - b. Request voluntary 50% load reduction from firm wholesale customers.
  - c. Maintain firm sales minimums and notify wholesale customers of impending load curtailment.
- 5. Step E
  - a. Notify firm wholesale customers of their contribution to firm load curtailment.
  - b. Continue purchasing all available power. Coordinate purchases with Grid Operations and Asset Management. Reserve available transmission service(s) to bring those purchase(s) into the TEC system, and tag the transaction(s).

#### L. GRID OPERATIONS

Upon the declaration of a long-term energy emergency, the Grid Operations Department will be responsible for the following actions:

- 1. Step A
  - a. Utilize Load Control In order to reduce generation peaks and intermediate loads and to conserve energy, increase off time of heating and air conditioning to 2 to 4 hours per day. Water heating will be off 4 to 6 hours per day.
  - b. Provide the Energy Emergency Coordinator with a short-term demand and energy forecast during the emergency.
  - c. Provide Asset Management an hourly load profile for the first 30 days and weekly peaks up to 75 days.
  - d. Continue to maintain 75% of operating margin as nonspinning reserve.
  - e. Review maintenance schedule to optimize obtainable fuels.
- 2. Step B
  - a. Utilize Load Control Increase off time of controlled heating and air conditioners to 6 hours per day. Water heaters will be shut off 8 to 10 hours per day.
  - b. Modify unit dispatch to add units with obtainable fuels (other than #2 oil) first, and then load units which burn the fuel in short supply.
  - c. Identify circuits that need emergency line ratings to allow maximum import and power transfer capability. Request Transmission Engineering & Operations to furnish these ratings.
- 3. Step C
  - a. Utilize Load Control Increase heating and air conditioning off time to 6 to 8 hours per day. Water heaters will be off 12 to 14 hours per day.
  - b. Implement emergency line ratings so as to increase import capability.

- c. Lower system distribution voltage 2 to 4 percent where it is expedient to do so.
- 4. Step D
  - a. Utilize Load Control Further increase heating and air conditioning off time to 8 to 10 hours per day. Water heaters will be off 16 to 18 hours per day.
  - b. Implement plans to ensure the orderly shutdown of all units burning the fuel in short supply in the event fuel is exhausted.
  - c. Implement plans to ensure power availability to all power plants and fuel handling facilities.
- 5. Step E
  - a. Continue as Step D.

#### M. ASSET MANAGEMENT

Upon the declaration of a long-term energy emergency, the Asset Management Department will be responsible for the following actions:

- 1. Step A
  - a. Run the "Commit" Program and provide the amount of each type of fuel to be used to the Wholesale Marketing & Fuels Department. The estimated fuel consumption should be on a daily basis for the first 30 days and then on a weekly basis for up to 75 days. Update the estimate as required.
  - b. Review maintenance schedule to optimize obtainable fuels.

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- 2. Step B
  - a. Modify unit dispatch to add units with obtainable fuels (other than #2 oil) first, and then load units which burn the fuel in short supply.
- 3. Step C
  - a. Continue as Step B.
- 4. Step D
  - a. Continue as Step C.
- 5. Step E
  - a. Continue as Step D.

### Attachment I

### LONG-TERM ENERGY EMERGENCY PLAN SUMMARY

		ACTION	50 Days* Emergency Declared STEP A	35 Days STEP B	25 Days STEP C	15 Days STEP D	10 Days 불 STEP E
	1.	Expedite Fuel: Oil	Purchase any proper oil,	Determine types of oil available.	Purchase any satisfactory burnable oll.	Search for and purchase any usable fuel.	
		Coal	Purchase any proper coal. Expedite coal transportation.	Purchase any satisfactory burnable coal. Plan fuel transfers.			
		Natural Gas	Purchase additional gas and transportation.	Purchase additional gas and transportation.	Purchase additional gas and transportation.	Purchase additional gas and transportation.	Purchase additional gas and transportation.
÷	2.	Communicate With TEC Employees	Issue Groupwise and Intranet announcements.				
112	3.	Communicate With Public and Media	Issue news release. Provide daily status briefing. Promote load conservation.				
	4.	Communicate With Governmental Organizations	Coordinate with Corporate Communications in notifying appropriate agencies. Request Governor to waive regulations.	Request legal authority for actions such as, waive/modify environmental restrictions, to be taken in this step. Update governmental agencles.	- -		

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#### Attachment I

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### LONG-TERM ENERGY EMERGENCY PLAN SUMMARY

		ACTION	50 Days⁺ Emergency Declared STEP A	35 Days STEP B	25 Days STEP C	15 Days STEP D	10 Days STEP E
	5.	Wholesale Market Power Sales and Purchases	Stop non-firm sales to wholesale customers. Request voluntary 5% MWH reduction from firm wholesale customers.	Arrange non-emergency power purchases, reserve transmission services and tag transaction(s). Request voluntary 15% MWH reduction from firm wholesale customers.	Reduce firm sales to a minimum. Purchase all available non- emergency power, reserve available transmission service, and tag transaction(s). Request 30% voluntary MWH reduction from firm wholesale customers.	Reduce firm sales to a minimum. Purchase all available emergency and non- emergency power, reserve available transmission service, and tag transaction(s). Request voluntary 50% MWH reduction from firm wholesale customers.	Notify firm wholesale customers of the percentage of firm load curtailment and advise that their firm sales will be reduced by the same percentage. Continue purchasing all available power.
5 1 3	6.	Waive/Modify Environmental Restrictions	Requests Governor to suspend SIP of CAA.				
	7.	Curtail TEC Energy Use:	Curtail non-essential energy uses.				
		Offices and Operation Center	Reduce MWH's by 10%. Monitor usage weekly.	Reduce MWH's BY 20%. Set thermostats to 65° for heating and to 80° for cooling. Cut off 25% of exterior lights, Cut off hot water heaters.	Further reduce A/C. Cut off 50% of exterior lights. Cancel use of TECO Plaza Halls or atrium.	Cut off all but critical A/C and heating.	
	8.	Promote Load Conservation: Voluntary	Request 5% MWH reduction. Educate customers.	Request 15% MWH reduction. Adjust thermostats -5%.	Commercial & Industrial: Request 30% MWH reduction.	Commercial & Industrial: Request 50% KWH reduction.	

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#### Attachment I

### LONG-TERM ENERGY EMERGENCY PLAN SUMMARY

	ACTION	50 Days* Emergency Declared STEP A	35 Days STEP B	25 Days STEP C	15 Days STEP D	10 Days °- STEP E 西
		Advertise conservation.	Cut out indoor & outdoor advertising lights. Cut out flood lighting as possible.	Set thermostats to 65° to 80°. Encourage alternate energy usage. Reduce operating hours if necessary. Residential: Stop using A/C, heating, H.W.H., dryers, dish washers, etc.		
114	Mandatory		Ban night sports. Close lighted parks, etc. Ban non-essential flood and outdoor advertising lighting.	Ban displays & window lighting. Ban in commercial establishments: a) A/C and heating during nonuse hours and in unoccupied areas b) Non-essential use of hot water.	Reduce street and area lighting where possible.	
9.	Utilize Load Control	Heat & A/C off 2-4 hrs. W.H. off 4-6 hrs.	Heat & A/C off 6 hrs. W.H. off 8-10 hrs.	Heat & A/C off 6-8 hrs. W.H. off 12-14 hrs.	Heat & A/C off 8-10 hrs. W.H. off 16-18 hrs.	
10.	Curtail Customer Load					Implement "Load Curtailment Plan."
11.	Modify System Operations	Review maintenance schedule Place 75% of Operating	Modify unit dispatch. Cycle units off-line.	Use emergency line ratings. Reduce voltage 2 to 4%.		Implement orderly shutdown of units as required. Ensure

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	-		-		PAGE 117	ORDER NO
		At	tachment l			0. pg
	LON	G-TERM ENERGY	EMERGENCY PLAN SU	JMMARY		3C-0: 0304
ACTION	50 Days* Emergency Declared STEP A	35 Days STEP B	25 Days STEP C	15 Days STEP D	10 Days STEP E	3-0770- 00-EM
	Margin on non-spin reserve.				power available to plants.	- PAA - ±M

\*Refers to total fuel supply in pipe line. Consideration is to be given to the "realistic days supply" which is defined as the "days supply" calculated as though there would be no fuels receipts but then adjusted for realistic, expected fuel deliveries.

#### ATTACHMENT II ENVIRONMENTAL PETITION FORM

#### BEFORE THE STATE OF FLORIDA OFFICE OF GOVERNOR

In The Matter of: Petition for Declaration of Energy Emergency and Other Relief;

#### TAMPA ELECTRIC COMPANY

Petitioner )

Petitioner, TAMPA ELECTRIC COMPANY, pursuant to Chapters 120, 377 and 252, Florida Statutes, and Section 110(f) of the Clean Air <u>Act, 42</u> U.S.C. § 7401 <u>et seg.</u>, hereby requests that the Governor of the State of Florida petition the President of the United States to determine that a national or regional energy emergency exists of such severity that (1) a temporary suspension of portions of Chapter 62, Florida Administrative Code (FAC) is necessary and (2) other means of responding to the energy emergency may be inadequate. In support of this request, Petitioner states:

#### IDENTIFICATION OF PARTIES

- 1. The name and address of Petitioner is TAMPA ELECTRIC COMPANY, Post Office, Box 111, Tampa, Florida 33601.
- 2. (Identify any other known parties).

#### BACKGROUND

- 3. Petitioner is the owner and operator of various steam electric power plants located in Hillsborough County, Florida, that are subject to regulation by the Florida Department of Environmental Protection (FDEP) and the Environmental Protection Commission of Hillsborough County (EPCHC) and the provisions of the Florida State Implementation Plan (SIP) contained in Chapters 62-204,210,212,213,214,296, and 297, FAC, regulating sources of air pollution.
- 4. Electric generating units owned by Petitioner located at the Francis J. Gannon Generating Station and Big Bend Generating Station in Hillsborough County, Florida, currently utilize coal as a primary energy source. Additional electric generating unites owned by Petitioner located at the Big Bend Generating Station in Hillsborough County, Florida, currently utilize oil as a primary energy source. Electric generating units owned by Petitioner located at the Bayside Power Station in Hillsborough County, Florida, currently utilize natural gas as a primary energy source. Electric generating units owned by

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Petitioner located at the Polk Power Station in Polk County, Florida, currently utilize gasified coal and natural gas as primary energy sources. Electric generating units owned by Petitioner located at the Phillips Power Station in Highland County, Florida currently utilize oil as a primary energy source.

5. Petitioner currently serves approximately \_\_\_\_\_\_ residential customers and a substantial number of industrial customers located both in Hillsborough County and portions of Pasco, Pinellas and Polk County, Florida.

#### FACTS SUPPORTING RELIEF

(Insert here the facts which support the Petition for Declaration of an Energy Emergency. The following is an example of how those facts could be presented).

- 6. Petitioner obtains its \_\_\_\_\_\_ sulfur content fuel supplies from \_\_\_\_\_\_ Petitioner has been advised that due to (insert here reasons for supply unavailability) a continuing supply of \_\_\_\_\_\_ sulfur content fuels will not be available and Petitioner will be required to supply its current fuel needs with fuel containing up to \_\_\_\_\_\_ sulfur content.
- 7. Petitioner's total net generating capability is \_\_\_\_\_\_megawatts. Approximately \_\_\_\_\_percent of that total is produced by \_\_\_\_\_ generating units which presently must burn \_\_\_\_\_ sulfur content fuel or below. On \_\_\_\_\_\_, 20\_\_\_\_, Petitioner had approximately \_\_\_\_\_ (barrels or tons) of \_\_\_\_\_ sulfur content fuel on hand. Projected burn rates predict that this inventory will be consumed within \_\_\_\_\_ days. Should Petitioner be unable to continue to replenish its \_\_\_\_\_ sulfur content fuel inventories, major curtailments of electric service would be required in the absence of permission to burn higher sulfur content fuel.
- 8. A low sulfur fuel shortage could significantly impact residential energy use of its \_\_\_\_\_ residential customers and its industrial customers on interruptible service arrangements.
- 9. Petitioner's ability to mitigate the impacts of a low sulfur fuel curtailment in the near term is limited by (insert here any discussion of seasonally high loads expected for the particular month and the inability to burn natural gas). It is not presently possible to determine the extent to which the expected shortfall can be mitigated through purchases of power and conservation.
- 10. Air quality modeling results for the Petitioner's units presently burning low sulfur fuels show that \_\_\_\_\_\_ percent sulfur content fuel could be burned at the \_\_\_\_\_\_\_ Stations without exceeding the State of Florida Ambient Air Quality Standards and the National Ambient Air Quality Standards. Increases in particulate matter emissions from the present limits of \_\_\_\_\_\_ pounds per million BTU's of heat input would not cause significant impact levels for total suspended particulate matter to be exceeded in the Hillsborough County air quality maintenance.

#### REQUEST FOR RELIEF

Based upon the foregoing, Petitioner respectfully requests that the Governor:

- a) immediately designate a Hearing Officer to conduct any necessary informal public hearings;
- b) issue an Executive Order declaring the existence of an energy emergency pursuant to Chapters 377 and 252, Florida Statutes, and suspending the procedural requirements of Chapter 120, Florida Statutes and regulations thereunder, as they may apply to any of his further actions in the energy emergency;
- c) petition the President of the United States to determine that the shortage of fuel has created a regional or national energy emergency and to authorize the Governor to suspend, as a matter of federal law, rules governing \_\_\_\_\_\_ emissions of the State Implementation Plan as may be necessary to allow \_\_\_\_\_\_ fired power plants owned by Petitioner to burn available fuels; and
- d) upon a subsequent satisfactory showing, suspend, as a matter of state and federal law, the applicability of any rules governing \_\_\_\_\_ emissions in Chapter 62-296, FAC, or any other rules, ordinances, or regulations of the State of Florida or its political subdivisions, as may be necessary to permit fired electric power plants owned by Petitioner to burn available fuels.

TAMPA ELECTRIC COMPANY

Ву: \_\_\_\_\_

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### Progress Energy Florida Plan for a Long Term Energy Emergency Caused by a Fuel Supply Shortage

Introduction	This plan outlines the procedure to be used in the event of a fuel emergency involving Progress Energy Florida (PEF). Should an extended fuel emergency occur, one in which the energy supply in the entire state is subject to jeopardy, then this plan applies.
	A Fuel Supply Committee is established and will consist of one representative from each of the following sections: Power Trading, Energy Control, Portfolio Management, Coal Procurement, Gas Trading & Logistics, and Oil Trading & Logistics. The Vice President of Regulated Commercial Operation or his appointed representative will serve as chairman. The chairman will closely monitor fuel supplies, deliveries, and anticipated usage rates. When fuel levels reach potentially serious levels, the chairman will activate the committee.
	The committee has authority and the responsibility to decide when the levels of fuel supply or rates of change in these levels are such that declaration of an ALERT is required. They will inform the Senior Vice President, Energy Supply, when an ALERT is declared. The committee will be responsible for recommending when the appropriate fuel emergency condition should be declared and so notify the Senior Vice President, Energy Supply, so that he may implement the appropriate portion of this plan.
Definitions	The classifications of degree of supply levels are defined in the following fuel emergency situations. These situations could occur at any site where generation and fuel storage facilities exist, thus causing a site emergency. Likewise, they could occur at multiple sites or system-wide.
	ALERT An ALERT condition exists when the potential for a fuel emergency arises and specific Company actions are deemed prudent.
	FUEL EMERGENCY When the inventory of fuel (on a system basis) is such that current or anticipated usage will result in the supply reaching the following levels before deliveries can be made and a downward trend is anticipated to continue: Light Oil – 10 days Residual – 10 days Coal – 10 days Natural Gas – Long-term loss of major pipeline supply source

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ALERT When an ALERT condition is declared, the following actions will be taken. These actions will be done under the direction of the Senior Vice President, Energy Supply, as normal operational events in an attempt to minimize the potential for a more severe emergency condition. These actions, while not necessarily in the sequence to be performed, include the following:
 Notify the Senior Vice President, Energy Delivery, that a fuel supply ALERT is declared and in progress.

2. Defer or reschedule, to the extent practicable, maintenance on oil or coal-fired units, taking into consideration heat rate and availability.

3. Operate oil, natural gas, and coal-fired generation utilizing the lowest heat rate source to minimize the consumption of distillate oil and residual oil by oil-fired units and/or coal by coal-fired units, and/or natural gas by natural gas fired units, consistent with conserving the fuel in short supply.

4. Purchase maximum amounts of energy available from outside the Company consistent with conserving the fuel in short supply.

5. Utilize load management procedures and voltage reductions to control demand and energy consistent with conserving the fuel in short supply.

6. Shut down low inventory and/or high heat rate units and/or natural gas units, over weekends and overnight, if practicable, to conserve the fuel which is in short supply.

7. Place maximum allowable Operating Reserve in the nonsynchronized quick-start category to minimize fuel consumption.

8. Request the Fuel Supply Committee to implement fuel transfers to eliminate geographical shortages and locate fuel where it can most efficiently be utilized.

9. Request the Environmental Service Department to remove environmentally initiated constraints for generating units and plants, which inhibit the most efficient use of available fuel.

Granting<br/>Authority in FuelAfter the Fuel Supply Committee has determined that a specific<br/>fuel emergency exists, they will inform the Senior Vice President,<br/>Energy Supply, who will implement the associated corrective<br/>actions for the specific FUEL EMERGENCY condition in effect<br/>consistent with system security constraints. The Senior Vice<br/>President, Energy Supply, will have the authority to implement<br/>and cancel steps within the specific FUEL EMERGENCY condition<br/>as system conditions permit.

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Declaration of Fuel Emergency	When a FUEL EMERGENCY is declared, the Senior Vice President, Energy Supply, shall ensure all actions normally anticipated to occur during an ALERT has taken place and then will invoke the following steps as needed:
	<ol> <li>Notify appropriate Progress Energy Florida personnel that a FUEL EMERGENCY is in effect. The Corporate Communications Department will have the responsibility for notification of employees, customers, and the general public. News media representatives will be contacted to assist.</li> </ol>
	2. Curtail Company use wherever possible.
	3. Request Senior Vice President, Energy Delivery, to limit transmission line equipment outages to emergency outages if the outages would reduce delivery of energy into the system.
	<ol> <li>Obtain all emergency energy available from neighboring systems.</li> </ol>
	<ol> <li>Request Senior Vice President, Energy Delivery, to reevaluate transmission limits to maximize delivery of energy into the system.</li> </ol>
	<ol><li>Advise Energy Control personnel to contact industrial and commercial customers and request voluntary reduction of load.</li></ol>
	7. Advise the Corporate Communications Department to make general radio and television appeals to the public to minimize electrical energy consumption.
	<ol> <li>Contact municipal systems and cooperative systems and request that their customers voluntarily reduce their load.</li> </ol>
	9. Curtailment of interruptible customers. Interruptible customers will be curtailed during periods when it would be necessary to operate liquid fuel combustion turbine to serve interruptible customers, and when it has been determined that present inventory of light oil less consumption, plus known shipments, will reduce inventory to below <u>12</u> hours minimum required for emergencies, or when residual oil inventory and/or coal inventory is expected to be below 3 days and a downward trend is expected to continue.
	10. Declare force majeure and discontinue from energy sales to neighboring systems, or as directed by Governor's orders during the emergency. (Except under extreme conditions, assistance could be provided if the fuel inventory as above the 12-hour emergency minimum.)
	11. In the event the supply situation continues to degrade, the Senior Vice President, Energy Supply, working with the FRCC, will ask the FPSC to obtain a declaration of a Fuel Supply Emergency from the Governor.

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> Customer Priorities for Load Interruption

In the early stages of a capacity emergency, PEF will curtail recallable interchange sales and those interchange sales declining a buy-through option. During Phase 1, interruptible and curtailable customers are notified that emergency purchases may be required. During Phase 2, emergency purchases for interruptible and curtailable customers begin. During Phase 3, interruptible and curtailable customer loads are interrupted. During Phase 4, emergency purchases are made to support firm load. Also, at various points during a developing capacity emergency several other actions are undertaken to mitigate the severity of the emergency, including maximizing available generation, activating DSM, activating voltage reduction, reduction of PEF energy consumption and public appeals for conservation.

Firm load curtailment occurs during Phase 5, when service to firm loads are interrupted on a rotating basis in order to maintain a balance between available generation and system load. The load interruptions will be rotated in order that no single customer or area is without electricity for an extended period of time.

The priority for interruption of individual customers and feeders is determined and reviewed on an annual basis as part of the PEF under-frequency relay program update. Each year, each feeder on the PEF system is reviewed and classified for purposes of potential firm load interruption. Feeders serving critical customers or loads are classified as 'no trip' and are exempt from interruption providing that resources exist to continue serving this critical group of customers. The types of customers and loads designated as no trip are as follows:

Critical PEF facilities Hospitals and nursing homes Customers on life-sustaining medical equipment Airports and FAA facilities Police and fire stations Telephone and satellite communication facilities Water treatment and pumping facilities Critical government facilities Newspaper, radio, and TV stations Malls and large public arenas Major commercial and industrial customers

Whenever possible during a capacity emergency, PEF will sustain uninterrupted service to critical customers.

Statewide FuelIn the event a Fuel Supply Emergency is declared by the GovernorSupplyof Florida due to conditions either within the Company or inEmergencyanother utility, Progress Energy Florida will take the actions listedwithin this plan consistent with the actions directed by the<br/>Governor's order and the FRCC, specifically:

1. The Fuel Supply Committee will be responsible for fuel calculations and transferring to the FRCC staff, upon request,

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	<ul> <li>PE's DAYS BURN by fuel type. They will also supply any additional data relating to fuel supply conditions requested by the FRCC staff.</li> <li>2. The Senior Vice President, Energy Supply, will assure the operation of all generating units as appropriate to share energy so as to minimize a statewide fuel shortage.</li> </ul>
	<ol> <li>The Director, Gas &amp; Oil Trading, will be responsible for arranging any necessary transfer of fuels and the conditions affecting the transfer and payment and/or return of such fuel.</li> </ol>
Authority for Reduction of Fuel Emergency Conditions	If any portion of this plan has been activated by the Governor due to a long-term fuel emergency within the state, then it will remain in effect until the emergency is declared over by the Governor.
	Should this plan, however, be initiated by the Fuel Supply Committee, this Committee will then advise the Senior Vice President, Energy Supply, when the levels of supply or rates of change in these levels are such that a fuel emergency condition can be terminated. The Senior Vice President, Energy Supply, will decide when to declare the termination of the appropriate emergency condition. The Fuel Supply Committee chairman will then notify all affected departments of the termination of the fuel emergency condition and institute relaxation of the conservation measures consistent with system reliability requirement. The Fuel Supply Committee chairman will also notify the appropriate state and federal agencies as required.

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May 2003 June 2002 December 1998 September 1997 October 1992 January 1992

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### Gulf Power Company Fuel Supply Emergency Plan

### I. PURPOSE

The purpose of this procedure is to document Gulf Power Company's (Gulf's) plan for responding to a long-term energy emergency caused by a significant fuel supply shortage.

### **II. DEFINITION**

A fuel supply emergency activating this procedure shall be invoked when evidence exists that indicates that within 45 days or less Gulf will be unable to receive projected fuel supplies sufficient to meet forecasted demand for generation from Gulf's generating units.

### III. APPLICABILITY

This procedure applies only to a fuel supply emergency which is: (1) expected to be long term in duration, (2) could not be remedied by alternative sources of fuel, capacity and/or energy, and (3) would result in widespread electricity shortages if no action were taken.

The procedure addresses both a fuel supply emergency that affects Gulf's generating facilities, as defined above, and a fuel supply emergency declared by the Governor of the state of Florida (Sections IV & IX).

### IV. NOTIFICATION

Whenever the criteria for a fuel supply emergency for Gulf Power has been met, the Vice President (VP) of Power Generation and Transmission, or his designee, shall notify the Chair of the Florida Reliability Coordinating Council's (FRCC) Reliability Assessment Group (RAG) of the existence of such long-term energy emergency.

Whenever the Governor of the state of Florida declares a fuel supply emergency, the VP of Power Generation and Transmission, or his designee, shall, at a minimum, notify the appropriate personnel within Gulf Power and the Southern Company, including the Southern Company Power Coordination Center (PCC) in Birmingham, Alabama, and the VP of Fuel Services for Southern Company Generation.

### Gulf Power Company Fuel Supply Emergency Plan

### V. RESPONSIBILITY/DECLARATION

The VP of Power Generation and Transmission, upon consultation with the VP of Fuel Services for Southern Company Generation and concurrence of the President of Gulf Power, shall be responsible for declaring a fuel supply emergency and initiating the Action Plan contained in this procedure.

### VI. GENERAL

### A. Inventory Planning and Fuel Supply Forecasting

Southern Company Services, Inc. (SCS), as agent for Gulf Power Company (Gulf), shall forecast the calendar year fuel inventory for each generating plant in Gulf's system by no later than the end of October of the prior year. Such forecasts shall be updated no less frequently than monthly throughout the calendar year.

Whenever such forecasting predicts a fuel supply shortage that has the potential to result in a fuel supply emergency as defined in Section II above, the VP of Power Generation and Transmission, the Fuel Manager, and the Manager of Transmission and Planning at Gulf shall be notified immediately.

The VP of Power Generation and Transmission shall then implement the appropriate portions of Sections VI. B and C below, and continue to monitor the situation. If the fuel supply shortage situation is deteriorating and does not appear to be remediable, the VP of Power Generation and Transmission shall implement Section V, above, when necessary.

### B. Emergency Coordination of Fuel Supplies

Gulf participates in a centralized fuel procurement program with SCS acting as fuel procurement agent for all the operating companies on the Southern electric system (SES). Fuel is procured in a manner that ensures sufficient quantities of the appropriate fuels will be available to system generation for future needs, barring catastrophic economic or physical events which could result in long-term disruptions to the fuel supply chain.

Although the majority of the Southern Company's fuel supply is procured well in advance, it is normally purchased for individual plants based on plant specific needs. Nevertheless, sharing of fuel resources between

### Gulf Power Company Fuel Supply Emergency Plan

plants on the SES can often be accomplished in fuel shortfall situations when the availability of Gulf's generating units is imperative. Sharing of fuel resources would be implemented any time system integrity is threatened or could not be maintained through the interchange of energy on the SES. These actions would normally be taken to prevent an emergency, but could be continued through a fuel supply emergency provided that more critical system resources are not placed in jeopardy.

Any such fuel exchange transactions between affiliates are required to be at cost with both parties being made whole, and must be mutually agreed upon.

SCS coordinates these efforts on behalf of the operating companies in a manner that best maintains system integrity while maximizing the benefits to customers.

#### C. System Operation and Interchange

The following actions may be taken, as practical and necessary, to mitigate the effects of a fuel supply emergency prior to implementing any of the demand side reductions in Section VII:

- 1. Gulf's generation resources may be withdrawn from producing energy for non-territorial sales.
- 2. Gulf may purchase interchange energy from available systems that are not experiencing fuel shortages in order to conserve whenever resources fall below the level defined in Section II above.
- 3. Gulf may operate its units out of economic dispatch or on an alternative fuel in order to conserve the type of fuel that is in short supply.
- 4. Gulf may implement non-traditional fuel transportation measures if the fuel supply emergency is associated with the transport of fuel.
- 5. Southern Company's Power Coordination Center (PCC) may implement a system alert as appropriate to the extent and nature of the fuel supply emergency.

### Gulf Power Company Fuel Supply Emergency Plan

### VII. ACTION PLAN

### A. Overview

This Action Plan is a phased approach to curtailing electricity usage during a fuel supply emergency. When 30 - 45 days of projected fuel supply remain, all practical internal methods of extending and conserving fuel, including the steps appropriate to the situation in Section VI. B & C above will be exhausted before implementing Phase 1.

Phase 1 is entirely voluntary, and would be implemented when there are 30 days or less of projected fuel supply availability. Each phase becomes more severe up to the fourth phase, which involves disconnecting all customers except essential services. Phase 2 is implemented when the projected fuel supply reaches 20 days. Phase 3 is implemented at 10 days; Phase 4 is implemented at 5 days of available fuel supply remaining.

### B. Phase I (30 days)

- 1. Appeal to all customers for voluntary reduction in the use of electricity because of an impending fuel shortage. Appeals will be made through news conferences, news releases, paid advertising, and other means. Listed below are energy conservation recommendations to be stressed in these appeals:
  - a. Gulf will implement the conservation plan for its own facilities.
  - b. Southern Wholesale Energy (SWE) Representatives will meet with all resale customers and apprise them of the fuel situation. At this meeting, SWE will strongly suggest that a public appeal begin immediately by the individual resale customers to their retail customers.
  - c. Gulf will appeal to all customers to:
    - Lower heating thermostats to 65 degrees or less during heating hours and raise cooling thermostats to at least 80 degrees during cooling hours in all conditioned spaces where this action will result in less energy consumption and does not damage equipment and structure. (Except medical exemptions upon advice of a physician.)

### Gulf Power Company Fuel Supply Emergency Plan

- Reduce all indoor lighting levels as close to minimum safety and task levels as practical. (Particularly commercial and industrial customers.)
- 3) Eliminate all unnecessary outdoor lighting.
- 4) Eliminate display lighting and decorative lighting.
- 5) Reduce parking lot lighting to 50 percent where practical and safety is not compromised.
- 6) Gulf will give individual customers assistance and advice, on request, regarding conservation measures applicable to specific installations.
- 7) Discontinue use of second and third refrigerators in the household and any unnecessary freezers.

#### C. Phase 2 (20 days)

- 1. Gulf will make a public announcement that a fuel supply emergency exists and that Gulf has been directed to implement the second phase of several energy conservation measures.
- 2. Commercial, Industrial, and Governmental customers will be requested to take the following steps:
  - a. Eliminate the use of lighting for indoor and outdoor advertising devices and displays and building flood lighting, except for lighting for a single business identification.
  - b. Reduce weekly hours of operation by 20 percent at all retail businesses, institutional facilities, public and private schools, office buildings, and industrial plants, except for vital health and safety institutions which Reduce weekly hours of operation by 20 percent at all retail businesses, institutional facilities, public and private schools, office buildings, and industrial plants, except for vital health and safety institutions which will not be required to close, but, nevertheless, will be expected to effect all possible reductions.
  - c. Lower heating thermostats to 60 degrees or less during heating hours and raise cooling thermostats to at least 80 degrees during cooling hours in transient or "short stay" public and semi-public buildings, such as supermarkets, museums, historical sites,

### Gulf Power Company Fuel Supply Emergency Plan

warehouses, and machine shops where this action, in fact, will reduce overall energy consumption and not damage health and property.

d. Lower heating thermostat settings in all other conditioned spaces to 65 degrees during heating hours and raise cooling thermostat settings to 80 degrees during cooling hours where this action, in fact, will reduce energy consumption.

in addition to the above steps, residential customers will be requested to curtail their use of certain appliances such as clothes dryers, dishwashers, and the like.

#### D. Phase 3 (10 days)

In this phase, Gulf will take additional actions under this contingency plan to further reduce electric demand, including the following actions, as appropriate:

Implement a rotating distribution feeder disconnect procedure, lower voltage by a small percentage, or take other actions which would affect primarily residential customers to achieve required energy reductions as indicated by the available fuel supply. This plan would be designed to allow rotating disconnects as often as required and utilize Section VII. G, Essential Services.

Residential customers being served in accordance with Gulf's Medically Essential Service Tariff will receive individual notification well in advance of any disconnect. These customers are advised during the application process to either install back-up power or to make adequate plans in case of an outage. Gulf will assist these customers as appropriate.

Request that all industrial customers decrease their energy requirements by an amount up to an additional 20 percent, which is equivalent to a total reduction of two days' operation per week based on a five-day work week.

(Implementation will be accompanied by a news release by Gulf.)

### Gulf Power Company Fuel Supply Emergency Plan

### E. Phase 4 (5 days)

Notify the Chair of FRCC RAG that the fuel supply for electric generation has reached a crisis level and discontinue electric service to all customers except for essential life supporting uses (Refer to Section VII. G.) (Implementation will be accompanied by a news release by Gulf.)

#### F. Relaxation of Action Plan

Whenever the fuel supply emergency ceases or improves to the point where a lower phase of the Action Plan is sufficient to continue electric service at the current level, the public and the Chair of FRCC RAG will be notified by the VP of Power Generation and Transmission or his designee. The relaxation will be consistent with the current fuel supply situation and will be implemented in the reverse sequence of Phases 1-4, above.

#### G. Essential Services

Electric Services that are essential to the health, safety, or welfare of the community shall be given priority on electric service for as long as the situation allows, provided that alternative sources of electric generation/supply are not available to such services.

The following types of customers may be included in this category:

- 1. Critical Gulf facilities
- 2. Hospitals and similar medical facilities
- 3. Police and fire stations
- 4. Certain vital military bases
- 5. Navigational aids
- 6. Water and sanitation facilities
- 7. Critical communications facilities
- 8. Essential emergency governmental facilities and services
- 9. Certain food storage and distribution centers

### Gulf Power Company Fuel Supply Emergency Plan

### VIII. GOVERNOR DECLARED EMERGENCY

Since Gulf Power is west of the Apalachicola River and connected to the Southern Electric System grid, a declaration of a fuel supply emergency by the Governor of the state of Florida may or may not have a direct effect on Gulf's generation resources.

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Whenever the Governor's declaration does not have a direct effect on the electric generation resources of Gulf, only portions of this plan will be implemented as appropriate to the situation.

### IX. ASSISTANCE

If other utilities in the state would benefit from the assistance of Gulf Power, Gulf will take whatever steps are prudent and appropriate to provide such assistance, depending on Gulf's fuel projections and the status of the generation/transmission system. This assistance would include, but not be limited to:

- 1. Making surplus fuel available for their use.
- 2. Maximizing the safe transfer of electricity between our systems.
- 3. Maximizing voltage support to their system when practical.

# Utilities Commission City of New Smyrna Beach, Florida



# **Emergency Response Plan**

# **Electric Operations Department System Operations Department**

March 2003

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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 Superintendent of Electric Transmission & Distribution ("T & D") /Fleet Maintenance will notify the Director of Electric Operations, 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 their supervision on alert or standby, depending upon the nature of the emergency.

Organization charts, equipment listings, maps, supplemental data and instructions designed to aid in setting up for the emergency will be maintained at the Operations Center in care of the Superintendent of T & D/Fleet Maintenance. Large scale maps showing roads, rivers, bridges, creeks, pipelines, transmission lines, and substations shall also be available at this location.

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 Foreman of Substations. 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 will also 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. Monitoring of Police and Civil Defense radio transmissions will be done, along with working very closely with these agencies in other emergencies of this nature.

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 Personnel Officer 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 the Personnel Officer in the coordination of communication problems with the S.C.A.D.A. 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, and coordinate with the System Operations Division on voltage reduction at substations. 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;
- Lift stations and treatment plants;
- 3. Water pumping plants and stations;
- 4. Red Cross shelters;
- 5. Hospitals, law enforcement centers, and nursing homes;
- 6. Communications centers;
- 7. Food centers and storage facilities; and
- 8. 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, if needed, as quickly as possible, and to put into effect the Mutual Aid Agreements.

## SEVERE ENERGY DEMAND/MINIMAL SYSTEM CAPACITY RESERVE MARGIN

A review of procedural steps for handling severe weather/high system demand conditions resulted in the following recommendations.

At the warning of a severe energy shortage (such as a forecast of below 30° Fahrenheit weather, or zero state reserves), the System Operations & Generation Department will notify the Director of Electric Operations, giving all possible details known at the time. After a review of the available information, if it appears likely that a severe situation is indeed impending (or if the State Coordinator calls), the following actions shall be taken:

- Notify all department heads, Police and Fire Departments, Hospital and Nursing Homes; City Government, and any other critical customers of the impending situation.
- 2. Issue news media energy conservation bulletins. Also, use appropriate notice/message for the Utilities Commission's telephone "Time and Temperature" service.
- Review the availability of all generation capacity. Contact other utilities for availability of Schedule "A" or "B" Replacement Capacity for any generation expected to be available during the emergency period.
- 4. Prioritize critical circuits and potential load shedding feeders.

As the high system demand increases, the recommended operating steps are listed below:

1. Load Management:

Initiate normal Load Management Relief;

- a. Initiate in-house Load Management, such as notifying the Pollution
   Control Plant to switch from PSA to liquid oxygen;
- b. Initiate Enhanced Residential Load Management Program; and
- c. Notify customers with standby generation (such as the hospital, police department, nursing home, that we are in a severe demand situation.
- 2. Commence the System Voltage Reduction Program by lowering the 23 kV

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level by 5%, thereby reducing the load approximately the same amount.

- 3. Should the capacity shortage continue to worsen, place the Water and Pollution Control plants on their auxiliary generating units, and separate from our distribution system. Notify Bert Fish Medical Center to switch to their auxiliary power.
- 4. Begin Coordinated Load Shedding with selected load outages rotated to match the load to the available capacity.
- 5. Notify all designated agencies of our status operating activities as requested.

#### FUEL SHORTAGE EMERGENCY

At such time as all needed Utilities Commission electric generation equipment is in use, fuel supplies at all needed facilities shall be monitored closely. Generation personnel shall notify the Director of System Operations & Generation or the Purchasing Department whenever supplies reach the point where additional fuel can be accommodated. Should the Purchasing Department notify the Director of System Operations & Generations & Generation that the purchase of additional fuel is not necessary, a Fuel Shortage Emergency may be declared.

The Director of System Operations & Generation will the notify the Florida Reliability Coordinating Council (FRCC) State Capacity Emergency Coordinator (SCEC) that a Fuel Shortage Emergency has been declared and that fuel supplies to the Utilities Commission may be interrupted. The SCEC will advise the System Operations Department what resources are available, either through purchased power schedules, or emergency fuel supplies. Should there be no relief available, the Director of System Operations & Generation shall notify the Director of Electric Operations that action may necessary under the Severe Energy Demand/Minimal System Capacity Reserve Margin Procedure.

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# 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.
- 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 by the Superintendent or his designee:

- 4 Be responsible for the restoration of service and rehabilitation of the electric transmission, substation and distribution facilities.
- 5. Coordinate the supply of materials and equipment with the Warehouse Manager.
- 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.
- 7. Conduct a damage survey of the electric system.
- 8. Determine priorities on damage repairs.
- 9. Organize and direct the repair and rehabilitation of electric facilities damaged in this emergency.
- 10. Evaluate and report to the Director of Electric Operations the progress made in restoration of service.
- 11. 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 Radio Network and other sources.

The Managers 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 Department 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.
- Coordinate, assign and allocate materials, personnel and equipment that is 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. Report any unit status changes to Director of Electric Operations.
- 4. Coordinate with Purchasing and Stores for any food or material needs.
- 5. Initiate "Black Start" procedures.
  - d. AMD checkouts;
  - b. Test and reset annunciator panel;
  - c. Electrical checkouts; and
  - d. Start unit.
- 6. Coordinate with the Director of Electric Operations to establish any requirements beyond the capability of plant personnel.

<u>PHASE #1</u> — Check 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. Get supply of gasoline for pump.
  - H. 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).
  - 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 <u>Watch</u> 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.
- 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.
- Install portable gasoline pump in the Swoope Plant to remove any water from the generator pits, to be discharged outside the building.

Should Hurricane <u>Warnings</u> 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.
  - D. The Manager will be mobile and in radio contact with the Swoope Plant.
- If there is either insufficient load, or no secure lines to feed power out of the Swoope Plant, the units will be shut down.
  - A. In the event there are no secure power lines to the Swoope Plant, then house load will be supplied by one of the diesel units.
- Should there be a threat of high water at the <u>Swoope Plant:</u>
  - A. The spare motors in the heated storage area of the warehouse will be moved to a storage shelf at a higher elevation.
  - B. Preparations will be made to remove or elevate motors and equipment in the plant, and below floor level on Swoope #3 and #4 should the sandbags and pump no longer prove effective.
  - C. 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 <u>Smith Street Plant:</u>

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- 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.
- 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.

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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 Department	424-2220
New Smyrna Beach Fire Department	424-2162
New Smyrna Beach Public Works (Mel Phillips)	424-2209

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### **EMERGENCY CONTRACTORS**

SOUTHEAST POWER CORPORATION PHONE: (407) 268-0540 (office) Robert Jones (407) 383-9612 (home) 1805 Hammock Road Titusville, FL 32796 (Mail: P.O. Box 850 - Titusville, FL 32781)

KOHLER CONSTRUCTION COMPANY PHONE: 6425 53 <sup>rd</sup> Street North - Pinellas Park, FL 33733 (Mail: P.O. Box 11626 - St. Petersburg, FL 33733)	(813) 527-2077 (office) (813) 522-3698 (office)
Whitev Kohler	(813) 393-8883 (home)
Joe Kohler	(813) 527-6930 (home)
Chris Hale	(813) 948-2095 (home)

OLSON ELECTRIC COMPANY, INC.	PHONE:(904) 258-8551 (office)
225 Carswell Avenue	(800) 843-5123 (office)
Holly Hill, FL 32017	
Jesse Colley <car (904)="" 679-9024="" phone=""></car>	(904) 672-1730 (home)
Mel Shaw <car (904)="" 679-9018="" phone=""></car>	(904) 673-3921 (home)
Larry Crosby <car (904)="" 679-9029="" phone=""></car>	(904) 860-1512 (home)
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### CAPACITY SHORTAGE EMERGENCY Stage I - 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, extension 7106. Presented as a public service by the Utilities Commission, City of New Smyrna Beach."

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# CAPACITY SHORTAGE EMERGENCY Stage I - 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:

- 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, extension 7106. Presented as a public service by the Utilities Commission, City of New Smyrna Beach."

# CAPACITY SHORTAGE EMERGENCY Stage I - 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, extension 7106. Presented as a public service by the Utilities Commission, City of New Smyrna Beach."

# CAPACITY SHORTAGE EMERGENCY Stage II - 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 II - 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."

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# CAPACITY SHORTAGE EMERGENCY Stage III - 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 \_ - minute intervals.

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

- If your electricity is on, discontinue all non-essential use to conserve electricity.
- 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.
- When power is restored, turn appliances back on gradually, on an as-needed basis.
- Because local utility phone lines are overloaded, please leave local telephone lines open for emergency calls only.
- If yours is the only home or business in your neighborhood experiencing an extended power outage, contact the Utilities Commission at 427-1366.
- Please stay tuned for further announcements."

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# CAPACITY SHORTAGE EMERGENCY Stage III - 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 \_\_\_\_\_\_\_ - minute intervals.

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

- If your electricity is on, discontinue all non-essential use to conserve electricity.
- 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.
- When power is restored, turn appliances back on gradually, on an as-needed basis.
- Because local utility phone lines are overloaded, please leave local telephone lines open for emergency calls only.
- If yours is the only home or business in your neighborhood experiencing an extended power outage, contact the Utilities Commission at 427-1366.
- Please stay tuned for further announcements."

# CAPACITY SHORTAGE EMERGENCY Stage IV - 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.
- 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 <u>watch</u>, continue normal activities, but stay tuned to radio or television for all NOAA National Weather Service advisories. Remember: a hurricane <u>watch</u> means <u>possible danger</u>; if the <u>danger materializes</u>, a hurricane <u>warning</u> will be issued. Meanwhile, keep alert. Ignore rumors.
- 4. When a hurricane <u>warning</u> 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.

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- 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. If it is not, move to a designated shelter, and stay there until the storm is over.
- 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 (423-7146).
- 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.

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

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### HOME PHONES

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### (INSERT LIST OF EMPLOYEE HOME PHONE NUMBERS/ADDRESSES)

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## PHONE LIST (INSERT MONTHLY UC PHONE LIST)

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### RADIO NUMBERS

# (INSERT LIST OF EMPLOYEE RADIO NUMBERS)

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## LAKELAND ELECTRIC

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## FUEL

## LONG - TERM ENERGY EMERGENCY PLAN

November, 1998

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# LAKELAND ELECTRIC DEPARTMENT LONG – TERM ENERGY EMERGENCY PLAN FOR

### FUEL SUPPLY SHORTAGE

### I. INTRODUCTION

The uncertainty in fuel supply is beyond the control of prudent planning and has the potential for fuel shortages in both Lakeland Electric and the whole State. This could result in a long-term electrical energy deficiency, which would adversely affect all customers. Therefore, this emergency plan was developed which would enable Lakeland Electric to best cope with the energy shortage and thereby protect the health, safety and welfare of its customers during the period of deficiency.

#### II. PURPOSE

The purpose of this Plan is to establish a systematic and efficient means of anticipating, assessing and responding, in an appropriate manner, to a long – term energy emergency caused by a fuel supply shortage.

### III. DEFINITION

An energy emergency exists when the utility has inadequate energy generating capability by reason of a fuel supply shortage and is thereby prevented from operating at required levels as established by its customers normal energy needs. An energy emergency differs from a short-term capacity emergency in that energy requirements cannot be met over an extended period. The period of advance warning and expected duration of an energy emergency is usually measured in terms of weeks or months, as opposed to hours or minutes for a short-term capacity deficiency.

### IV. AUTHORITY

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### A. DECLARE EMERGENCY

	Activi <b>ty</b>	Person Responsible		
1.	Regularly monitor fuel inventories and system load and publish weekly Fuel report.	Fuels Manager		
2.	Alert the General Manager to declare an energy emergency (See 4 below) any time fuel supplies appear to be in jeopardy due to availability of and/or quality constraints and it is probable that inventory levels will drop below desirable levels, as defined in Section V Step A.	Fuels Manager		
3.	After an energy emergency is declared, or at the direction of the Manager authorized to declare an energy emergency, the following procedure will be followed in determining the fuel supply situation.	Fuels Manager		
	a. Monitor and prepare short-term forecast of system load.	Supervisor of System Control		
	b. Monitor and forecast fuel inventories. Coordinate fuel plans with the members of the Florida Municipal Power Pool	Fuels Manager		
	c. Using the above data, run the Generation modeling program and provide the amount of each type of fuel expected to be used to the Fuels Coordinator. The estimated fuel consumption should be established on a daily basis for the first 30 days and then on a weekly basis for up to 75 days.	Supervisor of System Control		
	d. Using the output of b and c above, prepare and distribute a daily or weekly report on the overall fuel supply situation	Fuels Manager		

## B. ENERGY EMERGENCY COORDINATOR

Activity			Person Responsibl <b>e</b>			
1.	After the emergency is declared the Energy Emergency Coordinator is required to Coordinate all activities involved in Implementing The Energy Emergency Plan.	Energy Director	Supply	Business	Un	

## C. IMPLEMENTATION PLAN

The persons listed below will assist the Energy Emergency Coordinator and be responsible for implementing the part of the plan listed by their title.

	Activity	Person Responsible
1.	Expedite fuel procurement and coal transportation. Coordinate all fuel activities with the Florida Municipal Power Pool	Fuels Manager
2.	Communicate with Department and City	General Manager
3.	Communicate with media and public	Public Information Officer
4.	Communicate with Governmental organizations	Public Information Officer
5.	Waive environmental restrictions	Manager of Environmental Compliance
6.	Curtail Utility & Municipal use	Energy Supply Business Unit Director and Director of Power Production
7.	Promote load conservation, voluntary and mandatory	Account Managers, Public Information Officer
8.	Utilize load control	Supervisor of System Control
9.	Curtail firm load	Supervisor of System Control
10.	Modify system operation	Manager Electric System Control

#### V. THE EMERGENCY PLAN

When a long-term Energy Emergency Plan is declared, the following steps and actions may be taken so as to minimize the effect of the fuel shortage upon our customers.

Step A – After the Energy Emergency has been declared and the total fuel supply\* has decreased to 50 days and a continued downward trend is anticipated, the following measures should be implemented and continued for the duration of the emergency.

- 1. Expedite Fuel Procurement
  - a. Oil Request Lakeland Electric suppliers to locate and acquire any oil of the proper guality to meet both environmental and operational constraints.
  - b. Coal Attempt to purchase available coal from any sources that meet both environmental and operational constraints.
  - c. Natural Gas Request gas supplier to provide maximum amount of gas based on capacity of Lakeland Electric pipeline.
- 2. Communicate with Department and City
  - a. Issue Newsletter bulletin that explains why the fuel shortage has occurred, provides an overview of the Emergency Plan and communicates details of Step A.
  - b. Provide daily update on telephone hot line.
- 3. Communicate with Public and Media

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- a. Issue news release to the news media. It will explain why the fuel shortage has occurred, communicate actions Lakeland Electric is taking to deal with the problem and will provide specific conservation information to customers.
- b. Provide daily briefings to media on status of emergency.
- c. Promote load conservation by the public via advertisements that will provide customers with specific information on how to conserve electricity.
- \* Refers to the fuel on the property and that already in the delivery "pipeline".
  - 4. Communicate with Governmental Organizations
    - a. Coordinate with the Public Information Officer in notifying appropriate agencies.
    - b. Assist Manager of Environmental Compliance with Environmental Restrictions Waiver.

#### 5. Waive Environmental Restrictions

Start procedures to obtain approval of the Governor and the President to suspend the . State Implementation Plan (SIP) requirements of the Clean Air Act so as to be able to bum available fuels that may not meet the environmental constraints.

- 6. Curtail Utility & Municipal Use
  - Curtail all nonessential uses of electrical energy at all utility & municipal owned facilities. This should reduce Utility megawatt hour usage by at least 10%. Monitor usage of energy weekly.
  - b. Reduce on peak water pumping.
  - c. Reduce on peak consumption of pollution control facilities.
- 7. Promote Load Conservation
  - a. Voluntary
    - Increase efforts to educate customers in the efficient use of electrical equipment and supplies.
    - 2) Encourage customer conservation by advertising program of specific ways to conserve electric energy.
  - b. Request all customers to reduce their kilowatt hour usage by at least 10%.
  - c. Mandatory No action required.
- 8. Utilize Load Control

Utilize direct load control to reduce system demand on peak periods and optimize the use of Lakeland Electric's base load generating units by increasing cycle times of individually controlled items to 30 minutes per hour.

- 9. Curtail Firm Load No action required.
- 10. Modify System Operation
  - a. Discontinue non-firm sales to utilities not participating in the FRCC Long term energy plan.
  - b. Discontinue sales of economy interchange from units whose fuel is in short supply.
  - c. Review the maintenance schedule to optimize use of obtainable fuels.
  - d. Coordinate all activities with the Florida Municipal Power Pool

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Step B – If the total fuel supply has decreased to the range of 50 to 36 days and a continued downward trend is anticipated, the following additional measures should be implemented.

- 1. Expedite Fuel Procurement
  - a. Oil Suppliers of oil would be solicited by phone to determine types of oil available for purchase as well as quantity and delivery time. Will maximize on-site inventory.
  - b. Coal Purchase any coal that is available and can be burned in Lakeland Electric Power Plants.
  - c. Natural Gas Request gas supplier to obtain additional quantities of gas up to maximum capacity of Lakeland Electric pipeline.
- 2. Communicate with Department & City
  - a. Issue Newsletter bulletin that will update employees.
- 3. Communicate with Public and Media
  - a. Issue update news statement.
  - b. Continue advertisements telling customers how to conserve electricity.
- 4. Communicate with Governmental Organizations
  - a. Request legal authority from the proper governmental organization for the actions to be taken in the following steps.
  - b. Update appropriate governmental agencies.
- 5. Waive Environmental Restrictions No new action required.
- 6. Curtail Utility & Municipal Use
  - a. Reduce energy use by at least 20%.
  - b. Discontinue the use of lunchroom kitchens, turn off 25% of exterior lights, turn off hot water heaters.
  - c. Reset and lock air conditioning thermostats and heating thermostats to 80° degree and 65° respectively.

- 7. Promote Load Conservation
  - a. Voluntary
    - 1) Request residential and commercial customers to cut back on nonessential usage and to adjust thermostat setting 5 degrees down from normal during a hearing season and 4 degrees up from a normal setting during a cooling season.
    - Request customers to temporarily discontinue use of indoor advertising devices, outdoor displays and flood lighting except that essential for safety and security.
    - 3) Request all customers to reduce their kilowatt hour usage by at least 15%.
      - a) Mandatory Ban all nighttime sporting activities. Close all lighted parks, tennis courts, gulf courses, etc. Also, eliminate nonessential outdoor flood lighting and restrict the use of outdoor advertising lighting.
- 8. Utilize Load Control Increase cycle times of controlled water heaters, space heating, swimming pool pumps and air conditioners to one hour off every 1 to 4 hours.
- 9. Curtail Firm Load No action required.
- 10. Modify System Operation
  - a. Modify unit dispatch to load units with obtainable fuels (other than No. 2 oil) first, and then load units burn the fuel in short supply. Coordinate all activities with the Florida Municipal Pool
  - b. Where possible cycle units fueled by short supply fuel off line and still allow the same demand and energy output, but at a better heat rate and consume less station service power.
  - c. Purchase energy from the market to replace self generation when feasible.

Step C – When the total fuel supplies have decreased to the range of 36 to 25 days and a continued downward trend is anticipated, the following additional measures should be implemented:

- 1. Expedite Fuel Procurement
  - a. Oil Locate and purchase any oil available which would satisfactorily burn in Lakeland Electric power plants.
  - b. Coal Locate and purchase any usable coal.

- Natural Gas Request gas supplier to curtail deliveries to nonessential users to obtain additional quantities of gas up to maximum capacity of Lakeland Electric pipeline.
- 2. Communicate with Department & City
  - a. Issue Newsletter bulletin that will update employees.
- 3. Communicate with Public and Media
  - a. Issue updated news statement.
  - b. Continue advertising conservation.
- 4. Communicate with Governmental Organizations
  - a. Request legal authority from the proper governmental agency for the actions to be taken in the following steps.
  - b. Update governmental agencies.
- 5. Waive Environmental Restrictions No new action required.
- 6. Curtail Utility & Municipal Use
  - a. Discontinue the use of air conditioning units serving large areas with a small number of people by moving the people.
  - b. Turn off at least 50% of all exterior lights.
  - c. Fill power plant bunkers during off peak times.
  - d. Implement water usage ban on nonessential uses including lawn sprinkling and car washing.
- 7. Promote Load Conservation
  - a. Voluntary
    - Direct residential customers to further reduce energy consumption by stopping use of certain electrical services such as air conditioning, heating, hot water heaters, clothes dryers, dish washers, and other convenience devices and equipment.
    - 2) Conditioned offices and buildings other than critical services such as hospitals will be directed to lower thermostat settings to 65° during the heating season and raise thermostat settings to 80° during cooling season.

- 3) Commercial establishments, institutional facilities, public and private schools, office buildings and industrial plants will be directed to further reduce their consumption which may require a reduction in their operating hours.
- 4) Encourage customer use of generation and alternate energy supplies.
- 5) Request all commercial and industrial customers to reduce their kilowatt hour usage by at least 30%.
- b. Mandatory
  - 1) In commercial establishments, ban all nonessential use of hot water.
  - 2) Elimination of window and display lighting.
  - 3) Ban all air conditioning and heating during non-use hours and in unoccupied areas of commercial establishments.
- 8. Utilize Load Control
  - a. Increase cycle times to 2 to 4 hours off during every 2 to 6 hour period.
- 9. Curtail Firm Load No action required.
- 10. Notify System Operations
  - a. Reduce firm sales to other utilities to a minimum.
  - b. Implement emergency line ratings so as to increase import capability.
  - c. Purchase economy power against peaker prices when it will extend the availability of the fuel in short supply.
  - d. Purchase short term firm energy from the market, other than peaker energy, when it will extend the availability of the fuel in short supply.
  - e. Lower system distribution voltage 5 percent where it is possible to do so.

Step D – When the total fuel supply has decreased to a 25 to 15 day supply and a continued downward trend is anticipated, the following additional measures should be implemented.

- 1. Expedite Fuel Procurement
- 2. Investigate all possible fuel sources in search of any usable fuel.
- 3. Communicate with Department & City of Lakeland
- 4. Issue Newsletter bulletin. Emphasize that firm load customers will experience rotating blackouts and why.

- 5. Communicate with Public and Media
- 6. Issue updated news statement explaining that firm load customers will experience rotating blackouts and why.
- 7. Communicate with Governmental Organizations
- 8. Request legal authority from the proper governmental agencies for the actions to be taken in the following steps.
- 9. Update appropriate governmental agencies. In particular, advise them of firm load curtailment and its impact on their activities.
- 10. Waive Environmental Restrictions No new action required.
- 11. Curtail Utility & municipal Use
- 12. Eliminate all but critical air conditioning and heating such as that for computer facilities.
- 13. Use waivers obtained in (5) to eliminate stack gas scrubbing loads.
- 14. Promote Load Conservation
  - a. Voluntary Request all commercial and industrial customers to reduce their kilowatt hour usage by at least 50%.
  - b. Mandatory Reduce street and area lighting where possible.
- 15. Utilize Load Control Increase off periods to 6 to 12 hours.
- 16. Curtail Firm Load
  - a. Place the Lakeland Electric firm load curtailment plan into operation. The implementation of this plan will result in the interruption of electrical service to our customers on a rotating basis. The periods of interruption to electrical service will be rotated among the service areas so that no one area will be without electricity for an unduly long period of time. Selection of the areas to be interrupted will be made by company operating personnel in the exercise of their judgement according to circumstances existing at the time of the emergency.
- 17. Whenever possible during such emergencies, the company will give priority for service to hospitals, vital military installations major airports, police and fire, critical telephone exchanges, TV stations, and water and sewer facilities where no emergency power source is available.

- 18. Modify System Operation
  - a. Reduce firm sales to other utilities to zero.
  - b. Purchase any available energy that would extend the supply of the fuel in short ' supply.

Step E – When the total fuel supply has decreased to the area of 15 to 10 days and a continued downward trend is expected the following additional measures should be implemented.

- 1. Expedite Fuel Procurement No new action required.
- 2. Communicate with Department & City.
  - a. Issue updated Newsletter bulleting.
- 3. Communicate with Public and Media
  - a. Issue updated news statement.
- 4. Communicate with Governmental Organizations
  - a. Update appropriate governmental agencies.
- 5. Waive Environmental Restrictions No new action required.
- 6. Curtail Utility & Municipal Use No new action required.
- 7. Promote Load Conservation No new action required.
- 8. Utilize Load Control No new action required.
- 9. Curtail Firm Load No new action required.
- 10. Modify System Operation
  - a. Implement plans to insure the orderly shut down of all units burning the fuel in short supply in the event the fuel is exhausted.
  - b. Implement plans to insure power availability to all power plants and fuel handling facilities.

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#### LONG-TERM ENERGY EMERGENCY PLAN-SUMMARY

#### The following shows the additional measures to be taken for each step.

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	ACTION	50 to 75 Days* Emergency Declared STEP A	36 to 50 Days STEP B	25 to 36 Days STEP C	15 to 25 Days STEP D	10 to 15 Days STEP E
1.	Expedite Fuel Oil Coal Gas	Purchase any proper oil Purchase any proper coal. Purchase additional gas.	Determine types of oil Available. Purchase any satisfactory Burnable coal	Purchase any satisfactory Burnable oil. Purchase <u>any</u> usable coal Purchase maximum amount Of additional gas.	Search for and Purchase <u>any</u> usable fuel.	
2.	Curtail Utility & Municipal Use: Buildings and Power Plants	Curtail nonessential uses. Reduce KWH's by 10%. Monitor usage weekly. Reduce water and sewer	Reduce KWH's by 20% Set thermostats to 65° to 80° Cut off 25% of exterior lights Cut off hot water heaters.	Further reduce A/C Cut off 50% of exterior lights. Fill bunkers at off peak time	Cut off all but critical A/C and he	eating.
3.	Promote Load Conservation Voluntary	Request 5% KWH reduction. Educate customers. Advertise conservation.	Request 15% KWH reduction. Adjust thermostats $\pm$ 5%. Cut out indoor & outdoor adv. Cut out flood lighting as Possible.	C&I: Request 30% KW Reduction Set thermostats to 65° or 80°. Encourage alternate energy Usage. Reduce operating hours if necessary. Residential: Stop using A/C, Heating, H. W. H., dryers, dish Washers, etc.	C&I: Request 50 KWH reduction.	*

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ACTION	50 to 75 Days* Emergency Declared STEP A	36 to 50 Days STEP B	25 to 36 Days STEP C	15 to 25 Days STEP D	10 to 15 Days <u>STEP E</u>	
Mandatory		Ban night sports. Close lighted parks, etc. Ban nonessential flood and O. D. advertising lighting	<ul> <li>Ban displays &amp; window lighting</li> <li>Ban in commercial establishments</li> <li>a. A/C and heating during non-use hours and in unoccupied areas.</li> <li>b. Nonessential use of hot water.</li> </ul>	Reduce street and area lighting where possible.		
4. Utilize Load Control	Use to reduce peaks Cycle 30 min. per hour	Cycle 1 hr. per 1 to 4 hrs.	Cycle 2 to 4 hrs. per 2 to 6 hours	Off 6 to 12 hrs. per time.		
5. Modify System Operation	Stop non-firm sales to other utilities. Stop economy interch. sales		Reduce firm sales to a mim. Use emergency line ratings. Purchase economy power against	Reduce firm sales to zero.	Implement Orderly shut Down of units	
	Review maintenance Schedule. Place 75% of Spin. Res. On Step "O".	Modify unit dispatch. Cycle units off-line. Purchase out of state energy.	peaker prices. Purchase short-term firm Energy except peaker.	Purchase any Available energy.	Insure power avail. to Plants.	
	ACTION	50 to 75 Days* Emergency Declared STEP A	36 to 50 Days STEP B	25 to 36 Days STEP C	15 to 25 Days STEP D	10 to 15 Days STEP E
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9.	Curtail Firm Load				Implement "Firm	
5.	Waive Environmental Restrictions	Request Governor to suspend SIP of CAA.				
4.	Comm. With Governmental Organizations	Coordinate with Public Affairs in notifying Appropriate agencies. Assist with request to Governor.	Request legal authority for actions to be taken In this step. Update governmental Agencies.	Same as Step B.	Same as Step B.	Update appropriate agencies.
2.	Comm, With Dept. and City	Issue newsletter.	Issue updated newsletter.	Same as Step B.	Same as Step B.	Update appropriate agencies.
3.	Comm. With Public and Media	Issue news release. Provide daily status Briefing. Promote load conservation.	Update news release.	Same as Step B.	Same as Step B.	Update appropriate

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\* Refers to total fuel supply in pipe line. Consideration is to be given to the "realistic days supply" which is defined as the "days supply" calculated as though there would be no fuels receipts, but then adjusted for realistic, expected fuel deliveries

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VI. Detailed Department Plans For Each Step Of Emergency

Step A. – Reduce Utility & Municipal megawatt usage 10% by curtailing all nonessential uses at all utility and City owned facilities. S huijome measures to be taken are:

- 1. Building Services
  - a. Upon the declaration of a long-term energy emergency, the Assistant City Manager in conjunction with the Administration Building & Facilities Supervisor will be responsible for the following actions.
  - b. Turn off all unnecessary light i.e., work areas, conference rooms and hallways.
- 2. Each department head inform their employees (meeting/memo) to conserve electricity. This is in addition to informational releases by the Public Information Officer.
  - a. Refrain from using any piece of equipment requiring electrical power that can be delayed for a long period of time.
  - b. Arrange water system pumping schedules to maintain only minimum fire flow requirements during electric system peak hours.
- 3. Arrange water pollution control facilities pumping, re-circulating and aeration schedules to reduce consumption and demand during electric system peak hours.
- 4. The Administration Building & Facilities Supervisor will provide the Energy Emergency Coordinator the results of the weekly monitoring.
- 5. The Assistant City Manager and the Administration Building & Facilities Supervisor will take such actions recommended by the Energy Emergency Coordinator.

Step B. – Reduce Utility & Municipal megawatt hour usage 20%. Some additional measures to achieve this are:

- 1. Discontinue the use of lunchroom kitchens i.e., stoves, microwaves, and refrigerators.
- 2. Turn off 25% of exterior lights. Each department head and/or building attendant will be responsible for doing this. The Administration Building Facilities Supervisor will assist those departments who need help in achieving this goal.
- 3. Turn off all hot water heaters in City owned facilities.
- 4. Reset and lock all air conditioning thermostats to 80° and 65° respectively in City owned facilities.

# Step C

- 1. Turn off at least 50% of all exterior lights.
- 2. Discontinue the use of air conditioning units servicing large areas with a small number of people. This will involve the moving of some personnel.
- Step D Eliminate all but critical air conditioning and heating, i.e., communication and computer facilities.

# A. COMMERCIAL/INDUSTRIAL POWER SERVICES

Upon the declaration of a long-term energy emergency, the Customer Service Division, will be responsible for the following:

- Step A Account Managers shall contact all commercial and industrial customers (including interruptible load customers) and advise them of the fuel shortage and the need to curtail their load by 5% until further notice. They will also be advised of the potential for further curtailment if the fuel supply continues to diminish.
- Step B Account Managers shall contact commercial/industrial customers (including interruptible load customers) and advise them the fuel supply has diminished to a point which makes it necessary to request a further curtailment of 10% for a total at this point of 15% load curtailment until further notice. Also advise them of the specific conservation measures which should be taken as stated in Section VI C.
- Step C Account Managers shall contact all commercial and industrial customers (including interruptible load customers) and advise them the fuel supply has diminished to a point which makes it necessary to request a further curtailment of 15% for a total at this point of 30% load curtailment until further notice. Also advise them of the specific conservation measures which should be taken as stated in Section VI C.
- Step D Account Managers shall contact all commercial and industrial customers (including interruptible load customers) and advise them the fuel supply has diminished to a point which makes it necessary to request a further curtailment of 20% for a total at this point of 50% load curtailment until further notice. Also advise them of the specific conservation measures which should be taken as stated in Section VI C.
- Step E Account Managers shall contact all commercial and industrial customers (including interruptible load customers) and advise them of the continued need to maintain all load curtailment actions until further notice.

# Note: In all steps, the Account Managers shall:

- 1. Establish procedures to verify that all commercial and industrial customers are complying with the load curtailment plan in effect.
- 2. Maintain communications with each interruptible load customer for the purpose of providing status reports on the fuel shortage emergency and answering any questions.
- 3. Be responsible for communicating with each interruptible load customer upon restoring gradual load to each customer as he was removed for the curtailment process. The restoration process will follow basically the same steps as curtailment however, in reverse.

# B. CONSERVATION

Upon the declaration of a long-term energy emergency, the Public Information Officer\_with the cooperation of the Energy Conservation Section, will be responsible for the following:

# Step A – Promote Load Conservation

- 1. Voluntary Measures:
  - a. Urge customers through advertising program of specific ways to conserve electric energy.
  - b. Educate customers in the efficient and wise use of electrical equipment and appliances.
  - c. Request all customers to curtail their load by 5%.
- 2. Mandatory Measures No action required.
- Step B Promote Load Conservation
- 1. Voluntary Measures:
  - a. Announce to the public by newspaper, television and radio that an electric supply emergency exists and that they are being requested by the Utility to implement Step B of Load Reduction Program.
  - b. Direct commercial customers to temporarily discontinue use of indoor advertising devices, outdoor displays and flood lighting except that essential for safety and security.
  - c. Request residential and commercial customers to do without all nonessential electrical services, cut back on essential usage and adjust thermostat setting 5 degrees down from normal during a heating season and 5 degrees up from a normal setting during a cooling season.

- d. Notify public daily through news media as to the status of the Utilities electric supply emergency and the extent to which the emergency plan is working.
- e. Request all customers to curtail their load by 15%.
- 2. Mandatory Measures:
  - a. A governmental ban on all nighttime sporting activities. Closure of all lighted parks, tennis courts, golf courses, etc.
  - b. Elimination of nonessential outdoor flood lighting, and restriction on the use of outdoor advertising lighting.

Step C - Promote Load Conservation

- 1. Voluntary Measures: Residential
  - a. Announce to the public that the Utility's electric emergency supply continues to worsen and that it is requesting its customers to control and cease use of certain electric energy consuming devices.
  - b. Direct residential customers to further reduce energy consumption by eliminating use of nonessential electrical services, such as electric hot water heaters, clothes dryers, dishwashers, air conditioning, heating and other convenience devices and equipment.
  - c. Notify customers daily through news media as to the status of the electric supply emergency and the extent to which the plan is working.
- 2. Voluntary Measures: Commercial
  - a. Conditioned offices and buildings other than critical services such as hospitals will be directed to lower thermostat settings up to 65 degrees during the heating season and raise thermostat to 80 degrees during the cooling season.
  - b. Commercial establishments, institutional facilities, public and private schools, office buildings and industrial plants will be directed to further reduce their consumption which may require a reduction in their operating hours.
  - c. Encourage customer use of generation and alternate energy supplies.
  - d. Ask all commercial and industrial customers to curtail their load by 30%.
- 3. Mandatory Measures: Residential No new action required.

- 4. Mandatory Measures: Commercial
  - a. Elimination of window and display lighting.
  - b. A ban on air conditioning and heating during non-use hours.
  - c. A ban on air conditioning and heating in unoccupied areas.
  - d. Ban on all nonessential hot water use. Exceptions: Medical facilities, educational facilities, and food establishments.

Step D – Promote Load Conservation

- 1. Voluntary Measures: Residential
  - a. Announce to the public that the electric supply continues to deteriorate and that the Utility's rotating feeder disconnect plan, which will interrupt electrical service, mainly to residential and small commercial customers for specified periods of time, will be implemented to achieve capacity and energy reduction as dictated by the electric supply emergency. This plan will allow for feeder disconnect as often as required to achieve desired results.
- 2. Voluntary Measures: Commercial
  - a. Strict temperature control of HVAC systems.
  - b. Ask all commercial and industrial customers to curtail their load by 50%.
- 3. Mandatory Measures: Street and Area Lighting
  - a. Reduce exterior Municipal Street and Area Lighting Systems as practical within prudent guidelines.
- Step E Residential/Commercial/Industrial Customer Action
- 1. Voluntary Measures Continued observance of previous four steps.
- 2. Mandatory Measures Rotating blackouts.
- C. Environmental Planning

Upon the declaration of an energy emergency the Supervisor of Environmental Affairs will be responsible for the following actions:

Step A – To obtain the most expeditious relief, so as to be able to burn available fuels having a higher content of sulfur, Lakeland Electric would petition the Governor of Florida. Following an open public meeting on the action, a Hearing Officer would issue a recommended order to the Governor which would form the basis for his decision on whether to petition the President for authority to suspend the State Implementation Plan (SIP) requirements of the Clean Air Act.

At the public hearing, the following information will most likely be required from Lakeland Electric.

- 1. The nature and extent of the energy emergency;
- 2. Current and projected unemployment impacts associated with the energy emergency;
- 3. Current and projected loss of necessary energy supplies for residential use associated with the energy emergency;
- Alternative strategies including conservation, alternative fuels and power wheeling for emergency and the consequences of these strategies on unemployment and on residential energy supply;
- 5. Amount of energy savings expected to result from temporary suspension of portions of the implementation plan.
- 6. To the extent possible, pollutant emission levels both before and after the proposed temporary suspension of portions of the implementation plan; and
- 7. To the extent possible, preliminary assessment of the air quality and health effect impacts of the proposed temporary suspension of portions of the implementation plan.

# D. Firm Load Curtailment Coordinator

Upon declaration of a long-term energy emergency the Supervisor of System Control will be responsible for the following:

Steps A, B, and C – Stay knowledgeable of actions taken and results obtained by Steps A, B, and C.

Step D – Place the Lakeland Electric firm load curtailment plan into operation. The implementation of this plan will result in the interruption of electrical service to our customers on a rotating basis. The periods of interruption to electrical service will be rotated among the service areas so that no one area will be without electricity for an unduly long period of time. Selection of the areas to be interrupted will be made by company operating personnel in the exercise of their judgement according to circumstances existing at the time of the emergency.

Whenever possible during such emergencies, the company will give priority for service to hospitals, vital military installations, major airports, police and fire, critical telephone exchanges, TV stations and water and sewer facilities where no emergency power source is available.

For more detailed information, refer to the Lakeland Electric Load Curtailment Procedures.

# E. Fuels

Upon declaration of a long-term energy emergency the Fuels Manager will be responsible for the 'following:

- 1. Formulate emergency fuel procurement strategies, policies, and guidelines based upon analysis of internal and external variables impacting on Lakeland Electric's fuel operations; and update them as emergency conditions change.
- 2. Continuously monitor fuel market conditions in order to access current market conditions and future trends; and report market information to management.
- 3. Assure constant fuels supply to generation plants in accordance with environmental and performance standards as long as possible under the constraints caused by the fuel emergency.
- 4. Investigate alternate sources of supply, in accordance with the procurement arrangements set forth by the emergency strategy, to allow the Utility to respond to changes in regulation, operating requirements, or market conditions.
- 5. Manage existing fuel inventories in a way that assures the most efficient use of fuels under the constraints caused by the fuel emergency.
- 6. Provide fuel and transportation availability information and forecast for planning and control of operations under the fuel emergency conditions.
- 7. Develop information, reports, and testimony relating to Lakeland Electric's emergency fuel procurement activities for management, customers, and governmental agencies.
- 8. If, during the emergency, a physical transfer of fuel should become practical or necessary due to some physical limitation of the electrical system, the bilateral transfers will be accomplished through mutual agreement between the utilities involved. The principle upon which these transfers will be based is that the original owner or procurer of the fuel shall be made whole in terms of the cost, quantity, and quality of fuel transferred as soon after the emergency as practicable.

# F. Governmental Affairs

Upon the declaration of long-term energy emergency, Public Information Officer will be responsible for the following actions:

Step A

 Coordinate with the General Manager, those messages communicated to the Department & City and with media and public prior to the release of such communications to provide public officials with sufficient advance time to prepare proper responses for public inquiry.

- 2. Assist Manager of Environmental Compliance with governmental contact to waive Environmental Restrictions.
- 3. Notify selected public officials (see attached) of Energy Emergency. Relate message developed in 1) above. Advise of Utility Emergency Plan and Steps to be taken.

# Step B

- 1. Contract appropriate city and county officials (including but not limited to school officials) to implement 7.b. (Mandatory Load Conservation) to prohibit nighttime sporting activities and to close lighted parks, tennis courts, golf courses, etc.
- 2. Update officials on public communications.

# Step C

- 1. Contact local (city and county), state and federal agencies to implement 7.b curtailment of air conditioning and heating, nonessential use of hot water and elimination of window and display lighting.
- 2. Update public officials.

# Step D.

- 1. Contact city and county to reduce street and area lighting (7. b.)
- 2. Advise public officials of firm load curtailment (9.) and its potential impact on their activities.

# Step E.

1. Communicate all notices to governmental organizations on continuing basis.

# G. Engineering Division and Marketing Group

Upon the declaration of long-term energy emergency, System-Planning Division and Engineering Division and Marketing Group will be responsible for the following:

Step A – No action required.

Step B

- 1. Develop emergency line ratings for the lines requested by System Operations so as to allow maximum power transfer capability to Lakeland.
- 2. The Marketing Group will work with System Operations in negotiating a reduction of any long-term firm power sales to other utilities to a minimum when Step C is implemented.

Step C – Work with System Operations in negotiating a reduction of any long-term power sales to other utilities to zero when Step D is implemented.

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# H. Power Production Group

Upon the declaration of a long-term energy emergency, the Power Production Division will be responsible for the following actions:

# Step A

- 1. Eliminate or reduce convenience lighting except where required for safe work conditions.
- 2. Eliminate unnecessary air conditioning of unoccupied areas.
- 3. Review plant operations to determine unnecessary uses of energy, eliminating or reducing uses where practical.
- 4. Identify areas where additional reductions can be made if worsening situations dictate.

# Step B

- 1. With critical review of lighting and plant operations, continue elimination and reduction of unnecessary lighting and air conditioning.
- 2. Reset required air conditioning and heating thermostats to 80° and 65° respectively.
- 3. Discontinue use of lunchroom kitchens.
- 4. Turn off water heaters.
- 5. Discontinue lighting during daylight hours where possible.

# Step C

- 1. Continue review of energy uses making reductions where possible.
- 2. Reduce all lighting, interior and exterior, to the minimum required for safety.
- 3. Eliminate all nonessential air conditioning and heating load.
- 4. Reschedule bunkering of coal bunkers to coincide if possible with off peak hours.
- 5. Curtail or eliminate scrubbing and ash removal operations as allowed by environmental waivers.

# Step D

- 1. Low load situations should allow removing units from service resulting in a reduction in associated station service. An attempt should be made to accomplish as much reduction as possible.
- 2. Review plans for orderly shutdown of units.

# Step E

Proceed with orderly shutdown of units as fuel is exhausted.

I. Public Affairs

Upon the declaration of a long-term energy emergency, the Corporate Planning Division Public Information Officer will be responsible for the following actions:

# Step A

- 1. Communicate with Utility and Municipal employees.
  - a. Issue news release to the media. It will explain why the fuel shortage has occurred, communicate actions Lakeland Electric is taking to deal with the problem and will provide specific conservation information to customers.
  - b. Provide daily briefings to media on status of emergency.
  - c. Promote load conservation by the public via advertisements that will provide customers with specific information on how to conserve electricity.

# Step B

- 1. Communicate with Utility and Municipal employees.
  - a. Issue Newsletter bulleting that will update employees on actions taken to date, the results and that communicates details in Step B.
- 2. Communicate with public and news media.
  - a. Issue news statement about the continued downward trend in fuel supply. Statement will also explain Utility actions to solve the problem and will communicate conservation information as outlined in this Step.
  - b. Continue advertisements that provide customers with specific information on how to conserve electricity.

# Step C

- 1. Communicate with Utility and Municipal employees.
  - a. Issue Newsletter bulleting to communicate details of Step C. Continue hotline.
- 2. Communicate with public and news media.
  - a. Issue news statement about the continued downward trend in fuel supply as outlined in this Step, communicate conservation information and steps Utility is taking to solve the problem.

b. Continue advertising that communicates conservation information listed in this Step.

# Step D

- 1. Communicate with Utility and Municipal employees.
  - a. Issue news statement about the continued downward trend in fuel supply and need to conserve. As outlined in this Step, announce that firm-load customers will experience rotating blackouts, why, and what the Utility is doing to solve this problem.
  - b. In addition to conservation information, advertising will also explain why rotating blackouts are occurring. Ads will point out that the outages are being distributed evenly among all customers, except for hospitals, fire, and police, etc.

# Step E

- 1. Communicate with Utility and Municipal employees.
  - a. Issue Newsletter bulleting that communicates details in Step E.
- 2. Communicate with public and news medial
- Issue news statement to explain the continued downward trend in fuel supply. Communicate Utility actions as outlined in this Step, and the need for customer conservation.
  - a. Continue advertising that explains why rotating blackouts are occurring. Continue conservation ads.

# J. System Operation

Upon the declaration of a long-term energy emergency, the Engineering and Operations Division will be responsible for the following actions:

# Step A

- 1. Provide the Energy Emergency Coordinator with a short-term demand and energy forecast during the emergency.
- Run the generation modeling program and provide the amount of each type of fuel to be used to the Fuels Manager. The estimated fuel consumption should be on a daily basis for the first 30 days and then on a weekly basis for up to 75 days. Update the estimate as required.
- Utilize Load Control Increase cycle times of individually controlled items to 30 minutes/hour cycled every hour in order to further reduce generation peaks, shoulder loads and conserve KWH use.

- 4. Discontinue non-firm sales to utilities not participating in the FRCC Long-term Energy Emergency Plan.
- 5. Discontinue sales of Economy Interchange from units whose fuel is in short supply.
- 6. Review Maintenance Schedule to optimize obtainable fuels.

# Step B

1. Modify unit dispatch philosophy to load units with obtainable fuels (other than #2 oil) first, and then load units which burn the fuel in short supply.

# Step C

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- 1. Implement plans to insure the orderly shutdown of all units burning the fuel in short supply in the event fuels is exhausted.
- 2. Implement plans to insure power availability to all Power Plants and fuel handling facilities.
- 3. Direct Load Control Continue as Step D.

#### NOTES ENTITY CONTACTS NAME TITLE 24 Hour Office 850-413-9900 State Warning Point DCA Division of 850-413-9910 Emergency Emergency 850-413-9911 Contact Management Fax 850-488-7841 Florida Regional Office 813-877-5301 Ken Wiley General Manager Fax 813-289-5646 **Coordinating Council** Home 813-831-0280 Mobile 813-690-8344 Email kwiley@frcc.com Florida Regional Office 813-289-5644 **Director of Reliability** Linda Brousseau Coordinating Council Fax 813-289-5646 Home 727-593-0796 Mobile 727-415-7695 Email lbrousse@frcc.com Florida Power and Office 305-422-5246 Marty Mennes Chair FRCC Operating Fax 305-422-5022 Committee Light 727-384-7819 Florida Power Chuck Harper State Capacity emergency Office Corporation 727-284-7865 Coordinator Fax 727-584-4906 Home 727-460-4426 Mobile Email charles.j.harper@fpc.com Office 941-533-1161 Polk county Polk County Administrator 941-533-1161 Polk County Commission, Polk County Office Chairman 904-488-2986 Dept. of Environmental State of Florida Office Regulation Office 941-984-1375 Polk City Mayor Florida Public Service Office 850-413-6696 Emergency Coordinator David Crum Commission Fax 850-413-6697 Home 850-668-9350 Pager 800-226-7243 ID# 2742004 Email dcrum@psc.state.fl.us

# ENERGY EMERGENCY CONTACT LIST

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# SEMINOLE ELECTRIC COOPERATIVE, INC.

# AND

# MEMBER COOPERATIVES

# LONG-TERM FUEL EMERGENCY PLAN

# REVISED

# APRIL 2003

# SEMINOLE ELECTRIC COOPERATIVE, INC. AND MEMBER COOPERATIVES LONG-TERM EMERGENCY PLAN

# **PREFACE**

Fuel shortages caused by factors beyond those recognized as prudent planning and operating practices may result in a long-term electrical energy deficiency. The following plan was developed to provide a procedure for responding to a fuel supply shortage on the Seminole System or in the event of a Florida Fuel Supply Emergency.

To this end, the procedures described herein will first, establish steps to be taken by Seminole Electric Cooperative, Inc. and its member cooperatives (listed in Appendix A) to ascertain the existence of a fuel emergency and to respond to it, and second, establish steps to be taken by Seminole Electric Cooperative, Inc. and its member cooperatives in an effort to cooperate fully with the Florida Reliability Coordinating Council Fuel Supply Shortage Plan in the event of a Florida Fuel Supply Emergency.

Seminole and its member cooperatives have a unique relationship which must be recognized in the development and implementation of this emergency plan. Seminole Electric Cooperative, Inc., as the power supplier, has the responsibility of fuel supply, power generation, and wholesale purchases, and the member cooperatives have all responsibility for serving retail customers. In subscribing to this plan, Seminole and its members are committed to a joint coordinated implementation program. A list of the persons responsible for individual participant action under this plan is attached as Appendix A.

### PLAN REQUIREMENT

Pursuant to Florida Statute 25-6.018S, each Florida electric untility must have on file with the Florida Public Services Commission, a Long-Term Energy Emergency Plan. This plan is to establish a systematic and effective means of anticipating, assessing, and responding to a long-term energy caused by a fuel supply shortage.

This plan was required on January 31,1999 and is to be reviewed every three (3) years. If Plan does not need revising, Seminole must file a letter stating that the required review has been conducted and that the Plan continues to be adequate. If a revised Plan is necessary, such a Plan shall be submitted for FPSC approval and informational filing with Florida Reliability Coordination Council.

# SEMINOLE ELECTRIC COOPERATIVE, INC. AND MEMBER COOPERATIVES

# LONG-TERM FUEL EMERGENCY PLAN

# I. <u>PURPOSE</u>

The purpose of this plan is to provide an effective procedure for responding to a fuel supply shortage on the Seminole System or in the event of a Florida Fuel Supply Emergency.

# II FACILITIES

Coal is the primary fuel presently utilized by Seminole Electric Cooperative and its member cooperatives. Nuclear fuel is utilized in Crystal River Unit No. 3 of which Seminole owns a 1.6994 percent share. However, as nuclear fuel is Florida Power Corporation's responsibility and is not included in this plan. Natural gas is an important fuel source for Seminole's gas fired station and various Purchased Power Agreement facilities. Coal and natural oil will be covered in this Plan. Fuel Oil is a back up fuel source which will be reviewed in this plan.

In addition to Coal, Seminole uses natural gas as a fuel source for its Payne Creek Facility and various Purchase Power Agreement facilities. These facilities also use fuel oil as a backup fuel when natural gas is not available.

All three of these fuels; coal, natural gas and fuel oil will be addressed in this plan.

# III. DEFINITION

A fuel supply shortage is deemed an energy emergency whenever anticipated fuel stocks are not judged sufficient to provide for existing energy obligations over an extended period of time.

# IV. FUEL INVENTORY PLAN - COAL and PETROLEUM COKE

Coal is the primary fuel presently utilized by Seminole Electric Cooperative and its member cooperatives at the Seminole Generating Station at Palatka, Florida. Coal is sourced from various coal regions in Illinois, Indiana, Kentucky, Virginia, and Pennsylvania. The facility is

permitted to utilize up to 30% of its feed stock in the form of petroleum coke. The following plan references the total coal and petroleum coke inventory located at the plant. The facilities transportation of coal and petroleum coke is currently served by the CSX Railroad.

For the purpose of this plan, the available fuel inventory will be considered as the fuel on hand. However, fuel in transit which is known to be unaffected by causes related to the fuel shortage will be considered in the assessment of any particular situation. The equivalent of an additional 3-6 days burn is normally in transit.

# Normal Operating Inventory

The normal operating fuel inventory range will be 35-55 days burn at the Seminole plant.

# Alternative Action Level

The fuel inventory level at which alternative actions must be considered is 30 days burn and declining. At this level, measures must be taken first to assess the situation duration and secondly to facilitate existing transportation of fuel, locate alternate fuel or energy sources, and/or implement utility and customer conservation.

# Emergency Inventory Level

The fuel inventory level at which an emergency condition is considered to exist between 25 and 20 days burn and declining. At this level, more substantial steps must be taken to significantly reduce fuel consumption in order that a fuel supply at the generating plant site may be continuous.

# Critical Inventory Level

Below the 20 day level of inventory, all available methods must be used to reduce fuel consumption, including curtailment of firm load.

# V. FUEL INVENTORY PLAN - FUEL OIL

Fuel oil is used for several reasons by Seminole Electric Cooperative and its member cooperatives. No.2 diesel fuel oil is a flame stabilizing fuel and startup fuel presently utilized at the Seminole Generating Station at Palatka, Florida. For the Payne Creek facility and several facilities under Purchase Power Agreements, fuel oil is a backup fuel that can be utilized in an emergency when the primary fuel - natural gas is interrupted.

> For the purpose of this plan, the available fuel oil inventory will be considered as the fuel on hand. However, fuel in transit which is known to be unaffected by causes related to the fuel shortage will be considered in the assessment of any particular situation.

#### Normal Operating Inventory

The normal operating fuel inventory range will be 24 to 48 hours burn for full load operation at the gas fired generating facilities, that have dual pipeline access or have firm natural gas transportation capacity to meet partial plant operations. For facilities that have only one pipeline access and no firm natural gas transportation capacity, the fuel oil inventory range will be 48 to 72 hours burn for full load operation.

# Alternative Action Level

The fuel oil inventory level at which alternative actions must be considered is 24 hour burn level and declining. At this level, measures must be taken first to assess the situation duration and secondly to facilitate existing transportation of fuel, locate alternate fuel or energy sources, and/or implement utility and customer conservation.

# Emergency Inventory Level

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The fuel inventory level at which an emergency condition is considered to exist between 24 and 18 hour burn level and declining. At this level, more substantial steps must be taken to significantly reduce fuel consumption in order to preserve the available fuel oil supply at the generating plant site for further emergency operation.

# Critical Inventory Level

Below the 18 hour burn level of inventory, all available methods must be used to reduce fuel consumption, including curtailment of firm load.

# VI. NATURAL GAS STORAGE PLAN

Natural gas is the primary fuel type utilized by Seminole Electric Cooperative and its member cooperatives for the Payne Creek facility and several facilities under purchase power agreements. While fuel oil is provided at several sites as a backup fuel, certain situations can be protected by temporarily storing natural gas in the existing pipelines, if storage capacity is available. For the purpose of this plan, the available natural gas storage capability is on a case by case situation. It is Seminole's plan to facilitate the storage of natural gas prior to a Gulf of Mexico Hurricane to facilitate re-supply of natural gas interrupted during such storms. No specific levels can be determined or provided in this plan.

# VII. FORECASTING EXTENT OF FUEL SHORTAGE

In the event of a slowdown or interruption in the fuel supply (coal, petroleum coke, fuel oil or natural gas), the Director of Fuel Supply will forecast the extent of the shortage. If, as a result of this determination, the fuel inventory situation meets the definition of an energy emergency as described in Section II, the Director of Fuel Supply will report such findings to the Director of System Operations and Seminole's senior management for further action.

Proceed with Step VIII.

# VIII. ALTERNATE FUEL SOURCES

Seminole's Executive Vice President and General Manager shall authorize the Director of Fuel Supply to investigate potential alternate sources of similar fuels. The Director of Fuel Supply will communicate directly with the Director of System Operations to coordinate his findings with any alternate sources of purchased power.

In the event of the necessity to affect physical transfers of fuel stocks from Seminole to other utilities or vice versa, it is the intent of Seminole and its member cooperatives that the supplying party will be made whole in terms of all of the supplying utility's costs of replacing such fuel. These replacement costs will include, but are not limited to, the following components.

- 1. Fuel Market
- 2. Direct transportation
- 3. Indirect transportation
- 4. Sampling
- 5. Insurance
- 6. Applicable internal overhead

#### IX. <u>PURCHASED POWER</u>

The Director of Operations shall authorize the Chief System Coordinator to investigate potential sources of supplemental purchased power. The Operations Department will communicate directly with the Fuel Supply Department to compare the alternative energy sources and perform an

> economic evaluation of those alternatives. The Operations Department will determine which, if any, energy source is feasible and proceed to carry out that alternative. If the alternative fuel and energy sources are not sufficient to alleviate the energy emergency, the Director of System Operations will so notify the Executive Vice President and General Manager. Accompanying this notification will be an evaluation of the potential cumulative effect of all conservation measures described herein and a recommendation as to which measures should be carried out immediately to aid in alleviating the energy emergency.

> In the event of the necessity to affect the purchase of energy from other utilities or the sale of energy to other utilities during a fuel shortage situation, it is the intent of Seminole and its member cooperatives that the supplier of such energy shall be made whole in terms of all costs associated with the transaction.

Proceed with Step X

# X. EXTERNAL NOTIFICATION

In the event that alternative fuel and energy sources and recommended conservation measures are judged insufficient to alleviate the energy emergency, and after consultation with the Vice President, Energy Delivery, and the Executive Vice President General Manager and the Member System Managers, the Director of System Operations will notify the Chairman of the FRCC Reliability Assessment Group. Such notification will be in accordance with Section V of the FRCC Florida Electrical Emergency Contingency Plan, Fuel Supply Shortage Element for the purpose of requesting initiation of a Fuel Supply Alert.

In addition, the Director of Supply Operations will immediately initiate actions as described in the following section entitled "Chronology of Conservation Measures."

# XI.. CHRONOLOGY OF CONSERVATION MEASURES

The Director of System Operations, after consultation with the Vice President, Energy Delivery, and the Executive Vice President and General Manager, will work with the Member System Managers to affect the necessary steps to implement the following conservation measures to the extent that they are feasible, productive, and do not subject Seminole or its Member Cooperatives to significant liability.

Reduction of Power Usage at Utility-Owned Facilities Public Appeals to Conserve Energy

> Optimization of Fuel in Short Supply Direct Customer Appeals Voltage Reductions Load Management Notice to Local Governments by Member Cooperatives Relaxation of Environmental Constraints

The chronology and trigger points for each of these conservation measures are described as follows:

# Step A Normal Operating Level

If the Director of Fuel Supply determines that the fuel inventory levels are projected to decline to below normal burn levels and are anticipated to continue an uncontrolled decline, he shall immediately inform the Director of System Operations and, upon consultation with the Vice President, Energy Delivery and Vice President Energy Production, it will be the responsibility of the Director of System Operations to work with the Member System Managers to effect the following steps:

1. Reduction of Power Usage at Utility-Owned Facilities (Seminole and Member Cooperatives).

> Energy use, which is not necessary for production or minimum safety standards, will be reduced to minimum practical levels. These reductions shall include, but not be limited to indoor lighting, outdoor lighting, air conditioning set no lower than 80°F and heating set no higher than 65°F.

2. Public Appeals (Member Cooperatives)

All on-going advertising by Member Cooperatives, including billing stuffers and member meeting programs, through the local media will encourage conservation.

All Member Cooperatives will make public appeals through the local media for a general conservation effort.

NOTE: In the event of a statewide energy emergency, which has been officially designated as such by the Governor of the State of Florida, all public appeals

may be made uniformly under the direction of the Florida Reliability Coordinating Council.

3. Optimization of Fuel in Short Supply (Seminole)

The Director of Operations will authorize the Chief System Coordinator to take necessary actions to optimize the fuel in short supply. It is understood that this may require operation of the generation system at less than optimum conditions with regard to cost. This measure may require suspension of normal economic dispatch, utilization of offspecification fuel, supplemental firing of igniter fuels, variations in normal unit commitments, and energy purchases not normally considered prudent for reasons of cost.

4. Direct Customer Appeals (Member Cooperatives)

Direct appeals will be made by Member Cooperatives to large industrial and commercial customers to reduce consumption and fully utilize all customer-owned generation equipment which uses fuels not in short supply. Such appeals shall be disseminated by each individual member cooperative.

5. Voltage Reductions (Member Cooperatives)

No action required at this time.

6. Load Management (Member Cooperatives)

No action required at this time.

7. Notice to Local Government (Member Cooperatives)

Member cooperatives will inform local government officials of the energy emergency situation and request that steps be taken to reduce energy consumption used for street lighting, outdoor sporting events, advertising, and other general and specific functions. 8. Relaxation of Environmental Constraints (Seminole)

The Director of System Operations will request that Environmental Affairs begin investigations into possible emergency permit revisions which would significantly increase the efficiency of operation of any generating unit and/or permit the utilization of available off-specification fuel.

# Step B Alternative Action Level

If the Director of Fuel Supply determines that the fuel inventory levels are projected to decline to alternative action level and are anticipated to continue an uncontrolled decline, he shall immediately inform the Director of System Operations and, upon consultation with the Vice President, Energy Delivery and Vice President Energy Production, and the Executive Vice President and General Manager, it will be the responsibility of the Director of System Operations to work with the member systems to effect the following steps:

- 1. Continue all previous steps (Seminole and Member Cooperatives).
- 2. Conservation at Utility-Owned Facilities (Seminole and Member Cooperatives).

Request further reductions in energy use. Air conditioning will be set no lower than 85° F. Heating will be set no higher than 60° F. Non-essential hot water heating will be discontinued.

3. Public Appeals (Member Cooperatives)

The public shall be apprised of the energy emergency through the local media. Requests for conservation will ask for a 25% reduction in energy consumption. These appeals should include information on the possibility of load curtailment if conservation measures do not alleviate the energy emergency. Request that all thermostats be set according to guidelines established in Item 2 above.

NOTE: In the event of a statewide emergency which has been officially designated as such by the Governor of the State of

> Florida, all public appeals may be made uniformly under the direction of the Florida Reliability Coordinating Council.

4. Optimization of Fuel in Short Supply (Seminole)

The Director of Operations will direct the Chief System Coordinator to take any further action toward optimization of the fuel in short supply. At the discretion of the Director of Operations, the Chief System Coordinator may discontinue any consideration of cost in system dispatch actions.

5. Direct Customer Appeals (Member Cooperatives)

Further and stronger appeals to large industrial and commercial customers for conservation and full utilization of customer-owned generation will be made. These appeals should include information on the possibility of load curtailment if conservation measures do not alleviate the energy emergency. Ask for a 25% reduction in energy consumption.

6. Voltage Reductions (Member Cooperatives)

To the extent practical, distribution voltage will be reduced in an effort to reduce demand and energy by customers. The following criteria shall be considered by the Member Cooperative Manager in the implementation of this measure:

- A. A suitable means of controlling voltage is available to the cooperative.
- B. The extent of the voltage reduction does not, in the opinion of the Cooperative Manager, subject customer or cooperative equipment to damage or present a significant safety hazard.
- C. The voltage reduction is not counterproductive in reducing energy and/or

demand.

- D. The acceptable percent voltage reduction will be left to the judgement of the Member Manager.
- 7. Load Management (Member Cooperatives)

The use of Load Management will be maximized to reduce customer demand during peak periods.

8. Notice to Local Government (Member Cooperatives)

Member Cooperatives will appeal to local government officials for action which would mandate restrictions on energy consumption for street lighting, outdoor sporting events, and other outdoor events, advertising, and other general and specific functions.

9. Relaxation of Environmental Constraints (Seminole)

Based upon the results of the Environmental Section's investigation into relaxed environmental constraints, the Director of System Operations will recommend a plan of action to the Vice President, who will initiate action to notify appropriate agencies and/or obtain necessary variances.

# Step C Emergency Inventory Level

If the Director of Fuel Supply determines that the fuel inventory levels are projected to decline to emergency levels and are anticipated to continue an uncontrolled decline, he will immediately inform the Director of System Operations and, upon consultation with the Vice President, Energy Delivery and Vice President, Energy Production and Executive Vice President and General Manager, it will be the responsibility of the Director of System Operations to work with the Member System Managers to effect the following steps:

1. Continue all previous steps (Seminole and Member Cooperatives)

2. Conservation at Utility-Owned Facilities (Seminole and Member Cooperatives)

Reduce energy consumption to minimum possible levels. Set air conditioning to highest manageable levels and heating to lower manageable levels. Reduce lighting levels to minimum. Reduce office hours and occupied work space.

3. Public Appeals (Member Cooperatives)

Warn public of possibility of upcoming power curtailments. Explain procedures to be used during rotating blackouts. Appeal to all customers for 50% reduction of energy consumption. Ask that air conditioning and heating use be curtailed to minimum levels.

- NOTE: In the event of a statewide energy emergency, which has been designated a such by the Governor of the State of Florida, all public appeals may be made under the direction of the Florida Reliability Coordinating Council.
- 4. Optimization of Fuel in Short Supply (Seminole)

Suspend all economic dispatch considerations and fully utilize available alternatives fuels.

5. Direct Customer Appeals (Member Cooperatives)

Appeal for a 50% reduction in energy consumption by all large industrial and commercial customers. Warn customers of possibility of upcoming power curtailments and explain procedures to be used during rotating blackouts.

6. Voltage Reductions (Member Cooperatives)

Continue efforts.

7. Load Management (Member Cooperatives)

Continue efforts.

8. Notice to Local Government (Member Cooperatives)

Continue efforts to reduce non-essential energy usage through government mandate. Appeals should encourage partial shutdown of public institutions and other large facilities as judged feasible.

9. Relax Environmental Constraints (Seminole)

Continue efforts.

NOTE: In addition to the above measures, the Director of System Operations will take the appropriate steps to request the initiation of a Fuel Supply Alert as prescribed in Section V of the FRCC Florida Electrical Emergency Contingency Plan, Fuel Supply Shortage Element, if such an alert is not already in effect.

# Step D Critical Inventory Level

If the Director of Fuel Supply determines that the fuel inventory levels have dropped below critical leveland are anticipated to continue an uncontrolled decline, he will immediately inform the Director of System Operations, and upon consultation with the Vice President, Energy Delivery and Vice President, Energy Production, General Manager and Executive Vice President, and all Member System Manager, it will be the responsibility of the Director of System Operations to work with the Member Systems to effect the following steps:

- 1. Continue all previous steps (Seminole and Member Cooperatives)
- 2. Determine Required Extent of Curtailment (Seminole)

Director of Operations will consult with the Director of Fuel Supply, Chief System Coordinator, and other to determine the most prudent level of continued service.

> Begin manually initiated rotating blackouts of feeders to achieve the desired energy reduction. Exclude, if possible, only those facilities considered as essential services. A guideline for determination of which facilities should be considered as essential services is attached at Appendix B.

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# APPENDIX A

It is the intent of Seminole Electric Cooperative, Inc. and its member cooperatives to cooperate fully with the FRCC Florida Electrical Emergency Contingency Plan, Fuel Supply Shortage Element, in the event that activities under this plan are triggered by an energy emergency on the system of any participating utility. In such cases, the individual steps outlined in the SECI/Member Cooperative Plan will be implemented under the direction of the FRCC through the SECI Director of Operations. The persons responsible for the actions of individual participants in this plan are listed below:

Mr. Ed Ricketson	Central Florida Electric Cooperative, Inc.
Mr. Wm. C. Phillips	Clay Electric Cooperative, Inc.
Mr. Tommy Todd	Glades Electric Cooperative, Inc.
Ms. Pam May	Lee County Electric Cooperative, Inc.
Mr. Wm. T. Mulcay, Jr.	Peace River Electric Cooperative, Inc.
Mr. James P. Duncan	Sumter Electric Cooperative, Inc.
Mr. Jerry Martin	Suwannee Valley Electric Cooperative, Inc.
Mr. Gary Stallons	Talquin Electric Cooperative, Inc.
Mr. Ronald Bass	Tri-County Electric Cooperative, Inc.
Mr. Billy E. Brown	Withlacoochee River Electric Cooperative, Inc.

# APPENDIX B

# GUIDELINE FOR DEFINING ESSENTIAL SERVICES

Energy usage by certain consumers which is essential to the health, safety, or welfare of the community should be considered and, <u>insofar as the situation</u> <u>makes it practical</u>, their special requirements should be allowed to continue. Such continuation applies only to energy requirements for essential services and not to the entire customer service.

Although not an exhaustive list, the following types of services may be included in this category:

- A. Hospitals and similar medical services.
- B. Police and fire protection.
- C. Operation, guidance control, and navigation services for public transportation and shipping, including rail, mass transit, licensed commercial air transportation, and other forms of transportation.
- D. Communication services, including telephone and telegraph systems, television, and radio broadcasts.
- E. Water supply and sanitation services, including waterworks, pumping, and sewage disposal activities which cannot be reduced without seriously affecting public health.
- F. Central cold storage and mass distribution services required for the preservation of medical and/or food supplies essential to the community.
- G. Federal activities essential for national defense and state and local activities essential for providing emergency services.
- H. Operations essential for the production, refining, transmission, or distribution of fuel required to provide essential services to the community.
- I. Essential construction, operation, and maintenance activities for production and supply of energy required to provide essential services to the community.

Although customers providing these types of services may be given special

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consideration from the curtailment provisions of this plan, they should participate in all energy reductions involving non-essential services and should be encouraged to install emergency generation equipment, if continuity of service is essential. In case of customers supplied from multiple sources, only one source will typically be given special consideration.

Although not within the definition of essential services, the special situation of life sustaining medical equipment may be considered. Life sustaining medical equipment is defined as equipment:

- which is necessary to sustain the life of the user,
- which has been prescribed by the user's physician, and
- where any interruption of electricity to such equipment poses an <u>immediate</u> threat to the user.

Customers in this category should fully understand the need for sufficient and proper backup power sources. In addition, during emergency conditions, cooperation, and coordination should be provided to community service agencies and other governmental units which make special provisions for the needs of those with life sustaining medical equipment.

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# CITY OF TALLAHASSEE

# FUEL EMERGENCY PLAN

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# FUEL EMERGENCY PLAN CITY OF TALLAHASSEE ELECTRIC UTILITY

# LONG TERM EMERGENCY PLAN FUEL SUPPLY ELEMENT CONTENTS

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# SYSTEM DESCRIPTION

The City owns, operates and maintains an electric generation, transmission and distribution system that supplies power to approximately 97,300 customers.

The City's major generation facilities are located at two different sites. Sam O. Purdom Generating Station (Purdom Plant) located at St. Marks, Florida has approximately 50 MW of steam generation, 235 MW of combined cycle and 20 MW of combustion turbine generation capacity. Arvah B. Hopkins Generating Station (Hopkins Plant) located 10 miles west of Tallahassee, Florida, has approximately 325 MW of steam generation and 40 MW of combustion turbine capability.

All of the steam units can be fired with either natural gas, low sulfur No.6 fuel oil or a mixture of the two fuels. The combined cycle unit at Purdom (Purdom Unit 8) is normally fueled with natural gas and can be switched to low sulfur No. 2 fuel oil. Due to the size of the physical inventory storage capacity, Purdom Unit 8 can run at full load on fuel oil for a maximum of 32 consecutive hours. The combustion turbines can be fired with either natural gas or No.2 fuel oil.

Further, the City's C. H. Corn Hydroelectric Plant at Jackson Bluff Dam located 20 miles west of Tallahassee with a peak capability of 11 MW. On average, it has a dependable capacity of approximately 5 MW.

Currently, the City can purchase No. 2 and No. 6 fuel oil utilizing pre-established agreements with three (3) suppliers. There is not a limit on the number of such active agreements and they are identical with all vendors

Typically, the City's No. 6 fuel oil is shipped by barge and received at the Purdom Generating Station located on the St. Marks River. Transfer of No. 6 fuel oil from the Purdom Generating Station to the Hopkins Generating Station is made by truck. Further, No. 6 fuel oil is occasionally delivered by truck directly to the Hopkins Plant. No. 2 fuel oil is typically delivered by truck to both generating stations.

In the middle 1990's the fuel oil storage facilities at both generating stations underwent substantial upgrades to bring them in compliance with the new Florida Department of Environmental Protection rules. The upgrades included cleaning, inspection, and repair of all of the bulk fuel oil storage tanks at the generating stations, installation of impervious secondary containment for all of the No. 2 fuel oil tanks, and upgrading of the fuel transfer facilities to incorporate secondary containment. The fuel oil storage tanks are surrounded by containment of adequate capacity to contain fuel should the tanks rupture.

At the Purdom Station, fuel oil storage facilities consist of three above-ground tanks with the following nominal capacities: (i) 80,000 barrels and (ii) 20,000 barrels; both of which are utilized for No. 6 fuel oil; and (iii) 10,000 barrels utilized for No. 2 fuel oil. At the Hopkins Station, fuel oil storage facilities consist of four above-ground tanks: a 180,000-barrel tank and a

55,000-barrel tank utilized for No. 6 fuel oil and two 10,000-barrel capacity tanks utilized for No. 2 fuel oil. The City maintains an oil inventory sufficient to supply the City's operational needs for approximately an eighteen (18) day period under peak load demands.

The City receives gas supply for its Electric System through two delivery points with Florida Gas Transmission Company ("FGT"): one at the Arvah B. Hopkins Generating Station and one at the Sam O. Purdom Generating Station.

With the implementation of the FERC'S Restructuring Order No. 636 by FGT on November 1, 1993, the City consolidated into one agreement all previous arrangements for firm transportation service on the FGT system. Additionally, agreements for interruptible transportation were renewed while certain contracts for priority interruptible services were phased-out. Further, the City had contracted for additional quantities of firm transportation on FGT'S Phase III and Phase V facility expansion projects, which have been in service since March 1, 1995 and April 1, 2002 respectively.

Recognizing the opportunity for improving operational efficiencies and for enhancing economic benefits by consolidating activities of related resources of its Electric and Gas Utilities, the City has implemented a number of organizational and procedural changes which includes aggregating all gas requirement programs for both utilities. This aggregation of requirements has enabled the City to better optimize resource utilization and reduce its overall gas transportation capacity requirements. Further, restructuring of the natural gas industry has allowed the City to trade seasonal excess transportation capacity and participate routinely in the secondary gas supply and transportation markets. Wholesale purchases and sales of natural gas are performed daily on the open market by the City's Wholesale Energy Services staff.

It should be noted that additional transportation may be required, from time to time by the City and purchased on a short-term or interim-term basis at the open market. Also, FGT is anticipated to continue conducting open season firm solicitations on contracting for additional transportation. Further, the City has executed Interruptible Transportation Agreements with FGT for transporting gas economically on an as needed and as available basis subject to interruption.

In order to assure the gas supply needs for its combined Electric and Gas Utility systems, the City has entered into supply contracts with various producers/suppliers for well-head supply purchases of natural gas. To provide as much flexibility and diversity to the City as possible, these contracts contain varying terms and pricing provisions. The contracts provide for the sales, purchase and exchange of gas supply, gas transportation balancing and other services.

The City, has not encountered, nor does it anticipate any difficulties in securing sufficient gas at competitive market prices in the future.

The City's existing bulk power transmission system includes approximately 185 circuit miles of transmission lines that are operated at 230 kV, 115 kV and 69 kV voltage levels. The 115 kV transmission network forms a loop around the City's thirteen substations located at various sites
which transform the transmission voltage of 115 kV to the distribution voltage of 12.5 kV.

The City has one 230 kV, two 115 kV and two 69 kV interconnections with Florida Power Corporation. Also another 230 kV transmission line from the City's Hopkins Plant to Georgia's Power Company's South Bainbridge Station interconnects the City's electric system with that of Southern Company's.

# UTILITY PLAN

#### FUEL INVENTORY PLAN AND FUEL SHORTAGE FORECASTING:

The City of Tallahassee's primary fuel for its steam generators is natural gas. At present, longterm contracts provide natural gas on firm basis for approximately twenty percent (20%) of the City's daily average fuel requirements. Usually, additional natural gas supply of approximately 20% to 30% are covered under short-term (up to one year) physical and financial trade transactions. Further, the City maintains sufficient low sulfur fuel oil inventory to continue operation of its generating facilities for at least 18 days to meet the City's requirements, in the event gas supply is curtailed for an indefinite period.

The availability of natural gas and fuel oil, together with the inventory of fuel oil and power requirements of the City are evaluated monthly and monitored on a daily basis. This evaluation and monitoring will be more frequent and more extensive if an irregularity is noticed in the fuel supply. The seriousness and extent of actual and potential disruptions of fuel supply will be addressed and handled accordingly by the City officials.

# NOTIFICATION TO REGIONAL GOVERNMENT OFFICIALS AND NEWS MEDIA:

As soon as the reality of a potential long interruption in fuel supply is determined by City officials, it will be reported to the City Commissioners, other authorities and the news media. The general public will be informed through the Communications Office of the City of Tallahassee, local television, radio stations and newspapers and will be urged to take the following measures:

- 1. Reduce outside and inside lighting to an absolute minimum.
- 2. Lower heating and cooling loads. To heat homes, use means other than electricity, such as wood stoves, oil and gas heaters, etc.
- 3. Lower water heater thermostats.
- 4. Reduce usage of electrical appliances.
- 5. Reduce water consumption. This will reduce the City's water pumping load.

# APPEAL TO LARGE COMMERCIAL CUSTOMERS:

The large retail customers will be informed of the emergency through the City's Utility Account Representatives and the City's Public Information Office and urged to take the following steps to reduce electric consumption:

- 1. Reduce lighting including lighting inside their establishments and outside lighting for decorative purposes.
- 2. Reduce heating and cooling load.
- 3. If possible, use other means to supplement their power needs; e.g. diesel generator sets (customer shall have proper isolating equipment installed to avoid feedback into the City's system).

# **REDUCTION OF AUXILIARY POWER USAGE:**

The auxiliary power usage for the City's generating units is approximately 7.5% of the total power generation. In case of emergency, the following steps will be taken to reduce our auxiliary electrical consumption.

1. Lighting absolute inside the plants will be reduced to a minimum.

- 2. Outside lighting in areas like treatment ponds, cooling towers, tank farms and switchyards will be reduced to a minimum.
- 3. Thermostats in office areas will be adjusted to minimize the heating (cooling) load.
- 4. Shut down all nonessential fans, pumps, etc.

# **OPTIMUM USAGE OF GENERATING EQUIPMENT:**

The City utilizes economic dispatch methodologies operate its generating facilities. Economic dispatching ensures the best possible blend of fuel amount operation in recognition of different heat rates. The City will continue to operate generating facilities in a consistently efficient manner.

# **INTERRUPTIBLE LOADS:**

In the event a fuel shortage is declared, the City interruptible class customers would be notified that their loads will be interrupted.

# **ROTATING INTERRUPTION:**

The City's distribution system is capable of rotating interruption of electrical services by remote control. Upon declaration of a fuel shortage, the City may utilize rotating interruption to equalize the use of available energy, while maintaining adequate underfrequency load shedding capability.

When rotating interruptions, customers and communities with special needs that are essential to health, safety and welfare shall be considered and their special needs addressed. The City has established a coordinated underfrequency load shedding plan and rotating circuitry plan which takes into consideration the following community needs:

- 1. Hospitals, nursing homes and similar medical facilities;
- 2. Police and fire stations;
- 3. Operation, guidance control and navigation for public transportation, commercial air transportation and other forms of transportation;
- 4. Communication services, including telephone and telegraph systems, television and radio stations;
- 5. Water supply and sanitation services, including waterworks, pumping and sewage disposal

activities which cannot be reduced without seriously affecting public health;

- 6. Cold storage facilities for preservation of medical and/or food supplies essential to the community;
- 7. Federal activities essential for national defense and state and local activities service, and providing emergency services and
- 8. Fuel transmission and distribution facilities required to provide essential services to the community.

The City's Underfrequency Load Shedding Plans are standard operating procedures, copies of which can be found in the City Electric Power Supply Emergency Preparedness Manual.

# **VOLTAGE REDUCTION:**

The City has capability to reduce supply voltage levels. In case of an emergency, the voltage level can be lower manually, if dire need arises, to a point within acceptable limits of electrical appliances.

# **ENERGY INTERCHANGE:**

The City has interchange contracts with every Florida utility, the Southern Company and in excess of 20 independent power marketing entities for emergency, scheduled, economy interchange and negotiated transactions. Specifically, the tie-line with Southern Company enables the City to purchase power from out of state utilities.

The City will utilize all of its resources to mitigate the impact of an emergency on its customers and other meighboring utilities in Florida through the interchange of energy.

Actual sharing of fuel oil with other utilities would be highly impractical, due to location of the City's generation and fuel oil storage facilities with respect to other utilities. In cases of absolute necessity, however, fuel sharing with other Florida utilities will be considered. Further, natural gas supplies may be shared among other utilities, during emergencies.

# **FUEL SHORTAGE**

# FORECASTING THE EXTENT OF FUEL SHORTAGE:

Upon declaration of a fuel shortage by City officials, the City will:

- 1. Monitor and forecast short term City load;
- 2. Monitor and forecast the fuel inventory; and
- Determine unit commitment and forecast fuel consumption on a daily basis for the next 30 days and on a weekly basis for the next 60 days.

# **REIMBURSEMENT BY A UTILITY RECEIVING ENERGY OR FUEL:**

During the fuel shortage, the energy interchange with the other utilities will be made through existing agreements.

If a physical transfer of fuel should become necessary, due to some physical limitation of the electrical system, mutual agreement will be developed between the utilities involved. The original owner or procurer of the fuel will be fully reimbursable in terms of cost, quantity and quality of the fuel transferred, as soon as possible, after the emergency.

# **FUEL SUPPLY ALERT**

If the implementation of actions described in the Fuel Supply Shortage Element have been or are anticipated to be inadequate, the Chairman of the Florida Reliability Coordinating Council's (FRCC) Engineering Committee will be noticed of this impending emergency.

Upon declaration of a Fuel Supply Alert by the Florida Public Service Commission and after a request from the Chairman of Engineering Committee, the City will do the following:

- 1. Supply sufficient data to FRCC for verification of the threat of a fuel shortage;
- 2. Cooperate with FRCC"S Engineering Committee in determining if all measures to alleviate the emergency conditions have been exhausted, and
- 3. Honor FRCC"S Engineering Committee's recommendation of taking any additional measures.

# FUEL SUPPLY EMERGENCY

Following the designation of Fuel Supply Alert, the following will be implemented and the remaining days of fuel supply will be determined by FRCC.

Step A

- 1. Take measures to reduce the usage of electricity at City's owned facilities.
- 2. Implement conservation measures to minimize generation of electricity from the fuel in short supply. Make optimum usage of purchase energy, if available.
- 3. Discontinue all non-firm sales.
- 4. Request permission of the proper authorities to ease environmental and other regulations where such actions will be effective in increasing the supply of alternate fuels.
- 5. Employ all existing load management systems to reduce peaks and increase efficiency of generation.
- 6. The FRCC Executive Board, upon advice from the Engineering Committee, may request that the Governor of the State of Florida declare a Fuel Supply Emergency in Florida pursuant to Chapter 377.703, Florida Statutes or other appropriate statutory authority.
- Upon declaration of a Fuel Emergency by the Governor of the State of Florida, the City will take the following actions as deemed to be appropriate by the Engineering Committee.
  Step B
- 1. All previously implemented steps will be continued.
- 2. Make public appeals to all wholesale and retail customers to reduce their electrical consumption.
- 3. Request reduction in all outdoor lighting to a minimum level necessary for life and property protection, and elimination of all advertisement lighting except for the minimum required to indicate commercial facilities open after dark.
- 4. Substitute 75% of spinning reserve requirement by implementing lower underfrequency relay setting on distribution feeders.
- 5. Request proper legal authorization for proceeding to Steps C through E.

Step C

- 1. Continue all previously implemented steps.
- 2. Maximize usage of purchased energy, if available, so as to minimize the imbalance of energy supply among the participating utilities.
- 3. Request customers supplement their power requirements by using their own power generating equipment, if any. This equipment must be isolated from the City's system to avoid backfeed.
- 4. Replace remaining spinning reserve requirement by placing additional feeders on lower underfrequency relaying.

# Step D

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- 1. Continue all previously implemented steps.
- 2. Implement mandatory curtailment to the degree necessary to protect health, safety and welfare as invoked by proper legal authorities.

# Step E

- 1. Continue all previously implemented steps.
- 2. Utilize rotating interruption, including essential services, using load shedding procedure as necessary.
- 3. Should it become necessary in the Plan to bypass any of the steps and immediately proceed with more severe measures, the City will implement actions under the bypassed steps immediately.

# FLORIDA MUNICIPAL POWER AGENCY FUEL EMERGENCY PLAN

Florida Municipal Power Agency is a non-profit governmental action agency made of 29 municipalities. FMPA, under its All-Requirements Project, supplies all the energy requirements for the Cities of Ocala, Leesburg, Bushnell, Jacksonville Beach, Green Cove Springs, Clewiston, Vero Beach, Ft. Pierce, Key West, Starke, Havana, Newberry, Fort Meade, Lake Worth and the Kissimmee Utility Authority (KUA). In supplying this power, FMPA has several resources in its portfolio. These power resources include purchases from other utilities, FMPA generation and non-FMPA generation. (The terms "FMPA generation" and "Non-FMPA generation" do not refer to whether FMPA has an ownership interest in a particular power resource; instead these terms delineate between power resources under FMPA's operational control, FMPA generation.) The generating resources that FMPA controls are the certain generating units located at Vero Beach, Ft. Pierce, Key West, Lake Worth and KUA. The units, the MW capacity of each unit and the types of fuel available for each unit are listed on Attachment A. For non-FMPA generation units the Owner Operator is responsible for the fuel supply.

This fuel emergency plan is how FMPA anticipates handling different fuel emergencies for the FMPA generation while serving the electrical needs of the above-mentioned municipalities. There are two types of fuel that can be used in these generating units. The fuels are natural gas, and oil. Due to the oil embargo in the 70's and the gas pipeline rupture in 1998, FMPA is developing this plan to handle constraints on any of the fuels. This plan will be enacted if the State of Florida and/or FRCC declare a fuel emergency.

• Natural Gas Emergency Plan

When the natural gas pipeline is severely constrained, FGT (Florida Gas Transmission. Inc.) is required to notify FMPA of the constraint and inform FMPA the amount of natural gas available. Immediately upon notification of the constraint, FMPA will implement its plans to reduce its natural gas flow. The plan is as follows:

- 1. During this time of the fuel emergency, any purchase power available shall be utilized to the extent appropriate, taking into account relevant surrounding factors. All load management and interruptible load will be implemented and all non-firm sales will be terminated.
- 2. If more natural gas reduction is required, begin having all Vero Beach units and the KUA's Hansel and Cane Island units using natural gas start switching to the alternate fuel.
- 3. If more natural gas reduction is still required, have Key West start all units. Begin having Vero Beach and Ft. Pierce take all units using natural gas off up to the MW amount that equals the amount supplied by the Key West units.

- 4. If more natural gas reduction is still required, acquire the proper authorization from Florida Department of Environmental Protection (DEP) to allow the generating units to violate their stated permits.
- 5. If all the above options have been utilized and FMPA is still using too much natural gas, FMPA should call on the other utilities for emergency power. If emergency power is available, FMPA shall purchase the necessary amount of emergency power and reduce the natural gas burning units by that amount of MWs purchased.
- 6. If FMPA is still above the natural gas restriction after all of these steps, FMPA will declare an emergency and go to its Capacity Emergency Plan for reducing load.
- Fuel Oil Emergency Plan

Fuel oil is stored at all the generating sites mentioned previously. In general, for generation that can utilize natural gas, enough fuel oil is on site to run a unit at 50% capacity factor for approximately 5 to 10 days. At Ft. Pierce, however, the units are not allowed to use fuel oil unless natural gas in unavailable, so only enough fuel oil is on site for the units to run a 25% capacity factor for approximately 5 to 10 days. If fuel oil shipments are delayed due to unforeseen circumstances, FMPA has several days to implement a change to alternate fuels. During that time period, FMPA will analyze the situation and determine the best plan for reliability without forsaking cost efficient measures. FMPA will utilize all alternate fuels and aggressively seek out purchase power to prevent power interruption.

Under any fuel emergency, FMPA plans to work with all utilities to prevent power interruption to any customer. If alternative fuels and purchase power are not available, FMPA will implement is Capacity Emergency plan for the possibility of reducing load. The Capacity Emergency plan provides for notification to the State of Florida and FRCC and provides for the method of reducing load.

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# ATTACHMENT A

Operating	Unit and MW Capability	Primary	Alternate
Utility		Fuel	Fuel
Vero Beach	Vero #1 - 11 MWs	Natural Gas	None
	Vero #2 (Heat Recovery unit) – 15 MWs	None	None
	Vero #3 – 33 MWs	Natural Gas	Oil
	Vero #4 – 54 MWs	Natural Gas	Oil
	Vero #5 - 35 MWs	Natural Gas	
Ft. Pierce	King #5 (Heat Recovery unit) – 10 MWs	None	None
	King #7 – 28 MWs	Natural Gas	Oil*
	King #8 – 46 MWs	Natural Gas	Oil*
	King #9 – 21 MWs	Natural Gas	Oil*
	King Diesels – 5 MWs	Oil	
Key West	Key West Ct #1 – 17 MWs	Oil	
	Key West Ct #2, #3 - 34 MWs	Oil	
	Medium Speed Diesels #1, #2 – 11 MWs	Oil	
	High Speed Diesels #1, #2, #3 - 4.5 MWs	Oil	
	CudJoe #1, #2 – 3 MWs	Oil	
	Big Pine – 1.5 MWs	Oil	
Lake Worth	T. G. Smith S-2 (Heat Recovery Unit)- 20 MWs	None	None
	T. G. Smith S-3 – 26 MWs	Natural Gas	Oil
	T. G. Smith GT 5 – 10 MWs	Natural Gas	Oil
	T. G. Smith GT 1 - 31 MWs	Oil	
	T. G. Smith MUs – 10 MWs	Oil	
KUA	Hansel 8 – 2 MWs	Natural Gas	Oil
	Hansel 14 – 2 MWs	Natural Gas	Oil
	Hansel 15 – 2 MWs	Natural Gas	Oil
	Hansel 16 – 2 MWs	Natural Gas	Oil
	Hansel 17 – 2 MWs	Natural Gas	Oil
	Hansel 18 – 2 MWs	Natural Gas	Oil
	Hansel 19 – 2.5 MWs	Oil	
	Hansel 20 – 2.5 MWs	Oil	
	Hansel CC – 45 MWs	Natural Gas	Oil
KUA	Cane Island CT #1 – 30 MWs	Natural Gas	Oil
	Cane Island CC #2 - 120 MWs	Natural Gas	Oil
	Cane Island CC #3 – 240 MWs	Natural Gas	Oil

# FMPA CAPACITY EMERGENCY PLAN

### PURPOSE

The purpose of this plan is to provide the Personnel of the Florida Municipal Power Agency with a specific set of guidelines and procedures to use for the All-Requirements Project when responding to generating capacity shortages. The All-Requirements Project is the wholesale supplier of electricity to the City of Bushnell, City of Clewiston, Fort Pierce Utilities Authority, City of Green Cove Springs, Town of Havana, Keys Energy Services (Utility Board of the City of Key West), Kissimmee Utility Authority, Lake Worth Utilities, City of Leesburg, City of Jacksonville Beach, City of Ocala, City of Starke, and City of Vero Beach.

This plan is intended to coordinate with the individual All-Requirements Project participant's emergency plans and with the Florida Reliability Coordinating Council plan for responding to generating capacity shortages in the State of Florida.

This plan provides the Florida Municipal Power Agency operations personnel with procedures for use to contact and inform All-Requirement Project participants' operation and management personnel of a Generating Capacity Advisory, Generating Capacity Alert, Generating Capacity Emergency, or System Load Restoration.

A generating capacity shortage 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 FRCC definitions of a Generating Capacity Advisory, Generating Capacity Alert, Generating Capacity Emergency and System Load Restoration are defined in Appendix G.

The FMPA ALL-REQUIREMENTS PROJECT CAPACITY EMERGENCY PLAN is designed to address the timely notification of project participants 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 Orlando Utilities Commission dispatch center 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. The OUC dispatch center personnel will notify FMPA personnel of the Generating Capacity Advisory, Alert, Emergency or System Load Restoration.

The FMPA personnel will notify specified personnel at the cities of Bushnell, Clewiston, Fort Pierce, Green Cove Springs, Havana, Jacksonville Beach, Key West, Kissimmee, Lake Worth, Leesburg, Ocala, Starke and Vero Beach. If FMPA personnel cannot be reached, then OUC dispatch center personnel will notify specified personnel at the cities of Bushnell, Clewiston, Fort Pierce, Green Cove Springs, Havana, Jacksonville Beach, Key West, Kissimmee, Lake Worth, Leesburg, Ocala, Starke and Personnel at the cities of Bushnell, Clewiston, Fort Pierce, Green Cove Springs, Havana, Jacksonville Beach, Key West, Kissimmee, Lake Worth, Leesburg, Ocala, Starke and Vero Beach.

FMPA Capacity Emergency Plan

### **GENERATING CAPACITY ADVISORY**

The State Capacity Emergency Coordinator will, via the state messaging system, notify the Orlando Utilities Commission (OUC) dispatch center that an Advisory has been declared. Personnel of the OUC dispatch center will immediately notify the Florida Municipal Power Agency (FMPA). Personnel of FMPA will immediately notify the participants of the All-Requirements Project.

FMPA shall notify the State Capacity Emergency Coordinator if any of the All-Requirements participants are issuing or planning to issue public appeals for conservation.

When a Generating Capacity Advisory has been issued OUC dispatch personnel will immediately contact one of the FMPA personnel listed in Appendix A.

Then FMPA personnel (or OUC personnel if FMPA cannot be contacted) will contact All-Requirements participants office and fax as listed in Appendix A. The FMPA personnel will fax a <u>GENERATING CAPACITY ADVISORY FOR</u> <u>AREA 1</u> sheet in Appendix B, or a <u>GENERATING CAPACITY ADVISORY FOR AREA 2</u> sheet in Appendix C. Provide participant with reason Generating Capacity Advisory was declared:

- a) Temperature projections exceeded the prescribed criteria.
- b) One or more utilities are issuing or planning to issue a public appeals for conservation.
- c) Disruption of the Gas Pipeline(s) serving the FRCC Region

Recommended participant action:

a) Implement utility public awareness programs if appropriate.

- b) Notify utility emergency personnel if appropriate.
- c) Notify local emergency agencies if appropriate.

### GENERATING CAPACITY ALERT

The State Capacity Emergency Coordinator will, via the state messaging system, notify the Orlando Utilities Commission (OUC) dispatch center that an Alert has been declared. Personnel of the OUC dispatch center will immediately notify the Florida Municipal Power Agency (FMPA). Personnel of FMPA will immediately notify the participants of the All-Requirements Project.

When a Generating Capacity Advisory has been issued OUC dispatch personnel will immediately contact one of the FMPA personnel listed in Appendix A.

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Then FMPA personnel (or OUC personnel if FMPA cannot be contacted) will contact All-Requirements participants office and fax as listed in Appendix A. The FMPA personnel will fax a <u>GENERATING CAPACITY ALERT</u> sheet in Appendix D.

Provide participant with reason Generating Capacity Alert was declared is that the state operating margin is such that the loss of the largest generating unit in the state will necessitate interruption of firm load in the state.

- a) \_\_% reserves during peak on \_\_\_/ \_\_/
- b) \_\_\_\_\_MWs of FMPA resources are out of service or unexpected high loads, FMPA is purchasing power that can be recalled by the seller.

FMPA Capacity Emergency Plan

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**

The State Capacity Emergency Coordinator will, via the state messaging system, notify the OUC dispatch center that an Emergency has been issued. Personnel of the OUC dispatch center will immediately notify FMPA. Personnel of FMPA will immediately notify the participants of the All-Requirements Project.

OUC shall monitor the capability of FMPA generating resources and FMPA All-Requirements participant load. FMPA shall be notified by OUC if FMPA generating resources are not sufficient to serve the FMPA load and emergency purchases may not be available.

FMPA shall notify the State Capacity Emergency Coordinator if any of the All-Requirements participants have implemented firm load reductions.

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

Then FMPA personnel (or OUC personnel if FMPA cannot be contacted) will contact All-Requirements participants' office and fax as listed in Appendix A. The FMPA personnel will fax a GENERATING CAPACITY EMERGENCY sheet in Appendix E.

Provide participant with the reason that a Generating Capacity Emergency was declared due to state has lost firm load.

Status of All-Requirements Project situation:

- a) \_\_% reserves during peak on \_\_/ \_\_/ \_\_
- b) MWs of FMPA resources are out of service or unexpected high loads, FMPA is purchasing power that can be recalled by the seller.
- c) FMPA projects to be deficient by \_\_\_\_\_MW during the peak on \_\_\_/ \_\_\_ and, if purchase power is not available, will be contacting participants to reduce firm load.
- d) FMPA has requested firm load reductions of \_\_\_\_\_ MWs in the cities of \_\_\_\_\_\_

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
- g) Prepare to reduce firm load.

FMPA Capacity Emergency Plan

### SYSTEM LOAD RESTORATION

The State Capacity Emergency Coordinator will, via the state messaging system, notify the Orlando Utilities Commission (OUC) dispatch center that all firm load has been restored. Personnel of the OUC dispatch center will immediately notify the Florida Municipal Power Agency (FMPA). Personnel of FMPA will immediately notify the participants of the All-Requirements Project.

FMPA shall notify the State Capacity Emergency Coordinator when firm load has been restored if any of the All-Requirements participants have implemented firm load reductions.

When System Load Restoration has been issued, OUC dispatch personnel will immediately contact one of the FMPA personnel listed in Appendix A.

Then FMPA personnel (or OUC personnel if FMPA cannot be contacted) will contact All-Requirements participants' office and fax as listed in Appendix A. The FMPA personnel will fax a SYSTEM LOAD RESTORATION sheet in Appendix F.

# NOTIFICATION TO DEPARTMENT OF ENERGY

A report to Department of Energy Emergency Operations Center is necessary when the events below occur. Form EIA-417 (Appendix G) outlines the appropriate reporting procedures for the following conditions:

- 1. Uncontrolled loss of 300 MW firm system loads for more than 15minutes from a single incident.
- 2. Load shedding of more than 100 MW implemented under emergency operational policy
- 3. System-wide Voltage reductions of three percent or more
- 4. Public appeal to reduce the use of electricity for purposes of maintaining the continuity of the electric system
- 5. Actual or suspected physical attacks that could impact electric power system adequacy or reliability; or vandalism which target components of any security systems
- 6. Actual or suspected cyber or communications attacks that could impact electric power system adequacy or vulnerability
- 7. Fuel supply emergencies that could impact electric power system adequacy or reliability
- 8. Loss of electric service to more than 50,000 customers.
- 9. Complete operational failure or shut-down of the transmission and/or distribution electrical system.

The DOE Emergency Operations Center (EOC) (202) 586-8100 shall be notified as soon as practicable without undue interference with service restoration and, in any event, within 3 hours after the beginning of the interruption.

FMPA shall notify the DOE Emergency Operations Center (EOC) if FMPA requests meet any of the above conditions outlined in Form EIA-417.

Also, FMPA shall notify the DOE Emergency Operations Center (EOC) for any issuance of a public appeal by All-Requirements project participant(s) to reduce the use of electricity due to a Generating Capacity Advisory, Generating Capacity Alert, or Generating Capacity Emergency.

FMPA will fill out United States Department of Energy, Office of Energy Emergency Operations, 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 Manager of FMPA.

### FMPA Capacity Emergency Plan

The Operations Manager of FMPA will issue revisions of the plan to the following: All-Requirements participants Florida Reliability Coordinating Council Florida Public Service Commission Orlando Utilities Commission Dispatch Center

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FMPA Capacity Emergency Plan

# Appendix A

### **FMPA Personnel Contact List**

			TELEPHONE	#
Steven H. McElhaney	(407) 355-7767	(407) 359-7899	(407) 468-59 <b>35</b>	158*43639*106
Homer O. Bryant	(407) 355-7767	(407) 292-8564	(407) 468-59 <b>34</b>	158*43639*105
Gene E. Way	(407) 355-7767	(407) 273-1228	(407) 947-9984	158*43639*112

# All-Requirements Contact List

	OFFICE	DISPATCH	FAX	Nextel Radio	Cell Phone
City of Bushell Vince Ruano	(352) 793-2591		(352) 793-2711		
City of Clewiston Kevin McCarthy	(863) 983-1454		(863) 983-3406		(863) 228-0360
Fort Pierce Utilities Authority Tom Richards	(772) 466-1600 ext. 3400	(772) 461-5875 •	(772) 465-69 <b>84</b>	158*43639 <b>*8</b> 158*43639 <b>*9</b>	
City of Green Cove Springs Jimmy Knight	(904) 529-2249	(904) 529-2229	(904) 529-2232		
Town of Havana Susan Friedon	(850) 539-64 <b>93</b>		(850) 539-89 <b>32</b>		(850) 524-2268
City of Jacksonville Beach Joe Calendar	(904) 247-6281	(904) 247-6171 • (904) 247-6204	(904) 247-6120	158*43639*1	
Keys Energy Harry Bethel	(305) 295-1062	(305) 295-1059 *	(305) 295-1060	158*43639*10	
Kissimmee Utility Authority Ken Davis	(904) 247-6281	(904) 247-6171 • (904) 247-6204	(904) 247-6120	158*43639*1	
Lake Worth Utilities Walt Gill	(561) 586-1706	(561) 586-1704 *	(561) 586-1759		
City of Leesburg Lloyd Shank	(352) 728-9834	(352) 728-9830 •	(352) 728-9809	158*43639*3	
City of Ocala Dean Shaw	(352) 351-6600	(352) 351-6609 *	(352) 351-82 <b>63</b>	158*43639*108	(352) 898-2112
City of Starke Ricky Thompson	(904) 964-3389		(904) 966-0584		
City of Vero Beach Jimmy Castleberry	(772) 978-5030	(772) 978-5041 *	(772) 978-5090	158*43639*6 158*43639*7	

\* NOTE: The dispatch offices of these cities can be reached by the Orlando Utilities Commission Dispatcher via a NEXTEL radio communication system. ,

FMPA Capacity Emergency Plan

# Appendix B

#### FLORIDA MUNICIPAL POWER AGENCY ALL-REQUIRMENTS PROJECT EMERGENCY CONTINGENCY PLAN GENERATING CAPACITY SHORTAGE ELEMENT

#### **GENERATING CAPACITY ADVISORY FOR AREA 1\***

#### FOR ADDITIONAL INFORMATION CALL FMPA OFFICE (407) 355-7767

• (Area 1 includes Jacksonville, Pensacola & Tallahassee)

NOTE: Havana, Green Cove Springs, Jacksonville Beach, and Starke are in AREA 1.

Definition of Advisory:

Temperature projections exceed the prescribed criteria in two cities of area 1.

One or more utilities in area 1 are issuing or planning to issue public appeals for conservation.

\_\_\_\_\_Disruption of the Gas Pipeline(s) serving the FRCC Region

#### RECOMMENDED ACTION:

Notify utility emergency personnel.

\_\_\_\_Notify local emergency personnel.

\_\_\_\_\_Implement utility public awareness programs.

Generating Capacity Advisory declared for \_\_\_ / \_\_\_ / \_\_\_ /

THROUGH

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Date & Time issued \_\_\_\_/ \_\_\_/

Ву:\_\_\_\_\_

FMPA Capacity Emergency Plan

### Appendix C

#### FLORIDA MUNICIPAL POWER AGENCY ALL-REQUIRMENTS PROJECT EMERGENCY CONTINGENCY PLAN GENERATING CAPACITY SHORTAGE ELEMENT

#### **GENERATING CAPACITY ADVISORY FOR AREA 2\***

FOR ADDITIONAL INFORMATION CALL FMPA OFFICE (407) 355-7767

\* (Area 2 includes Miami, Orlando, St. Petersburg & Tampa)

NOTE: Bushnell, Clewiston, Fort Pierce, Key West, Kissimmee, Lake Worth, Leesburg, Ocala, and Vero Beach are in AREA 2.

Definition of Advisory:

Temperature projections exceed the prescribed criteria in two cities of area 2.

One or more utilities in area 2 are issuing or planning to issue public appeals for conservation.

Disruption of the Gas Pipeline(s) serving the FRCC Region

#### RECOMMENDED ACTION:

Notify utility emergency personnel.

Notify local emergency personnel.

Implement utility public awareness programs.

Generating Capacity Advisory declared for \_\_\_\_ / \_\_\_\_ / \_\_\_\_

## THROUGH

\_\_/\_\_/\_\_\_

\_\_\_\_: \_\_\_

Date & Time issued \_\_\_ / \_\_\_ / \_\_\_

By:\_\_\_\_\_

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FMPA Capacity Emergency Plan

# Appendix D

#### FLORIDA MUNICIPAL POWER AGENCY ALL-REQUIRMENTS PROJECT EMERGENCY CONTINGENCY PLAN GENERATING CAPACITY SHORTAGE ELEMENT

#### GENERATING CAPACITY ALERT

FOR ADDITIONAL INFORMATION CALL FMPA OFFICE (407) 355-7767

Definition of Alert:

A Generating Capacity Alert exists when the state operating margin is such that the loss of the largest generating unit will necessitate interruption of firm load in the state.

Generating Capacity Alert is declared for \_\_\_\_ / \_\_\_\_ / \_\_\_\_.

ALL-REQUIREMENTS PROJECT SITUATION:

\_FMPA projects \_\_\_% reserves during the peak on \_\_\_ / \_\_\_ / \_\_\_.

\_\_\_\_\_Due to FMPA resources out of service, FMPA is purchasing power that can be recalled by the seller.

Due to unexpected high loads, FMPA is purchasing power that can be recalled by the seller.

#### **RECOMMENDED ACTION:**

Notify utility emergency personnel.

\_\_\_\_\_Notify local emergency personnel.

Prepare a Generating Capacity Alert announcement for the news media.

\_\_\_\_\_Implement utility public awareness programs.

Implement Load Management/Interruptible Service programs

Implement procedures to reduce utility and city use of power.

Date & Time issued \_\_\_\_/ \_\_\_/ \_\_\_\_ :\_\_\_

Ву: \_\_\_\_\_

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FMPA Capacity Emergency Plan

# Appendix E

#### FLORIDA MUNICIPAL POWER AGENCY ALL-REQUIRMENTS PROJECT EMERGENCY CONTINGENCY PLAN GENERATING CAPACITY SHORTAGE ELEMENT

#### GENERATING CAPACITY EMERGENCY

FOR ADDITIONAL INFORMATION CALL FMPA OFFICE (407) 355-7767

Definition of Emergency:

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.

Generating Capacity Emergency is issued for \_\_\_ / \_\_\_ / \_\_\_.

ALL-REQUIREMENTS PROJECT SITUATION:

\_\_\_FMPA projects \_\_\_% reserves during the peak on \_\_\_ / \_\_\_ / \_\_\_.

\_\_\_\_\_Due to FMPA resources out of service, FMPA is purchasing power that can be recalled by the seller.

Due to unexpected high loads, FMPA is purchasing power that can be recalled by the seller.

\_\_\_\_\_FMPA projects to be deficient by \_\_\_\_ MW during the peak on \_\_\_/ \_\_\_ / \_\_\_ and, if purchase power is not available, will be contacting participants to reduce firm load.

\_\_\_\_FMPA has requested firm load reductions of \_\_\_\_ MW in the

cities of

RECOMMENDED ACTION:

Notify utility emergency personnel.

Notify local emergency personnel.

Prepare a Generating Capacity Emergency announcement for the news media.

Implement utility public awareness programs.

Implement Load Management/Interruptible programs

Implement procedures to reduce utility and city use of power.

\_\_\_\_Prepare to reduce load.

Date & Time issued \_\_\_\_ / \_\_\_ / \_\_\_\_ : \_\_\_\_ : \_\_\_\_

Ву:\_\_\_\_\_

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FMPA Capacity Emergency Plan

### Appendix F

#### FLORIDA MUNICIPAL POWER AGENCY ALL-REQUIRMENTS PROJECT EMERGENCY CONTINGENCY PLAN GENERATING CAPACITY SHORTAGE ELEMENT

#### SYSTEM LOAD RESTORATION

#### FOR ADDITIONAL INFORMATION CALL FMPA OFFICE (407) 355-7767

Definition of Restoration:

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

#### **RECOMMENDED ACTION:**

Notify utility emergency personnel.

Notify local emergency personnel.

Prepare a System Load Restoration announcement for the news media.

Implement utility public awareness programs.

System Load Restoration is issued for \_\_\_\_ / \_\_\_\_.

Date & Time issued \_\_\_\_/ \_\_\_/

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FMPA Capacity Emergency Plan

# Appendix G

#### 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 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 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 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 - 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 a little more than 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 this trigger is that when reserves fall below this level, loss of that size unit to an unexpected mechanical failure could lead to blackouts somewhere since insufficient backup is available.

The Alert starts actions to increase reserves. For example, available emergency supply options would be explored. Additionally, utilities can reduce electric demand through load management programs. These programs give utility dispatchers control over certain appliances and electrically-powered 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 1500 MW of load management is available statewide. Utilities also can 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

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#### FMPA Capacity Emergency Plan

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, in other words, blackouts occur or are inevitable somewhere 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 experience 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, cutting off interruptible customers, reducing voltage within established safe limits, and issuing appeals to consumers for emergency cutbacks of electricity use and voluntary conservation.

At this stage of the shortage plan, actions and information are coordinated among utilities, emergency agencies, the Governor, the Florida Public Service Commission, 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 shortage 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 sudgenly could occur 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 system. Once power is restored, appliances can be returned to use gradually as needed. This prevents sudden power drain as electricity is restored and avoids the possibility of an overload that could knock out 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**

#### FMPA Capacity Emergency Plan

"System Load Restoration" is the last phase of the plan and is instituted when rolling blackouts have been terminated and power supply is adequate. It 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.

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GENERATING FUEL EMERGENCY PLAN

# REEDY CREEK IMPROVEMENT DISTRICT

March 14, 2003

### 1. FORWARD

a) Reedy Creek Energy Services (*RCES*) is the operating agent for the Reedy Creek Improvement District (*RCID*) utility systems. RCES is responsible for procuring/generating the electrical capacity and energy to provide service to the RCID electrical customers. Currently RCES operates three generating units; one 40 MW combined cycle unit and two 2.5 MW diesel engines. The combined cycle unit has dual fuel capability with natural gas being the primary fuel and fuel oil as the alternate. Both diesel-generating units operate solely on fuel oil. RCID's generation equals roughly 22% of its electrical resources with the balance provided through purchase power agreements from neighboring utilities and generating resources.

# 2. PURPOSE

a) The purpose of this procedure is to outline the actions taken to ensure a continuous source of fuel for RCID's electrical generation resources and contingency actions necessary in the event of a shortage of fuel resources.

# 3. REFERENCES

- a) Florida Public Service Commission Rule 25-6.0185
- b) NERC Operating Policy 5: Emergency Operations
- c) NERC Operating Policy 6: Operations Planning
- 4. Notes
  - a) Per Public Service Commission Rule 25-6.0185 this procedure is to be reviewed every three years with subsequent notification to the Commission of the review completion. Any modification to the plan requires Commission approval upon the notification of review.
  - b) All modifications to the plan require notification and submission of the plan to the Florida Reliability Coordinating Council.

# 5. RESPONSE TO ENERGY EMERGENCIES DUE TO INADEQUATE FUEL SUPPLY

- a) The following conditions will constitute the declaration of a Energy Emergency and initiate action per the following steps:
  - i) Declaration of a fuel supply emergency by the Governor of Florida.

- ii) Inability to meet <u>projected</u> firm RCID electrical load due to inadequate (or projected inadequate) fuel supplies.
- iii) Inability to meet real-time firm RCID electrical demand due to inadequate fuel supplies.
- b) The RCES Energy Control Center shall be notified of the energy emergency as soon as possible after identification.
- c) Plant operations personnel shall be notified of the energy emergency and determine the following:
  - i) Unit availability and maximum capacity.
  - ii) Unit fuel source and availability of alternate fuels (contractual options and market) in the event of a primary fuel shortage.
  - iii) Potential for rescheduling, restoring from or postponing maintenance activities.
- d) The FRCC shall be notified of the energy emergency by RCID by means of the daily capacity assessment report and by notification to the State Emergency Capacity Coordinator. NOTE: The daily capacity assessment report is completed day ahead during winter months and morning of the peak during summer months.
- e) The RCES Utility Business Affairs (UBA) group will initiate contact with natural gas suppliers and/or the natural gas pipeline companies upon a natural gas energy emergency to determine the availability of additional natural gas supply volumes and/or pipeline capacity to support RCID generation facilities.
- f) RCES UBA will maintain frequent communications with the RCES Energy Control Center concerning fuel supply and electrical energy availability.
- g) RCES UBA will contact all suppliers of its firm energy resources to verify and/or take action with regard to the availability of firm contractual energy capacity.
- h) RCES UBA will contact all regional electrical energy marketing entities to identify availability of electrical capacity and energy for the periods identified as being unable to meet load requirements.
- i) If load/resource imbalance conditions require, the Energy Control Center shall notify large customers to curtail non-essential electrical load.

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- RCES Energy Plant Operations shall evaluate current operational constraints due to environmental limitations and the ability to request a waiver of those limitations.
- k) RCES UBA shall investigate and exercise contractual options to acquire additional capacity and energy to meet load requirements.
- 1) The FRCC Security Coordinator shall be notified of the energy emergency and the potential for shedding load, if necessary.
- m) In the event sufficient energy resources cannot be obtained, the current Load Shed Procedure shall be initiated by the Energy Control Center to balance load/generation resources.
- 6. Restoration From Potential and Real-Time Energy Emergencies
  - a) Energy emergency activities shall be restored from at the point at which the necessary energy resources are obtained to adequately serve all firm RCID electrical load. As required, the FRCC Security Coordinator shall be notified of the current condition of the RCID Control Area.

# GAINESVILLE REGIONAL UTILITIES

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# LONG-TERM ENERGY EMERGENCY PLAN

# FUEL SUPPLY SHORTAGE

DECEMBER 1982 REVISED: OCTOBER 1990 JUNE 2000 MARCH 2003

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# GAINESVILLE REGIONAL UTILITIES

# LONG-TERM EMERGENCY PLAN

# FUEL SUPPLY SHORTAGE

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# FUEL SUPPLY EMERGENCY

# ORGANIZATIONAL CHART

# GENERAL MANAGER

FUEL SUPPLY EMERGENCY COMMITTEE

# CORPORATE COMMUNICATIONS

ASSISTANT GENERAL MANAGER ASSISTANT GENERAL MANAGER ASSISTANT GENERAL MANAGER

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ENERGY SUPPLY ENERGY DELIVERY STRATEGIC PLANNING

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# GAINESVILLE REGIONAL UTILITIES LONG-TERM ENERGY EMERGENCY PLAN FUEL SUPPLY SHORTAGE

# INTRODUCTION/PURPOSE:

The purpose of the Long-Term Energy Emergency Plan is to establish a systematic and effective means of anticipating, assessing, and responding, in an appropriate and coordinated manner, to a long-term energy emergency caused by the combination of the lack of adequate purchased power from other utilities and GRU fuel supply shortage. Possible interruptions imposed by political, natural, labor or other factors may cause an interruption in Gainesville Regional Utilities (GRU) fuel supply beyond the normal interruptions which are recognized by prudent planning and operating practices. The following Long-Term Energy Emergency Plan was developed by request of the Florida Public Service Commission (FPSC) and with guidance from the Florida Reliability Coordinating Council (FRCC) to facilitate an orderly procedure by which GRU could purchase available electrical energy from other utilities or appropriately distribute GRU's available electrical energy during a fuel supply shortage.

The plan will be invoked by the General Manager after reviewing the impending circumstances with the City Commission. The GRU plan will be coordinated by the FPSC and FRCC with the emergency plans of other utilities such that available energy will be appropriately distributed so as to protect the health, safety, and welfare of the people of Florida, consistent with good operating practices.

# DEFINITION

An electric energy emergency exists when GRU has inadequate energy generating capability by reason of a fuel supply shortage, is unable to purchase the additional electrical energy needed from other utilities, and is thereby prevented from operating at required levels to supply its energy obligations. An energy emergency differs from a short-term capacity emergency in that energy requirements cannot be met over an extended period. The period of advance warning and expected duration of an emergency is usually measured in terms of weeks or months, as opposed to minutes or hours for a short-term capacity deficiency.

OVERVIEW

> The GRU Long-Term Energy Emergency Plan is one of several individual utility plans prepared by each Florida Utility which, when combined together, make up a statewide Long-Term Energy Plan which has been designed to provide a coordinated response to various communication, environmental, legal, political, and technical concerns which may arise on a statewide basis during an energy emergency. To address these issues, the GRU Long-Term Energy Emergency Plan has been divided into two basic sets of procedures:

> > 1.Fuel Supply Alert 2.Fuel Supply Emergency

Each basic set of procedures involves a number of additional plans and procedures which form to coordinated Long-Term Energy Emergency Plan. The following sections and the appendix describe these procedures and any collateral plans which may be implemented during a fuel supply shortage.

FUEL SUPPLY ALERT

DESIGNATION: The Energy Supply Department is responsible for fuel procurement, inventory monitoring, and projecting fuel availability. If at any time:

PROJECTED FUEL SUPPLY RECEIPTS AND THE AVAILABILITY OF PURCHASED ELECTRICAL ENERGY INDICATE THAT, IF NO ACTION IS TAKEN, FUEL INVENTORIES (INCLUDING SHIPMENTS IN TRANSIT) WILL FALL BELOW A LEVEL ADEQUATE TO PROVIDE CONTINUOUS UNINTERRUPTED SERVICE TO GRU CUSTOMERS, AND IF THERE IS NO APPARENT SOLUTION TO THE PROBLEM, THE POTENTIAL FOR A FUEL SUPPLY ALERT WILL BE EVALUATED. THE Assistant General Manager of Energy Supply WILL REVIEW THE ACTIONS TAKEN WITH THE General Manager AND HIS STAFF. IF AFTER THE REVIEW, INVENTORIES ARE STILL PROJECTED TO REACH AN INADEQUATE LEVEL, THE Assistant General Manager of Energy Supply WILL RECOMMEND THAT THE General Manager INITIATE A FUEL SUPPLY ALERT.

RESPONSIBILITY: Upon the initiation of a FUEL SUPPLY ALERT, the General Manager or his designee will assume emergency responsibility for initiating all FUEL SUPPLY ALERT actions, either directly or through the FUEL SUPPLY EMERGENCY COMMITTEE. The members of the FUEL SUPPLY EMERGENCY COMMITTEE shall be appointed by General Manager of GRU

# FUEL SUPPLY ALERT

Upon the initiation of a Fuel Supply Alert, the following actions shall be taken as appropriate:

Seek and procure alternate sources of fuel in short supply.

Monitor fuel usage and receipts, and forecast future fuel inventory levels.

Furnish fuel data and forecast to the General Manager, or his designee, as well as GRU's FRCC Operating Representative

Provide the FRCC with estimated energy services requirements with expected fuel supply availability. Coordinate fuel supply actions with FRCC.

Reduce non-essential lighting, as appropriate. Adjust heating and air conditioning thermostats to appropriate levels. Prepare to move generating plant systems into Step A of the Energy Emergency Plan.

Purchase outside electrical power to conserve fuel in short supply. Dispatch units to conserve fuel in short supply. Prepare to move into Step A of the Energy Emergency Plan. Provide news releases and summaries.

Provide news releases and summaries to Corporate Communications. Explain why the fuel shortage has occurred, what a Fuel Supply Alert means, what is being done to solve the problem and what the customers and other utility and municipal departments can do to deal with the problem.

> <u>FUEL SUPPLY EMERGENCY</u> DESIGNATION: If at any time following the designation of a FUEL SUPPLY ALERT:

> > TOTAL FUEL INVENTORIES FALL TO 80% OF PROJECTED REQUIREMENTS (INCLUDING DELIVERIES PLANNED AND IN ROUTE), A CONTINUED DOWNWARD TREND IS ANTICIPATED, AND ADEQUATE PURCHASED ELECTRICAL ENERGY IS NOT AVAILABLE, THE General Manager WILL DECLARE A FUEL SUPPLY EMERGENCY.

RESPONSIBILITY: After reviewing the impending circumstances with the City Manager and the City Commission, the General Manager will declare a FUEL SUPPLY EMERGENCY and assume emergency responsibility for initiating all FUEL SUPPLY EMERGENCY actions, either directly or through the FUEL SUPPLY EMERGENCY COMMITTEE.

### FUEL SUPPLY EMERGENCY SUMMARY

Upon the declaration of a FUEL SUPPLY ENERGY EMERGENCY, a series of steps within the Long-Term Emergency Plan shall be initiated. The criteria for initiating each step are shown below:

### CRITERIA

- STEP A 80% of projected fuel inventory requirements and the forecast of a continued downward trend.
- STEP B 60% of projected fuel inventory requirements and the forecast of a continued downward trend.
- STEP C 50% of projected fuel inventory requirements and the forecast of a continued downward trend.
- STEP D 30% of projected fuel inventory requirements and the forecast of a continued downward trend.
- STEP E 20% of projected fuel inventory requirements and the forecast of a continued downward trend.

These steps match the planned steps requested by the FPSC and the FRCC. The details of each step are outlined on the following pages. Should it become necessary in the implementation of this plant to by-pass any of the steps

> and immediately proceed with more severe measures, the actions under the bypassed steps shall be implemented, as appropriate.

> When FRCC notifies GRU that the fuel supply shortage has eased, the General Manager will request the measures taken under this plan be relaxed to the appropriate step.

### FUEL SUPPLY EMERGENGY

# STEP A

If total fuel inventories reach 80% of projected requirements, a continued downward trend is anticipated, and a FUEL SUPPLY EMERGENCY has been declared, then the following actions will be taken:

### ACTIONS

Expedite shipments of previously purchased coal and oil. Purchase additional coal and oil which meet regulatory criteria. Coordinate natural gas deliveries with supplier(s) and Florida Gas Transmission as appropriate to utilize gas consumption on the most efficient generating unit. Report fuel on hand, consumption, shipments and planned purchases to GRU's representative to TAG and the General Manager or his designee.

Provide FRCC Representative with GRU's expected fuel burns, load and generation availability. Coordinate information between FRCC and GRU Staff.

Curtail all non-essential uses of electrical energy. Continue reductions of nonessential plant lighting except in unsafe areas. Modify heating and air conditioning settings to low energy use settings except for temperature sensitive areas

# STEP B

If total fuel inventories reach 60% of projected requirements and a continued downward trend is anticipated, previously implemented steps shall be continued and the following additional actions shall be implemented:

Purchase any available coal, oil and natural which meet current regulatory criteria; expedite deliveries after purchase. Continue fuel supply situation reporting.

Continue reporting and coordination of activities with TAG.

Close down all outer buildings.

Reduce plant auxiliary loads as appropriate.

Continue previous activities.

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Make public appeals and distribute "How To" information to all customers, both residential and commercial, and to other utility and municipal departments to minimize their consumption of electrical energy. Individually contact all large commercial and industrial customers, request reductions in consumption of electrical energy and warn of impending mandatory curtailments. Make public and individual appeals for the reduction of all outdoor lighting to the minimum necessary for life and property protection, and eliminate all advertisement lighting except for the minimum required to indicate commercial facilities open after dark. Request a ban on all after dark sporting activities and closing of all parks, tennis courts, golf courses, etc., after dark. Assist Strategic Planning/Environmental/Legal in the preparation of specific mandatory reductions in electrical energy usage.

Prepare the necessary requests to submit to the proper authorities for approval of mandatory reductions in electrical energy usage.

## STEP C

If total fuel inventories reach 50% of projected requirements, and a continued downward trend is anticipated, previously implemented steps shall be continued and the following additional actions shall be implemented:

Continue to locate, purchase, and expedite deliveries of any coal, oil or other usable fuels which meet regulatory criteria. Continue reporting procedures.

Continue previous activities.

Shut Down all non-critical facilities and equipment

Maximize usage of purchased energy so as to minimize the imbalance of energy supplies among all utilities according to directions from FRCC.

Coordinate with Legal Services the request to that appropriate governmental agencies to voluntarily curtail roadway lighting systems. Implement voltage reduction procedures, as appropriate.

Provide Customer Operations/Public Information/Energy Services with information which identifies industrial customers who maintain customer-owned industrial generation equipment.

Continue to provide news releases, and energy reduction instructions to the Energy Services media, customers, and City employees.

Assist local police and other agencies in the understanding and enforcement of mandatory electrical energy reduction regulations.

Contact industrial customers who maintain customer-owned generation equipment to request that they utilize such equipment, if adequate fuel is available, to the maximum extent possible. Request residential customers to further reduce energy consumption by minimizing or stopping the use of air conditioning, heating, clothes dryers, and other convenience devices and equipment. Request users of conditioned offices and building, other than critical services such as hospitals, to lower thermostat settings to 60 degrees during the heating season and raise thermostat settings to 85 degrees during the cooling season. Request commercial establishments, institutional facilities, public and private schools, office buildings and industrial plants to further reduce consumption which may require a reduction in operating hours. Request commercial establishments to ban all non-essential use of hot water, eliminate window and display lighting and ban all air conditioning and heating during nonuse hours and in unoccupied areas.

Assist Strategic Planning /Environmental /Legal in mandatory curtailments and rotating blackouts. Prepare appropriate information on mandatory curtailments and rotating blackouts.

Prepare the necessary requests to submit to the proper authorities for approval of mandatory curtailments and rotating blackouts.

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## STEP D

If total fuel inventories reach 30% of projected requirements and a continued downward trend is anticipated, previous steps shall be continued and the following additional actions shall be implemented:

Continue previous activities.

Curtail to minimum possible levels all to utilities not participating in this plan, if legal obligations permit. Implement mandatory curtailment of services to the degree necessary to protect public health, safety and welfare, as permitted by the proper legal authority and after notifying TAG. See Appendix 6 for the "Guidelines for Defining Essential Services". Implement rotating blackouts on selective feeders. Feeders serving customers classified as critical loads or essential services will be exempt from rolling blackouts. These will be classified according to the "Guidelines for Defining Essential Services" in Appendix 6. A list of these feeders will be maintained in the Systems Dispatch office and in the office of the General Manager or his designee.

Continue previous activities.

Release information on mandatory curtailments and rotating blackouts. Continue previous activities.

# <u>STEP E</u>

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If total fuel inventories reach 20% of projected requirements and a continued downward trend in fuel supplies is anticipated, previously implemented steps shall be continued and the following additional actions shall be implemented

Prepare to orderly shut down all units burning the fuel in short supply. Implement plans to insure power availability to all power plants and fuel handling facilities.

Prepare Facilities for extended operation with minimal power consumption.

Continue curtailments, rotating blackouts, and manual load shedding procedures, as necessary

#### APPENDIX 1

#### COLLATERAL PLANS

Emergency conservation plans have been promulgated by various federal and state regulatory bodies and industry organizations. Following is a list of those collateral plans and other electric utility emergency plans having selected sections applicable to implementation of GRU's Long-Term Energy Emergency Plan.

> Standby Conservation Plan NO. 1 **Emergency Weekend Gasoline Sales Restrictions** (February 1979) DOE/ERA-0040 Standby Conservation Plan No. 2 **Emergency Building Temperature Restrictions** (February 1979), DOE/ERA-0047 Standby Conservation Plan No. 3 **Emergency Advertising Lighting Restrictions** (February 1979) DOE/ERA-0050 U.S. Department of Energy, Economic Regulatory Administration, Office of Utility Systems Emergency Electric Power Administration (formerly Defense Electric Power Administration of Department of the Interior) Emergency Actions (March 1979), DOE/ERA-0052 State of Florida, Department of Administration, State Energy Office: Florida's Energy Emergency Contingency Plan (November1978) Florida Electric Power Coordinating Group, Inc.: Operating Committee Handbook (June 1981) Electric Utility Emergency Procedure for Long-Term Energy Emergencies (August 3, 1981) Florida Power Corporation: Fuel Emergency Policy (April 1980) Florida Power & Light Company: Emergency Operations Plan - Short-Term Capacity Shortage (December 1978) Long-Term Energy Emergency Plan – Fuel Supply Shortage (Man 1979) Gulf Power Company: System Operations Emergency Procedures (June 1979) Tampa Electric Company: Long Term Energy Management Plan (May 1981)

## APPENDIX 2

## COMMUNICATION PROCEDURES WITH FRCC

The following steps will be the responsibility of GRU's representative to FRCC. The representative will report requested information as developed by Strategic Planning and Energy Supply Department. Following steps will be taken at the direction of FRCC. Other actions which may be requested by FRCC will be performed as required.

## Fuel Supply Alert Actions

- 1. GRU will provide an estimate of its energy source requirement by type of source for each of the next eight (8) calendar weeks following the request from FRCC.
- 2. GRU will determine the remaining days of fuel supply, expressed in terms of Days Burn, by fuel type for each of the next eight (8) calendar weeks following the request from FRCC.
- 3. Sufficient data will be provided to substantiate the previous calculations.

# Fuel Supply Emergency Actions

The above steps will be continued. In addition, when Step B of the Energy Emergency Plan is reached, FRCC will establish a schedule for contact with each participating utility. GRU's representative will report the following information to the FRCC Coordinator each day.

- 1. An hourly forecast of system load for the next twenty-four (24) hours.
- 2. The peak demands forecast and Net Energy for Load (NEL) for the six (6) days following item (1) above.
- 3. Generation available and scheduled maintenance for the next seven (7) days.
- 4. Remaining average fuel supply inventory data.
- 5. Previous day's hourly system load and peak demand.

## **APPENDIX 3**

## Energy Supply

The following plan will be implemented by Fuels Department as appropriate.

## ENERGY ALERT ACTIONS:

A. Fuel Situation Reporting Procedure

- 1. Strategic Planning-Forecasting will provide Fuel Supply Emergency Committee, as required, with estimates of GRU's Net Energy for Load (NEL) for successive eight (8), calendar week periods.
- 2. Fuel Supply Emergency Committee will calculate projected total and individual fuels requirements on a system and plant basis.
- 3. Fuel Supply Emergency Committee will monitor fuel use on a daily and monthly basis. Inventory levels will be calculated by comparing daily ending inventories to a rolling average of daily burns.

Ending Inventory 7-Day Average Daily Burn = Average Available Days Burn or Forecast Burn

When the System average available Days Burn of inventoried fuel is forecasted to drop below a level adequate to provide continuous uninterrupted service to GRU customers, Energy Emergency actions will be implemented according to the Long-Term Energy Emergency Plan.

- B. Steps to Augment Fuel Supplies and Transportation Options
  - 1. Seek alternative sources for fuel in short supply.
  - 2. Increase supply of substitute or replacement fuels.
  - 3. Purchase needed fuels, as required, under the direction of the General Manager.

## ENERGY EMERGENCY ACTIONS:

A. Fuel Situation Reporting Procedure

- 1. Strategic Planning-Forecasting will provide the Fuel Supply Emergency Committee, as required, with estimates of GRU's Net Energy for Loan (NEL) for successive seven (7) day periods.
- 2. Fuel Supply Emergency Committee will calculate projected total and individual fuel requirements on a daily and weekly basis as well as the impact on fuel inventories on a system and plant basis.
- B. Steps to Augment Fuel Supplies and Transportation Options.
  - 1. Manage existing fuel inventories to assure the most efficient use of fuels under the constraints imposed by the fuel emergency.
  - 2. Assure a constant fuel supply to generating plants in accordance with environmental and performance standards, as long as possible, under the constraints imposed by the fuel emergency
  - 3. Continuously monitor fuel market conditions in order to assess existing market conditions and future trends, and report market information to management.
  - 4. Formulate emergency fuel procurement strategies, policies, and guidelines based upon analysis of internal and external variables impacting GRU's fuel operations, and update as emergency conditions change conditions.
  - 5. Investigate alternate sources of supply, in accordance with procurement arrangements set forth by the emergency strategy, to allow the utility to respond to changes in regulation, operating requirements, or market conditions.
  - 6. Provide fuel and transportation, availability information and forecasts to assist in the planning and control of operations under fuel emergency conditions.
  - 7. Develop information, reports and testimony relating to GRU's emergency fuel procurement activities for management, customers and governmental agencies.
- C. During the Emergency, if a physical transfer of fuel should become practical or necessary due to some physical limitation of the electrical system, bilateral transfers will be accomplished through mutual agreement between the utilities invoiced. The principle upon which these transfers will be based is that of full reimbursement by the utility receiving energy or fuel during the Energy Emergency. Full reimbursement shall consider all of the supplying utility's cost of replacing such energy or fuel with the same or alternate energy or fuel.
- D. The Fuel Supply Emergency Committee shall inform the Utility Budget, Finance and Accounting Group and Strategic Planning of any planned fuels purchases, calculate

# cash requirements and coordinate any information necessary to assist in evaluating financial impacts on the Utility System

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#### APPENDIX 4

#### POWER PRODUCTION

#### DESCRIPTION OF FACILITIES

The facilities considered include J.R. Kelly Generating Station's one(1) steam unit, and three (3) combustion turbines, and one (1) Combined Cycle. Deerhaven Generating Stations two (2) steam units, three (3) combustion turbines and necessary supporting facilities at each generating station.

Electric generation requires a wide range of equipment which is continually utilized in the most efficient manner (reduction of this equipment's usage would minimally reduce power). Support systems consist of office space with its associated heating, ventilation, air conditioning (HVAC) and lighting, as well as warehouses, fuel receiving and processing equipment, and other necessary buildings with their respective uses. A noteworthy amount of in-station energy usage at the Deerhaven Generating Station is required for operating the water processing plant and combustion effluent (particulate) removal systems. Both stations operate additional important but non-critical auxiliary power plant equipment.

## REDUCTION OF ELECTRICAL CONSUMPTION

Principle areas which have been identified to facilitate reductions in station consumption include: HVAC systems, lighting, and combustion effluent removal equipment, remote buildings, water processing facility equipment and some important but non-critical auxiliary equipment. Some of the above alternatives have environmental consequence and would require special operating permits or modifications to existing permits.

## RESPONSIBILITIES

The Energy Supply Group is responsible for any modifications to generating station operations upon order from the General Manager or his designee. Strategic Planning is responsible for obtaining supplementary environmental permits or modifications to existing permits. Power Production will modify generating station operations as follows under FUEL ALERT AND FUEL SUPPLY EMERGENCY and conditions.

#### FUEL SUPPLY ALERT

- 1. Reduce roadway and non-essential plant, lighting,
- 2. Adjust heating and air conditioning thermostats to appropriate levels.
- 3. Prepare to move plant systems into Step A of the Energy Emergency Plan.

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## FUEL SUPPLY EMERGENCY

# <u>STEP A</u>

- 1. A. Curtail all non-essential uses of electrical energy.
  - B. Continue the reduction of all non-essential lighting by turning off power except in unsafe areas.
- 2. Modify heating and air conditioning settings to low energy use settings except for temperature sensitive areas as shown below

Electrical Equipment Rooms Computer Rooms Control Rooms Motor Control Rooms

# <u>STEP B</u>

1. Close down outer buildings.

Warehouses Vehicle Maintenance Building Track Hopper (when not in use) Railcar Maintenance Facility

- 2. Partial shutdown of plant water processing facilities. The Brine Concentrator and Spray Dryer shall be shut down as long as no environmental limits will be exceeded.
- 3. Reduce electrostatic precipitator power usage by turning off transformer rectifiers sets in the last row if regulatory criteria allows. (Providing no other Plant equipment will be effected in a detrimental manner).
- 4. Reduce cooling tower fan speed if plant efficiency can be maintained.

# STEP C

- 1. Complete shutdown of plant water processing facilities, if appropriate environmental permits have been obtained.
- 2. Continued reduction of precipitator power usage, if appropriate environmental permits have obtained.
- 3. Further reduce cooling tower fan speed if plant efficiency can be maintained.
- 4. Shut off gas re-circulation fans if plant efficiency can be maintained.

STEP D

Continue previous actions.

## STEP E

- 1. Prepare to orderly shut down all units burning the fuel in short supply.
- 2. Implement plans to insure power availability to all power plants and fuel handling facilities.

#### APPENDIX 5

## STRATEGIC PLANNING//ENVIRONMENTAL/LEGAL

An outline of fuel and environmental requirements and the necessary processes for changing these requirements follows:

GRU purchases fuel with qualities that enable compliance with Federal and State pollutant emissions standards. During a long-term energy emergency GRU will require Federal and State permission to burn fuels that may result in noncompliance with normal emission standards. Environmental Planning will coordinate activities with the City Attorney toward obtaining necessary Federal and State regulatory variance.

Permission to burn fuels that may result in noncompliance will be required from the Governor of Florida. Only after receiving authorization from the President of the United States may the Governor temporarily suspend necessary portions of the Florida State Implementation Plan (SIP). The SIP is a plan which Florida initiated to implement requirements of the Clean Air ACT Included in the SIP is 17-2 FAC, Florida's air pollution rules.

The permission process follows:

- 1. GRU will petition the Governor of Florida to petition the President of the United States to authorize the Governor to temporarily suspend appropriate sections of Florida's SIP. In addition, GRU will, if necessary, request the Governor to suspend appropriate requirements of chapter 120 FAC.
- 2. The Governor will schedule a public hearing and assign a hearing officer. 'Me hearing officer will issue findings based upon testimony from GRU as well as other interested parties.
- 3. Based upon the findings of the hearing officer, the Governor will either act upon GRU's petition or reject it. If the Governor acts to petition the President, the President will either authorize the Governor to temporarily suspend sections of Florida's SIP or reject the Governor's petition.

4. The President may authorize the Governor to temporarily suspend sections of Florida's SIP for a particular boiler for a maximum of four months. Not more than one such suspension may be issued for any source on the basis of the same set of circumstances or on the basis of the same emergency.

During the public hearing, GRU will likely have to provide at least the following:

- 1. The nature, extent and expected duration of the energy emergency.
- 2. The reasons leading up to GRU's energy emergency.
- 3. Current and projected high levels of unemployment associated with the energy emergency.
- 4. Current and projected loss of necessary energy supplies for residential dwellings.
- Demonstration that an emergency suspension can totally or partially alleviate high levels of unemployment or loss of energy supplies for residential dwellings.
- 6. Demonstration that alternative strategies including conservation, imported power or other fuels will not obviate the need for an emergency suspension.
- 7. Characteristics and amounts of fuels that will be burned that may require a temporary suspension of the SIP.
- 8. An estimate of what numerical emission standard, in pounds per million BTU, would be appropriate in place of the current standard.
- 9. A strategy to limit pollutant emissions.
- 10. The expected increase in pollutant emissions and the total pollutant emissions released per unit of time.
- 11. An estimate of effects upon air quality, environment and health.

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# **APPENDIX 6**

## **GUIDELINES FOR DEFINING ESSENTIAL SERVICES**

Customers essential to the health, safety, or welfare of the community should be considered and, insofar as the situation makes it practical, their special needs addressed.

Although not an exclusive list, the following types of installations may be included in this category:

- 1. Hospitals and similar medical facilities.
- 2. Police and fire stations.
- 3. Operation, guidance control, and navigation services for public transportation and shipping, including rail, mass transit, licensed commercial air transportation, and other forms of transportation.
- 4. Communication services, including telephone and telegraph systems, television, and radio stations.
- Water supply and sanitation services, including waterworks. pumping and sewage disposal activities which cannot be reduced without seriously affecting public health.
- 6. Central cold storage facilities and mass distribution centers required for the preservation of medical and/or food supplies essential to the community. Federal activities essential
- 7. Federal activities essential for national defense and state and local activities essential for providing emergency services.
- Installations essential for the production, refining, transmission, or distribution of fuel required to provide essential services to the community.
- Essential construction, operation, and maintenance activities for production and supply of energy required to provide essential services to the community.

Although these types of customers may be given special consideration from the curtailment provisions of this plan, they should be advised to install emergency generation equipment if continuity of service is essential. In the case

of customers supplied from multiple sources, only one source will typically be given special consideration. Other customers who, in their opinion, have critical equipment, should be advised to install emergency or portable generating equipment.

Although not within the definition of essential services, the special situation of life sustaining medical equipment may be considered. Life sustaining medical equipment is defined as equipment:

- 1. Which is necessary to sustain the life of the user,
- 2. Which has been prescribed by the user's physician, and
- 3. Where any interruption of electricity to such equipment poses an <u>immediate</u> threat to the user.

Customers in this category should fully understand the need for sufficient and proper backup power sources. In addition, during emergency conditions, to the maximum extent possible, cooperation and coordination will be provided to community service agencies and other governmental units which make special provisions for the needs of those with life sustaining medical equipment.

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Emergency Plan Manual

October 1990

# FUEL SUPPLY SHORTAGE PLAN (Revised 4/15/03)

This plan was developed to facilitate an orderly procedure by which the Orlando Utilities Commission (OUC) could appropriately distribute its available electrical energy in the event of a fuel supply shortage. This plan is designed to protect the health, safety, and welfare of the people in the OUC service area, which includes the City of St. Cloud by virtue of the Interlocal Agreement entered into by and between OUC and the City of St. Cloud effective May 1, 1997, during such periods when a fuel supply shortage emergency exists. This plan will be invoked at the OUC's initiative and will be coordinated with the emergency plans of other utilities in the State of Florida through the Florida Reliability Coordinating Council (FRCC).

The purpose of the plan is to establish an organize and effective means of anticipating, assessing, and responding, in an appropriate and coordinated manner, to a long-term emergency caused by reason of a fuel supply shortage.

An Energy Emergency exists when OUC has inadequate generating capability by reason of a fuel supply shortage and is thereby prevented from operating at required levels to supply its energy obligations. An energy emergency differs from a Generating Capacity Shortage emergency in that energy requirements cannot be met over an extended period. The period of advance warning and expected duration of an Energy Emergency is usually measured in terms of weeks or months, as opposed to minutes or hours for a Generating Capacity Shortage.

This plan covers the following:

Notifications 8 8 1

Fuel Conservation Actions

Plan Termination Guideline

Public Information and Appeals

Voltage Reduction Procedure

Load Shed Procedure

Fuel Payback Procedure

#### NOTIFICATIONS

The Director, Fuels Division is responsible for continuously monitoring the adequacy of the fuel inventory. When fuel supplies are decreasing, or are anticipated to decrease, below a

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> level adequate to provide for continuous, uninterrupted service to OUC customers the Director, Fuels Division will notify the Vice President, Power Resources Business Unit. The Vice President, Power Resources Business Unit will assess the fuel situation and if the Vice President, Power Resources Business Unit determines that a fuel supply emergency exists, the General Manager & CEO and all Vice Presidents will be notified. Following internal notifications, the the Chair of FRCC Reliability Assessment Group (RAG) will be notified of the impending emergency.

If, as a result of the FRCC notification, a Fuel Supply Alert is designated by the Florida Public Service Commission and the Governor of the State of Florida declares a fuel supply emergency pursuant to Chapter 377.703, Florida Statutes, or other appropriate statutory authority, then the U.S. Department of Energy (DOE) shall be notified of the fuel emergency and the following Fuel Conservation Actions will be initiated by OUC.

## FUEL CONSERVATION ACTIONS

Upon designation by the Governor of the State of Florida that a fuel supply emergency exists, the following steps will be implemented and followed. Should it become necessary in the implementation of this plan to by-pass any of the steps below and immediately proceed with more severe measures, the actions under the by-passed steps shall be implemented as appropriate.

# Step A

Curtail all use of electrical energy at all OUC buildings and facilities

- Turn off all unnecessary lights
- Turn off or adjust the thermostat on all A/C or Heating as required

Curtail energy consumption of customers subscribed to OUC's Curtailable Rate as specified in the Curtailable Rate Schedule of OUC's Administrative Policy Manual.

Discontinue all non-firm sales of electric energy to other utility companies which increases the use of fuel in short supply.

Operate all existing OUC generating sources to minimize the use of the fuel in short supply.

Purchase power from other utilities, where possible, to conserve the fuel in short supply.

Request authorization from the proper authorities to ease environmental and other regulations where such actions will be effective in increasing the supply of alternate fuels.

Request the City of Orlando and the City of St. Cloud to make the same reduction in energy use as OUC.

# Step B

If the actions of the preceding step A have not been adequate to mitigate the energy A-\fuelplan4-15-2003\_clean.doc ۱.

emergency and a continued downward trend in energy supplies is anticipated, the following additional measures will be implemented.

All previously implemented steps shall be continued. Make public appeals to all customers, both residential and commercial, to reduce their consumption of electrical energy.

Large commercial and industrial customers will be contacted individually and requested to reduce their consumption of electrical energy.

Make request to customers to reduce all outdoor decorative lighting and lighting used for advertisement except for the minimum required to indicate commercial facilities open after dark.

Reduce all street lighting to a minimum level necessary for life and property protection, per agreement with the City of Orlando and Orange County.

# Step C

If action of the preceding Steps A and B have not been adequate to mitigate this energy emergency and a continued downward trend in fuel supplies is anticipated, the following <u>additional</u> measures will be implemented.

All the previously implemented steps shall be continued.

Maximize the use of purchase power.

Implement a 5% voltage reduction (see Voltage Reduction below).

## <u>Step D</u>

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In the event the energy emergency continues to worsen, then the following steps will be implemented as a last resort.

All the previously implemented steps shall be continued.

To the extent legally permissible, through the use of legal authority, enforce the reduction of energy consumption to the degree necessary to protect public health and welfare.

If fuel is available from other utilities, it may be purchased at an agreed upon price or payback plan. (see Fuel Payback Plan below)

As a last resort, implement rotating blackouts on selected feeders as designated on the most current Load Shed Priority List which is on file in the Energy Control Center (ECC). (see Load Shedding below)

## PLAN TERMINATION GUIDELINE

When the fuel supply shortage eases, the General Manager & CEO will request the measures taken under this plan be relaxed to the appropriate step until at which time a return to normal operations can be achieved. The General Manager & CEO will terminate

the plan when fuel supplies return to normal levels and can be maintained at those levels.

## PUBLIC INFORMATION AND APPEALS

All communications with the public, the Media and local agencies shall be made by the 'Media Relations Coordinator.

The following City and local agencies will be contacted:

Mayor of Orlando

Chairmen of Orange and Osceola County Commissions

Police Chiefs from Orlando, Orange County, St. Cloud, and Osceola County

Fire Chiefs from Orlando, Orange County, St. Cloud, and Osceola County

Directors of Waste Water Departments for Orange and Osceola Counties

Orange and Osceola Counties Civil Emergency Management Departments

All public appeals to both large and small customers will be accompanied by suggestions on how they can conserve energy:

Turn off all unnecessary lights

Reduce or curtail the use of A/C and electric heat

If A/C is essential, set thermostat at 80 to 85 degrees

If electric heat is essential, set thermostat at 60 to 65 degrees

Curtail all use of clothes dryers, dishwashers and use of hot water.

Set hot water thermostat at 120 degrees.

These communications should be coordinated with the Public Information committee of the FRCC so as to be as non-conflicting as possible.

## VOLTAGE REDUCTION

The Energy Control Center will be responsible for implementing a 5% system-wide voltage reduction when authorized by the General Manager & CEO.

## LOAD SHEDDING

The Energy Control Center will be responsible for implementing Load Shedding when authorized by the General Manager & CEO. The System Operator shall use the most current Load Shed Priority List on file in Energy Control Center. Feeder circuits will be rotated every 10 to 15 minutes unless longer durations are authorized by the General Manager & CEO. The Load Shed Priority List is reviewed and revised, as required, by the Electric Engineering Division to ensure that it contains only feeders that serve non-essential loads.

#### FUEL PAY-BACK PLAN

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If, during the emergency, a physical transfer of fuel should become practical or necessary due to some physical limitation of the electrical system, the bilateral transfers will be accomplished through mutual agreement between the utilities involved. The principle upon which these transfers will be based is that the original owner or procurer of the fuel shall be made whole in terms of the cost, quantity, and quality of fuel transferred as soon after the emergency as practical.

# JEA EMERGENCY PLAN BOOK

# PLAN VI

## Effective Date: June 1, 2002

<u>SCOPE</u>: Insufficient fuel oil reserves to meet projected or actual customer load requirements.

<u>OBJECTIVE</u>: Recognition of an energy supply emergency due to projected fuel shortages and coordination of actions with other Florida electric utilities.

ASSIGNMENT OF RESPONSIBILITY: The Electric Delivery Group is responsible for maintenance of this procedure.

<u>PLAN VI CONCEPT</u>: This Plan VI is designed to govern JEA activities relative to a fuel supply emergency affecting Florida's electric utilities. The Plan coordinates with the Florida Reliability Coordinating Council (FRCC) Florida Electric Emergency Contingency Plan (Fuel Supply Shortage Element), dated November 1998.

The plan incorporates the following key elements associated with various levels of fuel shortages:

- Expedited Emergency Fuel Procurement
- Communication and Coordination
- Waiver of Environmental Restrictions
- Conservation and Load Management
- Modified Dispatch and Commitment
- Load Rotation

Organizational Services – Fuel Management Service process is responsible for maintaining an adequate fuel inventory, which recognizes reasonable delays or problems in the delivery or production of fuel. Monthly, Quarterly and Annual projection of fuel use shall be performed in order to accurately project necessary inventories.

Upon first detection of a possible fuel emergency, the Organizational Services Vice President shall notify the Director of Electric Delivery. Short Term Load Forecasting, Production Modeling and/or Unit Commitment analysis of applicable time periods shall be performed. Final determination of projected fuel requirements and inventories shall key the applicable section of Plan VI.

Load Forecasting, continuing Production Modeling and/or Unit Commitment analysis as requested by the Fuel Management Service Group will be used to monitor the extent of the fuel supply emergency.

Upon notification of a fuel supply emergency, the Vice President of Operations and Maintenance shall notify the Chair of the FRCC Reliability Assessment Group (RAG).

## DEFINITIONS:

A <u>Fuel Supply Alert</u> will exist at any time the JEA's oil supply is decreased to the range of 25 to 30 days of usable oil above the 5 ft. minimum tank bottoms and a continued trend is anticipated and alternate power from outside of the Florida State Grid is not projected to be available.

The Chair of RAG, after consultation with and concurrence by the Chair of the FRCC Executive Board, will notify the Florida Public Services Commission and request the initiation of a <u>Fuel Supply Alert</u> (as outline in section V of the <u>Florida Electric Emergency</u> Contingency Plan (Fuel Supply Shortage Element).

## 1.0 PROCEDURES FOR STEP A - FUEL SUPPLY FOR 20 TO 25 DAYS

When a Fuel Supply Emergency has been declared and the total fuel supply has decreased to the range of 20 to 25 days of usable oil above the 5 ft. minimum tank bottoms and a continued downward trend is anticipated and alternate power from outside of the Florida State Grid is not, or is not projected to be, available, the following measures should be implemented and continued during the duration of the emergency:

## 1.1 Expedite Fuel Procurement:

The Fuel Management Service Group will expedite fuel procurement. The Fuels Management Services Group will request all suppliers to locate and acquire any oil of the proper quality, which meets environmental and operational constraints.

## **1.2 Communicate Internally:**

- 1.2.1 The Vice President of Market Strategy will issue news bulletins explaining why the fuel shortage has occurred, providing an overview of the emergency plan and defining details of Step A.
- **1.2.2** The Vice President of Operations & Maintenance will provide a daily update to the Managing Director/CEO and Vice Presidents.

## **1.3** Communicate with the Public and Media:

The Vice President of Market Strategy, in coordination with FRCC, will:

- 1.3.1 Issue news releases to news media, explaining reason for shortage, action taken to deal with problem, and provide specific conservation information to the customers.
- 1.3.2 Provide daily information to the media on status of the emergency.
- 1.3.3 Promote load conservation by the public via announcements to the media that will provide customers with specific information on how to conserve electricity. The Vice President of Customer Relationship will coordinate this effort through the Vice President of Market Strategy.

#### 1.4 Communicate with Governmental Agencies/Officers:

The Vice President of Customer Relationship will update the Mayor's Office, President of City Council, and the City's Emergency Operations Center (Civil Defense).

#### **1.5** Waive Environmental Restrictions:

The Vice President of Environmental Services will start procedures to obtain approval of the Governor and the President to suspend the State Implementation Plan (SIP) requirements of the Clean Air Act in order to burn available fuels that may not meet environmental constraints.

#### **1.6 Curtail JEA Usage:**

Curtail all non-essential use of electrical energy at all utility-owned facilities. Monitor usage of energy weekly.

#### **1.7** Promote Load Conservation:

#### 1.7.1 Voluntary

- 1.7.1.1. Increase efforts to educate customers in the efficient use of electrical equipment and supply.
- 1.7.1.2 Urge conservation at the customer level by airing programs instructing them on specific ways to conserve electric energy.
- 1.7.1.3 Request all customers to reduce their kilowatt-hour usage by at least five percent.
- 1.7.2 Mandatory. No action required.

#### **1.8** Utilize Load Control:

Implement voltage reduction for peak period.

#### 1.9 Modify System Operation:

- **1.9.1** Discontinue non-firm sales to utilities not participating in the FRCC long-term plan.
- 1.9.2 Discontinue sales of economy energy from units whose fuel is in short supply.
- 1.9.3 Review the maintenance schedule to optimize use of obtainable fuels.
- 1.9.4 Purchase all available power from State Grid.

#### 1.10 Curtail Firm Load:

No action required.

## 2.0 PROCEDURES FOR STEP B - FUEL SUPPLY FOR 15 TO 20 DAYS

If the total fuel supply has decreased to the range of 15 to 20 days of usable oil above the 5 ft. minimum tank bottoms and a continued downward trend is anticipated and alternate power from outside of the Florida State Grid is not projected to be available, the following additional measures should be implemented.

#### 2.1 Expedite Fuel Procurement:

The Fuels Management Services Group will solicit suppliers of oil by phone to determine types of oil available for purchase, as well as quantity and delivery time. Will maximize on-site inventory.

#### 2.2 Communicate Internally:

The Vice President of Market Strategy will update employees.

## 2.3 Communicate with the Public and Media:

The Vice President of Market Strategy in coordination with FRCC, will:

- 2.3.1 Issue updated news statements.
- 2.3.2 Continue announcements telling customers how to conserve electricity.

## 2.4 Communicate with Governmental Agencies/Officers:

The Vice President of Market Strategy will update the Mayor's Office, President of City Council, and the City's Emergency Operations Center (EOC) (Civil Defense).

## 2.5 Waive Environmental Restrictions:

No new action required.

## 2.6 Curtail JEA Usage:

- 2.6.1 Reduce energy use by at least 20 percent.
- 2.6.2 Discontinue the use of lunchrooms and kitchens. Turn off 25 percent of exterior lights. Turn off hot water heaters.

2.6.3 Reset and lock all air conditioning and heating thermostats to 80ø and 65ø, respectively.

## 2.7 Promote Load Conservation:

- 2.7.1 Voluntary
  - 2.7.1.1. Request residential and commercial customers to cut back on non-essential usage and adjust thermostat levels five degrees lower than normal (during the heating season), and five degrees higher than normal (during the cooling season).

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- 2.7.1.2 Request customers to temporarily discontinue use of indoor advertising devices, outdoor displays, flood lighting (except where essential for safety and security).
- 2.7.1.3 Request all customers to reduce their kilowatt-hour usage by at least 15 percent.

#### 2.7.2 Mandatory.

Request ban of all nighttime sporting activities; closing of all lighted parks, tennis courts, golf courses, etc.; elimination of non-essential outdoor advertising lighting.

## 2.8 Utilize Load Control:

Where applicable, increase cycle times with controlled water heaters, space heating, swimming pool pumps, and air conditioners to one hour off every four hours.

## 2.9 Modify System Operation:

- 2.9.1 Modify unit dispatch to load units with obtainable fuels and then load units, which burn fuel in short supply.
- 2.9.2 Where possible, cycle units fueled by short supply fuel off line, and still allow the same demand and energy output but at a better heat rate and consume less station service.
- 2.9.3 Purchase power when it will extend availability of fuel in short supply, where economically feasible.

## 2.10 Curtail Firm Load:

No action required.

3.0

## PROCEDURES FOR STEP C . FUEL SUPPLY FOR 10 TO 15 DAYS

When the fuel supplies have decreased to the range of 10 to 15 days of usable oil above the 5 ft. minimum tank bottoms and a continued downward trend is anticipated and alternate power from outside of the Florida State Grid is not projected to be available. The following additional measures should be implemented:

## 3.1 Expedite Fuel Procurement:

The Fuels Management Services Group will locate and purchase any oil available which can be satisfactorily burned in JEA power plants.

## 3.2 Communicate Internally:

The Vice President of Market Strategy will issue a bulletin to update employees.

## 3.3 Communicate with the Public and Media:

The Vice President of Market Strategy, in coordination with FRCC, will:

- 3.3.1 Issue updated news statements.
- 3.3.2 Continue conservation announcements.

## 3.4 Communicate with Governmental Agencies/Officers:

The Vice President of Customer Relationship will update the Mayor's Office, President of City Council, and the City's Emergency Operations Center (EOC) (Civil Defense).

## 3.5 Waive Environmental Restrictions:

No new action required.

## 3.6 Curtail JEA Usage:

- 3.6.1 Discontinue use of air conditioning units serving large areas with a small number of people by moving people.
- 3.6.2 Turn off at least 50 percent of all exterior lights and discontinue the use of non-essential house facilities.

## 3.7 Promote Load Conservation:

#### 3.7.1 Voluntary

- 3.7.1.1. Request residential customers to further reduce energy consumption by stopping use of certain electrical services such as air conditioning, heating, water heaters, washers, dryers, dishwashers, and other convenience devices and equipment.
- 3.7.1.2 Request air-conditioned offices and buildings (other than critical services such as hospitals) to lower their thermostat setting to 65ø (during the heating season), and raise them to 80ø (during the cooling season).
- 3.7.1.3 Request commercial establishments, institutional facilities, public and private schools, office buildings, and industrial plants to reduce their consumption, which may require reduction in operating hours.
- 3.7.1.4 Encourage customer use of generation in alternate energy supply.
- 3.7.1.5 Request all commercial and industrial customers to reduce kilowatt-hour usage by 30 percent.
- 3.7.2 Mandatory (Request to Mayor)
  - 3.7.2.1 Request commercial establishments to ban all non-essential use of hot water.
  - 3.7.2.2 Request elimination of window and display lighting.
  - 3.7.2.3 Request ban of all air conditioning and heating during non-use hours and in unoccupied areas of commercial establishments.

#### 3.8 Utilize Load Control:

Increase cycle times two to four hours off during every two to six hour period.

## 3.9 Modify System Operation:

- 3.9.1 Reduce, to a minimum, firm sales to other utilities.
- 3.9.2 Implement emergency line rating to increase import capability.
- 3.9.3 Purchase power when it will extend availability of fuel in short supply.
- 3.9.4 Purchase short-term energy other than peaker energy when it will extend the availability of fuel in short supply.
- 3.9.5 Lower system distribution voltage two to three percent, where it is expedient to do so.

#### 3.10 Curtail Firm Load:

No action required.

## 4.0 PROCEDURES FOR STEP D - FUEL SUPPLY FOR 5 TO 10 DAYS

When the total fuel supply has decreased to the range of five to 10 days of usable oil above the 5 ft. minimum tank bottoms supply and a continued downward trend is anticipated and alternate power from outside of the Florida State Grid is not or is not project to be available, the following additional measures should be implemented:

#### 4.1 Expedite Fuel Procurement:

The Fuels Management Services Group will investigate all possible fuel supply sources in search of any usable fuel.

#### 4.2 Communicate Internally:

The Vice President of Market Strategy will issue a bulletin emphasizing the firm load curtailment customers will experience, rotating blackouts, and why.

#### 4.3 Communicate with the Public and Media:

The Vice President of Market Strategy, in coordination with FRCC, will issue updated news statements explaining the firm load curtailment customers will experience, rotating blackouts, and why.

#### 4.4 Communicate with Governmental Agencies/Officers:

The Vice President of Market Strategy will update the appropriate Governmental Agencies/Officers, and particularly advise them of firm load curtailment and its impact on activities.

## 4.5 Waive Environmental Restrictions:

No new action required.

## 4.6 Curtail JEA Usage:

Eliminate all but critical air conditioning and heating: such as, microwave and computer facilities.



## 4.7 Promote Load Conservation:

- 4.7.1 <u>Voluntary</u> Request all commercial and industrial customers to reduce their kilowatt-hour usage by at least 50 percent.
- 4.7.2 <u>Mandatory</u> No new action required.
- **4.8** Utilize Load Control Increase all cycle periods from six to ten hours.

#### 4.9 Modify System Operation:

- 4.9.1 Reduce firm sales to other utilities to zero.
- 4.9.2 Purchase any available energy that would extend the supply of fuel in short supply.

#### 4.10 Curtail Firm Load:

Implement circuit load rotation. The implementation of load rotation will result in the interruption of electrical service to our customers on a rotating basis. Periods of interruption of electrical service will be rotated among the service areas so that no one area will be without electricity for an unduly long period. Selection of areas to be interrupted will be made by the Company operating personnel in the exercise of their judgment according to the circumstances existing at the time of emergency. Whenever possible, during such emergency, JEA will give priority for service to hospitals, military installations, major airports, police, fire, critical telephone exchanges, TV stations, water and sewer facilities, and where no emergency power is available.

## 5.0 PROCEDURES FOR STEP E - FUEL SUPPLY FOR 0 TO 5 DAYS

When the total fuel supply has decreased to the range of zero to five days of usable oil above the 5 ft. minimum tank bottoms supply and a continued downward trend is expected, and alternate power from outside of the Florida State Grid is not, or is not projected to be, available, the following measures should be implemented:

## 5.1 Expedite Fuel Procurement:

No new action required.

## 5.2 Communicate Internally:

The Vice President of Market Strategy will issue updated bulletins.

## 5.3 Communicate with the Public and Media:

The Vice President of Market Strategy, in coordination with FRCC, will issue updated news statements.

## 5.4 Communicate with Governmental Agencies/Officers:

The Vice President of Customer Relationship will update appropriate Governmental Agencies/Officers.

#### 5.5 Waive Environmental Restrictions:

No new action required.

## 5.6 Curtail JEA Usage:

No new action required.

#### 5.7 Promote Load Conservation:

No new action required.

#### 5.8 Utilize Load Control

No new action required.

## 5.9 Modify System Operation:

Bulk Power Operations Group will:

- 5.9.1 Implement plans to insure the orderly shutdown of all units burning the fuel in short supply, in the event, the fuel is exhausted.
- 5.9.2 Implement plans to insure power availability to all power plants and fuel handling facilities.

## 5.10 Curtail Firm Load:

No new action required.

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